# Seattle Public Utilities Drainage and Wastewater

# Overview

Seattle Public Utilities (SPU) is responsible for maintaining 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
- 477 miles of storm drains / 295 storm drain outfalls
- 36,500 catch basins
- 65 miles of ditches, 121 miles of culverts
- 19,500 feet of green stormwater infrastructure
- 12 detention/treatment ponds
- 145 flow control facilities
- 189 water quality structures

The Drainage and Wastewater (DWF) CIP is the vehicle for rehabilitating, replacing, improving and expanding this infrastructure, as well as constructing projects that protect, conserve, and enhance the region's environmental resources. Planned spending in the DWF CIP is approximately \$663 million over the next six years.

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 the Utility to fund the CIP. By 2007, 25% of total CIP costs were funded by a cash contribution, with the remaining capital needs being debt financed.

# Summary of Upcoming Budget Issues and Challenges

The biggest challenge for the Drainage and Wastewater Fund will be continuing to manage large priority projects while still accomplishing Mayoral priorities and complying with Environmental Protection Agency (EPA), Department of Ecology (DOE), and the National Pollutant Discharge Elimination System (NPDES) permits within the financial limitations of the fund.

The City of Seattle negotiated a consent decree last year between the City, the EPA, and the United States Department of Justice (DOJ) for compliance with the Clean Water Act 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 and will drive spending in the Combined Sewer Overflows (CSO) Reduction Program over the next several years. The Consent Decree also includes requirements to implement a Capacity Management, Operations & Maintenance (CMOM) Program, which drives both operations and maintenance (O&M) spending and CIP spending in the Rehabilitation Program. Additionally, an NPDES permit for stormwater was renewed by the State government in 2013. This permit includes prescriptive requirements to help protect local waterways and Puget Sound from damaging pollutants and excessive runoff. This increasing 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., green stormwater infrastructure or GSI), CSO retrofits, pipe and pump station rehabilitation, and inflow/infiltration (I/I) reduction:

- Detention is the storage of stormwater and/or sewage during a rainfall event and can be accomplished through detention ponds (stormwater) or underground tanks (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 is the removal of 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 overflows by allowing stormwater to infiltrate slowly into the ground and cutting the volume of stormwater entering the system. GSI includes specific treatments that rely on specialized soils and plants that provide flow control and/or water quality benefits. The use of GSI is required through Seattle's NPDES permit and Stormwater Code.
- CSO retrofits are focused on optimizing the existing collection systems, using low-cost repairs and modifications to reduce overflows to waterways.
- Pipe and pump station rehabilitation 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 (I/I) reduction focuses on filling in cracks in sewer lines through which groundwater can 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 I/I, it is possible to reduce the frequency and volume of sanitary sewer overflows (SSOs) and sewer backups.

CIP funding is also needed to improve the existing drainage system so 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. In addition, this performance level benefits ratepayers by avoiding costly fines and damages.

The Combined Sewer Overflow (CSO) Reduction Program constitutes one of the major investments and challenges for the Drainage and Wastewater Fund in upcoming years. During heavy rains, the combination of stormwater (about 90 percent of the volume) and sewage may exceed the capacity of the combined sewer system 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 of Seattle. These spills violate water quality standards, create unacceptable risk to public health, and contaminate sediment and habitat for endangered species and pollute Puget Sound. CSO spills are illegal and unacceptable under any standard of environmental care.

Annual overflows 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 which limit overflows 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 a Long Term Control Plan, which will be submitted for Regulatory approval by May 2015. SPU must also achieve significant NPDES Wastewater Permit milestones for the control of CSOs to Lake Washington by December 30, 2015.

Most recently, the DOJ on behalf of the EPA and Washington State DOE finalized a Consent Decree describing measures the DOJ will require of SPU to remedy violations of the Clean Water Act. The Consent Decree includes, among other significant requirements, completion of a Long Term Control Plan (LTCP) by 2015 and completion of construction of all CSOs 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 meet current permit requirements including preparation of a Long Term Control Plan, accomplish required milestones to control CSOs into Lake Washington and achieve compliance with the 2025 goal.

While cost estimating is dependent on many factors, SPU's current expectation is to spend approximately \$204 million over the next six years (2015-2020) on CSO reduction projects. The projects will include a combination of underground storage tanks, GSI, system retrofits, gravity sewer pipe rehabilitation projects, and the development of a long-range plan for CSO projects to be constructed from 2016-2025. One of the biggest challenges of the program is siting wastewater facilities in a dense urban environment. SPU is addressing that challenge through an early and active community/stakeholder involvement process on each of its projects. 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.

Another challenge for the DWF is ensuring basic service level programs, such as flooding and system capacity, are not stripped of funding as our regulatory requirements continue to grow. The separated drainage and wastewater system is at capacity during storm events 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 to address the highest priority locations with capital improvements using available funding and staff resources. These highest priority projects include the South Park Pump Station project, the Thornton Confluence Improvement project, and Broadview Sewer and Stormwater Improvements project.

- The South Park Pump Station project will construct a pump station and water quality facility in South Park. The pump station will allow the existing storm drain trunk to meet the level of service adopted in the 2004 Comprehensive Drainage Plan. In turn, this allows for future projects to expand the collection system to address flooding complaints. The water quality facility will treat most stormwater flows from the basin, reducing pollutant loading to the Duwamish River. The project's engineering design is complicated by the tidal flows present in the Duwamish. The South Park Pump Station will be integral to the Integrated Plans South Park Water Quality Facility and will be a regulatory requirement if the Integrated Plan (IP) is approved.
- The Thornton Confluence Improvement project will replace the road culvert at 35<sup>th</sup> Ave NE and restore the floodplain area at the confluence of the north and south forks of Thornton Creek. This will reduce local flooding impacts to roads and private property as well as enhance instream and riparian habitat in a critical segment of the creek.
- The Broadview neighborhood has experienced a long history of capacity-related backups and overflows. The Broadview Sewer and Stormwater Improvements project will test non-traditional solutions to these longstanding issues, with a goal of reducing sewer backups and stormwater flooding in the Broadview basin.

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 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. The utility 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.

Finally, the DWF CIP must address projects that have a shared cost with the other two lines of business. A large issue in this area is the Seawall Replacement project. This project has the potential to have a significant impact to the DWF. Due to shifts in scope and design, the cost for the DWF has grown significantly and may lead to projects across the DWF CIP being reprioritized in order for SPU to meet the growing cost requirements.

# **Thematic Priorities**

The overriding 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 CIP are also guided by various federal regulations, City policies, long-term plan documents, and the SPU Asset Management Committee (AMC) benefit criteria. Many Drainage and Wastewater CIP projects are outlined in the Wastewater System Plan, Combined Sewer Overflow Reduction Plan, and the Comprehensive Drainage Plan. The Drainage and Wastewater Fund primarily considers three main criteria when prioritizing work: public health and safety, environmental protection/regulatory requirements, and Mayor/Council priorities. Project timing can be influenced by opportunities or requirements to combine construction activity with other projects.

<u>Public Health and Safety</u>: The overriding priority for the Drainage and Wastewater Fund is maintaining public health and safety. This will be accomplished through capital programs and projects including the 14<sup>th</sup> and Concord Combined Sewer System (CSS) Improvement project, the Localized Flood Control Program, the Broadview Sanitary Sewer Overflow (SSO) reduction program and the South Park Pump Station project. The primary Capital program is the sewer and drainage rehabilitation program. This program is focused on identifying and correcting defective or deteriorating infrastructure, including drainage and wastewater pipes, before failure which could result in sewer backups, roadway collapses or landslides.

<u>Environmental Protection/Regulatory Requirements</u>: The City of Seattle/SPU must meet state and federal regulatory requirements in order to comply with the Clean Water Act (CWA) and the Consent Decree that was entered in court on July 3, 2013, between the City, the EPA and DOJ. The two most significant regulatory drivers associated with the CWA are the NPDES Waste Discharge Permit (aka NPDES CSO Permit) and the NPDES Phase I Municipal Stormwater Permit (aka NDPES MS4 Permit).

- As required by the NPDES CSO Permit, Seattle developed a 2010 CSO Reduction Plan Amendment to describe the effort to reduce CSOs to the state standard of one overflow per outfall per year. As part of meeting these requirements, SPU will be constructing CSO reduction facilities at Windermere, South Genesee, and Henderson. DWF is committed to completing this program by 2018.
- As part of the NPDES MS4 Permit, Seattle is required to have a Structural Stormwater Control Program to address stormwater impacts that are not adequately controlled through other required permit actions. As part of meeting this requirement, SPU is constructing stormwater quality and flow control facilities including South Park Pump Station, the Capitol Hill Water Quality Facility, and Broadview sewer system improvements.

<u>City Priorities</u>: Projects in the 6-year CIP that address City priorities include the Venema Natural Drainage System (NDS) and Capitol Hill Water Quality Facility where green stormwater infrastructure will be used to reduce stormwater impacts while contributing to meeting sustainability goals.

- The Venema NDS project will construct natural drainage elements including large bioretention swales and permeable pavement in alleys. A swale is a specially designed area where stormwater can infiltrate into or through the ground or vegetation, depending on whether it is designed primarily for water quality treatment or flow control. The result will be improved stormwater flow control and water quality treatment in the Venema basin which will improve hydrology and water quality in Venema Creek, a tributary of Piper's Creek.
- The Capitol Hill Water Quality project will result in an innovative regional scale stormwater facility. The facility will include vegetated bioswales which will provide stormwater treatment for a portion of the largest sub-basin draining to South Lake Union while providing a vibrant pedestrian-friendly streetscape. This project will be constructed in partnership with the private development of adjacent properties, and includes new sidewalks and road surfaces.

# **Project Selection**

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 categories from least to most important. Some projects are identified as 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 Windermere, South Genesee Henderson and the Long Term Control Plan.
- **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 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 Point Sewer Pipe Rehabilitation and Emergency Rehabilitation programs.
- 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 Park Pump Station, Localized Flood Control program, Sanitary Sewer Overflow Capacity program, Point Sewer Pipe Rehabilitation, and Emergency Rehabilitation 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, and outside funding. An example of a highly ranked project in this category is the Capital Hill Water Quality Project.

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 Director 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.

# Aligning Infrastructure with Planned Growth

SPU is working to take better advantage of opportunities to incorporate improvements and repairs to our drainage and wastewater systems with major redevelopment and projects undertaken by others (e.g., private developers, other city departments, regional and state agencies). Currently, SPU is partnering with South Lake Union developers to build a regional GSI-based stormwater treatment facility to treat Capitol Hill stormwater runoff while also increasing green space in the public right of way. For the future, SPU will be ramping up long-range planning efforts to improve understanding of the existing conditions of our drainage and wastewater system, predicted growth areas, and possible impacts to the drainage and wastewater system. This better understanding will lead to more forward thinking decisions on where we need to better plan to for growth and allow us to better leverage both our investments and those made by others.

# **Future Projects on the Horizon**

The DWF CIP will increase programs to meet requirements and commitments outlined in the 2010 CSO Reduction Plan. The 2015-2020 Proposed CIP includes significant investments for the Henderson CSO reduction project.

The six-year CIP also includes funding for the Long Term Control Plan, which will identify all remaining CSO projects throughout the City to achieve the Washington State requirement to reduce CSOs down to an average one untreated CSO per year per outfall. Funding to address those remaining CSO projects will need to be included in future CIP budget submittals. In addition, SPU has been authorized by the EPA to prepare an Integrated Plan, which will propose projects to reduce stormwater pollution into the environment. Integrated Plan projects will need to be funded and constructed between 2016-2025. The Integrated Plan itself is funded under SPU's pre-capital planning operations and maintenance budget. Finally, water quality requirements for stormwater will likely result in increases in capital investment requirements on both new projects and potential retrofits of the existing system.

The programmatic analysis and prioritization currently being done in the Flooding, Sewer Back-up, and Landslides business area will result in a comprehensive list of small to large CIP projects to be constructed over the next 15 to 20 years. Projects will be similar to current projects such as 14<sup>th</sup> and Concord CSS improvements, Broadview sewer system improvements and the South Park Pump Station.

Additional stormwater and CSO facilities, both structural and green, will require growing levels of operations and maintenance support for inspection and maintenance.

## **CIP Revenue Sources**

SPU's Drainage and Wastewater CIP is funded largely by Drainage and Sewer ratepayers. SPU issues bonds, serviced by ratepayers that cover approximately 75% of the CIP, with the remainder funded by cash. DWF rates were approved by the Executive and City Council in 2012 for the three-year period of 2013-2015.

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 Ecology for up to 50% of sediments cleanup project costs.

(000s of Dollars)

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Drainage and Wastewater Fund	2015	2016	2017	2018	2019	2020	Total
PROTECTION OF BENEFICIAL USES	5,182	5,821	7,067	9,841	6,243	6,345	40,499
SEDIMENTS	4,797	2,420	3,778	21,315	19,264	17,140	68,714
COMBINED SEWER OVERFLOWS	60,067	48,337	24,890	23,197	16,400	31,334	204,225
REHABILITATI ON	10,629	16,338	21,020	22,520	22,520	24,520	117,547
FLOODING, SEWER BACKUP & LANDSLIDES	16,970	23,960	26,372	18,899	15,961	15,472	117,634
SHARED COST PROJECTS	13,783	12,242	22,645	9,925	8,821	6,382	73,798
TECHNOLOGY	10,498	7,956	6,149	6,443	4,778	5,081	40,905
Total	121,926	117,074	111,921	112,140	93,987	106,274	663,322

# CIP Spending by Major Category

**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 by improving water quality and protecting or enhancing creek habitat. The program includes projects to meet regulatory requirements. Funding in 2015 and 2016 will be focused on cost effective stormwater and water quality projects such as the Venema Creek Natural Drainage System (NDS) and the Capitol Hill Water Quality project.

Increases in the **Protection of Beneficial Uses BCL** in 2015 is the result of water quality stormwater projects identified as a part of the Integrated Plan and also the expansion of the Street Sweeping project to increase the sweeping frequency, extend the sweeping season, and add a new route. Commitments in the Integrated Plan are requirements of the Consent Decree. The decrease in 2016 is primarily the result of the Taylor Creek Culvert Replacement project construction being pushed out from 2016 to 2017 to accommodate a more involved and lengthier community engagement process.

**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 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. Funding is used to develop studies and analyses required by regulatory agencies for determining the boundaries and cleanup requirements for specific action sites. The study phase of sediment remediation projects often requires multiple years before specific cleanup actions are defined. As regulatory agency cleanup requirements become clear, additional individual cleanup projects will be included in subsequent CIP proposals.

Increases in the **Sediments BCL** reflect the latest schedule and estimates based on negotiations and agreements between parties for proposed actions needed. The Sediments program funds preliminary studies and analysis for cleanup of contaminated sediment sites, for actual cleanup of contaminated sites, for preliminary engineering for future cleanup efforts, and for liability allocation negotiations. The City will pay for only the costs associated with its portion of responsibility. Costs increase slightly in 2015 and 2016 due to negotiations and agreements with regulatory agencies and other PRPs.

**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 infrastructure (GSI) for CSO control, and development of regulatory required plans such as the Long-Term Control Plan (LTCP). Key projects in the 2015 Budget include the Henderson CSO projects, CSO facility retrofits at Delridge and Leschi, and GSI projects in Delridge and Ballard. In 2014, SPU began work on two of the projects in the LTCP, the largest of which is to construct storage (either tunnel storage or local tank storage facilities) in the Ballard and Fremont/Wallingford neighborhoods. Planning work is underway and will continue through the coming years to review potential siting areas and perform initial geo technical investigations. This work is starting early in order to meet CSO Consent Decree compliance date requirements.

Increases in the **Combined Sewer Overflows BCL** reflect revisions to the cash flow and schedules for the Henderson North CSO Reduction project which has been accelerated to begin construction in Q1 2015. In addition, the CSO Facility Retrofit project has increased costs to reduce the frequency and volume of CSOs in the Leschi Basin and Henderson Basin. The decrease of \$902,000 in 2016 is driven primarily by cost reductions in Future CSO Projects that resulted from delaying CSO investments in accordance with the Integrated Plan and implementing stormwater projects in the Protection of Beneficial Uses BCL. The reductions in 2016 were documented in the Strategic Business Plan process.

**Rehabilitation:** This program consists of projects that rehabilitate or replace existing drainage and wastewater assets in-kind to maintain or improve the current functionality level of the system. Projects include pump station structures, major mechanical and electrical components, and force mains; drainage and wastewater control structures and appurtenances; and pipes and culverts. 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 contract.

Changes in the **Rehabilitation BCL** are driven by the Strategic Business Plan process which decreased baseline funding in Point Sewer Pipe Rehab in 2015 while increasing No Dig Pipe Maintenance Rehab in

2016. This will allow SPU to evaluate and fund additional rehabilitation work on gravity sewer pipes and significantly reduce the risk of exceeding the Consent Decree target of four sanitary sewer overflows per 100 miles of sewer pipe. Efforts in these areas will focus on sites with the highest risk as well as those prioritized to fulfill regulatory NPDES permit commitments that will restore original pipe capacity and address issues with discharge points of selected outfalls where these characteristics have been diminished, as well as increasing capacity to pump stations to meet Consent Decree requirements.

**Flooding, Sewer Back-up, and Landslides:** This program is responsible for preventing and alleviating flooding and sewer backups in the City of Seattle, with a primary focus on the protection of public health, safety, and property. The program area is focused on planning, design, and construction of channels, pipes, roadside ditches, culverts, detention ponds, and natural drainage systems that control and/or convey storm runoff to receiving bodies. 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 the Broadview Long Term Plan, which aims to reduce sewer backups and stormwater flooding in the Broadview basin.

Increases in the **Flooding, Sewer Back-up, and Landslides BCL** are driven primarily by the Localized Flood Control Program which had projects delayed in 2013 and 2014 due to lack of resources. In addition, funding has been added to the Broadview Long Term Plan to reduce stormwater flooding and sewer backups, and new stormwater conveyance projects in South Park project have been funded according to the Strategic Business Plan.

**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) where costs are "shared," or paid for, by more than one of SPU's utility funds. In 2015, the Shared Cost program includes funding for a number of interdepartmental projects including the Alaskan Way Viaduct and Seawall Replacement, Mercer Corridor, and Sound Transit Link Light Rail. Funding is also included for SPU's Heavy Equipment Purchases, the Integrated Control Monitoring Program and a number of smaller projects.

Changes in the **Shared Cost Projects BCL** are driven primarily by Heavy Equipment Purchases-DWW in order to purchase vactor trucks for sewer cleaning and two new CCTV trucks for sewer inspection work. This need was approved in the Strategic Business Plan to support the future sewer rehabilitation work in the out years. Although there is a slight decrease in 2016, there is significant reduction in the Alaskan Way Viaduct project due to the delays caused by the tunnel drill. However, changes in costs associated with the Seawall Replacement Project may have significant impacts to the DWF in the next several years. Costs for Operational Facility-Construction have increased, as noted in the Strategic Business Plan, to address shortages of adequate space and future operational functions for SPU.

#### **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 2015 and 2016 address SPU's key initiatives, which focus on:

- Improving Internal Controls,
- Improving Productivity and Performance
- Improving Customer Service
- Transitioning from Data Rich to Knowledge Rich
- Improving Project Delivery

SPU will focus technology spending on the highest priority business needs. Increased spending in 2015 reflects major business changes in Project Delivery & Performance driving the need for several new technology systems as well as improved integration of the various systems in place. The decrease in 2016 is mainly due to the completion of the Utility Customer Billing System/CCSS project

BCL/Program Name/									
Project Title & ID	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Protection of Beneficial Uses					BC	L/Progra	m Code:		C333B
Best Management Practice Program (C3313)	3,260	19	0	0	0	0	0	0	3,280
Capitol Hill Water Quality Project (C3373)	7,269	261	237	2,516	239	695	0	0	11,217
Knickerbocker Floodplain Improvements (C3383)	561	1,868	138	0	0	0	0	0	2,567
Street Sweeping for Water Quality (C3363)	193	90	765	400	0	0	0	0	1,448
Taylor Creek Culvert Replacement (C3353)	1,835	747	800	895	3,247	3,615	291	143	11,573
Venema Creek Natural Drainage System (C3333)	3,165	1,116	2,142	268	108	0	0	0	6,800
Water Quality & Flow Improvements (C3393)	0	0	1,100	1,741	3,473	5,531	5,952	6,202	23,999
Protection of Beneficial Uses	16,284	4,102	5,182	5,821	7,067	9,841	6,243	6,345	60,883
Sediments					BC	L/Program	m Code:		C350B
Sediment Remediation - DWF (C3503)	38,020	3,423	4,797	2,420	3,778	21,315	19,264	17,140	110,155
Sediments	38,020	3,423	4,797	2,420	3,778	21,315	19,264	17,140	110,155
<b>Combined Sewer Overflows</b>					BC	L/Program	m Code:		C360B
Combined Sewer Overflow Facility Retrofit (C3611)	15,740	2,392	13,202	11,957	11,598	5,416	320	0	60,625
Future CSO Projects (C3612)	0	0	6,709	6,709	5,032	12,580	12,580	27,834	71,444
Green Stormwater Infrastructure Program (C3610)	6,976	6,302	9,635	5,123	6,111	4,185	2,500	2,500	43,332
Long Term Control Plan (C3604)	32,218	4,510	1,980	1,000	1,000	1,000	1,000	1,000	43,708
S Genesee Combined Sewer Overflow (C3608)	23,898	14,506	480	0	0	0	0	0	38,883
S Henderson Combined Sewer Overflow Storage (C3609)	18,421	8,206	26,761	23,548	1,149	17	0	0	78,103
Windermere Combined Sewer Overflow Storage (C3605)	38,711	12,915	1,300	0	0	0	0	0	52,926
<b>Combined Sewer Overflows</b>	135,964	48,831	60,067	48,337	24,890	23,197	16,400	31,334	389,021
Rehabilitation					BC	L/Program	m Code:		C370B
Emergency Rehabilitation (C3705)	10,357	1,070	598	598	598	598	598	598	15,014
No Dig Pipe & Maintenance Rehabilitation (C3707)	13,804	1,500	2,500	7,500	13,500	15,000	15,000	17,000	85,804

# **Project Summary**

\*Amounts in thousands of dollars

<b>Project S</b>	ummary
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BCL/Program Name/									
Project Title & ID	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Outfall Rehabilitation Program (C3708)	504	1,893	946	1,500	500	500	500	500	6,843
Point Sewer Pipe Rehabilitation (C3704)	46,769	4,236	2,152	3,152	3,152	3,152	3,152	3,152	68,918
Pump Station and Force Main Improvements (C3703)	9,774	3,251	4,183	3,338	3,020	3,020	3,020	3,020	32,626
Sewer Full Line Replacements (C3702)	0	250	250	250	250	250	250	250	1,750
Rehabilitation	81,207	12,200	10,629	16,338	21,020	22,520	22,520	24,520	210,954
Flooding, Sewer Back-up, and	Landslides				BC	L/Program	m Code:		C380B
Broadview Long Term Plan (C3812)	1,790	4,000	5,756	8,000	9,000	2,000	2,000	2,000	34,546
Culvert Replacement Program (C3810)	2,229	1,636	1,297	1,000	1,000	1,000	1,000	1,000	10,161
Densmore Basin Drainage Improvements (C3803)	7,588	12	0	0	0	0	0	0	7,600
Localized Flood Control Program (C3802)	6,349	5,309	3,195	5,002	4,741	4,656	4,575	4,497	38,323
Madison Valley Long Term Solution (C3805)	34,896	50	0	0	0	0	0	0	34,946
Meadowbrook Pond Sediment Management (C3808)	3,935	31	0	0	0	0	0	0	3,966
Sanitary Sewer Overflow Capacity (C3804)	5,531	3,340	4,361	4,916	5,631	5,743	5,858	5,975	41,356
South Park Pump Station (C3806)	6,495	1,500	1,500	5,000	6,000	5,500	2,527	2,000	30,523
Thornton Confluence Improvement (C3811)	2,135	4,485	861	42	0	0	0	0	7,523
Flooding, Sewer Back-up, and Landslides	70,948	20,363	16,970	23,960	26,372	18,899	15,961	15,472	208,944
Shared Cost Projects					BC	L/Program	m Code:		C410B
1% for Art – DWF (C4118- DWF)	2,303	655	583	762	770	640	502	477	6,690
Alaskan Way Viaduct & Seawall Replacement Program - DWF (C4102-DWF)	10,978	3,708	5,378	3,130	11,787	1,000	349	0	36,330
Bridging the Gap - DWF (C4119-DWF)	184	0	200	220	250	250	250	250	1,604
Emergency Storms - DWF (C4120-DWF)	4,506	100	100	100	100	100	100	100	5,206
First Hill Streetcar - DWF (C4130-DWF)	0	100	400	600	1,200	400	0	0	2,700
Heavy Equipment Purchases - DWF (C4116-DWF)	8,622	2,915	6,000	2,200	2,200	2,200	2,200	2,450	28,787

\*Amounts in thousands of dollars

BCL/Program Name/									
Project Title & ID	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Integrated Control Monitoring Program - DWF (C4108- DWF)	14,755	800	500	250	250	250	250	250	17,305
Mercer Corridor Project East Phase - DWF (C4114-DWF)	6,294	50	0	0	0	0	0	0	6,344
Mercer Corridor Project West Phase - DWF (C4133-DWF)	244	649	276	0	0	0	0	0	1,169
Meter Replacement - DWF (C4101-DWF)	4,584	585	575	585	594	608	613	623	8,766
Operational Facility - Construction - DWF (C4106- DWF)	9,064	761	1,163	5,275	4,712	3,213	3,077	1,806	29,070
Operational Facility - Other - DWF (C4115-DWF)	329	150	300	100	0	0	0	0	879
Operations Control Center - DWF (C4105-DWF)	2,458	806	340	60	206	310	400	222	4,802
Other Major Transportation Projects - DWF (C4123-DWF)	1	568	160	600	296	750	750	50	3,175
Security Improvements - DWF (C4113-DWF)	1,061	178	180	105	105	105	255	105	2,093
Sound Transit - North Link - DWF (C4135-DWF)	58	108	400	75	75	50	50	50	867
Sound Transit – University Link - DWF (C4110-DWF)	334	127	30	10	0	0	0	0	501
Sound Transit-East Link (C4122-DWF)	0	40	38	10	100	50	25	0	263
Yesler Terrace-DWF (C4136- DWF)	0	2,800	0	0	0	0	0	0	2,800
Shared Cost Projects	65,777	15,099	16,623	14,081	22,645	9,925	8,821	6,382	159,353
Technology					BC	L/Progra	m Code:		C510B
Asset Information Management (C5407)	2,477	1,345	847	934	886	905	865	988	9,247
Customer Contact & Billing (C5402)	590	4,048	4,243	1,938	1,332	1,230	513	1,025	14,918
Enterprise Information Management (C5403)	54	1,014	965	1,044	451	548	1,056	507	5,638
IT Infrastructure (C5404)	1,444	1,415	923	1,271	800	1,517	902	1,251	9,522
Project Delivery & Performance (C5405)	1,783	1,393	2,476	2,058	1,939	993	943	811	12,397
Science & System Performance (C5406)	992	1,030	1,044	711	742	1,250	500	500	6,770
Technology	7,341	10,245	10,498	7,956	6,149	6,443	4,778	5,081	58,491
Department Total*:	415,542	114,262	124,766	118,912	111,920	112,140	93,986	106,274	1,197,802

# **Project Summary**

\*Amounts in thousands of dollars

Fund Name & Code	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Drainage and Wastewater Fund (44010)	415,542	114,262	124,766	118,912	111,920	112,140	93,986	106,274	1,197,802
Department Total*:	415,542	114,262	124,766	118,912	111,920	112,140	93,986	106,274	1,197,802

# **Fund Summary**

\*Amounts in thousands of dollars

#### 1% for Art – DWF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2001
Project ID:	C4118-DWF	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program 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 program. Funds contributed to the 1% for Art program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	2,303	655	583	762	770	640	502	477	6,690
Total:	2,303	655	583	762	770	640	502	477	6,690
Fund Appropriations/Alloo	cations								
Drainage and Wastewater Fund	2,303	655	583	762	770	640	502	477	6,690
Total*:	2,303	655	583	762	770	640	502	477	6,690
O & M Costs (Savings)			67	67	67	67	67	67	401
Spending Plan by Fund									
Drainage and Wastewater Fund		710	583	762	770	640	502	477	4,443
Total:		710	583	762	770	640	502	477	4,443

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Facility	Start Date:	Q1/2004
Project ID:	C4102-DWF	End Date:	Q4/2019
Location:	SR 99 / Battery St		
Neighborhood Plan:	In more than one Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

#### Alaskan Way Viaduct & Seawall Replacement Program - DWF

This program relocates, replaces, and protects drainage and wastewater infrastructure affected by the replacement of the Alaskan Way Viaduct and Seawall. This program encompasses many sub-projects which are collectively known as the "Alaskan Way Viaduct and Seawall Replacement Program" (AWVSR Program.) 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources		· · ·	· · ·		· · · ·		· · · ·		
Drainage and Wastewater Rates	10,978	3,708	5,378	3,130	11,787	1,000	349	0	36,330
Total:	10,978	3,708	5,378	3,130	11,787	1,000	349	0	36,330
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	10,978	3,708	5,378	3,130	11,787	1,000	349	0	36,330
Total*:	10,978	3,708	5,378	3,130	11,787	1,000	349	0	36,330
O & M Costs (Savings)			363	363	363	363	363	363	2,180
Spending Plan by Fund									
Drainage and Wastewater Fund		7,989	5,378	3,130	11,787	1,000	349	0	29,633
Total:		7,989	5,378	3,130	11,787	1,000	349	0	29,633

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## **Best Management Practice Program**

BCL/Program Name:	Protection of Beneficial Uses	BCL/Program Code:	C333B
Project Type:	New Facility	Start Date:	Q2/2000
Project ID:	C3313	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This ongoing program provides high priority water quality improvement projects in the Norfolk, South Park, and Densmore drainage basins. Incorporating Best Management Practices (BMP), projects are identified, developed, and implemented. The results will be improved quality of stormwater runoff from City-owned storm drains, discharged to nearby receiving water bodies such as streams and lakes.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	3,260	19	0	0	0	0	0	0	3,280
Total:	3,260	19	0	0	0	0	0	0	3,280
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	3,260	19	0	0	0	0	0	0	3,280
Total*:	3,260	19	0	0	0	0	0	0	3,280
O & M Costs (Savings)			33	33	33	33	33	33	197
Spending Plan by Fund									
Drainage and Wastewater Fund		65	0	0	0	0	0	0	65
Total:		65	0	0	0	0	0	0	65

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

## **Bridging the Gap - DWF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2008
Project ID:	C4119-DWF	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This multi-year, multi-project program 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 "Bridging the Gap" program. SPU assesses the condition of its utility infrastructure at SDOT's project sites and conducts repairs and improvements as needed.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	184	0	200	220	250	250	250	250	1,604
Total:	184	0	200	220	250	250	250	250	1,604
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	184	0	200	220	250	250	250	250	1,604
Total*:	184	0	200	220	250	250	250	250	1,604
O & M Costs (Savings)			16	16	16	16	16	16	96
Spending Plan by Fund									
Drainage and Wastewater Fund		0	0	0	100	100	100	100	400
Total:		0	0	0	100	100	100	100	400

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

## **Broadview Long Term Plan**

BCL/Program Name:	Flooding, Sewer Back-up, and Landslides	BCL/Program Code:	C380B
Project Type:	Rehabilitation or Restoration	Start Date:	ONGOING
Project ID:	C3812	End Date:	ONGOING
Location:	Broadview		
Neighborhood Plan:	Broadview-Bitter Lake-Haller Lake	<b>Council District:</b>	5
Neighborhood District:	Northwest	Urban Village:	Not in an Urban Village

Portions of the Broadview neighborhood suffer from significant capacity limitations of the sanitary sewer resulting in numerous sewer backups into residences during wet weather events upon which the City has paid numerous claims dating to at least 1996. It is thought that this results from a combination of infiltration and inflow into the sanitary sewer system during wet weather. Program will develop and implement a plan with the goal of restoring sanitary sewer system capacity.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	1,790	4,000	5,756	8,000	9,000	2,000	2,000	2,000	34,546
Total:	1,790	4,000	5,756	8,000	9,000	2,000	2,000	2,000	34,546
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	1,790	4,000	5,756	8,000	9,000	2,000	2,000	2,000	34,546
Total*:	1,790	4,000	5,756	8,000	9,000	2,000	2,000	2,000	34,546
O & M Costs (Savings)			345	345	345	345	345	345	2,073
Spending Plan by Fund									
Drainage and Wastewater Fund		1,714	5,756	8,000	9,000	2,000	2,000	2,000	30,470
Total:		1,714	5,756	8,000	9,000	2,000	2,000	2,000	30,470

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Protection of Beneficial Uses	BCL/Program Code:	C333B
Project Type:	New Facility	Start Date:	Q1/2006
Project ID:	C3373	End Date:	Q4/2018
Location:	Yale Ave N/Pontius Ave N/Thomas Street		
Neighborhood Plan:	Not in a Neighborhood Plan	Council District:	7
Neighborhood District:	Lake Union	Urban Village:	South Lake Union

#### **Capitol Hill Water Quality Project**

This project provides construction of four blocks of biofiltration swales in the South Lake Union neighborhood. As part of a regional storm water treatment facility, this project will be constructed in partnership with an adjacent land developer and includes new sidewalks and road surfaces. The project treats runoff from a portion of approximately 435 acres of Capitol Hill.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	7,269	261	237	2,516	239	695	0	0	11,217
Total:	7,269	261	237	2,516	239	695	0	0	11,217
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	7,269	261	237	2,516	239	695	0	0	11,217
Total*:	7,269	261	237	2,516	239	695	0	0	11,217
O & M Costs (Savings)			112	112	112	112	112	112	673
Spending Plan by Fund									
Drainage and Wastewater Fund		270	237	2,516	239	695	0	0	3,956
Total:		270	237	2,516	239	695	0	0	3,956

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Combined Sewer Overflow Facility Retrofit**

BCL/Program Name:	Combined Sewer Overflows	<b>BCL/Program Code:</b>	C360B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2002
Project ID:	C3611	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

This ongoing program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	15,740	2,392	13,202	11,957	11,598	5,416	320	0	60,625
Total:	15,740	2,392	13,202	11,957	11,598	5,416	320	0	60,625
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	15,740	2,392	13,202	11,957	11,598	5,416	320	0	60,625
Total*:	15,740	2,392	13,202	11,957	11,598	5,416	320	0	60,625
O & M Costs (Savings)			606	606	606	606	606	606	3,638
Spending Plan by Fund									
Drainage and Wastewater Fund		4,879	13,202	11,957	11,598	5,416	320	0	47,372
Total:		4,879	13,202	11,957	11,598	5,416	320	0	47,372

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Flooding, Sewer Back-up, and Landslides	BCL/Program Code:	C380B
Project Type:	Rehabilitation or Restoration	Start Date:	Q2/2008
Project ID:	C3810	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

#### **Culvert Replacement Program**

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 risks and benefits of the project, including flooding and public infrastructure risk and benefits. Replacements will be addressed as part of this capital program, while small repairs and retrofits will be covered within the Operations and Maintenance budget. Funding transfers to from the budget placeholder to culvert replacement projects once they are approved through the AMC process.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	2,229	1,636	1,297	1,000	1,000	1,000	1,000	1,000	10,161
Total:	2,229	1,636	1,297	1,000	1,000	1,000	1,000	1,000	10,161
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	2,229	1,636	1,297	1,000	1,000	1,000	1,000	1,000	10,161
Total*:	2,229	1,636	1,297	1,000	1,000	1,000	1,000	1,000	10,161
O & M Costs (Savings)			102	102	102	102	102	102	610
Spending Plan by Fund									
Drainage and Wastewater Fund		684	1,297	1,000	1,000	1,000	1,000	1,000	6,981
Total:		684	1,297	1,000	1,000	1,000	1,000	1,000	6,981

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Flooding, Sewer Back-up, and Landslides	BCL/Program Code:	C380B
Project Type:	New Facility	Start Date:	Q1/2009
Project ID:	C3803	End Date:	Q2/2014
Location:	Densmore Basin		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	5
Neighborhood District:	Northwest	Urban Village:	Bitter Lake Village

#### **Densmore Basin Drainage Improvements**

This program reduces surface water flooding and stormwater pollutant loading within the Densmore Basin. Improvements may include increasing the detention volume of the existing Stone Pond facility in order to address stormwater flow, and using traditional storage facilities and/or low impact development techniques to reduce flooding impacts at key locations in the upper Densmore Basin.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	7,588	12	0	0	0	0	0	0	7,600
Total:	7,588	12	0	0	0	0	0	0	7,600
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	7,588	12	0	0	0	0	0	0	7,600
Total*:	7,588	12	0	0	0	0	0	0	7,600
O & M Costs (Savings)			76	76	76	76	76	76	456
Spending Plan by Fund									
Drainage and Wastewater Fund		59	0	0	0	0	0	0	59
Total:		59	0	0	0	0	0	0	59

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Emergency Rehabilitation**

BCL/Program Name:	Rehabilitation	<b>BCL/Program Code:</b>	C370B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/1998
Project ID:	C3705	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This ongoing project provides emergency sewer response to collapsed mainlines, surface street subsidence or voids resulting from leaking pipes, and storm-related incidents in Seattle, as well as emergency rehabilitation to drainage pipes that collapse, cause surface problems, or otherwise endanger public health or welfare. Typical improvements may include, but are not limited to, rehabilitation or replacement of structurally damaged pipes that caused the emergency and restoring surrounding areas. Rehabilitation or replacement quickly corrects the situation, avoids repeat incident, and extends the life of the asset.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	10,357	1,070	598	598	598	598	598	598	15,014
Total:	10,357	1,070	598	598	598	598	598	598	15,014
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	10,357	1,070	598	598	598	598	598	598	15,014
Total*:	10,357	1,070	598	598	598	598	598	598	15,014
O & M Costs (Savings)			150	150	150	150	150	150	901
Spending Plan by Fund									
Drainage and Wastewater Fund		1,539	598	598	598	598	598	598	5,126
Total:		1,539	598	598	598	598	598	598	5,126

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Emergency Storms - DWF**

<b>BCL/Program Name:</b>	Shared Cost Projects	<b>BCL/Program Code:</b>	C410B
Project Type:	Rehabilitation or Restoration	Start Date:	Q3/2007
Project ID:	C4120-DWF	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program 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 program will now serve as a placeholder for any future storm events.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	4,506	100	100	100	100	100	100	100	5,206
Total:	4,506	100	100	100	100	100	100	100	5,206
Fund Appropriations/Allo	ocations								
Drainage and Wastewater Fund	4,506	100	100	100	100	100	100	100	5,206
Total*:	4,506	100	100	100	100	100	100	100	5,206
O & M Costs (Savings)			52	52	52	52	52	52	312

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **First Hill Streetcar - DWF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2010
Project ID:	C4130-DWF	End Date:	Q4/2020
Location:	First Hill		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This project plans and relocates drainage and wastewater facilities that will be impacted by the SDOT-led First Hill Streetcar project, which will connect major employment centers on First Hill to the regional light rail system stations on Capitol Hill and in the International District. Currently this project is in the planning phase and no specific capitalizable betterments have been identified for the 2014-2019 timeframe but if they are, necessary funding will be requested.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	100	400	600	1,200	400	0	0	2,700
Total:	0	100	400	600	1,200	400	0	0	2,700
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	0	100	400	600	1,200	400	0	0	2,700
Total*:	0	100	400	600	1,200	400	0	0	2,700
O & M Costs (Savings)			27	27	27	27	27	27	162

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Future CSO Projects**

BCL/Program Name:	Combined Sewer Overflows	<b>BCL/Program Code:</b>	C360B
Project Type:	Improved Facility	Start Date:	Q1/2015
Project ID:	C3612	End Date:	Q4/2025
Location:			
Neighborhood Plan:	Not in Neighborhood Plan	<b>Council District:</b>	
Neighborhood District:		Urban Village:	

This program is for future combined sewer overflow (CSO) reduction projects that will be identified through the CSO Long-Term Control Plan (LTCP). Future projects are most likely to include underground storage projects, wastewater lift station improvements, and/or wastewater conveyance system improvements. Planning for the projects will begin around 2015, and the projects should complete their construction by 2025.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	6,709	6,709	5,032	12,580	12,580	27,834	71,444
Total:	0	0	6,709	6,709	5,032	12,580	12,580	27,834	71,444
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	0	0	6,709	6,709	5,032	12,580	12,580	27,834	71,444
Total*:	0	0	6,709	6,709	5,032	12,580	12,580	27,834	71,444
O & M Costs (Savings)			714	714	714	714	714	714	4,287

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Green Stormwater Infrastructure Program**

BCL/Program Name:	Combined Sewer Overflows	BCL/Program Code:	C360B
Project Type:	New Facility	Start Date:	Q1/2011
Project ID:	C3610	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	6,976	6,302	9,635	5,123	6,111	4,185	2,500	2,500	43,332
Total:	6,976	6,302	9,635	5,123	6,111	4,185	2,500	2,500	43,332
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	6,976	6,302	9,635	5,123	6,111	4,185	2,500	2,500	43,332
Total*:	6,976	6,302	9,635	5,123	6,111	4,185	2,500	2,500	43,332
O & M Costs (Savings)			433	433	433	433	433	433	2,600
Spending Plan by Fund									
Drainage and Wastewater Fund		4,498	9,635	5,123	6,111	4,185	2,500	2,500	34,551
Total:		4,498	9,635	5,123	6,111	4,185	2,500	2,500	34,551

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Heavy Equipment Purchases - DWF

<b>BCL/Program Name:</b>	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C4116-DWF	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program 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 program is one of three SPU fund-specific heavy equipment CIP programs.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	8,622	2,915	6,000	2,200	2,200	2,200	2,200	2,450	28,787
Total:	8,622	2,915	6,000	2,200	2,200	2,200	2,200	2,450	28,787
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	8,622	2,915	6,000	2,200	2,200	2,200	2,200	2,450	28,787
Total*:	8,622	2,915	6,000	2,200	2,200	2,200	2,200	2,450	28,787
O & M Costs (Savings)			288	288	288	288	288	0	1,439
Spending Plan by Fund									
Drainage and Wastewater Fund		1,723	6,000	2,200	2,200	2,200	2,200	2,450	18,973
Total:		1,723	6,000	2,200	2,200	2,200	2,200	2,450	18,973

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

Integrated	<b>Control Monit</b>	toring Program	- DWF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Investment	Start Date:	Q1/2002
Project ID:	C4108-DWF	End Date:	Q4/2019
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
N. 1. 1. 1		T	NL (
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program 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 program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	14,755	800	500	250	250	250	250	250	17,305
Total:	14,755	800	500	250	250	250	250	250	17,305
Fund Appropriations/Allo	ocations								
Drainage and Wastewater Fund	14,755	800	500	250	250	250	250	250	17,305
Total*:	14,755	800	500	250	250	250	250	250	17,305
O & M Costs (Savings)			173	173	173	173	173	173	1,038

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Knickerbocker Floodplain Improvements

BCL/Program Name:	Protection of Beneficial Uses	<b>BCL/Program Code:</b>	C333B
Project Type:	Rehabilitation or Restoration	Start Date:	Q3/2012
Project ID:	C3383	End Date:	Q4/2015
Location:			
Neighborhood Plan:	Not in Neighborhood Plan	<b>Council District:</b>	
Neighborhood District:		Urban Village:	

This project provides design, permits and construction of a floodplain restoration project on the south branch of Thornton Creek to contribute to reduced system-wide stream-side flooding and improve instream and riparian habitat and water quality. Project elements include stream realignment, floodplain excavation, installation of a hyporheic zone (a subsurface volume of sediment and porous space adjacent to a stream through which stream water readily exchanges), replacement of a pedestrian bridge, and riparian plantings. This project is consistent with a number of long-term plans (including the DWW Urban Watershed Strategy, 2004 Mayor's Aquatic Ecology Strategy, and 1999 Thornton Creek Watershed Action Plan) and follows the path mapped out by the Thornton Creek Confluence project which also increases floodplain area to provide stream water storage.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	561	1,868	138	0	0	0	0	0	2,567
Total:	561	1,868	138	0	0	0	0	0	2,567
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	561	1,868	138	0	0	0	0	0	2,567
Total*:	561	1,868	138	0	0	0	0	0	2,567
O & M Costs (Savings)			26	26	26	26	26	26	154
Spending Plan by Fund									
Drainage and Wastewater Fund		1,620	138	0	0	0	0	0	1,758
Total:		1,620	138	0	0	0	0	0	1,758

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

Localized Floo	d Control	<b>Program</b>

BCL/Program Name:	Flooding, Sewer Back-up, and Landslides	BCL/Program Code:	C380B
Project Type:	New Facility	Start Date:	Q1/2007
Project ID:	C3802	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	5
Neighborhood District:	Northwest	Urban Village:	Bitter Lake Village

This ongoing program provides flood control and local drainage and wastewater projects in under-served parts of Seattle to improve system capacity or increase the existing level of service. Candidate projects are identified through claims, complaints, studies, and field investigations. Drainage and Landslide Spot projects are also included within this program. The Localized Flood Control Program improves Drainage and Wastewater levels of service.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	6,349	5,309	3,195	5,002	4,741	4,656	4,575	4,497	38,323
Total:	6,349	5,309	3,195	5,002	4,741	4,656	4,575	4,497	38,323
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	6,349	5,309	3,195	5,002	4,741	4,656	4,575	4,497	38,323
Total*:	6,349	5,309	3,195	5,002	4,741	4,656	4,575	4,497	38,323
O & M Costs (Savings)			383	383	383	383	383	383	2,299
Spending Plan by Fund									
Drainage and Wastewater Fund		3,859	3,195	5,002	4,741	4,656	4,575	4,497	30,525
Total:		3,859	3,195	5,002	4,741	4,656	4,575	4,497	30,525

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Long Term Control Plan

<b>BCL/Program Name:</b>	Combined Sewer Overflows	<b>BCL/Program Code:</b>	C360B
Project Type:	New Facility	Start Date:	Q3/2008
Project ID:	C3604	End Date:	Q4/2025
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This program 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 CSO overflows, 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 Program also includes a Programmatic SEPA EIS (Note: includes the Alaskan Way Viaduct & Seawall Program C4102). The Plan and EIS will be submitted to EPA/ Washington State Department of Ecology for approval in 2015 and will include all City of Seattle CSO basins except existing CSO Projects at Windermere, Genesee, Henderson and Central Waterfront (except as noted).

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources			, i		·				
Drainage and Wastewater Rates	32,218	4,510	1,980	1,000	1,000	1,000	1,000	1,000	43,708
Total:	32,218	4,510	1,980	1,000	1,000	1,000	1,000	1,000	43,708
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	32,218	4,510	1,980	1,000	1,000	1,000	1,000	1,000	43,708
Total*:	32,218	4,510	1,980	1,000	1,000	1,000	1,000	1,000	43,708
O & M Costs (Savings)			437	437	437	437	437	437	2,622
Spending Plan by Fund									
Drainage and Wastewater Fund		2,775	1,980	1,000	1,000	1,000	1,000	1,000	9,755
Total:		2,775	1,980	1,000	1,000	1,000	1,000	1,000	9,755

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Flooding, Sewer Back-up, and Landslides	BCL/Program Code:	C380B
Project Type:	New Facility	Start Date:	Q1/2007
Project ID:	C3805	End Date:	Q2/2014
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Central	Urban Village:	Not in an Urban Village

#### **Madison Valley Long Term Solution**

This project provides stormwater flood control facilities to greatly reduce the potential for flooding in the Madison Valley area, especially in the vicinity of 30th Ave E. and E. John St, and in the area of 29th Ave E. and E. Madison St. Work will include construction of a large stormwater pipe in the NW section of the Madison Valley basin, a new stormwater storage facility in Washington Park, and an expanded stormwater retention area at 30th Ave E. and E. John St.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	34,896	50	0	0	0	0	0	0	34,946
Total:	34,896	50	0	0	0	0	0	0	34,946
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	34,896	50	0	0	0	0	0	0	34,946
Total*:	34,896	50	0	0	0	0	0	0	34,946
O & M Costs (Savings)			349	349	349	349	349	349	2,097
Spending Plan by Fund									
Drainage and Wastewater Fund		1,478	0	0	0	0	0	0	1,478
Total:		1,478	0	0	0	0	0	0	1,478

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.
BCL/Program Name:	Flooding, Sewer Back-up, and Landslides	BCL/Program Code:	C380B
Project Type:	Improved Facility	Start Date:	Q1/2012
Project ID:	C3808	End Date:	Q4/2014
Location:	35th AVE NE/NE 105th ST/NE 110th ST		
Neighborhood Plan:	Not in a Neighborhood Plan	Council District:	5
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

#### Meadowbrook Pond Sediment Management

The project provides for dredging of sediment in Meadowbrook Pond and modifying existing structures to improve functionality of the facility. These tasks will improve the maintenance operations and the cost efficiency and management of Meadowbrook Pond by reducing flow volume, sediments, and contaminants; capturing sediments more efficiently to improve maintenance and worker safety; improving dredging methods; developing definitive maintenance triggers; modifying structures to manage debris, improving flood control; expanding bypass capacity; and increasing water quality in the pond and downstream.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	3,935	31	0	0	0	0	0	0	3,966
Total:	3,935	31	0	0	0	0	0	0	3,966
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	3,935	31	0	0	0	0	0	0	3,966
Total*:	3,935	31	0	0	0	0	0	0	3,966
O & M Costs (Savings)			40	40	40	40	40	40	238
Spending Plan by Fund									
Drainage and Wastewater Fund		32	0	0	0	0	0	0	32
Total:		32	0	0	0	0	0	0	32

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Mercer Corridor Project East Phase - DWF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2007
Project ID:	C4114-DWF	End Date:	Q4/2014
Location:	South Lake Union		
Neighborhood Plan:	South Lake Union	<b>Council District:</b>	7/3
Neighborhood District:	Lake Union	Urban Village:	South Lake Union

This program funds the repair, relocation, protection, and upgrade of drainage and wastewater infrastructure related to the redevelopment of the South Lake Union neighborhood. Program work includes, but is not limited to, flow modeling and development of green roofs. This effort identifies SPU drainage and wastewater system direct impacts, opportunities for system improvements, and cost responsibility. This program also funds planning-level coordination with other city departments on projects within the South Lake Union area.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	6,294	50	0	0	0	0	0	0	6,344
Total:	6,294	50	0	0	0	0	0	0	6,344
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	6,294	50	0	0	0	0	0	0	6,344
Total*:	6,294	50	0	0	0	0	0	0	6,344
O & M Costs (Savings)			63	63	63	63	63	63	381

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Mercer Corridor Project West Phase - DWF

BCL/Program Name:	Shared Cost Projects	<b>BCL/Program Code:</b>	C410B
Project Type:	Improved Facility	Start Date:	Q1/2010
Project ID:	C4133-DWF	End Date:	Q4/2015
Location:	Mercer St/Elliot Ave W/Dexter Ave N		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This project provides drainage and wastewater utility improvements and relocations related to the Mercer Corridor project, West phase. The project will convert Mercer Street to a two-way street between Dexter Ave. and Elliott Ave. West. The Mercer underpass at Aurora Ave will be widened to allow for six travel lanes and a bicycle/pedestrian shared-use path between Dexter Ave and 5th Ave North. Roy Street, between Aurora and Queen Anne Ave., will also be converted to a twoway street with on-road bicycle lanes.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	244	649	276	0	0	0	0	0	1,169
Total:	244	649	276	0	0	0	0	0	1,169
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	244	649	276	0	0	0	0	0	1,169
Total*:	244	649	276	0	0	0	0	0	1,169
O & M Costs (Savings)			12	12	12	12	12	12	70
Spending Plan by Fund									
Drainage and Wastewater Fund		512	276	0	0	0	0	0	788
Total:		512	276	0	0	0	0	0	788

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Meter Replacement - DWF

BCL/Program Name:	Shared Cost Projects	<b>BCL/Program Code:</b>	C410B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2004
Project ID:	C4101-DWF	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This ongoing program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	4,584	585	575	585	594	608	613	623	8,766
Total:	4,584	585	575	585	594	608	613	623	8,766
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	4,584	585	575	585	594	608	613	623	8,766
Total*:	4,584	585	575	585	594	608	613	623	8,766
O & M Costs (Savings)			88	88	88	88	88	88	526
Spending Plan by Fund									
Drainage and Wastewater Fund		534	575	585	594	608	613	623	4,132
Total:		534	575	585	594	608	613	623	4,132

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Rehabilitation	BCL/Program Code:	C370B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/1998
Project ID:	C3707	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

#### No Dig Pipe & Maintenance Rehabilitation

This ongoing project provides trenchless technology to reline wastewater pipe in Seattle. Generally, prioritized critical sewer pipe that is intact though leaking, and very near the end of its useful life, is relined by a specialized vendor. Installation of the liner extends pipe segment life for more than fifty years.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	13,804	1,500	2,500	7,500	13,500	15,000	15,000	17,000	85,804
Total:	13,804	1,500	2,500	7,500	13,500	15,000	15,000	17,000	85,804
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	13,804	1,500	2,500	7,500	13,500	15,000	15,000	17,000	85,804
Total*:	13,804	1,500	2,500	7,500	13,500	15,000	15,000	17,000	85,804
O & M Costs (Savings)			858	858	858	858	858	858	5,148
Spending Plan by Fund									
Drainage and Wastewater Fund		1,571	2,500	7,500	13,500	15,000	15,000	17,000	72,071
Total:		1,571	2,500	7,500	13,500	15,000	15,000	17,000	72,071

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Operational Facility - Construction - DWF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2004
Project ID:	C4106-DWF	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

This ongoing facilities program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	9,064	761	1,163	5,275	4,712	3,213	3,077	1,806	29,070
Total:	9,064	761	1,163	5,275	4,712	3,213	3,077	1,806	29,070
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	9,064	761	1,163	5,275	4,712	3,213	3,077	1,806	29,070
Total*:	9,064	761	1,163	5,275	4,712	3,213	3,077	1,806	29,070
O & M Costs (Savings)			261	291	291	291	291	291	1,714
Spending Plan by Fund									
Drainage and Wastewater Fund		884	1,163	5,275	4,712	3,213	3,077	1,806	20,129
Total:		884	1,163	5,275	4,712	3,213	3,077	1,806	20,129

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

# **Operational Facility - Other - DWF**

BCL/Program Name:	Shared Cost Projects	<b>BCL/Program Code:</b>	C410B
Project Type:	Improved Facility	Start Date:	Q1/2006
Project ID:	C4115-DWF	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
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Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing facilities program provides funding to purchase, replace, or install new building materials or building equipment 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, drainage systems, prefabricated buildings, storage buildings, and fencing.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	329	150	300	100	0	0	0	0	879
Total:	329	150	300	100	0	0	0	0	879
Fund Appropriations/Allo	ocations								
Drainage and Wastewater Fund	329	150	300	100	0	0	0	0	879
Total*:	329	150	300	100	0	0	0	0	879
O & M Costs (Savings)			9	9	9	9	9	9	53

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Operations Control Center - DWF**

<b>BCL/Program Name:</b>	Shared Cost Projects	<b>BCL/Program Code:</b>	C410B
Project Type:	Improved Facility	Start Date:	Q1/2003
Project ID:	C4105-DWF	End Date:	ONGOING
Location:	2700 Airport Way S		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	2
Neighborhood District:	Greater Duwamish	Urban Village:	Duwamish

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,458	806	340	60	206	310	400	222	4,802
Total:	2,458	806	340	60	206	310	400	222	4,802
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	2,458	806	340	60	206	310	400	222	4,802
Total*:	2,458	806	340	60	206	310	400	222	4,802
O & M Costs (Savings)			48	48	48	48	48	48	288
Spending Plan by Fund									
Drainage and Wastewater Fund		493	340	60	206	310	400	222	2,031
Total:		493	340	60	206	310	400	222	2,031

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Rehabilitation or Restoration	Start Date:	Q2/2008
Project ID:	C4123-DWF	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

#### **Other Major Transportation Projects - DWF**

This ongoing program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	1	568	160	600	296	750	750	50	3,175
Total:	1	568	160	600	296	750	750	50	3,175
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	1	568	160	600	296	750	750	50	3,175
Total*:	1	568	160	600	296	750	750	50	3,175
O & M Costs (Savings)			32	32	32	32	32	32	191
Spending Plan by Fund									
Drainage and Wastewater Fund		430	160	600	296	750	750	50	3,036
Total:		430	160	600	296	750	750	50	3,036

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

# **Outfall Rehabilitation Program**

BCL/Program Name:	Rehabilitation	<b>BCL/Program Code:</b>	C370B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2012
Project ID:	C3708	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This ongoing program 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 program will investigate the condition of each of the outfalls and complete an options analysis, followed by design, construction, and closeout activities.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total		
<b>Revenue Sources</b>			·								
Drainage and Wastewater Rates	504	1,893	946	1,500	500	500	500	500	6,843		
Total:	504	1,893	946	1,500	500	500	500	500	6,843		
Fund Appropriations/Alloc	Fund Appropriations/Allocations										
Drainage and Wastewater Fund	504	1,893	946	1,500	500	500	500	500	6,843		
Total*:	504	1,893	946	1,500	500	500	500	500	6,843		
O & M Costs (Savings)			68	68	68	68	68	68	411		
Spending Plan by Fund											
Drainage and Wastewater Fund		1,565	946	1,500	500	500	500	500	6,011		
Total:		1,565	946	1,500	500	500	500	500	6,011		

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Point Sewer Pipe Rehabilitation**

<b>BCL/Program Name:</b>	Rehabilitation	BCL/Program Code:	C370B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2003
Project ID:	C3704	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

This ongoing project provides complex point sewer rehabilitation of sewer mains that are greater than seventeen feet deep in the downtown corridor, landslide prone areas, or difficult access areas. Failed or nonfunctional sections of pipe are assessed and prioritized for rehabilitation through one or two public works contracts. This project also provides point sewer rehabilitation of sewer mains that are less than seventeen feet deep in non-arterial Seattle roadways. In these cases, failed or nonfunctional sections of pipe are assessed and prioritized for rehabilitation by Seattle Public Utilities field operation crews. Sewer trouble spots and voids are addressed while increasing the sewer main asset life and function.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	46,769	4,236	2,152	3,152	3,152	3,152	3,152	3,152	68,918
Total:	46,769	4,236	2,152	3,152	3,152	3,152	3,152	3,152	68,918
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	46,769	4,236	2,152	3,152	3,152	3,152	3,152	3,152	68,918
Total*:	46,769	4,236	2,152	3,152	3,152	3,152	3,152	3,152	68,918
O & M Costs (Savings)			686	686	686	686	686	686	4,115
Spending Plan by Fund									
Drainage and Wastewater Fund		5,500	2,152	3,152	3,152	3,152	3,152	3,152	23,413
Total:		5,500	2,152	3,152	3,152	3,152	3,152	3,152	23,413

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Pump Station and Force Main Improvements**

BCL/Program Name:	Rehabilitation	BCL/Program Code:	C370B
Project Type:	New Facility	Start Date:	Q1/2008
Project ID:	C3703	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

This ongoing program 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 program enhances and extends the useful life of the existing pump stations which, in turn, protects water quality.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
Revenue Sources										
Drainage and Wastewater Rates	9,774	3,251	4,183	3,338	3,020	3,020	3,020	3,020	32,626	
Total:	9,774	3,251	4,183	3,338	3,020	3,020	3,020	3,020	32,626	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Drainage and Wastewater Fund	9,774	3,251	4,183	3,338	3,020	3,020	3,020	3,020	32,626	
Total*:	9,774	3,251	4,183	3,338	3,020	3,020	3,020	3,020	32,626	
O & M Costs (Savings)			326	326	326	326	326	326	1,958	
Spending Plan by Fund										
Drainage and Wastewater Fund		2,785	4,183	3,338	3,020	3,020	3,020	3,020	22,386	
Total:		2,785	4,183	3,338	3,020	3,020	3,020	3,020	22,386	

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# **S Genesee Combined Sewer Overflow**

BCL/Program Name:	Combined Sewer Overflows	BCL/Program Code:	C360B
Project Type:	New Facility	Start Date:	Q1/2005
Project ID:	C3608	End Date:	Q4/2015
Location:	S. Genesee St.		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	Southeast	Urban Village:	Not in an Urban Village

This project provides construction of combined sewer overflows (CSO) facilities in the Genesee 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	23,898	14,506	480	0	0	0	0	0	38,883
Total:	23,898	14,506	480	0	0	0	0	0	38,883
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	23,898	14,506	480	0	0	0	0	0	38,883
Total*:	23,898	14,506	480	0	0	0	0	0	38,883
O & M Costs (Savings)			389	389	389	389	389	389	2,333
Spending Plan by Fund									
Drainage and Wastewater Fund		13,535	480	0	0	0	0	0	14,015
Total:		13,535	480	0	0	0	0	0	14,015

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Combined Sewer Overflows	<b>BCL/Program Code:</b>	C360B
Project Type:	New Facility	Start Date:	Q1/2005
Project ID:	C3609	End Date:	Q4/2018
Location:	S Henderson St.		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	2
Neighborhood District:	Southeast	Urban Village:	Not in an Urban Village

#### **S Henderson Combined Sewer Overflow Storage**

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. Maintenance costs will not begin until after 2020, when the project completes construction.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
Revenue Sources										
Drainage and Wastewater Rates	18,421	8,206	26,761	23,548	1,149	17	0	0	78,103	
Total:	18,421	8,206	26,761	23,548	1,149	17	0	0	78,103	
Fund Appropriations/Allocations										
Drainage and Wastewater Fund	18,421	8,206	26,761	23,548	1,149	17	0	0	78,103	
Total*:	18,421	8,206	26,761	23,548	1,149	17	0	0	78,103	
O & M Costs (Savings)			781	781	781	781	781	781	4,686	
Spending Plan by Fund										
Drainage and Wastewater Fund		9,247	26,761	23,548	1,149	17	0	0	60,723	
Total:		9,247	26,761	23,548	1,149	17	0	0	60,723	

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Flooding, Sewer Back-up, and Landslides	BCL/Program Code:	C380B
Project Type:	New Investment	Start Date:	Q2/2002
Project ID:	C3804	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

#### **Sanitary Sewer Overflow Capacity**

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	5,531	3,340	4,361	4,916	5,631	5,743	5,858	5,975	41,356
Total:	5,531	3,340	4,361	4,916	5,631	5,743	5,858	5,975	41,356
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	5,531	3,340	4,361	4,916	5,631	5,743	5,858	5,975	41,356
Total*:	5,531	3,340	4,361	4,916	5,631	5,743	5,858	5,975	41,356
O & M Costs (Savings)			414	414	414	414	414	414	2,481
Spending Plan by Fund									
Drainage and Wastewater Fund		2,461	4,361	4,916	5,631	5,743	5,858	5,975	34,947
Total:		2,461	4,361	4,916	5,631	5,743	5,858	5,975	34,947

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Security Improvements - DWF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2007
Project ID:	C4113-DWF	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

This ongoing program 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. This program enhances protection of SPU's critical infrastructure and addresses vulnerabilities identified in U.S. Environmental Protection Agency (EPA) mandated vulnerability assessments.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total		
<b>Revenue Sources</b>											
Drainage and Wastewater Rates	1,061	178	180	105	105	105	255	105	2,093		
Total:	1,061	178	180	105	105	105	255	105	2,093		
Fund Appropriations/Alloc	Fund Appropriations/Allocations										
Drainage and Wastewater Fund	1,061	178	180	105	105	105	255	105	2,093		
Total*:	1,061	178	180	105	105	105	255	105	2,093		
O & M Costs (Savings)			21	21	21	21	21	21	126		
Spending Plan by Fund											
Drainage and Wastewater Fund		230	180	105	105	105	255	105	1,085		
Total:		230	180	105	105	105	255	105	1,085		

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Sediment Remediation - DWF**

BCL/Program Name:	Sediments	BCL/Program Code:	C350B
Project Type:	Rehabilitation or Restoration	Start Date:	Q4/2000
Project ID:	C3503	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	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	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
<b>Revenue Sources</b>										
Drainage and Wastewater Rates	38,020	3,423	4,797	2,420	3,778	21,315	19,264	17,140	110,155	
Total:	38,020	3,423	4,797	2,420	3,778	21,315	19,264	17,140	110,155	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Drainage and Wastewater Fund	38,020	3,423	4,797	2,420	3,778	21,315	19,264	17,140	110,155	
Total*:	38,020	3,423	4,797	2,420	3,778	21,315	19,264	17,140	110,155	
O & M Costs (Savings)			1,102	1,102	1,102	1,102	1,102	1,102	6,609	
Spending Plan by Fund										
Drainage and Wastewater Fund		3,176	4,797	2,420	3,778	21,315	19,264	17,140	71,887	
Total:		3,176	4,797	2,420	3,778	21,315	19,264	17,140	71,887	

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Sewer Full Line Replacements**

BCL/Program Name:	Rehabilitation	<b>BCL/Program Code:</b>	C370B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2001
Project ID:	C3702	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This ongoing program provides for replacement of existing sewer lines citywide with pipes of the same diameter and capacity. Closed circuit television inspections identify defects in sewer mainlines, and each mainline defect is catalogued in an SPU database and assigned a priority that reflects the urgency of repair. Replacement is done by pipe-bursting methods that avoid extended pavement cutting.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	0	250	250	250	250	250	250	250	1,750
Total:	0	250	250	250	250	250	250	250	1,750
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	0	250	250	250	250	250	250	250	1,750
Total*:	0	250	250	250	250	250	250	250	1,750
O & M Costs (Savings)			18	18	18	18	18	18	105
Spending Plan by Fund									
Drainage and Wastewater Fund		485	250	250	250	250	250	250	1,985
Total:		485	250	250	250	250	250	250	1,985

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Sound Transit - North Link - DWF

BCL/Program Name:	Shared Cost Projects	<b>BCL/Program Code:</b>	C410B
Project Type:	New Facility	Start Date:	Q1/2012
Project ID:	C4135-DWF	End Date:	Q4/2020
Location:	Various		
Neighborhood Plan:	In more than one Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This program funds relocation, replacement, and protection of drainage and wastewater infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the third segment of their electrical light rail transit system that includes 4.3 mile light rail extension, three additional stations, and other supporting facilities from the University of Washington to Northgate.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	58	108	400	75	75	50	50	50	867
Total:	58	108	400	75	75	50	50	50	867
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	58	108	400	75	75	50	50	50	867
Total*:	58	108	400	75	75	50	50	50	867
O & M Costs (Savings)			9	9	9	9	9	9	52
Spending Plan by Fund									
Drainage and Wastewater Fund		259	400	75	75	50	50	50	959
Total:		259	400	75	75	50	50	50	959

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Sound Transit – University Link - DWF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Facility	Start Date:	Q1/2007
Project ID:	C4110-DWF	End Date:	Q2/2016
Location:	Various		
Neighborhood Plan:	In more than one Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This program funds relocation, replacement, and protection of drainage and wastewater infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the second segment of their electrical light rail transit system that includes 3.15 miles of tunnel, two additional stations, and other supporting facilities from downtown to the University of Washington.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	334	127	30	10	0	0	0	0	501
Total:	334	127	30	10	0	0	0	0	501
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	334	127	30	10	0	0	0	0	501
Total*:	334	127	30	10	0	0	0	0	501
O & M Costs (Savings)			5	5	5	5	5	5	30
Spending Plan by Fund									
Drainage and Wastewater Fund		101	30	10	0	0	0	0	142
Total:		101	30	10	0	0	0	0	142

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Sound Transit-East Link

DCI /Dus sus IN Service	Shared Cast Drain sta	BCI /December Code	C410D
BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Facility	Start Date:	Q2/2013
Project ID:	C4122-DWF	End Date:	Q4/2020
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This program funds relocation, replacement, and protection of drainage and wastewater infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the next segment of their electrical light rail transit system that includes 14 mile light rail extension, 10 additional stations total (one in Seattle) and other supporting facilities from the International District (ID) across I-90 to Bellevue/Redmond.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	40	38	10	100	50	25	0	263
Total:	0	40	38	10	100	50	25	0	263
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	0	40	38	10	100	50	25	0	263
Total*:	0	40	38	10	100	50	25	0	263
O & M Costs (Savings)			3	3	3	3	3	3	16
Spending Plan by Fund									
Drainage and Wastewater Fund		53	38	10	100	50	25	0	275
Total:		53	38	10	100	50	25	0	275

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### South Park Pump Station

BCL/Program Name:	Flooding, Sewer Back-up, and Landslides	BCL/Program Code:	C380B
Project Type:	New Facility	Start Date:	Q3/2008
Project ID:	C3806	End Date:	Q4/2019
Location:	698 S Riverside DR/Holden/Austin		
Neighborhood Plan:	South Park	<b>Council District:</b>	1
Neighborhood District:	Greater Duwamish	Urban Village:	Duwamish

This project constructs a pump station (PS) and water quality facility (WQF) in South Park. The PS allows the existing storm drain trunk to meet the 2004 Comprehensive Drainage Plan level of service and allows future projects expanding the collection system to address flooding complaints. The WQF will treat most stormwater flows from the basin, reducing pollutant loading to the Duwamish. Flows over 11 CFS will bypass the WQF and be pumped directly to the river.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	6,495	1,500	1,500	5,000	6,000	5,500	2,527	2,000	30,523
Total:	6,495	1,500	1,500	5,000	6,000	5,500	2,527	2,000	30,523
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	6,495	1,500	1,500	5,000	6,000	5,500	2,527	2,000	30,523
Total*:	6,495	1,500	1,500	5,000	6,000	5,500	2,527	2,000	30,523
O & M Costs (Savings)			305	305	305	305	305	305	1,831
Spending Plan by Fund									
Drainage and Wastewater Fund		726	1,500	5,000	6,000	5,500	2,527	2,000	23,253
Total:		726	1,500	5,000	6,000	5,500	2,527	2,000	23,253

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Street Sweeping for Water Quality**

BCL/Program Name:	Protection of Beneficial Uses	<b>BCL/Program Code:</b>	C333B
Project Type:	New Investment	Start Date:	Q1/2011
Project ID:	C3363	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This program provides for a cost-effective, significant reduction in the potentially toxic pollutant load carried by stormwater runoff discharged by SPU's storm drain system to Puget Sound using new, high efficiency street sweeping technology. The Program is a partnership between Seattle Public Utilities, who sets the program direction, provides water quality expertise, and funding for the portion of routes that drain to the municipal separate storm sewer system (MS4), which discharges directly to our receiving waters and Seattle Department of Transportation, who provides operational expertise, street sweeping services, and funding for the portion of the routes that drain to the combined sewer system (CSS).

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	193	90	765	400	0	0	0	0	1,448
Total:	193	90	765	400	0	0	0	0	1,448
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	193	90	765	400	0	0	0	0	1,448
Total*:	193	90	765	400	0	0	0	0	1,448
O & M Costs (Savings)			14	14	14	14	14	14	87
Spending Plan by Fund									
Drainage and Wastewater Fund		110	765	400	0	0	0	0	1,275
Total:		110	765	400	0	0	0	0	1,275

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

# **Taylor Creek Culvert Replacement**

BCL/Program Name:	Protection of Beneficial Uses	<b>BCL/Program Code:</b>	C333B
Project Type:	New Facility	Start Date:	Q4/1999
Project ID:	C3353	End Date:	Q4/2016
Location:	Taylor Creek at Rainier Ave S		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	2
Neighborhood District:	Southeast	Urban Village:	Not in an Urban Village

This project provides funding to replace the barrier culvert at Rainier Avenue South for lower Taylor Creek. Design alternatives include rerouting and other habitat improvements. The Taylor Creek culvert at Rainier Avenue South is the number one fish-passage barrier in the city that blocks access to a majority of spawning and rearing habitat in upper Taylor Creek to all species of salmonids.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>					·				
Drainage and Wastewater Rates	1,835	747	800	895	3,247	3,615	291	143	11,573
Total:	1,835	747	800	895	3,247	3,615	291	143	11,573
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	1,835	747	800	895	3,247	3,615	291	143	11,573
Total*:	1,835	747	800	895	3,247	3,615	291	143	11,573
O & M Costs (Savings)			116	116	116	116	116	116	694
Spending Plan by Fund									
Drainage and Wastewater Fund		378	800	895	3,247	3,615	291	143	9,369
Total:		378	800	895	3,247	3,615	291	143	9,369

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Flooding, Sewer Back-up, and Landslides	BCL/Program Code:	C380B
Project Type:	Improved Facility	Start Date:	Q1/2008
Project ID:	C3811	End Date:	Q4/2015
Location:	Thornton Creek		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

#### **Thornton Confluence Improvement**

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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,135	4,485	861	42	0	0	0	0	7,523
Total:	2,135	4,485	861	42	0	0	0	0	7,523
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	2,135	4,485	861	42	0	0	0	0	7,523
Total*:	2,135	4,485	861	42	0	0	0	0	7,523
O & M Costs (Savings)			75	75	75	75	75	75	451
Spending Plan by Fund									
Drainage and Wastewater Fund		4,291	861	42	0	0	0	0	5,194
Total:		4,291	861	42	0	0	0	0	5,194

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Protection of Beneficial Uses	BCL/Program Code:	C333B
Project Type:	New Facility	Start Date:	Q1/2003
Project ID:	C3333	End Date:	Q4/2017
Location:	1st and 2nd Ave NW/NW 120th St/NW 122nd St		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	5
Neighborhood District:	Northwest	Urban Village:	Not in an Urban Village

#### Venema Creek Natural Drainage System

This project provides stormwater flow control and water quality treatment using a Natural Drainage System approach within the Venema Creek sub basin of Pipers Creek. Proposed design uses the concept developed for the Pinehurst Natural Drainage System project (parking on only one side of road, large bioretention swale on the other side of road). Alley improvements using permeable pavements are also being considered. The project focus is retrofitting stormwater runoff from the 105-acre residential and commercial land area in an effort to reduce the effect of stormwater flow on the aquatic biota within Venema Creek.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	3,165	1,116	2,142	268	108	0	0	0	6,800
Total:	3,165	1,116	2,142	268	108	0	0	0	6,800
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	3,165	1,116	2,142	268	108	0	0	0	6,800
Total*:	3,165	1,116	2,142	268	108	0	0	0	6,800
O & M Costs (Savings)			68	68	68	68	68	68	408
Spending Plan by Fund									
Drainage and Wastewater Fund		1,071	2,142	268	108	0	0	0	3,590
Total:		1,071	2,142	268	108	0	0	0	3,590

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Water Quality & Flow Improvements

BCL/Program Name:	Protection of Beneficial Uses	<b>BCL/Program Code:</b>	C333B
Project Type:	New Facility	Start Date:	Q1/2017
Project ID:	C3393	End Date:	ONGOING
Location:			
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one
			Urban Village

This program is for future Protection of Beneficial Uses projects that will protect and improve water quality and flow in creeks and other habitats. Types of projects will include natural drainage system (NDS) projects, creek daylighting projects, fish passage improvements, stream/creek habitat improvements, and passive or active stormwater treatment facilities.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>	·								
Drainage and Wastewater Rates	0	0	1,100	1,741	3,473	5,531	5,952	6,202	23,999
Total:	0	0	1,100	1,741	3,473	5,531	5,952	6,202	23,999
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	0	0	1,100	1,741	3,473	5,531	5,952	6,202	23,999
Total*:	0	0	1,100	1,741	3,473	5,531	5,952	6,202	23,999
O & M Costs (Savings)			240	240	240	240	240	240	1,440

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BCL/Program Name:	Combined Sewer Overflows	BCL/Program Code:	C360B
Project Type:	New Facility	Start Date:	Q2/2002
Project ID:	C3605	End Date:	Q4/2015
Location:	NE 65th St./Sand Point Way NE		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	4
Neighborhood District:	Northeast	Urban Village:	Not in an Urban Village

This project provides construction of off-line storage and best management practice combined sewer overflow (CSO) facilities in the Windermere area in the northeast part of Seattle. Facilities will be built to meet water quality standards for Lake Washington in accordance with state and federal regulations. The project also intends to meet requirements of the City's current CSO National Pollutant Discharge Elimination System (NPDES) permit.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	38,711	12,915	1,300	0	0	0	0	0	52,926
Total:	38,711	12,915	1,300	0	0	0	0	0	52,926
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	38,711	12,915	1,300	0	0	0	0	0	52,926
Total*:	38,711	12,915	1,300	0	0	0	0	0	52,926
O & M Costs (Savings)			389	389	389	389	389	389	2,333
Spending Plan by Fund									
Drainage and Wastewater Fund		9,333	1,300	0	0	0	0	0	10,633
Total:		9,333	1,300	0	0	0	0	0	10,633

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Yesler Terrace-DWF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Facility	Start Date:	Q1/2014
Project ID:	C4136-DWF	End Date:	Q4/2014
Location:	Yesler and Broadway		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	3
Neighborhood District:	Central	Urban Village:	Not in an Urban Village

Seattle Housing Authority (SHA) is leading a major project to replace Yesler Terrace's aging public housing buildings with a new mixed-income community. This project provides funding for SPU Drainage and Wastewater infrastructure investments in association with this project.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Drainage and Wastewater Rates	0	2,800	0	0	0	0	0	0	2,800
Total:	0	2,800	0	0	0	0	0	0	2,800
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	0	2,800	0	0	0	0	0	0	2,800
Total*:	0	2,800	0	0	0	0	0	0	2,800
O & M Costs (Savings)			28	28	28	28	28	28	168

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

# 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 infrastructure:

- Two recycling and disposal stations (transfer stations)
- Two household hazardous waste facilities
- A fleet of trucks and heavy equipment
- Three closed landfills previously used by the City

The Solid Waste Fund (SWF) 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 \$105 million (excluding Technology) for 2015 through 2020.

The largest anticipated projects over this time period are:

- Rebuilding of the North Transfer Station (2013-2016)
- Constructing a recycling/re-use facility at the South Transfer Station (2015-2018)
- Completing the South Park Development Project (2015-2018)

These projects comprise roughly 70% of the CIP. Other significant projects include the possible replacement of or improvements to the South Household Hazardous Waste facility and the department's annual fleet and equipment investment.

SPU funds a majority of the SWF CIP through the sale of revenue bonds. By using debt financing through bond sales, SPU is able to distribute the cost of large, expensive system improvements over several years to better address equity between current and future ratepayers. SPU plans Solid Waste Bond issues in 2014, 2015 and 2017. Cash and repayment of debt come from rate-based charges to customers whose garbage, recycling, and organics are handled by the City's solid waste infrastructure and services. Solid Waste rates were last set in 2012 for the period of 2013-2016.

# 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.

<u>Logistics</u>: Solid Waste must continue handling solid waste while it reconstructs the North Transfer Station. With the new South Transfer Station on line, Solid Waste is now focused on reconstruction of the North Transfer Station (NTS). To adequately manage waste, the old South Transfer Station will be kept in operation until the North Transfer Station is complete. This will require diversion of waste from the northern station to the old STS. In addition, it will require Solid Waste to maintain the aged STS through 2016.

<u>Financial Challenges:</u> Reconstruction of the North Transfer Station along with site remediation efforts puts considerable short-term financial strain on the Solid Waste Fund. At the same time that Solid Waste 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.

To address the funding needed for transfer station reconstructions and site remediation, SPU is planning bond sales in 2014, 2015, and 2017. The cost to repay or service these bonds will be paid through ratebased revenues, which also support the utility's 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 moderate rate increases and operational efficiencies.

# **Thematic Priorities**

The SPU Solid Waste Fund places a high priority on managing environmental issues and addressing regulatory requirements related to current and historic Solid Waste facilities while protecting human health and safety.

- <u>Managing environmental issues and regulations:</u> 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 high gas levels are detected, SPU implements improvements to extract the excess gas or otherwise mitigate the environmental impacts of the gas increase. Also, the new transfer stations will greatly reduce the environmental impacts of the existing stations on neighboring communities.
- <u>Protecting human health and safety:</u> The old South and existing North transfer stations are at the end of their useful lives. Safety standards at these older facilities will be greatly enhanced once the rebuilds are complete, resulting in greater safety for the public and SPU employees. Well-functioning and efficient transfer stations are part of a solid waste collection system that protects human health.

# **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 regulations).

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 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 North and South Transfer Station Rebuild Phase 2 projects.
- 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 North and South Transfer Station Rebuild projects as well as the Household Hazardous Waste Relocation project.
- **Other Factors:** Other important factors include high net present value or cost-effectiveness, social or environmental benefits which were not otherwise recognized, a project already in progress or near completion, limited time opportunity, demonstration projects, community visibility, outside funding.

**Every project is rated against each criterion**. Criteria ratings are then considered in determining an overall project priority ranking, using expert judgment (rather than a formula). Priority rankings for the CIP are determined by the leads for each Line of Business (LOB), with reviews by key internal stakeholders. The ranking scheme and criteria are the same for all LOBs, and are approved by the SPU Director 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.

# Aligning Infrastructure with Planned Growth

The City's Comprehensive Plan incorporates the Solid Waste six-year CIP by reference to provide the infrastructure needed for the solid waste system. In addition, investments in solid waste infrastructure support the Comprehensive Plan's sustainability and zero waste goals.

The City's transfer stations are part of a comprehensive waste management system that aims to accommodate population growth while reducing the overall amount of solid waste sent to landfills. The transfer stations balance the capital cost of station construction with convenience and collection cost minimization. This is reflected in optimizing a north end transfer station and a south end transfer station as opposed to one large central station or multiple small neighborhood-based stations.

The South Park Development project will result in an approved cleanup of the historic landfill and put approximately 20 acres of unused property back into productive use and create economic opportunities adjacent to the South Park Urban Village.

# **Future Projects on the Horizon**

In the seven years prior to the initiation of the transfer station rebuild projects, the Solid Waste Fund CIP Budget averaged \$4.7 million annually. In the years when the transfer station rebuild projects are included, the SWF CIP Budget averages \$37 million annually. Once the stations are completed, the core Solid Waste Fund CIP is expected to return to the lower, historical levels.

Once the North 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 on the new facilities.

# **CIP Revenue Source**

The majority of Solid Waste CIP is funded through bonds and to a lesser extent current cash contributions, the mix of which is determined by the financial health of the Solid Waste Fund and the best value to ratepayers. Both of these funding sources are paid by Solid Waste ratepayers. 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 two transfer station replacement projects. These projects are the primary drivers of CIP spending and have required rate increases to finance them. The currently approved rate increase for 2015 is 4.3%.

# **CIP Spending by Major Category**

Solid Waste Fund	2014	2015	2016	2017	2018	2019	Total
New Facilities	49,393	23,377	15,684	1,157	-	-	89,610
Rehabilitation & Heavy Equipment	30	430	30	30	415	15	950
Shared Cost Projects	2,193	3,147	2,301	2,212	2,288	1,879	14,021
Technology	6,781	4,663	2,443	2,352	1,482	2,346	20,067
Total	58,396	31,617	20,459	5,751	4,185	4,240	124,647

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

**New Facilities:** This program plans, designs, and constructs new facilities to enhance solid waste operations. In 2014, SPU will continue the implementation of its Solid Waste Facilities Master Plan, which features a two-station configuration. The key project drivers of the New Facilities budget category are the North Transfer Station Rebuild and South Park Development projects.

The changes in this BCL are due to programmatic reductions in the South Park Development project and the SRDS HHW Relocation project. The estimate for the South Park Development Project was reduced to reflect the results of the Remedial Investigation/Feasibility Study regarding reductions in the scope of the anticipated site cleanup. The SRDS HHW Relocation project was reduced because the project scope changed from a full facility relocation/rebuild to modifications required to keep the facility in its existing location.

**Rehabilitation and Heavy Equipment:** This program designs and constructs projects to repair and/or upgrade solid waste facilities. The key driver of this budget category is the Kent Highlands Landfill program. Landfill improvements include the replacement of existing flares, drainage improvements, groundwater protection and water treatment as required by State environmental policy.

**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.
The proposed budget for this BCL will increase in 2015 and 2016. The key drivers in 2015 are the SWF SCADA project, Operational Facility Construction, and an increase in the 1% for Arts program that dedicates 1% of applicable project funding toward art in public facilities and spaces. The Operational Facility Construction is related to Action Plan OE-06 SPU Facilities Management in the Strategic Business Plan. It will be used to address shortages of adequate space for existing and future operational functions for SPU staff.

**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 2015 and 2016 address SPU's key initiatives, which focus on:

- Improving Internal Controls,
- Improving Productivity and Performance
- Improving Customer Service
- Transitioning from Data Rich to Knowledge Rich
- Improving Project Delivery

SPU will focus technology spending on the highest priority business needs. Increased spending in 2015 reflects major business changes in Project Delivery & Performance driving the need for several new technology systems as well as improved integration of the various systems in place. The decrease in 2016 is mainly due to the completion of the Utility Customer Billing System/CCSS project.

BCL/Program Name/									
Project Title & ID	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
New Facilities					BCI	L/Program	n Code:		C230B
Miscellaneous Station Improvements (C2303)	2,776	600	600	581	100	100	0	0	4,757
North Transfer Station Rebuild (C2306)	10,427	25,219	46,440	3,057	0	0	0	0	85,143
South Park Development (C2304)	3,280	744	796	10,302	6,108	0	0	0	21,229
South Recycling Disposal Station Household Hazardous Waste Relocation (C2305)	0	0	57	236	476	57	0	0	825
South Transfer Station Rebuild (C2302)	76,630	1,500	1,500	9,200	9,000	1,000	0	0	98,830
New Facilities	93,113	28,063	49,393	23,377	15,684	1,157	0	0	210,786
Rehabilitation and Heavy Equi	pment				BCI	L/Program	n Code:		C240B
Kent Highlands Landfill (C2402)	1,102	20	15	15	15	15	415	15	1,612
Midway Landfill (C2403)	109	25	15	415	15	15	0	0	594
Rehabilitation and Heavy Equipment	1,211	45	30	430	30	30	415	15	2,206
Shared Cost Projects					BCI	L/Program	n Code:		C410B
1% for Art – SWF (C4118- SWF)	852	292	476	124	111	2	1	0	1,859
Heavy Equipment Purchases - SWF (C4116-SWF)	5,975	1,380	1,200	1,200	1,200	1,200	1,200	1,200	14,555
Integrated Control Monitoring Program - SWF (C4108-SWF)	0	200	200	150	0	0	0	0	550
Operational Facility - Construction - SWF (C4106- SWF)	2,554	80	245	1,560	833	848	825	570	7,514
Operations Control Center - SWF (C4105-SWF)	702	152	2	18	63	68	68	14	1,086
Security Improvements - SWF (C4113-SWF)	890	135	70	95	95	95	195	95	1,670
Shared Cost Projects	10,974	2,239	2,193	3,147	2,301	2,212	2,288	1,879	27,234
Technology					BCI	L/Program	n Code:		C510B
Asset Information Management (C5407)	1,076	460	364	363	379	389	225	270	3,525
Customer Contact & Billing (C5402)	230	3,632	4,048	1,938	572	450	188	375	11,432
Enterprise Information Management (C5403)	23	472	357	383	165	205	394	190	2,189
IT Infrastructure (C5404)	452	524	338	465	293	555	330	458	3,414

# **Project Summary**

\*Amounts in thousands of dollars

		IIVJ			5				
BCL/Program Name/									
Project Title & ID	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Project Delivery & Performance (C5405)	788	533	925	763	716	426	345	304	4,800
Science & System Performance (C5406)	87	181	750	750	319	327	0	750	3,164
Technology	2,656	5,802	6,781	4,663	2,443	2,352	1,482	2,346	28,524
Department Total*:	107,955	36,149	58,396	31,617	20,459	5,751	4,185	4,240	268,750

# **Project Summary**

\*Amounts in thousands of dollars

Fund Name & Code	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Solid Waste Fund (45010)	107,955	36,149	58,396	31,617	20,459	5,751	4,185	4,240	268,750
Department Total*:	107,955	36,149	58,396	31,617	20,459	5,751	4,185	4,240	268,750

# **Fund Summary**

\*Amounts in thousands of dollars

### 1% for Art – SWF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2001
Project ID:	C4118-SWF	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program 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 program. Funds contributed to the 1% for Art program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources								· · ·	
Solid Waste Rates	852	292	476	124	111	2	1	0	1,859
Total:	852	292	476	124	111	2	1	0	1,859
Fund Appropriations/Alloc	cations								
Solid Waste Fund	852	292	476	124	111	2	1	0	1,859
Total*:	852	292	476	124	111	2	1	0	1,859
O & M Costs (Savings)			19	19	19	19	19	19	112
Spending Plan by Fund									
Solid Waste Fund		260	476	124	111	2	1	0	974
Total:		260	476	124	111	2	1	0	974

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Heavy Equipment Purchases - SWF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C4116-SWF	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program 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, class 8 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 four SPU fund-specific heavy equipment CIP projects.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Solid Waste Rates	5,975	1,380	1,200	1,200	1,200	1,200	1,200	1,200	14,555
Total:	5,975	1,380	1,200	1,200	1,200	1,200	1,200	1,200	14,555
Fund Appropriations/Alloc	ations								
Solid Waste Fund	5,975	1,380	1,200	1,200	1,200	1,200	1,200	1,200	14,555
Total*:	5,975	1,380	1,200	1,200	1,200	1,200	1,200	1,200	14,555
O & M Costs (Savings)			146	146	146	146	146	146	873
Spending Plan by Fund									
Solid Waste Fund		410	1,200	1,200	1,200	1,200	1,200	1,200	7,610
Total:		410	1,200	1,200	1,200	1,200	1,200	1,200	7,610

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Integrated Control Monitoring Program - SWF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Investment	Start Date:	Q1/2013
Project ID:	C4108-SWF	End Date:	Q4/2014
Location:	Kent, WA		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Solid Waste Rates	0	200	200	150	0	0	0	0	550
Total:	0	200	200	150	0	0	0	0	550
Fund Appropriations/Alloc	cations								
Solid Waste Fund	0	200	200	150	0	0	0	0	550
Total*:	0	200	200	150	0	0	0	0	550
O & M Costs (Savings)			6	6	6	6	6	6	33
Spending Plan by Fund									
Solid Waste Fund		0	200	150	0	0	0	0	350
Total:		0	200	150	0	0	0	0	350

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### Kent Highlands Landfill

BCL/Program Name:	Rehabilitation and Heavy Equipment	BCL/Program Code:	C240B
Project Type:	Improved Facility	Start Date:	Q1/2005
Project ID:	C2402	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
Neighborhood District:	Not in a Neighborhood District	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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Solid Waste Rates	1,102	20	15	15	15	15	415	15	1,612
Total:	1,102	20	15	15	15	15	415	15	1,612
Fund Appropriations/Alloc	cations								
Solid Waste Fund	1,102	20	15	15	15	15	415	15	1,612
Total*:	1,102	20	15	15	15	15	415	15	1,612
O & M Costs (Savings)			16	16	16	16	16	16	97
Spending Plan by Fund									
Solid Waste Fund		15	15	15	15	15	415	15	505
Total:		15	15	15	15	15	415	15	505

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Midway Landfill**

BCL/Program Name:	Rehabilitation and Heavy Equipment	BCL/Program Code:	C240B
Project Type:	Improved Facility	Start Date:	Q1/2005
Project ID:	C2403	End Date:	Q4/2016
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	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 as well as retrofits to the existing Midway flare facility. 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.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Solid Waste Rates	109	25	15	415	15	15	0	0	594
Total:	109	25	15	415	15	15	0	0	594
Fund Appropriations/Allo	cations								
Solid Waste Fund	109	25	15	415	15	15	0	0	594
Total*:	109	25	15	415	15	15	0	0	594
O & M Costs (Savings)			5,940	5,940	5,940	5,940	5,940	5,940	35,640
Spending Plan by Fund									
Solid Waste Fund		15	15	415	15	15	0	0	475
Total:		15	15	415	15	15	0	0	475

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Miscellaneous Station Improvements**

BCL/Program Name:	New Facilities	BCL/Program Code:	C230B
Project Type:	Improved Facility	Start Date:	Q4/2003
Project ID:	C2303	End Date:	Q4/2015
Location:	8101 2nd Ave S		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	1
Neighborhood District:	Greater Duwamish	Urban Village:	Duwamish

This project provides repairs to the existing City solid waste transfer stations. The existing City solid waste transfer stations were constructed in the mid-1960s and are nearing the end of their useful lives. This funding allows short term actions to ensure that these facilities operate reliably and safely, pending construction of the new North and South Transfer Stations. The work includes drainage modifications, emergency equipment rehabilitation, and temporary replacement/refurbishment of aging crew facilities.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Solid Waste Rates	2,776	600	600	581	100	100	0	0	4,757
Total:	2,776	600	600	581	100	100	0	0	4,757
Fund Appropriations/Allo	cations								
Solid Waste Fund	2,776	600	600	581	100	100	0	0	4,757
Total*:	2,776	600	600	581	100	100	0	0	4,757
O & M Costs (Savings)			48	48	48	48	48	48	285
Spending Plan by Fund									
Solid Waste Fund		100	600	581	100	100	0	0	1,481
Total:		100	600	581	100	100	0	0	1,481

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **North Transfer Station Rebuild**

BCL/Program Name:	New Facilities	BCL/Program Code:	C230B
Project Type:	New Facility	Start Date:	Q1/2006
Project ID:	C2306	End Date:	Q4/2016
Location:	1350 N 34th St		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	4
Neighborhood District:	Lake Union	Urban Village:	Not in an Urban Village

This project provides for the replacement of the existing North Recycling and Disposal Station (NRDS) in Wallingford. The existing station was built in 1967 and is outdated and nearing the end of its useful life. The project includes the demolition of the existing transfer station and warehouse building on the adjacent property to the east. The new transfer station campus includes the tipping floor, recycling facility, educational center, new administrative building and employee facilities.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Solid Waste Rates	10,427	25,219	46,440	3,057	0	0	0	0	85,143
Total:	10,427	25,219	46,440	3,057	0	0	0	0	85,143
Fund Appropriations/Allocations									
Solid Waste Fund	10,427	25,219	46,440	3,057	0	0	0	0	85,143
Total*:	10,427	25,219	46,440	3,057	0	0	0	0	85,143
O & M Costs (Savings)			851	851	851	851	851	851	5,109
Spending Plan by Fund									
Solid Waste Fund		21,901	46,440	3,057	0	0	0	0	71,398
Total:		21,901	46,440	3,057	0	0	0	0	71,398

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Operational Facility - Construction - SWF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2004
Project ID:	C4106-SWF	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

This ongoing facilities program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Solid Waste Rates	2,554	80	245	1,560	833	848	825	570	7,514
Total:	2,554	80	245	1,560	833	848	825	570	7,514
Fund Appropriations/Allocations									
Solid Waste Fund	2,554	80	245	1,560	833	848	825	570	7,514
Total*:	2,554	80	245	1,560	833	848	825	570	7,514
O & M Costs (Savings)			73	73	75	75	75	75	447
Spending Plan by Fund									
Solid Waste Fund		74	245	1,560	833	848	825	570	4,953
Total:		74	245	1,560	833	848	825	570	4,953

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### **Operations Control Center - SWF**

<b>BCL/Program Name:</b>	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	ONGOING
Project ID:	C4105-SWF	End Date:	ONGOING
Location:	2700 Airport Way S		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	2
N I I. D. 4		TT	
Neighborhood District:	Greater Duwamish	Urban Village:	Duwamish

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Solid Waste Rates	702	152	2	18	63	68	68	14	1,086
Total:	702	152	2	18	63	68	68	14	1,086
Fund Appropriations/Alloc	cations								
Solid Waste Fund	702	152	2	18	63	68	68	14	1,086
Total*:	702	152	2	18	63	68	68	14	1,086
O & M Costs (Savings)			11	11	11	11	11	11	65
Spending Plan by Fund									
Solid Waste Fund		147	2	18	63	68	68	14	378
Total:		147	2	18	63	68	68	14	378

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Security Improvements - SWF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2007
Project ID:	C4113-SWF	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

This ongoing program 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. In addition, this program enhances protection of SPU's critical infrastructure and addresses vulnerabilities identified in U.S. Environmental Protection Agency (EPA) mandated vulnerability assessments.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Solid Waste Rates	890	135	70	95	95	95	195	95	1,670
Total:	890	135	70	95	95	95	195	95	1,670
Fund Appropriations/Alloc	cations								
Solid Waste Fund	890	135	70	95	95	95	195	95	1,670
Total*:	890	135	70	95	95	95	195	95	1,670
O & M Costs (Savings)			17	17	17	17	17	17	100
Spending Plan by Fund									
Solid Waste Fund		170	70	95	95	95	195	95	815
Total:		170	70	95	95	95	195	95	815

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### South Park Development

BCL/Program Name:	New Facilities	<b>BCL/Program Code:</b>	C230B
Project Type:	Improved Facility	Start Date:	Q2/2006
Project ID:	C2304	End Date:	Q4/2017
Location:	8100 2nd Ave S		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	1
Neighborhood District:	Greater Duwamish	Urban Village:	Duwamish

This project complies with a Washington State Department of Ecology Agreed Order to conduct a Remedial Investigation and Feasibility Study of the historic South Park Landfill site and covers investigation and eventual remediation of the landfill site to protect human health and the environment. Final cost allocation among potentially liable parties will occur at a later stage.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Solid Waste Rates	3,280	744	796	10,302	6,108	0	0	0	21,229
Total:	3,280	744	796	10,302	6,108	0	0	0	21,229
Fund Appropriations/Alloc	cations								
Solid Waste Fund	3,280	744	796	10,302	6,108	0	0	0	21,229
Total*:	3,280	744	796	10,302	6,108	0	0	0	21,229
O & M Costs (Savings)			212	212	212	212	212	212	1,274
Spending Plan by Fund									
Solid Waste Fund		1,893	796	10,302	6,108	0	0	0	19,099
Total:		1,893	796	10,302	6,108	0	0	0	19,099

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### South Recycling Disposal Station Household Hazardous Waste Relocation

BCL/Program Name:	New Facilities	BCL/Program Code:	C230B
Project Type:	Improved Facility	Start Date:	Q1/2015
Project ID:	C2305	End Date:	Q4/2018
Location:	8105 5th Ave S		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Greater Duwamish	Urban Village:	Duwamish

This project relocates the South Household Hazardous Waste (SHHW) facility and makes facility improvements required by code and ensures other South Recycling and Disposal Station (SRDS) redevelopment efforts are not constrained. Work on the North Transfer Station and South Transfer Station projects must be completed before this project can start.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Solid Waste Rates	0	0	57	236	476	57	0	0	825
Total:	0	0	57	236	476	57	0	0	825
Fund Appropriations/Allo	ocations								
Solid Waste Fund	0	0	57	236	476	57	0	0	825
Total*:	0	0	57	236	476	57	0	0	825
O & M Costs (Savings)			8	8	8	8	8	8	50

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### South Transfer Station Rebuild

BCL/Program Name:	New Facilities	<b>BCL/Program Code:</b>	C230B
Project Type:	New Facility	Start Date:	Q1/2006
Project ID:	C2302	End Date:	Q4/2017
Location:	8100 2nd AVE S		
Neighborhood Plan:	Duwamish	<b>Council District:</b>	1
Neighborhood District:	Greater Duwamish	Urban Village:	Duwamish

This program provides for the replacement of the existing South Recycling and Disposal Station (SRDS) in South Park. The existing solid waste transfer station was built in 1966 and is outdated and nearing the end of its useful life. The design and construction of replacement facilities is a two phase project. The first phase includes the development of a new transfer station and associated facilities adjacent to the existing facility on a 9.1 acre parcel to the northwest of the existing station. The second phase includes demolition of the existing facilities and development of new recycling and reuse facilities, a household hazardous waste facility, and other utility facilities.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Solid Waste Rates	76,630	1,500	1,500	9,200	9,000	1,000	0	0	98,830
Total:	76,630	1,500	1,500	9,200	9,000	1,000	0	0	98,830
Fund Appropriations/Alloc	ations								
Solid Waste Fund	76,630	1,500	1,500	9,200	9,000	1,000	0	0	98,830
Total*:	76,630	1,500	1,500	9,200	9,000	1,000	0	0	98,830
O & M Costs (Savings)			988	988	988	988	988	988	5,930
Spending Plan by Fund									
Solid Waste Fund		570	1,500	9,200	9,000	1,000	0	0	21,270
Total:		570	1,500	9,200	9,000	1,000	0	0	21,270

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

# Seattle Public Utilities Technology Projects

BCL/Program Name/									
Project Title & ID	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Technology	BCL/Program Code:								
Asset Information Management (C5407)	7,278	3,315	2,258	2,344	2,358	2,415	2,000	2,300	24,267
Customer Contact & Billing (C5402)	1,483	12,095	12,675	5,873	3,552	3,369	1,250	2,500	42,797
Enterprise Information Management (C5403)	143	2,426	2,365	2,550	1,100	1,350	2,600	1,250	13,784
IT Infrastructure (C5404)	3,526	3,709	2,250	3,100	1,950	3,700	2,200	3,050	23,484
Project Delivery & Performance (C5405)	5,015	3,627	6,100	5,050	4,750	2,649	2,300	2,000	31,490
Science & System Performance (C5406)	1,155	1,483	2,674	2,341	2,061	2,498	1,000	1,750	14,963
Technology	18,600	26,654	28,323	21,259	15,770	15,980	11,350	12,850	150,786
Department Total*:	18,600	26,654	28,323	21,259	15,770	15,980	11,350	12,850	150,786

# **Project Summary**

\*Amounts in thousands of dollars

				ai	<b>,</b>				
Fund Name & Code	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Drainage and Wastewater Fund (44010)	7,341	10,245	10,498	7,956	6,149	6,443	4,778	5,081	58,491
Solid Waste Fund (45010)	2,656	5,802	6,781	4,663	2,443	2,352	1,482	2,346	28,524
Water Fund (43000)	8,603	10,607	11,044	8,641	7,178	7,185	5,090	5,423	63,771
Department Total*:	18,600	26,654	28,323	21,259	15,770	15,980	11,350	12,850	150,786

## **Fund Summary**

\*Amounts in thousands of dollars

### **Asset Information Management**

BCL/Program Name:	Technology	<b>BCL/Program Code:</b>	C510B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C5407	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program provides applications, upgrades and data management tools in support of SPU's work and asset management programs. Several new and updated technology solutions designed to enhance the efficiency and effectiveness of drinking water, sewer, drainage, and solid waste operations are planned. These include the development of an Asset Data Register in support of performance analytics, and dispatch and emergency response systems. Other related, but as yet undetermined projects will be undertaken to further enhance safety and improve responsiveness of SPU's utility operations.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	3,725	1,510	1,048	1,048	1,093	1,120	910	1,042	11,495
Drainage and Wastewater Rates	2,477	1,345	847	934	886	905	865	988	9,247
Solid Waste Rates	1,076	460	364	363	379	389	225	270	3,525
Total:	7,278	3,315	2,258	2,344	2,358	2,415	2,000	2,300	24,267
Fund Appropriations/Allo	cations								
Water Fund	3,725	1,510	1,048	1,048	1,093	1,120	910	1,042	11,495
Drainage and Wastewater Fund	2,477	1,345	847	934	886	905	865	988	9,247
Solid Waste Fund	1,076	460	364	363	379	389	225	270	3,525
Total*:	7,278	3,315	2,258	2,344	2,358	2,415	2,000	2,300	24,267
O & M Costs (Savings)			243	243	243	243	243	243	1,456
Spending Plan by Fund									
Water Fund		1,070	1,048	1,048	1,093	1,120	910	1,042	7,331
Drainage and Wastewater Fund		951	847	934	886	905	865	988	6,376
Solid Waste Fund		458	364	363	379	389	225	270	2,448
Total:		2,480	2,258	2,344	2,358	2,415	2,000	2,300	16,155

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Customer Contact & Billing**

BCL/Program Name:	Technology	BCL/Program Code:	C510B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C5402	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This program will provide 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, a replacement of the Consolidated Customer Service System and new technology solutions for enhanced customer contact management. This program is intended to enhance customer service, customer contact, and ensure accurate Utility billing.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	663	4,414	4,384	1,997	1,648	1,689	550	1,100	16,446
Drainage and Wastewater Rates	590	4,048	4,243	1,938	1,332	1,230	513	1,025	14,918
Solid Waste Rates	230	3,632	4,048	1,938	572	450	188	375	11,432
Total:	1,483	12,095	12,675	5,873	3,552	3,369	1,250	2,500	42,797
Fund Appropriations/Allo	cations								
Water Fund	663	4,414	4,384	1,997	1,648	1,689	550	1,100	16,446
Drainage and Wastewater Fund	590	4,048	4,243	1,938	1,332	1,230	513	1,025	14,918
Solid Waste Fund	230	3,632	4,048	1,938	572	450	188	375	11,432
Total*:	1,483	12,095	12,675	5,873	3,552	3,369	1,250	2,500	42,797
O & M Costs (Savings)			428	428	428	428	428	428	2,568
Spending Plan by Fund									
Water Fund		3,872	4,384	1,997	1,648	1,689	550	1,100	15,240
Drainage and Wastewater Fund		3,720	4,243	1,938	1,332	1,230	513	1,025	14,001
Solid Waste Fund		3,330	4,048	1,938	572	450	188	375	10,901
Total:		10,922	12,675	5,873	3,552	3,369	1,250	2,500	40,142

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Enterprise Information Management**

BCL/Program Name:	Technology	BCL/Program Code:	C510B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C5403	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This program will provide 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 program enhances SPU's ability to retrieve, share, distribute and manage corporate information.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Water Rates	66	940	1,043	1,123	484	598	1,150	554	5,957
Drainage and Wastewater Rates	54	1,014	965	1,044	451	548	1,056	507	5,638
Solid Waste Rates	23	472	357	383	165	205	394	190	2,189
Total:	143	2,426	2,365	2,550	1,100	1,350	2,600	1,250	13,784
Fund Appropriations/Allo	cations								
Water Fund	66	940	1,043	1,123	484	598	1,150	554	5,957
Drainage and Wastewater Fund	54	1,014	965	1,044	451	548	1,056	507	5,638
Solid Waste Fund	23	472	357	383	165	205	394	190	2,189
Total*:	143	2,426	2,365	2,550	1,100	1,350	2,600	1,250	13,784
O & M Costs (Savings)			138	138	138	138	138	138	827
Spending Plan by Fund									
Water Fund		940	1,043	1,123	484	598	1,150	554	5,891
Drainage and Wastewater Fund		864	965	1,044	451	548	1,056	507	5,434
Solid Waste Fund		322	357	383	165	205	394	190	2,016
Total:		2,126	2,365	2,550	1,100	1,350	2,600	1,250	13,341

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **IT Infrastructure**

BCL/Program Name:	Technology	<b>BCL/Program Code:</b>	C510B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C5404	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	1,630	1,769	990	1,364	858	1,628	968	1,342	10,549
Drainage and Wastewater Rates	1,444	1,415	923	1,271	800	1,517	902	1,251	9,522
Solid Waste Rates	452	524	338	465	293	555	330	458	3,414
Total:	3,526	3,709	2,250	3,100	1,950	3,700	2,200	3,050	23,484
Fund Appropriations/Allo	cations								
Water Fund	1,630	1,769	990	1,364	858	1,628	968	1,342	10,549
Drainage and Wastewater Fund	1,444	1,415	923	1,271	800	1,517	902	1,251	9,522
Solid Waste Fund	452	524	338	465	293	555	330	458	3,414
Total*:	3,526	3,709	2,250	3,100	1,950	3,700	2,200	3,050	23,484
O & M Costs (Savings)			235	235	235	235	235	235	1,409
Spending Plan by Fund									
Water Fund		1,710	990	1,364	858	1,628	968	1,342	8,860
Drainage and Wastewater Fund		1,721	923	1,271	800	1,517	902	1,251	8,384
Solid Waste Fund		509	338	465	293	555	330	458	2,947
Total:		3,940	2,250	3,100	1,950	3,700	2,200	3,050	20,190

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### **Project Delivery & Performance**

BCL/Program Name:	Technology	BCL/Program Code:	C510B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C5405	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program 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 program will result in an improved ability to plan and deliver projects on schedule and within budget.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	2,444	1,701	2,698	2,229	2,095	1,229	1,012	885	14,294
Drainage and Wastewater Rates	1,783	1,393	2,476	2,058	1,939	993	943	811	12,397
Solid Waste Rates	788	533	925	763	716	426	345	304	4,800
Total:	5,015	3,627	6,100	5,050	4,750	2,649	2,300	2,000	31,490
Fund Appropriations/Allo	cations								
Water Fund	2,444	1,701	2,698	2,229	2,095	1,229	1,012	885	14,294
Drainage and Wastewater Fund	1,783	1,393	2,476	2,058	1,939	993	943	811	12,397
Solid Waste Fund	788	533	925	763	716	426	345	304	4,800
Total*:	5,015	3,627	6,100	5,050	4,750	2,649	2,300	2,000	31,490
O & M Costs (Savings)			315	315	315	315	315	315	1,889
Spending Plan by Fund									
Water Fund		1,401	2,698	2,229	2,095	1,229	1,012	885	11,550
Drainage and Wastewater Fund		1,175	2,476	2,058	1,939	993	943	811	10,395
Solid Waste Fund		487	925	763	716	426	345	304	3,966
Total:		3,063	6,100	5,050	4,750	2,649	2,300	2,000	25,912

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### Science & System Performance

BCL/Program Name:	Technology	BCL/Program Code:	C510B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C5406	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program 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 program enhances SPU's ability to control water quality and comply with environmental and health regulations.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources								·	
Water Rates	75	272	880	880	1,000	921	500	500	5,029
Drainage and Wastewater Rates	992	1,030	1,044	711	742	1,250	500	500	6,770
Solid Waste Rates	87	181	750	750	319	327	0	750	3,164
Total:	1,155	1,483	2,674	2,341	2,061	2,498	1,000	1,750	14,963
Fund Appropriations/Allo	cations								
Water Fund	75	272	880	880	1,000	921	500	500	5,029
Drainage and Wastewater Fund	992	1,030	1,044	711	742	1,250	500	500	6,770
Solid Waste Fund	87	181	750	750	319	327	0	750	3,164
Total*:	1,155	1,483	2,674	2,341	2,061	2,498	1,000	1,750	14,963
O & M Costs (Savings)			150	150	150	150	150	150	898
Spending Plan by Fund									
Water Fund		735	880	880	1,000	921	500	500	5,416
Drainage and Wastewater Fund		991	1,044	711	742	1,250	500	500	5,738
Solid Waste Fund		424	750	750	319	327	0	750	3,319
Total:		2,149	2,674	2,341	2,061	2,498	1,000	1,750	14,474

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# Seattle Public Utilities Water

## Overview

SPU delivers an average of approximately 120 million gallons of drinking water per day to more than 1.3 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;
- 354.5 million gallons of treated water storage;
- 30 pump stations;
- Approximately 1,900 miles of transmission and distribution system pipelines;
- Over 188,000 meters and service connections;
- More than 21,000 distribution system valves;
- About 18,000 hydrants;
- Monitoring and control systems; and,
- Various buildings and other related facilities.

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

Planned spending in the Water Capital Improvement Program (CIP) is \$395 million over the next six years. Major projects include:

- Seismic retrofits to the correct design flaws at four of the newly buried treated water reservoirs ;
- Morse Lake Pump Plant changes to improve water storage access; and
- Water system improvements associated with transportation projects.

The 2015-2020 Proposed CIP also includes many ongoing programs, such as improving the distribution and transmission system water mains, valves, and pump stations, watershed stewardship and conservation projects and programs, and facilities, vehicles, and heavy equipment investments. By 2017, however, the overall CIP will be reduced, and investments will be substantially focused on rehabilitating and replacing infrastructure for delivery of clean drinking water, with continued watershed stewardship.

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 has updated the Water System Plan through 2018, a Washington Department of Health (WDOH) regulatory requirement due every six years.

## Summary of Upcoming Budget Issues and Challenges

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

<u>Water Conservation</u>: The City of Seattle, Seattle residents, and Seattle's wholesale water partners have worked together to reduce water consumption. As a result, consumption has declined since 1990 and is projected to further decline but at a slower rate. In 2010, consumption was 33% below 1990 levels, despite serving a larger population. Seattle currently has some of the lowest per capita water consumption in the nation. While this accomplishment helps contribute to a sustainable future for the region, it puts financial pressure on the utility because fixed costs, including the costs of the CIP, need to be distributed across fewer units of water sold. This trend also puts pressure on SPU management and employees to deliver services as efficiently as possible.

<u>Transitioning from Major Projects toward Asset Management</u>: 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 (HCP). 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 major projects.

Against the backdrop of these trends, the 2015-2020 Proposed Water CIP has been developed to:

- Provide for water system modifications associated with various Seattle and regional transportation projects.
- Preserve the transmission and distribution systems, as well as 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.
- 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.

## **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. SPU plans to decommission Roosevelt Reservoir, and further evaluate the possibility of decommissioning Volunteer Reservoir. However, permanent actions at these two reservoirs are not expected to occur until enough time has elapsed to observe the water system's performance without them. Additionally, by 2019, SPU will begin the planning and design of new covers on the Lake Forest Park and Bitter Lake reservoirs to replace the existing floating covers that will be nearing 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 Waterman 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 Director 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 are in need of major improvements (such as seismic retrofits) that are avoided, as well as reduces annual operating costs since the level of maintenance is 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.

Some examples of retirements are:

- Richmond Highlands Tanks (decommissioning the smaller of two): \$1.8 million in capital cost savings;
- Myrtle Tank #1: \$900,000 in capital cost savings;
- Roosevelt Reservoir: \$24 million in capital cost savings;
- Volunteer Reservoir retirement is under consideration (\$25 million in potential capital savings since this reservoir would have to be buried if it were kept in service); and,
- Lincoln, Beacon and West Seattle Reservoirs were downsized based on demand analysis.

Some examples of deferrals are:

- Landsburg Flood Passage Improvements to improve woody debris management and performance during high flood flows at Landsburg Diversion (\$5M): Delayed beyond 2020; and
- Cedar Falls Facilities Development to improve buildings and office space at Cedar Falls Headquarters: Deferral of Phase 2 to beyond 2020.

# Aligning Infrastructure with Planned Growth

In its Water System Plan updates, SPU forecasts water demands to meet the growth projections as planned for in Seattle's most recent Comprehensive Plan and ensures that there will be adequate water supply for at least the next 20 years. These growth projections include expected residential and commercial growth into designated Urban Centers and Urban Villages. The 2013 Water System Plan indicates that new sources of supply would not be needed until sometime after 2060.

Growth-based infrastructure needs in Urban Centers and Urban Villages are addressed through specific programs in the Water CIP, including water main extensions, new water connections for new construction, fire flow improvements, and water main rehabilitations. The water distribution system in these areas is fairly robust, and needed improvements are generally located within areas where the land use is changed from single family zoning to a more intensive use needing higher flows for firefighting. Projects containing these improvements are evaluated through a business case process and are prioritized among the other projects in the CIP.

## **Future Projects on the Horizon**

The Water CIP is coming to the end of a 20-year period of investments in major infrastructure projects. These projects have positioned SPU to meet drinking water quality and environmental regulations. Projects have included the Tolt and Cedar Water Treatment Facilities, Tolt Pipeline 2, Reservoir Covering Program, the Cedar River Watershed HCP, and a new Water Quality Laboratory. SPU has also made a major reinvestment in the Supervisory Control and Data Acquisition System which is used to monitor and control the regional and retail water system. However, these investments have also led to increasing debt service payments that constrain future budgets.

The 6-year CIP includes one large project, Morse Lake Pump Plant, and a few special mid-range programs, such as seismic retrofitting of reservoirs, and programs related to transportation projects and improvements to SPU facilities. The Morse Lake Pump Plant project provides for reliable release of

water from Morse Lake into the Cedar River. This is necessary to maintain the supply of drinking water to the region and meet regulatory minimums for the amount of "in-stream flows" in the river to support aquatic habitat, wetlands, riparian vegetation, and water quality. Additionally, by 2019, SPU will begin the planning and design of 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.

As noted above, 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 will be developing a plan that will define recovery time to agreed levels of service and develop a prioritized list of recommended investments to improve resiliency.

Beyond these projects, emphasis will be on asset management based rehabilitation and replacement of distribution system infrastructure (e.g. mains, valves, hydrants, meters). Example of such projects to date are the 3<sup>rd</sup> Ave West PRVs project, which installed new pressure reducing valves (PRVs) in the Ballard neighborhood, and the WM Ship Canal Crossing at 3<sup>rd</sup> Ave West project, which rehabilitates a failing water main (WM) underneath the Ship Canal Bridge. There is significant planning and analysis work involved in applying asset management and determining the appropriate level of CIP versus operating and maintenance work needed for each asset, and shifting the workforce accordingly.

## **CIP Revenue Sources**

SPU's Water CIP is funded largely by Water ratepayers. About 70% of the Water Fund's Operating revenues come from retail ratepayers, split approximately evenly between residential and commercial customers. Another 23% of the Water Fund's overall revenues come from wholesale purveyors who serve surrounding jurisdictions. The remaining 7% consists of non-rate revenue, which includes such things as tap fees received. SPU issues bonds, serviced by ratepayers, which in the current period covers 49% of the CIP, with the remainder funded by cash and loan, 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 the SPU water mains. These "tap fees" are a volatile revenue source, trending with the construction-related sectors of the economy.
# **CIP Spending by Major Category**

Water Fund	2015	2016	2017	2018	2019	2020	Total
DISTRIBUTION	20,713	18,000	21,974	25,041	23,166	23,846	132,739
TRANSMISSION	2,498	3,247	2,055	2,826	2,130	2,914	15,669
WATERSHED STEWARDSHIP	301	551	551	250	250	100	2,003
WATER QUALITY AND TREATMENT	11,417	7,577	234	250	1,430	3,470	24,379
WATER RESOURCES	13,965	23,780	9,480	3,807	3,463	2,856	57,351
HABITAT CONSERVATION	2,604	2,821	2,776	4,766	1,779	2,209	16,954
SHARED COST	21,971	21,214	19,806	16,390	12,897	8,765	101,043
TECHNOLOGY	11,044	8,641	7,178	7,185	5,090	5,423	44,562
Total	84,513	85,831	64,054	60,515	50,204	49,582	394,699

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

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

Reductions in the **Distribution BCL** in 2015 compared to amounts adopted in the 2014-2019 CIP, are due primarily to fewer projects identified for Pump Station Improvements, Tank Improvements and Distribution System Improvements (e.g., fire flow improvements). Reductions in 2016 are due primarily to reductions in those same programs, plus reductions in Waterman Rehabilitation. These reductions are proposed to provide capacity to make water system changes associated with transportation projects. In addition, for both years, anticipated increase in demand for New Taps is offset by a decrease in Service Renewals performed by the same work crews.

**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 water from the treatment facilities to Seattle and to other local utilities that purchase a portion of SPU's supply for their customers.

Reductions in the **Transmission BCL** in 2015 and increases in 2016 compared to amounts adopted in the 2014-2019 CIP are due primarily to delaying work on Tolt Pipeline Improvements while engineering studies are being completed. Additional shifts in cash flows are anticipated for Cathodic Protection as the

program moves to bundling projects for design and construction in every other year for more efficient project delivery.

**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. Three of these projects are being carried out in response to the Endangered Species Act's designation of the Chinook salmon as a threatened species.

- The Cedar River Municipal Watershed is 90,638 acres of land owned by the City of Seattle and provides about 70% of the drinking water used by over 1.3 million people in the greater Seattle area. 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 smaller and lesser known but still essential 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 can provide up to 120 million gallons of drinking water per day.

Increases in 2015 and 2016 in the **Watershed Stewardship BCL** are proposed for remediation of identified soil contamination at various locations in the Cedar River Municipal Watershed. Another contribution to the increase in 2015 is for construction of vault toilet facilities at the Rattlesnake Lake Recreation Area, which is less costly than renting portable toilets.

**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 treatment facilities and burying five reservoirs that contain already treated water that is distributed directly to Seattle residents and wholesale customers for drinking purposes.

Increases in 2015 and 2016 in the **Water Quality & Treatment BCL** result from higher cost projections based on recently completed engineering studies for correcting seismic design flaws at four of the newly buried reservoirs.

**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 the Morse Lake Pump Plant. The Morse Lake Pump Plant is one of the last big investments contemplated in the Water CIP in this decade.

Increases in the **Water Resources BCL** in 2015 and 2016 are a result of two factors. First, the Landsburg Flood Passage Project under the Dam Safety Program has been postponed to sometime after 2020 because of its lower priority. Second, the cash flow for the Morse Lake Pump Plant has been adjusted to reflect the current design and construction schedule, with no change to the total project cost.

**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 70% of the region'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 2015 and 2016 in the **Habitat Conservation Program BCL** are attributable to earlier than anticipated work at Ballard Locks to help protect downstream migrating fish and for a new project to replace the existing broodstock collection weir on the Cedar River with one that performs better under high river flows to meet the requirements for the Cedar Sockeye Hatchery.

**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. In 2015, the Shared Cost program includes funding for a number of interdepartmental projects including continuation of projects initiated under the Bridging the Gap program, Alaskan Way Viaduct and Seawall Replacement, Mercer Corridor and Sound Transit Link Light Rail. Funding is also included for SPU's Heavy Equipment Purchases, the Integrated Control Monitoring Program and a number of smaller projects.

The **Shared Cost Projects BCL** increases in 2015 and 2016. The primary driver for the increase is due to newly identified water main replacement projects associated with projects initiated under the Bridging the Gap program (e.g., SDOT's 23<sup>rd</sup> Ave Corridor Improvements Project).

**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 2015 and 2016 address SPU's key initiatives, which focus on:

- Improving Internal Controls,
- Improving Productivity and Performance
- Improving Customer Service
- Transitioning from Data Rich to Knowledge Rich
- Improving Project Delivery

SPU will focus technology spending on the highest priority business needs. Increased spending in 2015 reflects major business changes in Project Delivery & Performance driving the need for several new technology systems as well as improved integration of the various systems in place. The decrease in 2016 is mainly due to the completion of the Utility Customer Billing System/CCSS project.

BCL/Program Name/									
Project Title & ID	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Distribution					BC	L/Program	m Code:		C110B
Chamber Upgrades - Distribution (C1137)	103	27	27	28	28	29	29	30	300
Distribution System Improvements (C1128)	4,150	3,530	3,370	2,473	2,533	3,500	4,000	4,500	28,056
Distribution System In-Line Gate Valves (C1136)	728	318	325	331	338	345	351	359	3,095
Multiple Utility Relocation (C1133)	5,359	2,629	1,317	271	563	574	586	597	11,897
Pump Station Improvements (C1135)	251	250	125	700	2,225	125	125	125	3,926
Tank Improvements (C1134)	4,165	116	250	750	500	100	550	850	7,281
Water Infrastructure - Distribution System Modifications (C1138)	41	200	100	102	104	106	108	110	871
Water Infrastructure - Hydrant Replacement/Relocation (C1110)	4,780	371	204	208	212	216	221	225	6,438
Water Infrastructure - New Hydrants (C1112)	521	106	61	25	13	13	13	14	765
Water Infrastructure - New Taps (C1113)	101,231	4,900	6,000	6,120	6,242	6,367	6,495	6,624	143,980
Water Infrastructure - Service Renewal (C1109)	100,763	5,837	4,986	5,086	5,188	5,291	5,397	5,505	138,053
Water Infrastructure - Watermain Extensions (C1111)	13,392	796	812	828	845	862	879	897	19,310
Watermain Rehabilitation (C1129)	6,980	4,426	3,137	1,078	3,182	7,513	4,411	4,010	34,737
Distribution	242,464	23,507	20,713	18,000	21,974	25,041	23,166	23,846	398,711
Transmission					BC	L/Program	m Code:		C120B
Cathodic Protection Program (C1208)	735	1,219	1,023	1,040	320	1,060	330	1,080	6,807
Purveyor Meters Replace - SPU (C1206)	1,084	102	200	204	208	213	218	223	2,452
Replace Air Valve Chambers (C1209)	1,648	117	122	125	125	127	130	133	2,526
Transmission Pipelines Rehabilitation (C1207)	3,936	1,376	1,102	1,854	1,377	1,399	1,422	1,445	13,912
Water System Dewatering (C1205)	199	102	50	24	25	27	30	33	490
Transmission	7,602	2,916	2,498	3,247	2,055	2,826	2,130	2,914	26,187

# **Project Summary**

\*Amounts in thousands of dollars

BCL/Program Name/									
Project Title & ID	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Watershed Stewardship					BCI	/Program	n Code:		C130B
Cedar Bridges (C1307)	1,618	1	1	1	1	250	250	100	2,222
Environmental Stewardship (C1301)	3	0	210	100	100	0	0	0	413
Kerriston Road (C1314)	752	17	0	0	0	0	0	0	769
Tolt Bridges (C1308)	0	0	0	450	450	0	0	0	900
Tolt Watershed Restoration (C1310)	312	6	5	0	0	0	0	0	323
Transmission Right-of-Way Improvements (C1316)	117	20	85	0	0	0	0	0	222
Watershed Stewardship	2,802	44	301	551	551	250	250	100	4,849
Water Quality & Treatment					BCI	/Program	n Code:		C140B
Landsburg Chlorination Upgrades (C1417)	0	1,016	0	0	0	0	0	0	1,016
Reservior Covering-Bitter Lake (C1419)	0	0	0	0	0	0	590	1,790	2,380
Reservoir Covering - Beacon (C1408)	42,405	925	103	5,063	0	0	0	0	48,496
Reservoir Covering - Maple Leaf (C1411)	38,629	5,187	7,036	1,008	0	0	0	0	51,860
Reservoir Covering - Myrtle (C1410)	12,369	315	1,256	1,146	0	0	0	0	15,086
Reservoir Covering - West Seattle (C1409)	35,296	4,020	2,717	10	0	0	0	0	42,043
Reservoir Covering-Lake Forest Park (C1418)	0	0	0	0	0	0	590	1,200	1,790
Treatment Facility/Water Quality Improvements (C1413)	208	100	205	250	234	250	250	480	1,978
Water Quality Equipment (C1414)	249	143	101	100	0	0	0	0	593
Water Quality & Treatment	129,156	11,706	11,417	7,577	234	250	1,430	3,470	165,241
Water Resources					BCI	/Program	n Code:		C150B
Dam Safety Program (C1506)	6,721	459	1,025	932	940	800	800	200	11,876
Morse Lake Pump Plant (C1508)	14,948	2,862	9,054	18,232	5,496	0	0	0	50,593
Regional Water Conservation Program (C1504)	19,298	1,803	1,839	1,876	1,914	1,952	1,991	2,031	32,704
Seattle Direct Service Additional Conservation (C1505)	6,402	690	566	577	589	601	613	625	10,662

# **Project Summary**

\*Amounts in thousands of dollars

Project	Summary
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BCL/Program Name/									
Project Title & ID	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Water Supply Flexibility Program (C1507)	333	869	1,480	2,053	0	0	0	0	4,735
Water System Plan - 2019 (C1510)	0	0	0	110	541	454	59	0	1,164
Water Resources	47,702	6,683	13,965	23,780	9,480	3,807	3,463	2,856	111,735
Habitat Conservation Program					BCI	./Program	n Code:		C160B
Ballard Locks Improvements (C1606)	9	0	200	200	200	200	0	536	1,345
Cedar Sockeye Hatchery (C1605)	21,492	205	70	250	444	2,700	130	0	25,291
Downstream Fish Habitat (C1607)	4,991	520	734	795	532	241	0	0	7,813
Instream Flow Management Studies (C1608)	4,917	204	208	212	216	221	225	230	6,433
Stream & Riparian Restoration (C1602)	7,454	394	204	164	165	167	168	169	8,884
Upland Reserve Forest Restoration (C1603)	7,269	283	98	93	95	97	98	100	8,133
Watershed Road Improvement/Decommissionin g (C1601)	11,922	1,004	1,090	1,106	1,124	1,140	1,157	1,175	19,718
Habitat Conservation Program	58,053	2,610	2,604	2,821	2,776	4,766	1,779	2,209	77,616
Shared Cost Projects					BCI	./Program	n Code:		C410B
1% for Art – WF (C4118-WF)	1,225	249	171	93	77	81	117	122	2,135
Alaskan Way Viaduct & Seawall Replacement Program - WF (C4102-WF)	6,598	4,682	5,918	3,478	227	727	238	0	21,869
Bridging the Gap - WF (C4119 -WF)	6,113	2,604	4,802	5,223	604	500	500	500	20,845
Emergency Storms - WF (C4120-WF)	95	128	100	100	100	100	100	100	823
First Hill Streetcar - WF (C4130-WF)	0	150	1,150	2,500	3,400	1,000	0	0	8,200
Heavy Equipment Purchases - WF (C4116-WF)	8,427	3,803	3,006	2,000	2,000	2,000	2,000	2,000	25,236
Integrated Control Monitoring Program - WF (C4108-WF)	7,385	405	480	480	480	480	480	480	10,670
Mercer Corridor Project East Phase - WF (C4114-WF)	3,428	30	0	0	0	0	0	0	3,458
Mercer Corridor Project West Phase - WF (C4133-WF)	162	455	343	0	0	0	0	0	959
Meter Replacement - WF	4,966	634	623	633	643	659	664	674	9,497

\*Amounts in thousands of dollars

BCL/Program Name/									
Project Title & ID	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Operational Facility - Construction - WF (C4106- WF)	15,195	1,492	753	985	2,620	2,860	4,270	1,680	29,855
Operational Facility - Other - WF (C4115-WF)	973	256	400	350	0	0	0	0	1,979
Operations Control Center - WF (C4105-WF)	4,641	1,630	583	122	431	623	783	415	9,227
Other Major Transportation Projects - WF (C4123-WF)	36	265	0	50	50	300	500	500	1,701
Regional Facility - WF (C4107 -WF)	5,437	6,515	5,109	5,750	8,124	6,035	1,870	1,319	40,159
Security Improvements - WF (C4113-WF)	6,228	1,713	1,078	1,050	950	950	1,300	950	14,219
Sound Transit - North Link - WF (C4135-WF)	58	311	516	100	100	75	75	25	1,260
Sound Transit - Water Betterment (C4125)	1,502	50	50	0	0	0	0	0	1,602
Sound Transit – University Link - WF (C4110-WF)	329	137	30	10	0	0	0	0	506
Sound Transit-East Link (C4122-WF)	0	40	53	10	0	0	0	0	103
Yesler Terrace-WF (C4136- WF)	0	200	0	0	0	0	0	0	200
Shared Cost Projects	72,799	25,748	25,164	22,934	19,806	16,390	12,897	8,765	204,502
Technology					BC	L/Program	m Code:		C510B
Asset Information Management (C5407)	3,725	1,510	1,048	1,048	1,093	1,120	910	1,042	11,495
Customer Contact & Billing (C5402)	663	4,414	4,384	1,997	1,648	1,689	550	1,100	16,446
Enterprise Information Management (C5403)	66	940	1,043	1,123	484	598	1,150	554	5,957
IT Infrastructure (C5404)	1,630	1,769	990	1,364	858	1,628	968	1,342	10,549
Project Delivery & Performance (C5405)	2,444	1,701	2,698	2,229	2,095	1,229	1,012	885	14,294
Science & System Performance (C5406)	75	272	880	880	1,000	921	500	500	5,029
Technology	8,603	10,607	11,044	8,641	7,178	7,185	5,090	5,423	63,771
Department Total*:	569,180	83,821	87,706	87,551	64,054	60,515	50,204	49,582	1,052,613

# **Project Summary**

\*Amounts in thousands of dollars

					<b>J</b>				
Fund Name & Code	LTD Actuals	2014	2015	2016	2017	2018	2019	2020	Total
Water Fund (43000)	569,180	83,821	87,706	87,551	64,054	60,515	50,204	49,582	1,052,613
Department Total*:	569,180	83,821	87,706	87,551	64,054	60,515	50,204	49,582	1,052,613

# **Fund Summary**

\*Amounts in thousands of dollars

#### 1% for Art – WF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2001
Project ID:	C4118-WF	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program 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 program. Funds contributed to the 1% for Art program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources								·	
Water Rates	1,225	249	171	93	77	81	117	122	2,135
Total:	1,225	249	171	93	77	81	117	122	2,135
Fund Appropriations/Alloc	cations								
Water Fund	1,225	249	171	93	77	81	117	122	2,135
Total*:	1,225	249	171	93	77	81	117	122	2,135
O & M Costs (Savings)			21	21	21	21	21	21	128
Spending Plan by Fund									
Water Fund		183	171	93	77	81	117	122	844
Total:		183	171	93	77	81	117	122	844

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Alaskan Way Viaduct & Seawall Replacement Program - WF

BCL/Program Name:	Shared Cost Projects	<b>BCL/Program Code:</b>	C410B
Project Type:	New Facility	Start Date:	Q1/2004
Project ID:	C4102-WF	End Date:	Q4/2019
Location:	SR 99 / Battery St		
Neighborhood Plan:	In more than one Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This program 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 Program" (AWVSR Program.) 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	6,598	4,682	5,918	3,478	227	727	238	0	21,869
Total:	6,598	4,682	5,918	3,478	227	727	238	0	21,869
Fund Appropriations/Alloc	cations								
Water Fund	6,598	4,682	5,918	3,478	227	727	238	0	21,869
Total*:	6,598	4,682	5,918	3,478	227	727	238	0	21,869
O & M Costs (Savings)			219	219	219	219	219	219	1,312
Spending Plan by Fund									
Water Fund		5,536	5,918	3,478	227	727	238	0	16,124
Total:		5,536	5,918	3,478	227	727	238	0	16,124

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Ballard Locks Improvements**

BCL/Program Name:	Habitat Conservation Program	BCL/Program Code:	C160B
Project Type:	Improved Facility	Start Date:	Q1/2000
Project ID:	C1606	End Date:	Q4/2020
Location:	NW 54th St /30th Ave NW		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	6
Neighborhood District:	Ballard	Urban Village:	Ballard Interbay

This program 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 program is a requirement of the Cedar River Habitat Conservation Plan (HCP.)

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	9	0	200	200	200	200	0	536	1,345
Total:	9	0	200	200	200	200	0	536	1,345
Fund Appropriations/Al	locations								
Water Fund	9	0	200	200	200	200	0	536	1,345
Total*:	9	0	200	200	200	200	0	536	1,345
O & M Costs (Savings)			13	13	13	13	13	13	81

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

## **Bridging the Gap - WF**

BCL/Program Name:	Shared Cost Projects	<b>BCL/Program Code:</b>	C410B
Project Type:	Improved Facility	Start Date:	Q1/2008
Project ID:	C4119-WF	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	Not in a Naighborhood District	Urban Villaga	Not in an Urban Village
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Orban village

This multi-year, multi-project program 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 "Bridging the Gap" program. SPU assesses the condition of its utility infrastructure at SDOT's project sites and conducts repairs and improvements as needed.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	6,113	2,604	4,802	5,223	604	500	500	500	20,845
Total:	6,113	2,604	4,802	5,223	604	500	500	500	20,845
Fund Appropriations/Allocations									
Water Fund	6,113	2,604	4,802	5,223	604	500	500	500	20,845
Total*:	6,113	2,604	4,802	5,223	604	500	500	500	20,845
O & M Costs (Savings)			208	208	208	208	208	208	1,251
Spending Plan by Fund									
Water Fund		952	4,802	5,223	604	500	500	500	13,081
Total:		952	4,802	5,223	604	500	500	500	13,081

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Cathodic Protection Program**

BCL/Program Name:	Transmission	BCL/Program Code:	C120B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2004
Project ID:	C1208	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	735	1,219	1,023	1,040	320	1,060	330	1,080	6,807
Total:	735	1,219	1,023	1,040	320	1,060	330	1,080	6,807
Fund Appropriations/Alloc	cations								
Water Fund	735	1,219	1,023	1,040	320	1,060	330	1,080	6,807
Total*:	735	1,219	1,023	1,040	320	1,060	330	1,080	6,807
O & M Costs (Savings)			68	68	68	68	68	68	408
Spending Plan by Fund									
Water Fund		516	1,023	1,040	320	1,060	330	1,080	5,369
Total:		516	1,023	1,040	320	1,060	330	1,080	5,369

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Cedar Bridges**

BCL/Program Name:	Watershed Stewardship	<b>BCL/Program Code:</b>	C130B
Project Type:	Improved Facility	Start Date:	Q1/2007
Project ID:	C1307	End Date:	ONGOING
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
		TT 1 T7*11	NT / 1 TT 1 T7'11
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	1,618	1	1	1	1	250	250	100	2,222
Total:	1,618	1	1	1	1	250	250	100	2,222
Fund Appropriations/All	ocations								
Water Fund	1,618	1	1	1	1	250	250	100	2,222
Total*:	1,618	1	1	1	1	250	250	100	2,222
O & M Costs (Savings)			22	22	22	22	22	22	133

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Cedar Sockeye Hatchery**

BCL/Program Name:	Habitat Conservation Program	BCL/Program Code:	C160B
Project Type:	New Facility	Start Date:	Q1/2000
Project ID:	C1605	End Date:	Q2/2016
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
		TT 1 T7411	NT / 1 TT 1 T7'11
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This program provides a sockeye salmon hatchery to replace the interim hatchery on the Cedar River at Landsburg Dam, and includes a broodstock collection facility in Renton near the I-405 overpass, and a state-of-the-art hatchery facility located near the Landsburg Dam. These facilities are a requirement of the Cedar River Habitat Conservation Plan (HCP).

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	21,492	205	70	250	444	2,700	130	0	25,291
Total:	21,492	205	70	250	444	2,700	130	0	25,291
Fund Appropriations/Allocations									
Water Fund	21,492	205	70	250	444	2,700	130	0	25,291
Total*:	21,492	205	70	250	444	2,700	130	0	25,291
O & M Costs (Savings)			253	253	253	253	253	253	1,517
Spending Plan by Fund									
Water Fund		45	70	250	444	2,700	130	0	3,639
Total:		45	70	250	444	2,700	130	0	3,639

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Chamber Upgrades - Distribution**

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2003
Project ID:	C1137	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	Not in a Neighborhood District	Urban Village:	In more than one Urban Village

This ongoing project improves access to the 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	103	27	27	28	28	29	29	30	300
Total:	103	27	27	28	28	29	29	30	300
Fund Appropriations/Allo	cations								
Water Fund	103	27	27	28	28	29	29	30	300
Total*:	103	27	27	28	28	29	29	30	300
O & M Costs (Savings)			3	3	3	3	3	3	18
Spending Plan by Fund									
Water Fund		59	27	28	28	29	29	30	229
Total:		59	27	28	28	29	29	30	229

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Dam Safety Program**

BCL/Program Name:	Water Resources	BCL/Program Code:	C150B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2008
Project ID:	C1506	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
<b>Revenue Sources</b>										
Water Rates	6,721	459	1,025	932	940	800	800	200	11,876	
Total:	6,721	459	1,025	932	940	800	800	200	11,876	
Fund Appropriations/Allo	Fund Appropriations/Allocations									
Water Fund	6,721	459	1,025	932	940	800	800	200	11,876	
Total*:	6,721	459	1,025	932	940	800	800	200	11,876	
O & M Costs (Savings)			119	119	119	119	119	119	713	
Spending Plan by Fund										
Water Fund		50	1,025	932	940	800	800	200	4,747	
Total:		50	1,025	932	940	800	800	200	4,747	

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Distribution System Improvements**

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	Improved Facility	Start Date:	Q1/2003
Project ID:	C1128	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This ongoing program improves service reliability, pressure, capacity, and fire flow in the City's water distribution system. Typical improvements may include, but are not limited to, booster pump station installation, creation of new service zones, and tank elevation or replacement, as well as additional watermain 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	4,150	3,530	3,370	2,473	2,533	3,500	4,000	4,500	28,056
Total:	4,150	3,530	3,370	2,473	2,533	3,500	4,000	4,500	28,056
Fund Appropriations/Allocations									
Water Fund	4,150	3,530	3,370	2,473	2,533	3,500	4,000	4,500	28,056
Total*:	4,150	3,530	3,370	2,473	2,533	3,500	4,000	4,500	28,056
O & M Costs (Savings)			281	281	281	281	281	281	1,683
Spending Plan by Fund									
Water Fund		1,276	3,370	2,473	2,533	3,500	4,000	4,500	21,651
Total:		1,276	3,370	2,473	2,533	3,500	4,000	4,500	21,651

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Distribution System In-Line Gate Valves**

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/1999
Project ID:	C1136	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

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 watermain 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 watermain shut down.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	728	318	325	331	338	345	351	359	3,095
Total:	728	318	325	331	338	345	351	359	3,095
Fund Appropriations/Alloc	cations								
Water Fund	728	318	325	331	338	345	351	359	3,095
Total*:	728	318	325	331	338	345	351	359	3,095
O & M Costs (Savings)			31	31	31	31	31	31	186
Spending Plan by Fund									
Water Fund		318	325	331	338	345	351	359	2,366
Total:		318	325	331	338	345	351	359	2,366

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Downstream Fish Habitat**

BCL/Program Name:	Habitat Conservation Program	BCL/Program Code:	C160B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2001
Project ID:	C1607	End Date:	Q4/2017
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village
Neighborhood District:	Not in a neighborhood District	Urban vinage:	Not in an Orban vinage

This ongoing program 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 mainstem of the Cedar River. Although this is an ongoing program, no work is currently planned for 2018. This program is a requirement of the Cedar River Habitat Conservation Plan (HCP.)

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	4,991	520	734	795	532	241	0	0	7,813
Total:	4,991	520	734	795	532	241	0	0	7,813
Fund Appropriations/Allo	cations								
Water Fund	4,991	520	734	795	532	241	0	0	7,813
Total*:	4,991	520	734	795	532	241	0	0	7,813
O & M Costs (Savings)			78	78	78	78	78	78	469
Spending Plan by Fund									
Water Fund		220	734	795	532	241	0	0	2,522
Total:		220	734	795	532	241	0	0	2,522

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Emergency Storms - WF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Rehabilitation or Restoration	Start Date:	Q3/2007
Project ID:	C4120-WF	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources								·	
Water Rates	95	128	100	100	100	100	100	100	823
Total:	95	128	100	100	100	100	100	100	823
Fund Appropriations/Allo	cations								
Water Fund	95	128	100	100	100	100	100	100	823
Total*:	95	128	100	100	100	100	100	100	823
O & M Costs (Savings)			8	8	8	8	8	8	49
Spending Plan by Fund									
Water Fund		259	100	100	100	100	100	100	859
Total:		259	100	100	100	100	100	100	859

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

## **Environmental Stewardship**

BCL/Program Name:	Watershed Stewardship	<b>BCL/Program Code:</b>	C130B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2014
Project ID:	C1301	End Date:	Q4/2017
Location:			
Neighborhood Plan:	Not in Neighborhood Plan	<b>Council District:</b>	
Neighborhood District:		Urban Village:	

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	3	0	210	100	100	0	0	0	413
Total:	3	0	210	100	100	0	0	0	413
Fund Appropriations/All	ocations								
Water Fund	3	0	210	100	100	0	0	0	413
Total*:	3	0	210	100	100	0	0	0	413
O & M Costs (Savings)			4	4	4	4	4	4	25

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **First Hill Streetcar - WF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2010
Project ID:	C4130-WF	End Date:	Q4/2017
Location:	First Hill		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This project plans and relocates water facilities that will be impacted by the SDOT-led First Hill Streetcar project, 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 planning phase.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	0	150	1,150	2,500	3,400	1,000	0	0	8,200
Total:	0	150	1,150	2,500	3,400	1,000	0	0	8,200
Fund Appropriations/Alloc	cations								
Water Fund	0	150	1,150	2,500	3,400	1,000	0	0	8,200
Total*:	0	150	1,150	2,500	3,400	1,000	0	0	8,200
O & M Costs (Savings)			82	82	82	82	82	82	492
Spending Plan by Fund									
Water Fund		650	1,150	2,500	3,400	1,000	0	0	8,700
Total:		650	1,150	2,500	3,400	1,000	0	0	8,700

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

# Heavy Equipment Purchases - WF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C4116-WF	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program 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 four SPU fund-specific heavy equipment CIP projects.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	8,427	3,803	3,006	2,000	2,000	2,000	2,000	2,000	25,236
Total:	8,427	3,803	3,006	2,000	2,000	2,000	2,000	2,000	25,236
Fund Appropriations/Alloc	ations								
Water Fund	8,427	3,803	3,006	2,000	2,000	2,000	2,000	2,000	25,236
Total*:	8,427	3,803	3,006	2,000	2,000	2,000	2,000	2,000	25,236
O & M Costs (Savings)			253	253	253	253	253	253	1,520
Spending Plan by Fund									
Water Fund		2,592	3,006	2,000	2,000	2,000	2,000	2,000	15,598
Total:		2,592	3,006	2,000	2,000	2,000	2,000	2,000	15,598

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Instream Flow Management Studies**

BCL/Program Name:	Habitat Conservation Program	BCL/Program Code:	C160B
Project Type:	Improved Facility	Start Date:	Q4/2003
Project ID:	C1608	End Date:	ONGOING
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Naishhashaad District.	Net in a Neighborhood Distairt	Tubou Villago.	Net in an Unban Willoco
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Water Rates	4,917	204	208	212	216	221	225	230	6,433
Total:	4,917	204	208	212	216	221	225	230	6,433
Fund Appropriations/Allo	cations								
Water Fund	4,917	204	208	212	216	221	225	230	6,433
Total*:	4,917	204	208	212	216	221	225	230	6,433
O & M Costs (Savings)			64	64	64	64	64	64	386
Spending Plan by Fund									
Water Fund		0	208	212	216	221	225	230	1,313
Total:		0	208	212	216	221	225	230	1,313

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Integrated Control Monitoring Program - WF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Investment	Start Date:	Q1/2002
Project ID:	C4108-WF	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban

This ongoing program funds improvements to the centralized monitoring and control of the drinking water portion of the overall Supervisory Control and Data Acquisition (SCADA) system infrastructure throughout King County. Infrastructure affected may include, but is not limited to, flow and pressure sensors, remote control pumps, and valves. This program enhances the delivery and quality of drinking water and the delivery of water to fire hydrants, also known as "fire flow."

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	7,385	405	480	480	480	480	480	480	10,670
Total:	7,385	405	480	480	480	480	480	480	10,670
Fund Appropriations/Allo	cations								
Water Fund	7,385	405	480	480	480	480	480	480	10,670
Total*:	7,385	405	480	480	480	480	480	480	10,670
O & M Costs (Savings)			107	107	107	107	107	107	640
Spending Plan by Fund									
Water Fund		423	480	480	480	480	480	480	3,303
Total:		423	480	480	480	480	480	480	3,303

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Kerriston Road

BCL/Program Name:	Watershed Stewardship	<b>BCL/Program Code:</b>	C130B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2009
Project ID:	C1314	End Date:	Q4/2013
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
		TT 1 T7*11	NT / ' TT I X7'II
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This project acquires properties adjacent to the lower Cedar River Municipal Watershed that are accessed via Kerriston Road which runs through the lower municipal watershed. Acquisition of these lands minimizes the risk to water quality from access through the watershed by the public. No funding has been requested for the 2013-2018 time frame but once specific acquisitions are identified, appropriate budget authority will be sought.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	752	17	0	0	0	0	0	0	769
Total:	752	17	0	0	0	0	0	0	769
Fund Appropriations/Allo	cations								
Water Fund	752	17	0	0	0	0	0	0	769
Total*:	752	17	0	0	0	0	0	0	769
O & M Costs (Savings)			8	8	8	8	8	8	46
Spending Plan by Fund									
Water Fund		95	0	0	0	0	0	0	95
Total:		95	0	0	0	0	0	0	95

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

## Landsburg Chlorination Upgrades

BCL/Program Name:	Water Quality & Treatment	<b>BCL/Program Code:</b>	C140B
Project Type:	Improved Facility	Start Date:	Q1/2011
Project ID:	C1417	End Date:	Q4/2016
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This project constructs new sodium hypochlorite (liquid) chlorination facilities at the Landsburg Cedar River Diversion Facilities. The project will enhance safety and site security through replacement of the aging gas chlorine facilities at the site.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	0	1,016	0	0	0	0	0	0	1,016
Total:	0	1,016	0	0	0	0	0	0	1,016
Fund Appropriations/Alloc	ations								
Water Fund	0	1,016	0	0	0	0	0	0	1,016
Total*:	0	1,016	0	0	0	0	0	0	1,016
O & M Costs (Savings)			12	12	12	12	12	12	71
Spending Plan by Fund									
Water Fund		0	0	0	0	0	0	0	0
Total:		0	0	0	0	0	0	0	0

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Mercer Corridor Project East Phase - WF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2007
Project ID:	C4114-WF	End Date:	Q4/2014
Location:	South Lake Union		
Neighborhood Plan:	South Lake Union	<b>Council District:</b>	7/3
Neighborhood District:	Lake Union	Urban Village:	South Lake Union

This program funds the repair, relocation, protection, and upgrade of water infrastructure related to the redevelopment of the South Lake Union neighborhood. This effort identifies SPU water system direct impacts, opportunities for system improvements, and cost responsibility. This program also funds planning-level coordination with other City departments on projects within the South Lake Union area.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	3,428	30	0	0	0	0	0	0	3,458
Total:	3,428	30	0	0	0	0	0	0	3,458
Fund Appropriations/Allo	cations								
Water Fund	3,428	30	0	0	0	0	0	0	3,458
Total*:	3,428	30	0	0	0	0	0	0	3,458
O & M Costs (Savings)			35	35	35	35	35	35	207
Spending Plan by Fund									
Water Fund		87	0	0	0	0	0	0	87
Total:		87	0	0	0	0	0	0	87

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

<b>Mercer</b>	Corridor	<b>Project</b>	West	Phase -	WF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2010
Project ID:	C4133-WF	End Date:	Q4/2015
Location:	Mercer ST /Elliot AVE W/Dexter AVE N		
Neighborhood Plan:	In more than one Plan	<b>Council District:</b>	7
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This project provides water utility improvements and relocations related to the Mercer Corridor Project, West phase. Work in this project will convert Mercer Street to a two-way street between Dexter Ave and Elliott Ave West. The Mercer underpass at Aurora Ave will be widened to allow for six travel lanes and a bicycle/pedestrian shared use path between Dexter Ave and 5th Ave North. Roy Street, between Aurora and Queen Anne Ave., will also be converted to a two-way street with on-road bicycle lanes.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	162	455	343	0	0	0	0	0	959
Total:	162	455	343	0	0	0	0	0	959
Fund Appropriations/Allo	cations								
Water Fund	162	455	343	0	0	0	0	0	959
Total*:	162	455	343	0	0	0	0	0	959
O & M Costs (Savings)			10	10	10	10	10	10	58
Spending Plan by Fund									
Water Fund		332	343	0	0	0	0	0	675
Total:		332	343	0	0	0	0	0	675

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Meter Replacement - WF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2004
Project ID:	C4101-WF	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This ongoing program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	4,966	634	623	633	643	659	664	674	9,497
Total:	4,966	634	623	633	643	659	664	674	9,497
Fund Appropriations/Allo	cations								
Water Fund	4,966	634	623	633	643	659	664	674	9,497
Total*:	4,966	634	623	633	643	659	664	674	9,497
O & M Costs (Savings)			95	95	95	95	95	95	570
Spending Plan by Fund									
Water Fund		579	623	633	643	659	664	674	4,476
Total:		579	623	633	643	659	664	674	4,476

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Morse Lake Pump Plant

BCL/Program Name:	Water Resources	BCL/Program Code:	C150B
Project Type:	Improved Facility	Start Date:	Q1/2003
Project ID:	C1508	End Date:	Q4/2017
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This project includes funding to replace the existing barge-mounted pump plants at Chester Morse Lake. The pump plants at Chester Morse Lake are nearing the end of their useful lives. These pumps are designed for drought situations to access so-called "dead storage" at the lake, which is at or below the level that drains by gravity. The improvements enhance the ability to provide reliable water supply and in-stream flows in the Cedar River during drought conditions and to address requirements of the Habitat Conservation Plan. Most pre-2012 costs are deferred costs that will be amortized over ten years.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
Revenue Sources										
Water Rates	14,948	2,862	9,054	18,232	5,496	0	0	0	50,593	
Total:	14,948	2,862	9,054	18,232	5,496	0	0	0	50,593	
Fund Appropriations/Allocations										
Water Fund	14,948	2,862	9,054	18,232	5,496	0	0	0	50,593	
Total*:	14,948	2,862	9,054	18,232	5,496	0	0	0	50,593	
O & M Costs (Savings)			506	506	506	506	506	506	3,036	
Spending Plan by Fund										
Water Fund		2,584	9,054	18,232	5,496	0	0	0	35,366	
Total:		2,584	9,054	18,232	5,496	0	0	0	35,366	

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Multiple Utility Relocation**

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2007
Project ID:	C1133	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
<b>Revenue Sources</b>										
Water Rates	5,359	2,629	1,317	271	563	574	586	597	11,897	
Total:	5,359	2,629	1,317	271	563	574	586	597	11,897	
Fund Appropriations/Allocations										
Water Fund	5,359	2,629	1,317	271	563	574	586	597	11,897	
Total*:	5,359	2,629	1,317	271	563	574	586	597	11,897	
O & M Costs (Savings)			119	119	119	119	119	119	714	
Spending Plan by Fund										
Water Fund		849	1,317	271	563	574	586	597	4,757	
Total:		849	1,317	271	563	574	586	597	4,757	

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Operational Facility - Construction - WF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2004
Project ID:	C4106-WF	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

This ongoing facilities program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	15,195	1,492	753	985	2,620	2,860	4,270	1,680	29,855
Total:	15,195	1,492	753	985	2,620	2,860	4,270	1,680	29,855
Fund Appropriations/Allocations									
Water Fund	15,195	1,492	753	985	2,620	2,860	4,270	1,680	29,855
Total*:	15,195	1,492	753	985	2,620	2,860	4,270	1,680	29,855
O & M Costs (Savings)			299	299	299	299	299	299	1,791
Spending Plan by Fund									
Water Fund		1,398	753	985	2,620	2,860	4,270	1,680	14,565
Total:		1,398	753	985	2,620	2,860	4,270	1,680	14,565

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Operational Facility - Other - WF**

BCL/Program Name:	Shared Cost Projects	<b>BCL/Program Code:</b>	C410B
Project Type:	Improved Facility	Start Date:	Q4/2006
Project ID:	C4115-WF	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

This ongoing facilities program provides funding to purchase, replace, or install new building materials or building equipment 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, water systems, prefabricated buildings, storage buildings, and fencing. Specific projects have been identified through 2016. As future projects are identified, necessary funding will be requested.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Water Rates	973	256	400	350	0	0	0	0	1,979
Total:	973	256	400	350	0	0	0	0	1,979
Fund Appropriations/Alloc	cations								
Water Fund	973	256	400	350	0	0	0	0	1,979
Total*:	973	256	400	350	0	0	0	0	1,979
O & M Costs (Savings)			20	20	20	20	20	20	119
Spending Plan by Fund									
Water Fund		24	400	350	0	0	0	0	774
Total:		24	400	350	0	0	0	0	774

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.
#### **Operations Control Center - WF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2003
Project ID:	C4105-WF	End Date:	ONGOING
Location:	2700 Airport Way S		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	2
Neighborhood District:	Greater Duwamish	Urban Village:	Duwamish
reighbor noou District.	Greater Duwannon	orban vinage.	Duwalinsii

This ongoing facilities program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Water Rates	4,641	1,630	583	122	431	623	783	415	9,227
Total:	4,641	1,630	583	122	431	623	783	415	9,227
Fund Appropriations/Alloc	cations								
Water Fund	4,641	1,630	583	122	431	623	783	415	9,227
Total*:	4,641	1,630	583	122	431	623	783	415	9,227
O & M Costs (Savings)			92	92	92	92	92	92	554
Spending Plan by Fund									
Water Fund		1,089	583	122	431	623	783	415	4,044
Total:		1,089	583	122	431	623	783	415	4,044

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Other Major Transportation Projects - WF**

BCL/Program Name:	Shared Cost Projects	<b>BCL/Program Code:</b>	C410B
Project Type:	Rehabilitation or Restoration	Start Date:	Q2/2008
Project ID:	C4123-WF	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Water Rates	36	265	0	50	50	300	500	500	1,701
Total:	36	265	0	50	50	300	500	500	1,701
Fund Appropriations/Alloc	cations								
Water Fund	36	265	0	50	50	300	500	500	1,701
Total*:	36	265	0	50	50	300	500	500	1,701
O & M Costs (Savings)			17	17	17	17	17	17	102
Spending Plan by Fund									
Water Fund		19	0	50	50	300	500	500	1,419
Total:		19	0	50	50	300	500	500	1,419

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Pump Station Improvements**

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	Rehabilitation or Restoration	Start Date:	Q3/2008
Project ID:	C1135	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	251	250	125	700	2,225	125	125	125	3,926
Total:	251	250	125	700	2,225	125	125	125	3,926
Fund Appropriations/All	ocations								
Water Fund	251	250	125	700	2,225	125	125	125	3,926
Total*:	251	250	125	700	2,225	125	125	125	3,926
O & M Costs (Savings)			39	39	39	39	39	39	236

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Purveyor Meters Replace - SPU**

BCL/Program Name:	Transmission	<b>BCL/Program Code:</b>	C120B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2000
Project ID:	C1206	End Date:	ONGOING
Location:	Regional		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	1,084	102	200	204	208	213	218	223	2,452
Total:	1,084	102	200	204	208	213	218	223	2,452
Fund Appropriations/Alloc	cations								
Water Fund	1,084	102	200	204	208	213	218	223	2,452
Total*:	1,084	102	200	204	208	213	218	223	2,452
O & M Costs (Savings)			25	25	25	25	25	25	147
Spending Plan by Fund									
Water Fund		350	200	204	208	213	218	223	1,616
Total:		350	200	204	208	213	218	223	1,616

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Regional Facility - WF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2007
Project ID:	C4107-WF	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This ongoing facilities program renovates, rehabilitates, replaces existing buildings, and constructs new facilities at various locations outside the city limits to address deficiencies, failures, and functional changes in the drinking water system.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
Revenue Sources										
Water Rates	5,437	6,515	5,109	5,750	8,124	6,035	1,870	1,319	40,159	
Total:	5,437	6,515	5,109	5,750	8,124	6,035	1,870	1,319	40,159	
Fund Appropriations/Allocations										
Water Fund	5,437	6,515	5,109	5,750	8,124	6,035	1,870	1,319	40,159	
Total*:	5,437	6,515	5,109	5,750	8,124	6,035	1,870	1,319	40,159	
O & M Costs (Savings)			402	402	402	402	402	402	2,410	
Spending Plan by Fund										
Water Fund		7,630	5,109	5,750	8,124	6,035	1,870	1,319	35,837	
Total:		7,630	5,109	5,750	8,124	6,035	1,870	1,319	35,837	

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Regional Water Conservation Program**

BCL/Program Name:	Water Resources	BCL/Program Code:	C150B
Project Type:	Improved Facility	Start Date:	Q1/1999
Project ID:	C1504	End Date:	ONGOING
Location:	Citywide Plus Wholesale		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
Revenue Sources										
Water Rates	19,298	1,803	1,839	1,876	1,914	1,952	1,991	2,031	32,704	
Total:	19,298	1,803	1,839	1,876	1,914	1,952	1,991	2,031	32,704	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Water Fund	19,298	1,803	1,839	1,876	1,914	1,952	1,991	2,031	32,704	
Total*:	19,298	1,803	1,839	1,876	1,914	1,952	1,991	2,031	32,704	
O & M Costs (Savings)			327	327	327	327	327	327	1,962	
Spending Plan by Fund										
Water Fund		1,859	1,839	1,876	1,914	1,952	1,991	2,031	13,462	
Total:		1,859	1,839	1,876	1,914	1,952	1,991	2,031	13,462	

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Replace Air Valve Chambers**

BCL/Program Name:	Transmission	<b>BCL/Program Code:</b>	C120B
Project Type:	Rehabilitation or Restoration	Start Date:	Q3/1999
Project ID:	C1209	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	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	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
Revenue Sources										
Water Rates	1,648	117	122	125	125	127	130	133	2,526	
Total:	1,648	117	122	125	125	127	130	133	2,526	
Fund Appropriations/Allocations										
Water Fund	1,648	117	122	125	125	127	130	133	2,526	
Total*:	1,648	117	122	125	125	127	130	133	2,526	
O & M Costs (Savings)			25	25	25	25	25	25	152	
Spending Plan by Fund										
Water Fund		78	122	125	125	127	130	133	840	
Total:		78	122	125	125	127	130	133	840	

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Reservior Covering-Bitter Lake**

BCL/Program Name:	Water Quality & Treatment	<b>BCL/Program Code:</b>	C140B
Project Type:	Improved Facility	Start Date:	Q1/2019
Project ID:	C1419	End Date:	Q4/2020
Location:	N 143rd St and Linden Ave N		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	5
Naiabh ach a ad District.	Novéhovosé	Lubar Villaga	Net in an Urban Village
Neighborhood District:	Northwest	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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	0	0	0	0	0	0	590	1,790	2,380
Total:	0	0	0	0	0	0	590	1,790	2,380
Fund Appropriations/All	locations								
Water Fund	0	0	0	0	0	0	590	1,790	2,380
Total*:	0	0	0	0	0	0	590	1,790	2,380
O & M Costs (Savings)			0	0	0	0	24	24	48

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Reservoir Covering - Beacon**

BCL/Program Name:	Water Quality & Treatment	BCL/Program Code:	C140B
Project Type:	Improved Facility	Start Date:	Q1/2001
Project ID:	C1408	End Date:	Q4/2016
Location:	S Spokane St/Beacon Ave S		
Neighborhood Plan:	North Beacon Hill	<b>Council District:</b>	2
Neighborhood District:	Greater Duwamish	Urban Village:	Not in an Urban Village

This project will construct a 50 million gallon reinforced concrete buried reservoir in compliance with new state and federal regulations and improves water quality as well as the security of the drinking water system. It is part of the reservoir burying program which was adopted by Ordinance 120899 in August 2002.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	42,405	925	103	5,063	0	0	0	0	48,496
Total:	42,405	925	103	5,063	0	0	0	0	48,496
Fund Appropriations/Alloc	cations								
Water Fund	42,405	925	103	5,063	0	0	0	0	48,496
Total*:	42,405	925	103	5,063	0	0	0	0	48,496
O & M Costs (Savings)			485	485	485	485	485	485	2,910
Spending Plan by Fund									
Water Fund		1,076	103	5,063	0	0	0	0	6,242
Total:		1,076	103	5,063	0	0	0	0	6,242

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Reservoir Covering - Maple Leaf**

BCL/Program Name:	Water Quality & Treatment	BCL/Program Code:	C140B
Project Type:	Improved Facility	Start Date:	Q4/2001
Project ID:	C1411	End Date:	Q2/2016
Location:	NE 86th St/Roosevelt Wy NE		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	5
Neighborhood District:	North	Urban Village:	Not in an Urban Village

This project will construct a 60 million gallon, dual-cell, reinforced concrete buried reservoir in compliance with new state and federal regulations. This effort improves water quality and the security of the drinking water system. It is part of the Reservoir burying program which was adopted by Ordinance 120899 in August 2002.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	38,629	5,187	7,036	1,008	0	0	0	0	51,860
Total:	38,629	5,187	7,036	1,008	0	0	0	0	51,860
Fund Appropriations/Alloc	cations								
Water Fund	38,629	5,187	7,036	1,008	0	0	0	0	51,860
Total*:	38,629	5,187	7,036	1,008	0	0	0	0	51,860
O & M Costs (Savings)			519	519	519	519	519	519	3,112
Spending Plan by Fund									
Water Fund		1,315	7,036	1,008	0	0	0	0	9,359
Total:		1,315	7,036	1,008	0	0	0	0	9,359

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Reservoir Covering - Myrtle**

BCL/Program Name:	Water Quality & Treatment	BCL/Program Code:	C140B
Project Type:	Improved Facility	Start Date:	Q4/2001
Project ID:	C1410	End Date:	Q4/2016
Location:	SW Myrtle St/35th Ave SW		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	1
Neighborhood District:	Southwest	Urban Village:	Not in an Urban Village

This project will construct a 5 million gallon reinforced concrete buried reservoir in compliance with new state and federal regulations. This effort improves water quality and the security of the drinking water system. It is part of the Reservoir burying program which was adopted by Ordinance 120899 in August 2002.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	12,369	315	1,256	1,146	0	0	0	0	15,086
Total:	12,369	315	1,256	1,146	0	0	0	0	15,086
Fund Appropriations/Allo	cations								
Water Fund	12,369	315	1,256	1,146	0	0	0	0	15,086
Total*:	12,369	315	1,256	1,146	0	0	0	0	15,086
O & M Costs (Savings)			151	151	151	151	151	151	905
Spending Plan by Fund									
Water Fund		158	1,256	1,146	0	0	0	0	2,559
Total:		158	1,256	1,146	0	0	0	0	2,559

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Reservoir Covering - West Seattle**

BCL/Program Name:	Water Quality & Treatment	<b>BCL/Program Code:</b>	C140B
Project Type:	Improved Facility	Start Date:	Q4/2001
Project ID:	C1409	End Date:	Q1/2015
Location:	SW Henderson St/8th Ave SW		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	1
Neighborhood District:	Delridge	Urban Village:	Not in an Urban Village

This project will construct a 30 million gallon reinforced concrete buried reservoir in compliance with new state and federal regulations. This effort improves water quality and the security of the drinking water system. It is part of the Reservoir burying program which was adopted by Ordinance 120899 in August 2002.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
Revenue Sources										
Water Rates	35,296	4,020	2,717	10	0	0	0	0	42,043	
Total:	35,296	4,020	2,717	10	0	0	0	0	42,043	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Water Fund	35,296	4,020	2,717	10	0	0	0	0	42,043	
Total*:	35,296	4,020	2,717	10	0	0	0	0	42,043	
O & M Costs (Savings)			420	420	420	420	420	420	2,523	
Spending Plan by Fund										
Water Fund		2,305	2,717	10	0	0	0	0	5,032	
Total:		2,305	2,717	10	0	0	0	0	5,032	

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Reservoir Covering-Lake Forest Park**

BCL/Program Name:	Water Quality & Treatment	BCL/Program Code:	C140B
Project Type:	Improved Facility	Start Date:	Q1/2019
Project ID:	C1418	End Date:	Q4/2020
Location:			
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
Neighborhood District:	Outside Seattle City	Urban Village:	Not in an Urban

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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	0	0	0	0	0	0	590	1,200	1,790
Total:	0	0	0	0	0	0	590	1,200	1,790
Fund Appropriations/All	locations								
Water Fund	0	0	0	0	0	0	590	1,200	1,790
Total*:	0	0	0	0	0	0	590	1,200	1,790
O & M Costs (Savings)			0	0	0	0	18	18	36

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

## Seattle Direct Service Additional Conservation

BCL/Program Name:	Water Resources	<b>BCL/Program Code:</b>	C150B
Project Type:	Improved Facility	Start Date:	Q1/2001
Project ID:	C1505	End Date:	ONGOING
Location:	Citywide & Direct Service		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This ongoing program provides water use efficiency resources to the City's low-income customers to implement water conservation measures authorized by Ordinance 120532, adopted in 2001, and supplements funding provided under SPU's Regional Water Conservation Program (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. The program is cooperatively managed by SPU and the City's Human Services Department and requires an annual report to be provided to Council.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Water Rates	6,402	690	566	577	589	601	613	625	10,662
Total:	6,402	690	566	577	589	601	613	625	10,662
Fund Appropriations/Allo	cations								
Water Fund	6,402	690	566	577	589	601	613	625	10,662
Total*:	6,402	690	566	577	589	601	613	625	10,662
O & M Costs (Savings)			107	107	107	107	107	107	640
Spending Plan by Fund									
Water Fund		574	566	577	589	601	613	625	4,145
Total:		574	566	577	589	601	613	625	4,145

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Security Improvements - WF**

BCL/Program Name:	Shared Cost Projects	<b>BCL/Program Code:</b>	C410B
Project Type:	Improved Facility	Start Date:	Q1/2005
Project ID:	C4113-WF	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
N. 1. 1. 1		TT-1	NT ( 1 TT 1 - 37'11
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

This ongoing program 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. This program enhances protection of SPU's critical infrastructure and addresses vulnerabilities identified in U.S. Environmental Protection Agency (EPA) mandated vulnerability assessments.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	6,228	1,713	1,078	1,050	950	950	1,300	950	14,219
Total:	6,228	1,713	1,078	1,050	950	950	1,300	950	14,219
Fund Appropriations/Alloc	cations								
Water Fund	6,228	1,713	1,078	1,050	950	950	1,300	950	14,219
Total*:	6,228	1,713	1,078	1,050	950	950	1,300	950	14,219
O & M Costs (Savings)			142	142	142	142	142	142	853
Spending Plan by Fund									
Water Fund		1,036	1,078	1,050	950	950	1,300	950	7,314
Total:		1,036	1,078	1,050	950	950	1,300	950	7,314

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Sound Transit - North Link - WF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Facility	Start Date:	Q1/2012
Project ID:	C4135-WF	End Date:	Q4/2020
Location:	Various		
Neighborhood Plan:	In more than one Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This program funds relocation, replacement, and protection of water infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the third segment of their electrical light rail transit system that includes 4.3 mile light rail extension, three additional stations, and other supporting facilities from the University of Washington to Northgate.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	58	311	516	100	100	75	75	25	1,260
Total:	58	311	516	100	100	75	75	25	1,260
Fund Appropriations/Allo	cations								
Water Fund	58	311	516	100	100	75	75	25	1,260
Total*:	58	311	516	100	100	75	75	25	1,260
O & M Costs (Savings)			13	13	13	13	13	13	76
Spending Plan by Fund									
Water Fund		788	516	100	100	75	75	25	1,680
Total:		788	516	100	100	75	75	25	1,680

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Sound Transit - Water Betterment

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2014
Project ID:	C4125	End Date:	Q4/2015
Location:	Central & South areas of Seattle		
Neighborhood Plan:	In more than one Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This project funds improvements to watermains and appurtenances (hydrants, valves, coatings, cathodic protection, etc.) affected by the development of Sound Transit's Light Rail System. These improvements are "opportunity" projects that become available and are cost effective as Sound Transit constructs Light Rail and rebuilds the street right-of-way. This project covers Sound Transit's alignment within SPU's service area, including the South Link to SeaTac International Airport, the University Link, and the North Link towards Northgate.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	1,502	50	50	0	0	0	0	0	1,602
Total:	1,502	50	50	0	0	0	0	0	1,602
Fund Appropriations/All	ocations								
Water Fund	1,502	50	50	0	0	0	0	0	1,602
Total*:	1,502	50	50	0	0	0	0	0	1,602
O & M Costs (Savings)			16	16	16	16	16	16	96

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### Sound Transit – University Link - WF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Facility	Start Date:	Q1/2007
Project ID:	C4110-WF	End Date:	Q2/2016
Location:	Various		
Neighborhood Plan:	In more than one Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This program funds relocation, replacement, and protection of water system infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the second segment of their electrical light rail transit system that includes 3.15 miles of tunnel, two additional stations, and other supporting facilities from downtown to the University of Washington.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	329	137	30	10	0	0	0	0	506
Total:	329	137	30	10	0	0	0	0	506
Fund Appropriations/Allo	cations								
Water Fund	329	137	30	10	0	0	0	0	506
Total*:	329	137	30	10	0	0	0	0	506
O & M Costs (Savings)			5	5	5	5	5	5	30
Spending Plan by Fund									
Water Fund		111	30	10	0	0	0	0	151
Total:		111	30	10	0	0	0	0	151

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Sound Transit-East Link

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Facility	Start Date:	Q2/2013
Project ID:	C4122-WF	End Date:	Q4/2015
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This program funds relocation, replacement, and protection of water infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the next segment of their electrical light rail transit system that includes 14 mile light rail extension, 10 additional stations total (one in Seattle) and other supporting facilities from the International District (ID) across I-90 to Bellevue/Redmond.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	0	40	53	10	0	0	0	0	103
Total:	0	40	53	10	0	0	0	0	103
Fund Appropriations/Allo	cations								
Water Fund	0	40	53	10	0	0	0	0	103
Total*:	0	40	53	10	0	0	0	0	103
O & M Costs (Savings)			1	1	1	1	1	1	6
Spending Plan by Fund									
Water Fund		53	53	10	0	0	0	0	115
Total:		53	53	10	0	0	0	0	115

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### Stream & Riparian Restoration

BCL/Program Name:	Habitat Conservation Program	BCL/Program Code:	C160B
Project Type:	Rehabilitation or Restoration	Start Date:	Q2/2000
Project ID:	C1602	End Date:	ONGOING
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	7,454	394	204	164	165	167	168	169	8,884
Total:	7,454	394	204	164	165	167	168	169	8,884
Fund Appropriations/Alloc	cations								
Water Fund	7,454	394	204	164	165	167	168	169	8,884
Total*:	7,454	394	204	164	165	167	168	169	8,884
O & M Costs (Savings)			89	89	89	89	89	89	533
Spending Plan by Fund									
Water Fund		375	204	164	165	167	168	169	1,411
Total:		375	204	164	165	167	168	169	1,411

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Tank Improvements**

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2008
Project ID:	C1134	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	4,165	116	250	750	500	100	550	850	7,281
Total:	4,165	116	250	750	500	100	550	850	7,281
Fund Appropriations/Allo	cations								
Water Fund	4,165	116	250	750	500	100	550	850	7,281
Total*:	4,165	116	250	750	500	100	550	850	7,281
O & M Costs (Savings)			73	73	73	73	73	73	437
Spending Plan by Fund									
Water Fund		1	250	750	500	100	550	850	3,001
Total:		1	250	750	500	100	550	850	3,001

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### **Tolt Bridges**

BCL/Program Name:	Watershed Stewardship	<b>BCL/Program Code:</b>	C130B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2004
Project ID:	C1308	End Date:	ONGOING
Location:	Tolt River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This program replaces aging bridges on forest roads in the Tolt River Watershed, including Chuck Judd Creek Bridge and Siwash Creek Bridge. It improves aging bridge assets 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. This program maintains compliance with state laws and safety and environmental regulations, including Washington Department of Natural Resources (WDNR) forest practice regulations and Washington Department of Health (DOH) Watershed Protection Plan regulations.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	0	0	0	450	450	0	0	0	900
Total:	0	0	0	450	450	0	0	0	900
Fund Appropriations/All	locations								
Water Fund	0	0	0	450	450	0	0	0	900
Total*:	0	0	0	450	450	0	0	0	900
O & M Costs (Savings)			0	9	9	9	9	9	45

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Tolt Watershed Restoration**

BCL/Program Name:	Watershed Stewardship	BCL/Program Code:	C130B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2009
Project ID:	C1310	End Date:	Q4/2020
Location:	Tolt River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This program provides aquatic and riparian restoration, and funds improvements and decommissioning of the road system in the Tolt River Municipal Watershed. This program improves Tolt Watershed management practices to be consistent with the land management practices in the Cedar River Watershed, the City's other primary water supply watershed. Projects are based upon recommendations of the 2011 Tolt Watershed Management Plan.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Water Rates	312	6	5	0	0	0	0	0	323
Total:	312	6	5	0	0	0	0	0	323
Fund Appropriations/Allo	cations								
Water Fund	312	6	5	0	0	0	0	0	323
Total*:	312	6	5	0	0	0	0	0	323
O & M Costs (Savings)			3	3	3	3	3	3	19
Spending Plan by Fund									
Water Fund		15	5	0	0	0	0	0	20
Total:		15	5	0	0	0	0	0	20

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Transmission Pipelines Rehabilitation**

BCL/Program Name:	Transmission	<b>BCL/Program Code:</b>	C120B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2005
Project ID:	C1207	End Date:	ONGOING
Location:	Regional		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
Revenue Sources										
Water Rates	3,936	1,376	1,102	1,854	1,377	1,399	1,422	1,445	13,912	
Total:	3,936	1,376	1,102	1,854	1,377	1,399	1,422	1,445	13,912	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Water Fund	3,936	1,376	1,102	1,854	1,377	1,399	1,422	1,445	13,912	
Total*:	3,936	1,376	1,102	1,854	1,377	1,399	1,422	1,445	13,912	
O & M Costs (Savings)			139	139	139	139	139	139	835	
Spending Plan by Fund										
Water Fund		814	1,102	1,854	1,377	1,399	1,422	1,445	9,414	
Total:		814	1,102	1,854	1,377	1,399	1,422	1,445	9,414	

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Transmission Right-of-Way Improvements**

BCL/Program Name:	Watershed Stewardship	BCL/Program Code:	C130B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2012
Project ID:	C1316	End Date:	Q4/2014
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This project provides drainage and vegetation improvements within and adjacent to water transmission rights-of-way and in the Lake Youngs Reserve. These improvements will reduce long-term maintenance costs, contribute to worker safety, and reduce sediment delivery adjacent waterways.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	117	20	85	0	0	0	0	0	222
Total:	117	20	85	0	0	0	0	0	222
Fund Appropriations/Alloc	cations								
Water Fund	117	20	85	0	0	0	0	0	222
Total*:	117	20	85	0	0	0	0	0	222
O & M Costs (Savings)			2	2	2	2	2	2	13
Spending Plan by Fund									
Water Fund		0	85	0	0	0	0	0	85
Total:		0	85	0	0	0	0	0	85

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Treatment Facility/Water Quality Improvements**

BCL/Program Name:	Water Quality & Treatment	<b>BCL/Program Code:</b>	C140B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2007
Project ID:	C1413	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	208	100	205	250	234	250	250	480	1,978
Total:	208	100	205	250	234	250	250	480	1,978
Fund Appropriations/Alloc	cations								
Water Fund	208	100	205	250	234	250	250	480	1,978
Total*:	208	100	205	250	234	250	250	480	1,978
O & M Costs (Savings)			20	20	20	20	20	20	119
Spending Plan by Fund									
Water Fund		220	205	250	234	250	250	480	1,889
Total:		220	205	250	234	250	250	480	1,889

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### **Upland Reserve Forest Restoration**

BCL/Program Name:	Habitat Conservation Program	BCL/Program Code:	C160B
Project Type:	Rehabilitation or Restoration	Start Date:	Q2/2000
Project ID:	C1603	End Date:	ONGOING
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	7,269	283	98	93	95	97	98	100	8,133
Total:	7,269	283	98	93	95	97	98	100	8,133
Fund Appropriations/Alloc	cations								
Water Fund	7,269	283	98	93	95	97	98	100	8,133
Total*:	7,269	283	98	93	95	97	98	100	8,133
O & M Costs (Savings)			81	81	81	81	81	81	488
Spending Plan by Fund									
Water Fund		192	98	93	95	97	98	100	773
Total:		192	98	93	95	97	98	100	773

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2013
Project ID:	C1138	End Date:	ONGOING
Location:			
Neighborhood Plan:	Not in Neighborhood Plan	<b>Council District:</b>	
Neighborhood District:		Urban Village:	

This ongoing program provides funding for modifications and relocations of existing Distribution System assets resulting from third party project impacts to Distribution System infrastructure located in the right-of-way or on public property. The costs are recovered from third parties and primarily other public utilities and agencies through Memorandums of Agreement and standard charges. This program covers all Distribution System modifications and relocations that are funded by third parties excluding Water main Extension Program projects. The benefit of this program 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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>									
Water Rates	41	200	100	102	104	106	108	110	871
Total:	41	200	100	102	104	106	108	110	871
Fund Appropriations/Allo	cations								
Water Fund	41	200	100	102	104	106	108	110	871
Total*:	41	200	100	102	104	106	108	110	871
O & M Costs (Savings)			9	9	9	9	9	9	52
Spending Plan by Fund									
Water Fund		100	100	102	104	106	108	110	731
Total:		100	100	102	104	106	108	110	731

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	Rehabilitation or Restoration	Start Date:	Q4/1998
Project ID:	C1110	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

#### Water Infrastructure - Hydrant Replacement/Relocation

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	4,780	371	204	208	212	216	221	225	6,438
Total:	4,780	371	204	208	212	216	221	225	6,438
Fund Appropriations/Alloc	cations								
Water Fund	4,780	371	204	208	212	216	221	225	6,438
Total*:	4,780	371	204	208	212	216	221	225	6,438
O & M Costs (Savings)			64	64	64	64	64	64	386
Spending Plan by Fund									
Water Fund		200	204	208	212	216	221	225	1,486
Total:		200	204	208	212	216	221	225	1,486

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### Water Infrastructure - New Hydrants

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	New Facility	Start Date:	Q2/1999
Project ID:	C1112	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	521	106	61	25	13	13	13	14	765
Total:	521	106	61	25	13	13	13	14	765
Fund Appropriations/Allo	cations								
Water Fund	521	106	61	25	13	13	13	14	765
Total*:	521	106	61	25	13	13	13	14	765
O & M Costs (Savings)			8	8	8	8	8	8	46
Spending Plan by Fund									
Water Fund		106	61	25	13	13	13	14	245
Total:		106	61	25	13	13	13	14	245

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

#### Water Infrastructure - New Taps

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	New Facility	Start Date:	Q4/1998
Project ID:	C1113	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
Revenue Sources										
Water Rates	101,231	4,900	6,000	6,120	6,242	6,367	6,495	6,624	143,980	
Total:	101,231	4,900	6,000	6,120	6,242	6,367	6,495	6,624	143,980	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Water Fund	101,231	4,900	6,000	6,120	6,242	6,367	6,495	6,624	143,980	
Total*:	101,231	4,900	6,000	6,120	6,242	6,367	6,495	6,624	143,980	
O & M Costs (Savings)			1,440	1,440	1,440	1,440	1,440	1,440	8,639	
Spending Plan by Fund										
Water Fund		6,000	6,000	6,120	6,242	6,367	6,495	6,624	43,849	
Total:		6,000	6,000	6,120	6,242	6,367	6,495	6,624	43,849	

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.

### Water Infrastructure - Service Renewal

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	Rehabilitation or Restoration	Start Date:	Q4/1998
Project ID:	C1109	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
Revenue Sources										
Water Rates	100,763	5,837	4,986	5,086	5,188	5,291	5,397	5,505	138,053	
Total:	100,763	5,837	4,986	5,086	5,188	5,291	5,397	5,505	138,053	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Water Fund	100,763	5,837	4,986	5,086	5,188	5,291	5,397	5,505	138,053	
Total*:	100,763	5,837	4,986	5,086	5,188	5,291	5,397	5,505	138,053	
O & M Costs (Savings)			1,381	1,381	1,381	1,381	1,381	1,381	8,283	
Spending Plan by Fund										
Water Fund		5,837	4,986	5,086	5,188	5,291	5,397	5,505	37,290	
Total:		5,837	4,986	5,086	5,188	5,291	5,397	5,505	37,290	

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### Water Infrastructure - Watermain Extensions

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	New Facility	Start Date:	Q1/1998
Project ID:	C1111	End Date:	ONGOING
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	Council District: Urban Village:	Multiple
Neighborhood District:	In more than one District		In more than one Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	13,392	796	812	828	845	862	879	897	19,310
Total:	13,392	796	812	828	845	862	879	897	19,310
Fund Appropriations/Allo	cations								
Water Fund	13,392	796	812	828	845	862	879	897	19,310
Total*:	13,392	796	812	828	845	862	879	897	19,310
O & M Costs (Savings)			193	193	193	193	193	193	1,159
Spending Plan by Fund									
Water Fund		796	812	828	845	862	879	897	5,919
Total:		796	812	828	845	862	879	897	5,919

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# Water Quality Equipment

Water Quality & Treatment	<b>BCL/Program Code:</b>	C140B
Improved Facility	Start Date:	Q1/2007
C1414	End Date:	Q4/2015
Various		
Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Not in a Neighborhood District	Urban Village:	Not in an Urban Village
	mproved Facility C1414 Various	Improved FacilityStart Date:C1414End Date:VariousVariousNot in a Neighborhood PlanCouncil District:

This project installs water quality monitoring equipment throughout the drinking water distribution system and enhances SPU's drinking water quality, security, and public health surveillance system. This effort will improve Seattle's ability to detect and respond appropriately to potential drinking water contamination events as recommended by research produced by SPU and the Environmental Protection Agency (EPA) for online monitoring equipment and SPU's broader efforts to increase the security of the water system.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	249	143	101	100	0	0	0	0	593
Total:	249	143	101	100	0	0	0	0	593
Fund Appropriations/All	locations								
Water Fund	249	143	101	100	0	0	0	0	593
Total*:	249	143	101	100	0	0	0	0	593
O & M Costs (Savings)			6	6	6	6	6	6	36

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#### Water Supply Flexibility Program

BCL/Program Name:	Water Resources	BCL/Program Code:	C150B
Project Type:	New Investment	Start Date:	Q1/2008
Project ID:	C1507	End Date:	Q4/2016
Location:	Multiple		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This program improves water system performance, reliability, and flexibility during severe weather events, supply and infrastructure emergencies, as well as enhancing environmental performance for fish and supporting regulatory and policy compliance in these areas. Project improvements include Tolt Reservoir Temperature and the Overflow Dike in Chester Morse Lake, and may include but are not limited to, dam integrity and alternatives to improved crest control, reservoir water temperature, and water quality management.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	333	869	1,480	2,053	0	0	0	0	4,735
Total:	333	869	1,480	2,053	0	0	0	0	4,735
Fund Appropriations/Allo	cations								
Water Fund	333	869	1,480	2,053	0	0	0	0	4,735
Total*:	333	869	1,480	2,053	0	0	0	0	4,735
O & M Costs (Savings)			47	47	47	47	47	47	284
Spending Plan by Fund									
Water Fund		0	1,480	2,053	0	0	0	0	3,533
Total:		0	1,480	2,053	0	0	0	0	3,533

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### Water System Dewatering

BCL/Program Name:	Transmission	<b>BCL/Program Code:</b>	C120B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2007
Project ID:	C1205	End Date:	ONGOING
Location:	Regional		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources									
Water Rates	199	102	50	24	25	27	30	33	490
Total:	199	102	50	24	25	27	30	33	490
Fund Appropriations/Alloc	cations								
Water Fund	199	102	50	24	25	27	30	33	490
Total*:	199	102	50	24	25	27	30	33	490
O & M Costs (Savings)			5	5	5	5	5	5	29
Spending Plan by Fund									
Water Fund		45	50	24	25	27	30	33	234
Total:		45	50	24	25	27	30	33	234

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### Water System Plan - 2019

BCL/Program Name:	Water Resources	BCL/Program Code:	C150B
Project Type:	New Investment	Start Date:	Q1/2016
Project ID:	C1510	End Date:	Q4/2019
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	Not in a Neighborhood District	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	2014 Rev	2015	2016	2017	2018	2019	2020	Total
Revenue Sources			, ,					· · ·	
Water Rates	0	0	0	110	541	454	59	0	1,164
Total:	0	0	0	110	541	454	59	0	1,164
Fund Appropriations/All	ocations								
Water Fund	0	0	0	110	541	454	59	0	1,164
Total*:	0	0	0	110	541	454	59	0	1,164
O & M Costs (Savings)			0	12	12	12	12	12	58

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#### Watermain Rehabilitation

BCL/Program Name:	Distribution	BCL/Program Code:	C110B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2004
Project ID:	C1129	End Date:	ONGOING
Location:	Regional		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Multiple
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This ongoing program replaces or rehabilitates existing watermains in Seattle. Replacements occur when leaks become too frequent. Rehabilitation by lining the interior of the pipe with cement mortar restores the capacity of watermains that have degraded due to interior deposits. The benefits of this program are restored quality of the delivered water, lower use of chlorine to maintain required chlorine residual, and restored pressures.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total		
Revenue Sources											
Water Rates	6,980	4,426	3,137	1,078	3,182	7,513	4,411	4,010	34,737		
Total:	6,980	4,426	3,137	1,078	3,182	7,513	4,411	4,010	34,737		
Fund Appropriations/Alloc	Fund Appropriations/Allocations										
Water Fund	6,980	4,426	3,137	1,078	3,182	7,513	4,411	4,010	34,737		
Total*:	6,980	4,426	3,137	1,078	3,182	7,513	4,411	4,010	34,737		
O & M Costs (Savings)			347	347	347	347	347	347	2,084		
Spending Plan by Fund											
Water Fund		1,150	3,137	1,078	3,182	7,513	4,411	4,010	24,481		
Total:		1,150	3,137	1,078	3,182	7,513	4,411	4,010	24,481		

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### Watershed Road Improvement/Decommissioning

BCL/Program Name:	Habitat Conservation Program	<b>BCL/Program Code:</b>	C160B
Project Type:	Rehabilitation or Restoration	Start Date:	Q1/2001
Project ID:	C1601	End Date:	ONGOING
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	Outside Seattle
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total	
Revenue Sources										
Water Rates	11,922	1,004	1,090	1,106	1,124	1,140	1,157	1,175	19,718	
Total:	11,922	1,004	1,090	1,106	1,124	1,140	1,157	1,175	19,718	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Water Fund	11,922	1,004	1,090	1,106	1,124	1,140	1,157	1,175	19,718	
Total*:	11,922	1,004	1,090	1,106	1,124	1,140	1,157	1,175	19,718	
O & M Costs (Savings)			197	197	197	197	197	197	1,183	
Spending Plan by Fund										
Water Fund		794	1,090	1,106	1,124	1,140	1,157	1,175	7,586	
Total:		794	1,090	1,106	1,124	1,140	1,157	1,175	7,586	

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## **Yesler Terrace-WF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Facility	Start Date:	Q1/2014
Project ID:	C4136-WF	End Date:	Q4/2014
Location:	Yelser and Broadway		
Neighborhood Plan:	Not in a Neighborhood Plan	<b>Council District:</b>	3
Neighborhood District:	Central	Urban Village:	Not in an Urban Village

Seattle Housing Authority (SHA) is leading a major project to replace Yesler Terrace's aging public housing buildings with a new mixed-income community. This project provides funding for SPU Water infrastructure investments in association with this project.

	LTD Actuals	2014 Rev	2015	2016	2017	2018	2019	2020	Total
<b>Revenue Sources</b>	·								
Water Rates	0	200	0	0	0	0	0	0	200
Total:	0	200	0	0	0	0	0	0	200
Fund Appropriations/Allo	ocations								
Water Fund	0	200	0	0	0	0	0	0	200
Total*:	0	200	0	0	0	0	0	0	200
O & M Costs (Savings)			2	2	2	2	2	2	12

\*This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.