# SPU -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:

- 948 miles of sanitary sewers \*
- 477 miles of storm drains
- 472 miles of combined sewers \*
- 68 pump stations
- 90 permitted combined sewer overflow outfalls
- 295 storm drain outfalls
- 189 stormwater quality treatment facilities
- 145 flow control facilities
- 38 combined sewer overflow control detention tanks/pipes

\* Based on Permitted Use. In past years the statistics for Sanitary Sewers and Combined Sewers were determined based on "Probable Flow", which is a designation used by GIS and engineers for planning purposes and is not a precise classification used for issuing permits. "Permitted Use" is a better measure for statistical data and more accurate because this classification is used by the Department of Planning and Development (DPD) for issuing connection permits.

The Drainage and Wastewater (DWF) CIP is the vehicle for rehabilitating, replacing, improving and expanding this infrastructure, as well as constructing projects that protect, conserve, and enhance our region's environmental resources. Planned spending in the DWF CIP is approximately \$525 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. Overhead costs for the CIP are budgeted in the SPU operating fund and are reimbursed as CIP expenditures are incurred. DWF rates are currently being reviewed by Council for the three-year period of 2013-2015.

# 2013-2018 CIP

The Drainage and Wastewater CIP addresses the challenge of managing large priority projects while still accomplishing Mayoral priorities and complying with U.S. Environmental Protection Agency (EPA) and Washington State Department of Ecology (DOE) National Pollutant Discharge Elimination System (NPDES) permits - all within the financial limitations of the fund.

The City of Seattle negotiated a consent decree this year between the City, the EPA, and the DOE for compliance with the Clean Water Act and state regulations. This requirement will drive spending in the Combined Sewer Overflows (CSO) Reduction Program over the next several years. Additionally, an NPDES permit for stormwater, granted by the State government in 2007, introduced more 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 of Seattle to make substantial investments in detention, treatment, CSO retrofits and reductions, and Green Stormwater Infrastructure (GSI).

Detention is the storage of stormwater during a rainfall event and can be accomplished through detention ponds, underground tanks or through infiltration into the ground. 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. Treatment is the removal of pollutants and can be accomplished through infiltration or the use of technology such as specialized media filters. CSO reductions are focused on optimizing the existing collection system using low-cost retrofits and constructing large underground storage facilities to reduce overflows to waterways. 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.

CIP funding is also needed to improve the existing drainage system so that residents experience less flooding and fewer sewage backups. Sewer backups are prohibited and considered by regulators to be a violation of our federal permits. Prudent investment in capital projects and maintenance moves SPU closer to meeting this standard, and 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 local 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, contaminate sediment and habitat for endangered species and pollute Puget Sound. CSO spills are illegal and unacceptable under any standard of environmental care.

While annual overflows have been reduced from 30 billion gallons per year in 1970 to less than 100 million gallons per year today, SPU is still not meeting regulatory mandates which limit overflows to one 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 to be completed by 2015. SPU must also achieve significant permit milestones for the control of CSOs to Lake Washington by December 30, 2015. Most recently, the U.S. Department of Justice on behalf of the U.S. Environmental Protection Agency and the Washington State Department of Ecology finalized a consent decree describing measures U.S. Justice 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 by 2015 and control of all CSOs by 2025. Continuing investments in CSO control will enable SPU to meet these permit requirements.

SPU is expected to spend approximately \$215 million over the next six years (2013-2018) on CSO reduction projects. The projects will include a combination of underground storage tanks, GSI, system retrofits, 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. SPU must also maintain an active partnership with King County to operate the wastewater system and plan for potential joint CSO reduction projects.

The Drainage and Wastewater CIP must also ensure basic service level programs, such as flooding and system capacity, are not stripped of funding as 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 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 in stream 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.

# **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. SPU also actively seeks grants and low interest loans. Recently awarded grants include two lowinterest loans from the Washington State Department of Ecology's (DOE) Water Pollution Control Revolving Fund. These loans will help fund construction of the Capitol Hill Water Quality project and South Park Pump Station project. These loans are set at a lower interest rate than what SPU can borrow or issue debt and offset the need to draw down extra dollars from SPU's construction fund.

DWF rates are currently being reviewed by Council for the three-year period of 2013-2015.

# **Thematic Priorities and Project Selection**

Many Drainage and Wastewater CIP projects are outlined in the Wastewater System Plan, the Combined Sewer Overflow Reduction Plan, and the Comprehensive Drainage Plan. SPU staff consider three main criteria when prioritizing work: public health and safety (for example, safety from flooding during storm events, such as the Madison Valley Long Term Solution and the North 107<sup>th</sup> Street and Midvale North Drainage projects); environmental protection and regulatory compliance (such as investments to comply with the NPDES CSO Permit); and, Mayor and Council priorities (such as the Venema Natural Drainage System and the Capital Hill Water Quality Facility where green stormwater infrastructure will be used to reduce stormwater impacts while contributing to meeting sustainability goals).

SPU's capital planners identify candidate CIP projects through an awareness of ongoing planning processes (e.g. comprehensive plans, program plans), external projects and opportunities, and emergencies or other unexpected events that indicate specific investments are possibly recommended. SPU's Asset Management system then provides rigorous analysis of projects, using a business case process that establishes whether a problem or opportunity is timely and important, and whether the proposed solution is superior to alternatives based on a triple bottom line analysis (economic, environmental and social) of life cycle costs and benefits – or is a "must do" project (e.g. required by regulation).

After candidate projects have been identified, SPU prioritizes its projects for inclusion in the CIP 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 and South Henderson CSO projects.
- **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 the 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. Examples of highly ranked projects in this category include the North 107<sup>th</sup> and Midvale Drainage project (part of the Densmore Basin Drainage Improvements program) and the Long Term Control Plan.

Every project is rated against each criterion. Criteria ratings are then considered in determining an overall project priority ranking, using expert judgment. Priority rankings for the CIP are determined by the leads for each Line of Business, with review by key internal stakeholders. The ranking scheme and criteria are the same for all Lines of Business, 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. This process can also result in project scope changes, as more cost-effective approaches to meeting the business need are identified.

#### **CIP Expenditures by Major Categories**

Drainage and Wastewater Fund	2013	2014	2015	2016	2017	2018	Total
Protection of Beneficial Uses	\$5,108	\$5,142	\$4,323	\$5,222	\$2,734	\$3,083	\$25,611

#### **CIP Spending by Major Category** (in '000s)

Drainage and Wastewater Fund	2013	2014	2015	2016	2017	2018	Total
Sediments	\$1,679	\$2,050	\$1,561	\$797	\$797	\$797	\$7,681
Combined Sewer Overflows	\$43,834	\$49,202	\$36,144	\$44,210	\$18,222	\$23,087	\$214,699
Rehabilitation	\$9,191	\$8,770	\$9,950	\$12,850	\$13,224	\$13,102	\$67,086
Flooding, Sewer Backup and Landslides	\$16,710	\$17,201	\$7,173	\$16,360	\$26,700	\$25,660	\$109,804
Shared Cost Projects	\$10,728	\$11,395	\$8,179	\$12,873	\$10,459	\$10,415	\$64,050
Technology	\$8,880	\$7,613	\$5,154	\$4,720	\$4,821	\$4,942	\$36,129
Total	\$96,131	\$101,373	\$72,484	\$97,032	\$76,956	\$81,085	\$525,061

**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 2013 and 2014 will be focused on two cost effective stormwater projects: the Venema Creek Natural Drainage System project and the Capitol Hill Water Quality project. Both of these projects were cancelled in 2009 due to financial constraints, but have since been re-instated. Capital funding is also included to support the Knickerbocker Floodplain Improvement project, which was included in the 2012 2<sup>nd</sup> Quarter Supplemental.

Decreases in the **Protection of Beneficial Uses BCL** in 2013, compared to amounts adopted in 2012 in the 2012-2017 CIP, are primarily the result of the Venema Creek Natural Drainage System project. In 2012, schedule delays driven by community and design concerns shifted project construction costs from 2012-2013 to 2014-2015.

**Sediments**: The City of Seattle is named as a potentially responsible party (PRP) for the Duwamish River Superfund Site because of alleged contamination of sediments in the river from CSO and storm drain discharges. The City continues to work with 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 are included in subsequent CIP proposals.

Decreases in the **Sediments BCL** for 2013, compared to amounts adopted in 2012 in the 2012-2017 CIP, reflect the latest schedule and estimates based on negotiations and agreements between parties for proposed actions needed.

**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 for CSO control, and development of regulatory required plans such as the Long-Term Control Plan. Key projects in the 2013 Budget include

the Windermere, South Genesee and South Henderson CSO projects. When completed, these projects will result in cutting CSO volumes into Lake Washington by about 14 million gallons per year, a reduction of about 60 percent from current overflows.

Compared to amounts adopted in 2012 in the 2012-2017 CIP, the **Combined Sewer Overflows BCL** is decreasing in 2013 by \$9.4 million reflecting revisions primarily due to the cash flow and schedules for the Windermere and S. Genesee CSO projects. Adjustments for Windermere are the result of delayed construction that was planned to start in April 2012; however, the project experienced permitting delays that have since been resolved. Construction contracts were signed in July 2012, and construction is starting September 2012. The result is a shift of \$7 million from 2012 based on projected spending compared to the adopted CIP amount, a \$7 million decrease compared to the endorsed amount in 2013, followed by a \$17 million increase in 2014. Overall project costs have increased 19% due to increased construction costs determined as design progressed and the project became more defined. The original estimates for S. Genesee were based on high-level planning work, and have been refined to reflect the chosen alternative.

**Rehabilitation:** This program consists of projects to rehabilitate or replace existing drainage and wastewater assets in-kind to maintain 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, no-dig pipe and maintenance rehabilitation, point sewer pipe rehabilitation by crews, and point sewer pipe rehabilitation by contract.

Decreases in the **Rehabilitation BCL** for 2013, compared to amounts adopted in 2012 in the 2012-2017 CIP, are driven by the Pump Station and Force Main Improvements program and the Point Sewer Pipe Rehabilitation program. Reductions of \$1.3 million in 2013 in the Pump Station and Force Main Improvements program reflect a recent CIP prioritization that cut the project portfolio to only the most critical projects during the proposed 3-year rate period. SPU will prioritize essential pump station and force main improvements that are highest risk or emergencies and make fewer replacements and upgrades. Similarly, reductions to the Point Sewer Pipe Rehabilitation program of \$2.8 million in 2013 were driven by the recent CIP prioritization process. SPU will use remaining available funds to rehabilitate those sites with the highest risk scores in addition to non-arterial, less complicated sites (e.g., emergencies at the connection, emergencies resulting from void inspections in the right-of-way, or short sections of shallow pipe).

**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.

Decreased funding for the **Flooding, Sewer Back-up, and Landslides BCL** in 2013 compared with amounts adopted in 2012 in the 2012-2017 CIP will delay two projects. The total proposed decrease in 2013 of \$9.6 million is the result of the CIP prioritization to cut back to only the most critical projects. Approximately \$3 million of Culvert Replacement projects was moved out of 2013, only leaving funding to finish current projects in 2013. The Localized Flood Control program was reduced in 2013 proposed in order to focus on only the highest priority flood control projects. A decrease to 2013 Proposed

compared to 2012 Adopted in the South Park Pump Station project resulted from delays related to the reevaluation of water quality treatment technology and how it impacts and relates to the integrated plan (coordination with other CSO projects). Additionally, the decision was made to fold the Inflow/Infiltration Control program into the programmatic Sanitary Sewer Overflow (SSO) Capacity program and subsequently push funding into 2014.

**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 2013, 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 University Link. Funding is also included for SPU's Heavy Equipment Purchases, the Integrated Control Monitoring Program and a number of smaller projects.

Reductions in the **Shared Cost Projects BCL** for 2013, compared to amounts adopted in 2012 in the 2012-2017 CIP, are driven by the Drainage and Wastewater Operations Relocation, the Mercer Corridor West Project and the Alaskan Way Viaduct (AWV) programs. The 2013-2018 Proposed CIP for AWV and Mercer Corridor West reflects the latest schedule and more refined cost estimates, which includes construction for the seawall and bored tunnel portals and associated utility relocation. Additionally, the Drainage and Wastewater Operations Relocation project was reduced in 2013 because the project was cancelled after an executive decision was made not to relocate the Drainage and Wastewater Operations Staff out of the Charles Street Complex due to the construction of the First Hill Streectcar maintenance shed.

**Technology:** This program category is presented in the separate "Technology CIP" section of SPU's 2013-2018 Proposed CIP. The 2013-2018 Proposed CIP increases the DWF technology CIP spending by \$1.5 million as compared to the 2012 Adopted Budget in the 2012-2017 Adopted CIP. The Drainage and Wastewater Utility's share of the overall 2013 Technology CIP increase is 36%, or \$1.5 million, based on the Drainage and Wastewater Utility's share of benefit from these projects. SPU will focus technology spending on the highest priority business needs. These include utility asset management (Maximo Upgrade/Technical Information Management), budget and financial management (Budget Planning and Forecasting, Summit Upgrade), customer contact and billing (Utility Customer Billing System/CCSS), and science and system performance (Internet-based Supervisory Control and Data Acquisition Information Management System (I-SCADA IMS) enhancements).

# Anticipated Operating Expenses Associated with Capital Facilities Projects

When appropriate, the projects in the Drainage and Wastewater CIP include operations and maintenance cost estimates. These estimates will be refined after project completion and will be included as part of SPU's future budget submittals. Additional stormwater and SCO facilities, both structural and green, will require growing levels of operations and maintenance support for inspection and maintenance.

BCL/Program Name/									
Project Title & ID	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Protection of Beneficial Uses					BC	L/Program	m Code:		C333B
Best Management Practice Program (C3313)	3,090	50	40	729	1,000	2,539	2,252	2,302	12,003
Capitol Hill Water Quality Project (C3373)	1,657	2,724	2,478	335	198	2,472	481	780	11,125
Knickerbocker Floodplain Improvements (C3383)	0	0	1,540	78	0	0	0	0	1,618
Street Sweeping for Water Quality (C3363)	42	825	100	0	0	150	0	0	1,117
Taylor Creek Culvert Replacement (C3353)	1,573	100	450	3,000	125	60	0	0	5,308
Venema Creek Natural Drainage System (C3333)	1,674	1,101	500	1,000	3,000	0	0	0	7,275
Protection of Beneficial Uses	8,035	4,800	5,108	5,142	4,323	5,222	2,734	3,083	38,446
Sediments					BC	L/Program	m Code:		C350B
Sediment Remediation - DWF (C3503)	32,552	5,595	1,679	2,050	1,561	797	797	797	45,828
Sediments	32,552	5,595	1,679	2,050	1,561	797	797	797	45,828
<b>Combined Sewer Overflows</b>		BCL/Program Code:							
Combined Sewer Overflow Facility Retrofit (C3611)	8,856	3,654	3,024	3,516	3,258	1,104	0	0	23,411
Future CSO Projects (C3612)	0	0	0	0	0	4,705	9,806	19,312	33,823
Green Stormwater Infrastructure Program (C3610)	2,591	2,603	4,799	6,409	6,205	6,496	3,005	2,709	34,818
Long Term Control Plan (C3604)	22,186	7,315	4,517	2,908	2,252	2,000	0	0	41,177
S Genesee Combined Sewer Overflow (C3608)	6,928	1,507	8,120	11,537	2,373	0	0	0	30,466
S Henderson Combined Sewer Overflow Storage (C3609)	9,215	1,908	6,196	6,791	21,415	29,905	5,411	1,066	81,907
Windermere Combined Sewer Overflow Storage (C3605)	12,876	13,672	17,178	18,042	641	0	0	0	62,408
<b>Combined Sewer Overflows</b>	62,652	30,658	43,834	49,202	36,144	44,210	18,222	23,087	308,010
Rehabilitation					BC	L/Program	m Code:		C370B
Emergency Rehabilitation (C3705)	6,899	2,640	1,980	1,820	3,000	2,000	2,044	2,088	22,470
No Dig Pipe & Maintenance Rehabilitation (C3707)	13,055	1,530	1,500	1,500	1,500	1,500	1,533	1,566	23,684
Outfall Rehabilitation Program (C3708)	0	510	0	0	0	300	400	0	1,210

# **Project Summary**

\*Amounts in thousands of dollars

# **Project Summary**

BCL/Program Name/					•				
Project Title & ID	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Point Sewer Pipe Rehabilitation (C3704)	36,456	4,947	3,900	3,900	3,900	6,300	6,437	6,577	72,418
Pump Station and Force Main Improvements (C3703)	6,415	2,766	1,560	1,300	1,300	2,500	2,555	2,610	21,005
Sewer Full Line Replacements (C3702)	349	230	250	250	250	250	255	261	2,096
Rehabilitation	63,174	12,623	9,190	8,770	9,950	12,850	13,224	13,102	142,883
Flooding, Sewer Back-up, and	Landslides				BC	L/Program	m Code:		C380B
Broadview Long Term Plan (C3812)	0	2,000	2,500	2,000	2,000	6,000	7,000	2,000	23,500
Culvert Replacement Program (C3810)	1,615	1,837	440	700	950	5,000	5,000	5,000	20,541
Densmore Basin Drainage Improvements (C3803)	5,581	4,241	350	0	0	0	0	0	10,172
Inflow/Infiltration Control (C3807)	0	377	0	0	0	0	0	0	377
Localized Flood Control Program (C3802)	2,476	4,689	2,600	1,860	1,460	2,660	9,700	10,660	36,105
Madison Valley Long Term Solution (C3805)	27,702	1,920	250	0	0	0	0	0	29,872
Meadowbrook Pond Sediment Management (C3808)	347	1,500	135	31	0	0	0	0	2,013
Sanitary Sewer Overflow Capacity (C3804)	3,960	3,080	1,935	8,250	1,600	1,500	5,000	8,000	33,325
South Park Pump Station (C3806)	5,315	6,778	4,500	3,800	1,100	1,200	0	0	22,693
Thornton Confluence Improvement (C3811)	1,098	800	4,000	560	63	0	0	0	6,521
Flooding, Sewer Back-up, and Landslides	48,095	27,221	16,710	17,201	7,173	16,360	26,700	25,660	185,120
Shared Cost Projects					BC	L/Program	m Code:		C410B
1% for Art – DWF (C4118- DWF)	1,757	452	622	606	625	558	450	0	5,071
Alaskan Way Viaduct & Seawall Replacement Program - DWF (C4102-DWF)	7,488	1,530	3,107	5,291	3,104	6,085	6,332	6,661	39,596
Bridging the Gap - DWF (C4119-DWF)	184	1,137	500	500	500	500	1,436	1,454	6,211
Emergency Storms - DWF (C4120-DWF)	4,506	0	150	150	0	0	0	0	4,806
First Hill Streetcar - DWF (C4130-DWF)	0	0	0	0	0	0	0	0	0
Heavy Equipment Purchases - DWF (C4116-DWF)	8,283	1,706	1,525	1,725	2,000	3,200	0	0	18,440

\*Amounts in thousands of dollars

BCL/Program Name/									
Project Title & ID	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Integrated Control Monitoring Program - DWF (C4108- DWF)	9,664	1,613	1,050	500	250	500	500	500	14,577
Mercer Corridor Project East Phase - DWF (C4114-DWF)	5,629	1,010	795	0	0	0	0	0	7,433
Mercer Corridor Project West Phase - DWF (C4133-DWF)	81	335	629	494	89	0	0	0	1,628
Meter Replacement - DWF (C4101-DWF)	3,533	567	652	585	595	605	321	327	7,185
Operational Facility - Construction - DWF (C4106- DWF)	4,308	263	1,263	856	884	988	812	1,135	10,508
Operational Facility - Other - DWF (C4115-DWF)	329	6,381	75	150	0	0	0	0	6,936
Operations Control Center - DWF (C4105-DWF)	2,351	85	76	314	4	113	284	13	3,240
Other Major Transportation Projects - DWF (C4123-DWF)	1	10	0	0	0	0	0	0	12
Security Improvements - DWF (C4113-DWF)	1,006	148	21	36	22	249	249	250	1,982
Sound Transit - North Link - DWF (C4135-DWF)	0	88	72	75	75	75	75	75	534
Sound Transit – University Link - DWF (C4110-DWF)	297	98	191	113	30	0	0	0	729
Shared Cost Projects	49,417	15,422	10,728	11,395	8,179	12,873	10,459	10,415	128,888
Technology					BC	L/Progra	m Code:		C510B
Asset Information Management (C5407)	1,296	1,737	1,246	992	847	847	883	905	8,753
Customer Contact & Billing (C5402)	276	626	4,501	3,848	1,466	1,276	1,332	1,365	14,691
Enterprise Information Management (C5403)	41	218	259	226	231	225	172	176	1,548
IT Infrastructure (C5404)	909	600	848	557	637	733	722	740	5,746
Project Delivery & Performance (C5405)	941	1,047	1,150	1,296	1,262	929	969	993	8,586
Science & System Performance (C5406)	390	588	876	694	711	711	742	761	5,474
Technology	3,853	4,815	8,880	7,613	5,154	4,720	4,821	4,941	44,798
Department Total*:	267,777	101,134	96,131	101,373	72,484	97,032	76,956	81,085	893,972

# **Project Summary**

\*Amounts in thousands of dollars

					,				
Fund Name & Code	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Drainage and Wastewater Fund (44010)	267,777	101,134	96,131	101,373	72,484	97,032	76,956	81,085	893,972
Department Total*:	267,777	101,134	96,131	101,373	72,484	97,032	76,956	81,085	893,972

# **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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,757	452	622	606	625	558	450	0	5,071
Total:	1,757	452	622	606	625	558	450	0	5,071
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	1,757	452	622	606	625	558	450	0	5,071
Total*:	1,757	452	622	606	625	558	450	0	5,071
O & M Costs (Savings)			51	51	51	51	51	51	304
Spending Plan by Fund									
Drainage and Wastewater Fund		443	622	606	625	558	450	0	3,305
Total:		443	622	606	625	558	450	0	3,305

\*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:	Q4/2018
Location:	SR 99 / Battery St		
Neighborhood Plan:	In more than one Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	7,488	1,530	3,107	5,291	3,104	6,085	6,332	6,661	39,596
Total:	7,488	1,530	3,107	5,291	3,104	6,085	6,332	6,661	39,596
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	7,488	1,530	3,107	5,291	3,104	6,085	6,332	6,661	39,596
Total*:	7,488	1,530	3,107	5,291	3,104	6,085	6,332	6,661	39,596
O & M Costs (Savings)			406	406	406	406	406	406	2,433
Spending Plan by Fund									
Drainage and Wastewater Fund		1,537	3,107	5,291	3,104	6,085	6,332	6,661	32,115
Total:		1,537	3,107	5,291	3,104	6,085	6,332	6,661	32,115

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

# **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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	3,090	50	40	729	1,000	2,539	2,252	2,302	12,003
Total:	3,090	50	40	729	1,000	2,539	2,252	2,302	12,003
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	3,090	50	40	729	1,000	2,539	2,252	2,302	12,003
Total*:	3,090	50	40	729	1,000	2,539	2,252	2,302	12,003
O & M Costs (Savings)			97	97	97	97	97	97	582
Spending Plan by Fund									
Drainage and Wastewater Fund		83	40	729	1,000	2,539	2,252	2,302	8,946
Total:		83	40	729	1,000	2,539	2,252	2,302	8,946

\*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:	Q4/2018
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	184	1,137	500	500	500	500	1,436	1,454	6,211
Total:	184	1,137	500	500	500	500	1,436	1,454	6,211
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	184	1,137	500	500	500	500	1,436	1,454	6,211
Total*:	184	1,137	500	500	500	500	1,436	1,454	6,211
O & M Costs (Savings)			43	43	43	43	43	43	259
Spending Plan by Fund									
Drainage and Wastewater Fund		50	500	500	500	500	1,436	1,454	4,940
Total:		50	500	500	500	500	1,436	1,454	4,940

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

# <u>Broadview Long Term Plan</u>

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	Neighborhood Plan Matrix:	
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Drainage and Wastewater Rates	0	2,000	2,500	2,000	2,000	6,000	7,000	2,000	23,500
Total:	0	2,000	2,500	2,000	2,000	6,000	7,000	2,000	23,500
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	0	2,000	2,500	2,000	2,000	6,000	7,000	2,000	23,500
Total*:	0	2,000	2,500	2,000	2,000	6,000	7,000	2,000	23,500
O & M Costs (Savings)			235	235	235	235	235	235	1,410
Spending Plan by Fund									
Drainage and Wastewater Fund		0	2,500	2,000	2,000	6,000	7,000	2,000	21,500
Total:		0	2,500	2,000	2,000	6,000	7,000	2,000	21,500

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

<b>BCL/Program Name:</b>	Protection of Beneficial Uses	<b>BCL/Program Code:</b>	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,657	2,724	2,478	335	198	2,472	481	780	11,125
Total:	1,657	2,724	2,478	335	198	2,472	481	780	11,125
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	1,657	2,724	2,478	335	198	2,472	481	780	11,125
Total*:	1,657	2,724	2,478	335	198	2,472	481	780	11,125
O & M Costs (Savings)			11	11	11	11	11	11	67
Spending Plan by Fund									
Drainage and Wastewater Fund		2,419	2,478	335	198	2,472	481	780	9,164
Total:		2,419	2,478	335	198	2,472	481	780	9,164

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<b>BCL/Program Name:</b>	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	Neighborhood Plan Matrix:	N/A
Neighborhood District:	In more than one District	Urban Village:	Not in an Urban Village

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

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. Although this is an ongoing project, no work is currently planned for 2017 or 2018.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
<b>Revenue Sources</b>										
Drainage and Wastewater Rates	8,856	3,654	3,024	3,516	3,258	1,104	0	0	23,411	
Total:	8,856	3,654	3,024	3,516	3,258	1,104	0	0	23,411	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Drainage and Wastewater Fund	8,856	3,654	3,024	3,516	3,258	1,104	0	0	23,411	
Total*:	8,856	3,654	3,024	3,516	3,258	1,104	0	0	23,411	
O & M Costs (Savings)			234	234	234	234	234	234	1,405	
Spending Plan by Fund										
Drainage and Wastewater Fund		3,337	3,024	3,516	3,258	1,104	0	0	14,238	
Total:		3,337	3,024	3,516	3,258	1,104	0	0	14,238	

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
<b>Revenue Sources</b>										
Drainage and Wastewater Rates	1,615	1,837	440	700	950	5,000	5,000	5,000	20,541	
Total:	1,615	1,837	440	700	950	5,000	5,000	5,000	20,541	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Drainage and Wastewater Fund	1,615	1,837	440	700	950	5,000	5,000	5,000	20,541	
Total*:	1,615	1,837	440	700	950	5,000	5,000	5,000	20,541	
O & M Costs (Savings)			205	205	205	205	205	205	1,232	
Spending Plan by Fund										
Drainage and Wastewater Fund		1,867	440	700	950	5,000	5,000	5,000	18,957	
Total:		1,867	440	700	950	5,000	5,000	5,000	18,957	

\*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:	Q4/2013
Location:	Densmore Basin		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
<b>Revenue Sources</b>										
Drainage and Wastewater Rates	5,581	4,241	350	0	0	0	0	0	10,172	
Total:	5,581	4,241	350	0	0	0	0	0	10,172	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Drainage and Wastewater Fund	5,581	4,241	350	0	0	0	0	0	10,172	
Total*:	5,581	4,241	350	0	0	0	0	0	10,172	
O & M Costs (Savings)			102	102	102	102	102	102	610	
Spending Plan by Fund										
Drainage and Wastewater Fund		3,852	350	0	0	0	0	0	4,202	
Total:		3,852	350	0	0	0	0	0	4,202	

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	6,899	2,640	1,980	1,820	3,000	2,000	2,044	2,088	22,470
Total:	6,899	2,640	1,980	1,820	3,000	2,000	2,044	2,088	22,470
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	6,899	2,640	1,980	1,820	3,000	2,000	2,044	2,088	22,470
Total*:	6,899	2,640	1,980	1,820	3,000	2,000	2,044	2,088	22,470
O & M Costs (Savings)			183	183	183	183	183	183	1,100
Spending Plan by Fund									
Drainage and Wastewater Fund		2,000	1,980	1,820	3,000	2,000	2,044	2,088	14,932
Total:		2,000	1,980	1,820	3,000	2,000	2,044	2,088	14,932

\*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**

BCL/Program Name:	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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Drainage and Wastewater Rates	4,506	0	150	150	0	0	0	0	4,806
Total:	4,506	0	150	150	0	0	0	0	4,806
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	4,506	0	150	150	0	0	0	0	4,806
Total*:	4,506	0	150	150	0	0	0	0	4,806
O & M Costs (Savings)			48	48	48	48	48	48	288
Spending Plan by Fund									
Drainage and Wastewater Fund		150	150	150	0	0	0	0	450
Total:		150	150	150	0	0	0	0	450

\*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:	Q4/2013
Location:	First Hill		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	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 2013-2018 timeframe but if they are, necessary funding will be requested. Operating funding for the project is currently proposed as part of the 2013-2014 Proposed Budget.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	0	0	0	0	0	0	0
Total:	0	0	0	0	0	0	0	0	0
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	0	0	0	0	0	0	0	0	0
Total*:	0	0	0	0	0	0	0	0	0
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Drainage and Wastewater Fund		700	0	0	0	0	0	0	700
Total:		700	0	0	0	0	0	0	700

\*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	BCL/Program Code:	C360B
Project Type:	Improved Facility	Start Date:	Q1/2016
Project ID:	C3612	End Date:	Q4/2025
Location:			
Neighborhood Plan:	Not in Neighborhood Plan	Neighborhood Plan Matrix:	
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 2014, and the projects should complete their construction by 2025.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	0	0	0	4,705	9,806	19,312	33,823
Total:	0	0	0	0	0	4,705	9,806	19,312	33,823
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	0	0	0	0	0	4,705	9,806	19,312	33,823
Total*:	0	0	0	0	0	4,705	9,806	19,312	33,823
O & M Costs (Savings)			0	0	0	338	338	338	1,015

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

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

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

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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Drainage and Wastewater Rates	2,591	2,603	4,799	6,409	6,205	6,496	3,005	2,709	34,818
Total:	2,591	2,603	4,799	6,409	6,205	6,496	3,005	2,709	34,818
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	2,591	2,603	4,799	6,409	6,205	6,496	3,005	2,709	34,818
Total*:	2,591	2,603	4,799	6,409	6,205	6,496	3,005	2,709	34,818
O & M Costs (Savings)			295	295	295	295	295	295	1,773
Spending Plan by Fund									
Drainage and Wastewater Fund		2,515	4,799	6,409	6,205	6,496	3,005	2,709	32,139
Total:		2,515	4,799	6,409	6,205	6,496	3,005	2,709	32,139

\*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

BCL/Program Name:	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	Neighborhood Plan Matrix:	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. No specific equipment purchases have been identified for 2017 or 2018 but once they are appropriate budget authority will be requested.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	8,283	1,706	1,525	1,725	2,000	3,200	0	0	18,440
Total:	8,283	1,706	1,525	1,725	2,000	3,200	0	0	18,440
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	8,283	1,706	1,525	1,725	2,000	3,200	0	0	18,440
Total*:	8,283	1,706	1,525	1,725	2,000	3,200	0	0	18,440
O & M Costs (Savings)			184	184	184	184	184	184	1,106
Spending Plan by Fund									
Drainage and Wastewater Fund		1,612	1,525	1,725	2,000	3,200	0	0	10,062
Total:		1,612	1,525	1,725	2,000	3,200	0	0	10,062

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

Inflow/Infiltration Control
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BCL/Program Name:	Flooding, Sewer Back-up, and Landslides	BCL/Program Code:	C380B
Project Type:	Improved Facility	Start Date:	Q1/2011
Project ID:	C3807	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

This ongoing project reduces inflow and infiltration (I/I) to sanitary sewers from side sewers and other pipe openings. Reductions may result from inspections, repair, and/or enforcement of codes. I/I reduction improves the capacity of the existing sanitary sewer system by removing excess storm flows, thereby reducing the potential for overflows and decreasing quantities going to Metro's treatment facilities. It will be rolled into C3804 - Sanitary Sewer Overflow Cpcity starting in 2013.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Drainage and Wastewater Rates	0	377	0	0	0	0	0	0	377
Total:	0	377	0	0	0	0	0	0	377
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	0	377	0	0	0	0	0	0	377
Total*:	0	377	0	0	0	0	0	0	377
O & M Costs (Savings)			4	4	4	4	4	4	23
Spending Plan by Fund									
Drainage and Wastewater Fund		1,000	0	0	0	0	0	0	1,000
Total:		1,000	0	0	0	0	0	0	1,000

\*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 - 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:	Q4/2018
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	9,664	1,613	1,050	500	250	500	500	500	14,577
Total:	9,664	1,613	1,050	500	250	500	500	500	14,577
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	9,664	1,613	1,050	500	250	500	500	500	14,577
Total*:	9,664	1,613	1,050	500	250	500	500	500	14,577
O & M Costs (Savings)			168	168	168	168	168	168	1,010
Spending Plan by Fund									
Drainage and Wastewater Fund		1,708	1,050	500	250	500	500	500	5,008
Total:		1,708	1,050	500	250	500	500	500	5,008

\*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:	Q4/2014
Location:			
Neighborhood Plan:	Not in Neighborhood Plan	Neighborhood Plan Matrix:	
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	1,540	78	0	0	0	0	1,618
Total:	0	0	1,540	78	0	0	0	0	1,618
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	0	0	1,540	78	0	0	0	0	1,618
Total*:	0	0	1,540	78	0	0	0	0	1,618
O & M Costs (Savings)			19	19	19	19	19	19	112
Spending Plan by Fund									
Drainage and Wastewater Fund		250	1,540	78	0	0	0	0	1,868
Total:		250	1,540	78	0	0	0	0	1,868

\*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:	C3802	End Date:	ONGOING						
Location:	Various								
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A						
Neighborhood District:	Northwest	Urban Village:	Bitter Lake Village						

#### Localized Flood Control Program

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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,476	4,689	2,600	1,860	1,460	2,660	9,700	10,660	36,105
Total:	2,476	4,689	2,600	1,860	1,460	2,660	9,700	10,660	36,105
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	2,476	4,689	2,600	1,860	1,460	2,660	9,700	10,660	36,105
Total*:	2,476	4,689	2,600	1,860	1,460	2,660	9,700	10,660	36,105
O & M Costs (Savings)			361	361	361	361	361	361	2,166
Spending Plan by Fund									
Drainage and Wastewater Fund		2,501	2,600	1,860	1,460	2,660	9,700	10,660	31,441
Total:		2,501	2,600	1,860	1,460	2,660	9,700	10,660	31,441

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#### Long Term Control Plan

BCL/Program Name:	Combined Sewer Overflows	BCL/Program Code:	C360B
Project Type:	New Facility	Start Date:	Q3/2008
Project ID:	C3604	End Date:	Q4/2030
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	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).

No specific work has been identified for the years 2017 and 2018 but once it is appropriate budget authority will be requested.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Drainage and Wastewater Rates	22,186	7,315	4,517	2,908	2,252	2,000	0	0	41,177
Total:	22,186	7,315	4,517	2,908	2,252	2,000	0	0	41,177
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	22,186	7,315	4,517	2,908	2,252	2,000	0	0	41,177
Total*:	22,186	7,315	4,517	2,908	2,252	2,000	0	0	41,177
O & M Costs (Savings)			412	412	412	412	412	412	2,471

\*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:	Q4/2013
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
<b>Revenue Sources</b>										
Drainage and Wastewater Rates	27,702	1,920	250	0	0	0	0	0	29,872	
Total:	27,702	1,920	250	0	0	0	0	0	29,872	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Drainage and Wastewater Fund	27,702	1,920	250	0	0	0	0	0	29,872	
Total*:	27,702	1,920	250	0	0	0	0	0	29,872	
O & M Costs (Savings)			299	299	299	299	299	299	1,792	
Spending Plan by Fund										
Drainage and Wastewater Fund		5,110	250	0	0	0	0	0	5,360	
Total:		5,110	250	0	0	0	0	0	5,360	

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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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Drainage and Wastewater Rates	347	1,500	135	31	0	0	0	0	2,013
Total:	347	1,500	135	31	0	0	0	0	2,013
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	347	1,500	135	31	0	0	0	0	2,013
Total*:	347	1,500	135	31	0	0	0	0	2,013
O & M Costs (Savings)			20	20	20	20	20	20	121
Spending Plan by Fund									
Drainage and Wastewater Fund		1,700	135	31	0	0	0	0	1,866
Total:		1,700	135	31	0	0	0	0	1,866

\*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:	Q4/2013
Location:	South Lake Union		
Neighborhood Plan:	South Lake Union	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	5,629	1,010	795	0	0	0	0	0	7,433
Total:	5,629	1,010	795	0	0	0	0	0	7,433
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	5,629	1,010	795	0	0	0	0	0	7,433
Total*:	5,629	1,010	795	0	0	0	0	0	7,433
O & M Costs (Savings)			74	74	74	74	74	74	446
Spending Plan by Fund									
Drainage and Wastewater Fund		1,050	895	0	0	0	0	0	1,945
Total:		1,050	895	0	0	0	0	0	1,945

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	T01, T02, T03, T11 T15
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Drainage and Wastewater Rates	81	335	629	494	89	0	0	0	1,628
Total:	81	335	629	494	89	0	0	0	1,628
Fund Appropriations/Allo	ocations								
Drainage and Wastewater Fund	81	335	629	494	89	0	0	0	1,628
Total*:	81	335	629	494	89	0	0	0	1,628
O & M Costs (Savings)			16	16	16	16	16	16	98

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Drainage and Wastewater Rates	3,533	567	652	585	595	605	321	327	7,185
Total:	3,533	567	652	585	595	605	321	327	7,185
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	3,533	567	652	585	595	605	321	327	7,185
Total*:	3,533	567	652	585	595	605	321	327	7,185
O & M Costs (Savings)			70	70	70	70	70	70	418
Spending Plan by Fund									
Drainage and Wastewater Fund		565	652	585	595	605	321	327	3,651
Total:		565	652	585	595	605	321	327	3,651

\*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	Neighborhood Plan Matrix:	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. No funding has been requested for the 2017-2018 time frame but once specific work is identified, additional spending authority will be requested.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
<b>Revenue Sources</b>										
Drainage and Wastewater Rates	13,055	1,530	1,500	1,500	1,500	1,500	1,533	1,566	23,684	
Total:	13,055	1,530	1,500	1,500	1,500	1,500	1,533	1,566	23,684	
Fund Appropriations/Allocations										
Drainage and Wastewater Fund	13,055	1,530	1,500	1,500	1,500	1,500	1,533	1,566	23,684	
Total*:	13,055	1,530	1,500	1,500	1,500	1,500	1,533	1,566	23,684	
O & M Costs (Savings)			206	206	206	206	206	206	1,235	
Spending Plan by Fund										
Drainage and Wastewater Fund		1,500	1,500	1,500	1,500	1,500	1,533	1,566	10,599	
Total:		1,500	1,500	1,500	1,500	1,500	1,533	1,566	10,599	

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	4,308	263	1,263	856	884	988	812	1,135	10,508
Total:	4,308	263	1,263	856	884	988	812	1,135	10,508
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	4,308	263	1,263	856	884	988	812	1,135	10,508
Total*:	4,308	263	1,263	856	884	988	812	1,135	10,508
O & M Costs (Savings)			138	138	138	138	138	138	826
Spending Plan by Fund									
Drainage and Wastewater Fund		723	1,263	856	884	988	812	1,135	6,661
Total:		723	1,263	856	884	988	812	1,135	6,661

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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. No work is currently planned for drainage and wastewater facilities in 2015-2018.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Drainage and Wastewater Rates	329	6,381	75	150	0	0	0	0	6,936
Total:	329	6,381	75	150	0	0	0	0	6,936
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	329	6,381	75	150	0	0	0	0	6,936
Total*:	329	6,381	75	150	0	0	0	0	6,936
O & M Costs (Savings)			69	69	69	69	69	69	416
Spending Plan by Fund									
Drainage and Wastewater Fund		0	75	150	0	0	0	0	225
Total:		0	75	150	0	0	0	0	225

\*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**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,351	85	76	314	4	113	284	13	3,240
Total:	2,351	85	76	314	4	113	284	13	3,240
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	2,351	85	76	314	4	113	284	13	3,240
Total*:	2,351	85	76	314	4	113	284	13	3,240
O & M Costs (Savings)			33	33	33	33	33	33	199
Spending Plan by Fund									
Drainage and Wastewater Fund		52	76	314	4	113	284	13	856
Total:		52	76	314	4	113	284	13	856

\*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	<b>BCL/Program Code:</b>	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	Neighborhood Plan Matrix:	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. No work has been identified for the 2013-2018 time frame but once specific projects emerge, appropriate spending authority will be requested.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Drainage and Wastewater Rates	1	10	0	0	0	0	0	0	12
Total:	1	10	0	0	0	0	0	0	12
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	1	10	0	0	0	0	0	0	12
Total*:	1	10	0	0	0	0	0	0	12
O & M Costs (Savings)			0	0	0	0	0	0	1
Spending Plan by Fund									
Drainage and Wastewater 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.

# **Outfall Rehabilitation Program**

BCL/Program Name:	Rehabilitation	BCL/Program Code:	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	Neighborhood Plan Matrix:	
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	510	0	0	0	300	400	0	1,210
Total:	0	510	0	0	0	300	400	0	1,210
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	0	510	0	0	0	300	400	0	1,210
Total*:	0	510	0	0	0	300	400	0	1,210
O & M Costs (Savings)			12	12	12	12	12	12	73
Spending Plan by Fund									
Drainage and Wastewater Fund		0	0	0	0	300	400	0	700
Total:		0	0	0	0	300	400	0	700

\*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**

BCL/Program Name:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	36,456	4,947	3,900	3,900	3,900	6,300	6,437	6,577	72,418
Total:	36,456	4,947	3,900	3,900	3,900	6,300	6,437	6,577	72,418
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	36,456	4,947	3,900	3,900	3,900	6,300	6,437	6,577	72,418
Total*:	36,456	4,947	3,900	3,900	3,900	6,300	6,437	6,577	72,418
O & M Costs (Savings)			594	594	594	594	594	594	3,564

\*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	<b>BCL/Program Code:</b>	C370B
Project Type:	New Facility	Start Date:	Q1/2008
Project ID:	C3703	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total		
<b>Revenue Sources</b>											
Drainage and Wastewater Rates	6,415	2,766	1,560	1,300	1,300	2,500	2,555	2,610	21,005		
Total:	6,415	2,766	1,560	1,300	1,300	2,500	2,555	2,610	21,005		
Fund Appropriations/Alloc	Fund Appropriations/Allocations										
Drainage and Wastewater Fund	6,415	2,766	1,560	1,300	1,300	2,500	2,555	2,610	21,005		
Total*:	6,415	2,766	1,560	1,300	1,300	2,500	2,555	2,610	21,005		
O & M Costs (Savings)			158	158	158	158	158	158	950		
Spending Plan by Fund											
Drainage and Wastewater Fund		1,837	1,560	1,300	1,300	2,500	2,555	2,610	13,662		
Total:		1,837	1,560	1,300	1,300	2,500	2,555	2,610	13,662		

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

# **<u>S Genesee Combined Sewer Overflow</u>**

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	Neighborhood Plan Matrix:	
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
<b>Revenue Sources</b>										
Drainage and Wastewater Rates	6,928	1,507	8,120	11,537	2,373	0	0	0	30,466	
Total:	6,928	1,507	8,120	11,537	2,373	0	0	0	30,466	
Fund Appropriations/Allocations										
Drainage and Wastewater Fund	6,928	1,507	8,120	11,537	2,373	0	0	0	30,466	
Total*:	6,928	1,507	8,120	11,537	2,373	0	0	0	30,466	
O & M Costs (Savings)			305	305	305	305	305	305	1,828	
Spending Plan by Fund										
Drainage and Wastewater Fund		2,290	8,120	11,537	2,373	0	0	0	24,321	
Total:		2,290	8,120	11,537	2,373	0	0	0	24,321	

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

<b>BCL/Program Name:</b>	Combined Sewer Overflows	BCL/Program Code:	C360B
Project Type:	New Facility	Start Date:	Q1/2005
Project ID:	C3609	End Date:	Q4/2020
Location:	S Henderson St.		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
Neighborhood District:	Southeast	Urban Village:	Not in an Urban Village

#### **<u>S Henderson Combined Sewer Overflow Storage</u>**

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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
<b>Revenue Sources</b>										
Drainage and Wastewater Rates	9,215	1,908	6,196	6,791	21,415	29,905	5,411	1,066	81,907	
Total:	9,215	1,908	6,196	6,791	21,415	29,905	5,411	1,066	81,907	
Fund Appropriations/Allocations										
Drainage and Wastewater Fund	9,215	1,908	6,196	6,791	21,415	29,905	5,411	1,066	81,907	
Total*:	9,215	1,908	6,196	6,791	21,415	29,905	5,411	1,066	81,907	
O & M Costs (Savings)			0	0	0	0	0	0	0	
Spending Plan by Fund										
Drainage and Wastewater Fund		2,598	6,196	6,791	21,415	29,905	5,411	1,066	73,381	
Total:		2,598	6,196	6,791	21,415	29,905	5,411	1,066	73,381	

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
<b>Revenue Sources</b>										
Drainage and Wastewater Rates	3,960	3,080	1,935	8,250	1,600	1,500	5,000	8,000	33,325	
Total:	3,960	3,080	1,935	8,250	1,600	1,500	5,000	8,000	33,325	
Fund Appropriations/Allocations										
Drainage and Wastewater Fund	3,960	3,080	1,935	8,250	1,600	1,500	5,000	8,000	33,325	
Total*:	3,960	3,080	1,935	8,250	1,600	1,500	5,000	8,000	33,325	
O & M Costs (Savings)			333	333	333	333	333	333	2,000	
Spending Plan by Fund										
Drainage and Wastewater Fund		2,075	1,935	8,250	1,600	1,500	5,000	8,000	28,360	
Total:		2,075	1,935	8,250	1,600	1,500	5,000	8,000	28,360	

\*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:	Q4/2018
Location:	Citywide		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,006	148	21	36	22	249	249	250	1,982
Total:	1,006	148	21	36	22	249	249	250	1,982
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	1,006	148	21	36	22	249	249	250	1,982
Total*:	1,006	148	21	36	22	249	249	250	1,982
O & M Costs (Savings)			24	24	24	24	24	24	147
Spending Plan by Fund									
Drainage and Wastewater Fund		74	21	36	22	249	249	250	902
Total:		74	21	36	22	249	249	250	902

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total		
<b>Revenue Sources</b>											
Drainage and Wastewater Rates	32,552	5,595	1,679	2,050	1,561	797	797	797	45,828		
Total:	32,552	5,595	1,679	2,050	1,561	797	797	797	45,828		
Fund Appropriations/Alloc	Fund Appropriations/Allocations										
Drainage and Wastewater Fund	32,552	5,595	1,679	2,050	1,561	797	797	797	45,828		
Total*:	32,552	5,595	1,679	2,050	1,561	797	797	797	45,828		
O & M Costs (Savings)			458	458	458	458	458	458	2,750		
Spending Plan by Fund											
Drainage and Wastewater Fund		5,550	1,679	2,050	1,561	797	797	797	13,231		
Total:		5,550	1,679	2,050	1,561	797	797	797	13,231		

\*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	Neighborhood Plan Matrix:	N/A
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. No funding has been requested for the 2017-2018 time frame but once specific replacements are identified, appropriate budget authority will be requested.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	349	230	250	250	250	250	255	261	2,096
Total:	349	230	250	250	250	250	255	261	2,096
Fund Appropriations/Allo	ocations								
Drainage and Wastewater Fund	349	230	250	250	250	250	255	261	2,096
Total*:	349	230	250	250	250	250	255	261	2,096
O & M Costs (Savings)			16	16	16	16	16	16	95

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	88	72	75	75	75	75	75	534
Total:	0	88	72	75	75	75	75	75	534
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	0	88	72	75	75	75	75	75	534
Total*:	0	88	72	75	75	75	75	75	534
O & M Costs (Savings)			9	9	9	9	9	9	54
Spending Plan by Fund									
Drainage and Wastewater Fund		0	72	75	75	75	75	75	447
Total:		0	72	75	75	75	75	75	447

\*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:	Q4/2015
Location:	Various		
Neighborhood Plan:	In more than one Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	297	98	191	113	30	0	0	0	729
Total:	297	98	191	113	30	0	0	0	729
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	297	98	191	113	30	0	0	0	729
Total*:	297	98	191	113	30	0	0	0	729
O & M Costs (Savings)			8	8	8	8	8	8	48
Spending Plan by Fund									
Drainage and Wastewater Fund		165	191	113	30	0	0	0	499
Total:		165	191	113	30	0	0	0	499

\*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:	Q4/2016
Location:	698 S Riverside DR/Holden/Austin		
Neighborhood Plan:	South Park	Neighborhood Plan Matrix:	
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	5,315	6,778	4,500	3,800	1,100	1,200	0	0	22,693
Total:	5,315	6,778	4,500	3,800	1,100	1,200	0	0	22,693
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	5,315	6,778	4,500	3,800	1,100	1,200	0	0	22,693
Total*:	5,315	6,778	4,500	3,800	1,100	1,200	0	0	22,693
O & M Costs (Savings)			227	227	227	227	227	227	1,362
Spending Plan by Fund									
Drainage and Wastewater Fund		951	4,500	3,800	1,100	1,200	0	0	11,551
Total:		951	4,500	3,800	1,100	1,200	0	0	11,551

\*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	<b>Quality</b>

BCL/Program Name:	Protection of Beneficial Uses	BCL/Program Code:	C333B
Project Type:	New Investment	Start Date:	Q1/2011
Project ID:	C3363	End Date:	Q4/2016
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	42	825	100	0	0	150	0	0	1,117
Total:	42	825	100	0	0	150	0	0	1,117
Fund Appropriations/Allo	ocations								
Drainage and Wastewater Fund	42	825	100	0	0	150	0	0	1,117
Total*:	42	825	100	0	0	150	0	0	1,117
O & M Costs (Savings)			11	11	11	11	11	11	67

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,573	100	450	3,000	125	60	0	0	5,308
Total:	1,573	100	450	3,000	125	60	0	0	5,308
Fund Appropriations/Allo	ocations								
Drainage and Wastewater Fund	1,573	100	450	3,000	125	60	0	0	5,308
Total*:	1,573	100	450	3,000	125	60	0	0	5,308
O & M Costs (Savings)			53	53	53	53	53	53	318

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,098	800	4,000	560	63	0	0	0	6,521
Total:	1,098	800	4,000	560	63	0	0	0	6,521
Fund Appropriations/Allo	ocations								
Drainage and Wastewater Fund	1,098	800	4,000	560	63	0	0	0	6,521
Total*:	1,098	800	4,000	560	63	0	0	0	6,521
O & M Costs (Savings)			65	65	65	65	65	65	391

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

<b>BCL/Program Name:</b>	Protection of Beneficial Uses	<b>BCL/Program Code:</b>	C333B
Project Type:	New Facility	Start Date:	Q1/2003
Project ID:	C3333	End Date:	Q4/2015
Location:	1st and 2nd Ave NW/NW 120th St/NW 122nd St		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Drainage and Wastewater Rates	1,674	1,101	500	1,000	3,000	0	0	0	7,275
Total:	1,674	1,101	500	1,000	3,000	0	0	0	7,275
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	1,674	1,101	500	1,000	3,000	0	0	0	7,275
Total*:	1,674	1,101	500	1,000	3,000	0	0	0	7,275
O & M Costs (Savings)			73	73	73	73	73	73	437
Spending Plan by Fund									
Drainage and Wastewater Fund		784	500	1,000	3,000	0	0	0	5,284
Total:		784	500	1,000	3,000	0	0	0	5,284

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

Windermere	Combined	Sewer	<b>Overflow</b>	<b>Storage</b>

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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	12,876	13,672	17,178	18,042	641	0	0	0	62,408
Total:	12,876	13,672	17,178	18,042	641	0	0	0	62,408
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	12,876	13,672	17,178	18,042	641	0	0	0	62,408
Total*:	12,876	13,672	17,178	18,042	641	0	0	0	62,408
O & M Costs (Savings)			624	624	624	624	624	624	3,744
Spending Plan by Fund									
Drainage and Wastewater Fund		12,384	17,178	18,042	641	0	0	0	48,245
Total:		12,384	17,178	18,042	641	0	0	0	48,245

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

# SPU -SOLID WASTE

# **Overview**

Seattle Public Utilities (SPU) is responsible for the collection and disposal of solid waste generated within the City of Seattle. To fulfill this responsibility the City owns major capital facilities, including two recycling and disposal stations, also known as transfer stations, and two household hazardous waste facilities, and a fleet of trucks and heavy equipment. In addition, the Solid Waste Capital Improvement Plan (CIP) supports post-closure projects on two landfills previously used by the City.

Funding for Solid Waste capital projects comes predominantly from rates charged to customers whose trash, recycling, and composting are handled by the City's solid waste infrastructure and services. Changes to the solid waste rates are proposed in 2012 for the period 2013-2016, and support the 2013-2018 Adopted CIP. There will also be a Solid Waste Fund bond issuance in 2013.

## 2013-2018 CIP

Planned spending in the Solid Waste Fund (SWF) CIP is \$135M over the next six years (excluding Technology). By far the largest projects over this time period are the rebuilding the North Transfer Station between 2013 and 2017, demolishing the old South Transfer Station, and constructing a recycling/re-use facility at the South Transfer Station location between 2015 and 2018. These projects comprise 63% of the total CIP. The other significant projects are the South Park Development project, funding the investigation and closure of the South Park Landfill, and the replacement of the South Household Hazardous Waste facility.

As solid waste management has evolved, the functions of the City's NRDS (North Recycling and Disposal Station) and SRDS (South Recycling and Disposal Station) expanded dramatically, yet the basic buildings and facilities did not change. Today the stations accept more than 10 categories of separated material—from garbage to wood waste to vehicle batteries. Typically, transfer facilities are designed to last for 30 years. Seattle's stations have exceeded this life-span, despite limited maintenance. Overall, they are outmoded and no longer adequately handle current volumes of materials and customers.

Built in the mid-1960s, both transfer stations have experienced close to half a century of hard industrial use that has worn out the buildings considerably and caused significant increases in ongoing maintenance of electrical and other systems. The aged stations are not designed for likely future earthquakes, are overcrowded given the size of Seattle's current population, and have limited space for recycling. The new South Transfer Station will finish construction in 2012. The new North Transfer Station will likely be substantially complete in 2016. Completing both station rebuild projects in a time of declining revenues poses a financial challenge to the utility. SPU has responded by reducing costs and positions in the 2013-2014 Proposed Budget, identifying efficiencies that allow services to be delivered more cost effectively, and pairing these with rate increases for 2013-2016 driven by the capital costs of the new transfer stations.

The schedules for the cleanup of the South Park Landfill and the redevelopment of the old transfer station as a Recycling/Re-use center in the Solid Waste CIP are dependent on the construction schedule for the North Transfer Station project. The demolition of the old South Transfer Station will not occur until the North Transfer Station is rebuilt. This will allow the old South Transfer Station to be kept open along with the new South Transfer station during the period when the North Transfer Station is closed for construction. SPU is deliberately sequencing construction in this manner to ensure that two facilities are open at all times to accommodate anticipated volumes of solid waste from residents and businesses in Seattle. Once the North Transfer Station has been rebuilt, and the new North and South Transfer Stations are both on line, the old South Recycling and Disposal Station will be demolished. Following demolition, landfill closure activities as defined by the South Park Landfill Cleanup Action Plan will be completed on the old South Transfer Station property

The remediation of the historic landfill in the South Park neighborhood poses another challenge for Solid Waste CIP planners. From the early 20th Century until the mid 1960s, a landfill was located in the South Park neighborhood near the location of the old South Transfer Station. The City previously used the site as a landfill, and SPU currently owns a portion of the site. Thus, the City is among the potentially liable parties in the cleanup of the site. The final cost allocation among parties will not be known until later in the project, and the scope of the remediation has yet to be finalized. As a consequence, total project costs and timing are difficult to accurately estimate at this time.

# **CIP** Revenue Sources

SPU's Solid Waste CIP is funded largely by Solid Waste ratepayers. SPU issues bonds, serviced by ratepayers, that in the current rate period cover 84% of the CIP, with the remainder funded by cash. SPU also actively seeks grants, low interest loans, and other funding sources. The Solid Waste Utility has been under financial stress since 2008 as a result of the economic downturn, which curbed the volume of waste and recyclables, and caused prices for recyclable materials to dip considerably for several months. Rate increases are proposed in 2012 for the period 2013-2016, and include increases for the average residential and commercial customer of 2.7%, or \$1.70 per month, in 2013. The rate increases are a response to declining volumes and the capital investments required to rebuild the City's two transfer stations.

# **Thematic Priorities and Project Selection Criteria**

The SPU Solid Waste Fund has two main priorities; managing environmental issues and regulatory requirements related to current and historic Solid Waste facilities (for example, at the former landfill sites), and protecting human health and safety (for example, incorporation of modern safety standards into the new transfer stations to the benefit of customers and employees). The Mayor's Walk Bike Ride initiative is also supported through design elements of the two transfer station projects that provide trails and public green space.

SPU's capital planners identify candidate CIP projects through an awareness of ongoing planning processes (e.g., comprehensive plans, program plans), external projects and opportunities, and emergencies or other unexpected events that indicate specific investments are possibly recommended.

SPU's Asset Management system then provides rigorous analysis of projects, by using a business case process that establishes whether 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 -- or is a "must do" project (e.g., required by regulation).

After candidate projects have been identified, SPU prioritizes the capital projects for inclusion in the CIP 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 Landfill 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 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 not otherwise captured, a project already in progress or near completion, limited time opportunity, demonstration projects, community visibility, outside funding. An example of a project in this category is the SW Comp Plan Update 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, with review by key internal stakeholders. The ranking scheme and criteria are the same for all Lines of Business, 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 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.

Solid Waste Fund	2013	2014	2015	2016	2017	2018	Total
New Facilities	\$8,888	\$32,077	\$35,162	\$23,012	\$20,809	\$2,177	\$122,125
Rehabilitation & Heavy Equipment	\$80	\$45	\$145	\$145	\$95	\$45	\$555
Shared Cost Projects	\$2,179	\$2,357	\$1,492	\$2,207	\$1,951	\$1,879	\$12,066
Technology	\$5,612	\$4,892	\$2,316	\$2,042	\$2,070	\$2,122	\$19,054
Total	\$16,760	\$39,370	\$39,116	\$27,407	\$24,924	\$6,222	\$153,800

#### CIP Expenditures by Major Category (in '000s)

The investments in the new transfer stations have caused the Solid Waste CIP to increase materially. In the seven years prior to the initiation of the transfer station rebuild projects, the core Solid Waste CIP Budget averaged \$4.7 million annually. During the years when the transfer station rebuild projects are included in the budget, planned spending in the core Solid Waste CIP averages \$22 million annually. However, once these investments are made and the transfer stations are completed, the Solid Waste CIP is expected to return to lower, historical spending levels.

**New Facilities:** This program plans, designs, and constructs new facilities to enhance solid waste operations. The key project drivers of the New Facilities budget category are the North and South Transfer Station Rebuild projects.

The proposed budget for this BCL decreases by \$2.4M in 2013 and \$13.7M in 2014 as costs shift into future years. Now that a preferred design concept has been recommended by stakeholders and approved by SPU, a design contract for the North Transfer Station (NTS) has been procured and more is known

about the likely construction schedule. This has resulted in a slight shift in construction timing from 2014 to 2015. The South Park Development Project decreased by \$506k in 2013 and \$11.6M in 2014 as a result of these NTS schedule changes.

**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 replacement of existing flares, drainage improvements, groundwater protection and water treatment as required by State environmental policy.

Most of the changes in this BCL are related to the deferral of the Kent Highlands North Pond Diversion project, which has experienced delays obtaining Department of Health approval.

**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 decreases by \$28,000 in 2013 and increases by \$403,000 in 2014. The key driver is the SWF SCADA program, in which projected spending was delayed one year due to staff resource constraints.

**Technology:** The Technology capital portfolio is managed via six business-focused program areas, which provide an enterprise-wide view of technology investments in the context of SPU's strategic, business, and City-wide priorities. These areas are: Customer Contact and Billing, Enterprise Information Management, IT Infrastructure, Project Delivery & Performance, Science & System Performance and Asset Information Management. Programmatic investments in 2013 and 2014 were prioritized within the context of SPU's key initiatives for information technology projects, which focus on improving internal controls, improving productivity and performance, improving customer service, transitioning from data rich to knowledge rich environment, and improving project delivery.

The 2013-2018 Proposed CIP increases Technology CIP spending for all utility funds by \$4.29 million in 2013 and decreases it by \$261,000 in 2014 compared to the 2012-2017 Adopted CIP. The Solid Waste Utility's Technology CIP amount increased \$1.3 million in 2013 and decreased \$233,930 in 2014. These amounts are based on the Solid Waste Utility's share of benefit from these projects.

# Anticipated Operating Expenses Associated with Capital Facilities Projects

When appropriate, the projects in the Solid Waste CIP include operations and maintenance cost estimates. These estimates will be refined after project completion and will be included as part of SPU's future budget submittals.

BCL/Program Name/									
Project Title & ID	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
New Facilities					BC	L/Program	m Code:		C230B
Miscellaneous Station Improvements (C2303)	2,757	346	300	400	100	0	0	0	3,902
North Transfer Station Rebuild (C2306)	3,718	1,761	7,049	29,477	33,000	748	200	0	75,953
South Park Development (C2304)	2,089	468	540	700	385	13,228	9,572	0	26,982
South Recycling Disposal Station Household Hazardous Waste Relocation (C2305)	0	0	0	0	177	1,036	1,036	177	2,425
South Transfer Station Rebuild (C2302)	62,698	11,418	1,000	1,500	1,500	8,000	10,000	2,000	98,116
New Facilities	71,262	13,992	8,888	32,077	35,162	23,012	20,808	2,177	207,379
Rehabilitation and Heavy Equi	pment				BC	L/Program	m Code:		C240B
2010 Solid Waste Comprehensive Plan Update (C2407)	363	50	3	0	100	100	50	0	666
Kent Highlands Landfill (C2402)	515	429	52	20	20	20	20	20	1,096
Midway Landfill (C2403)	109	65	25	25	25	25	25	25	324
Rehabilitation and Heavy Equipment	987	544	80	45	145	145	95	45	2,087
Shared Cost Projects					BC	L/Program	m Code:		C410B
1% for Art – SWF (C4118- SWF)	522	345	332	322	134	298	196	200	2,349
Heavy Equipment Purchases - SWF (C4116-SWF)	4,553	2,641	1,500	1,500	1,000	1,500	1,500	1,530	15,725
Integrated Control Monitoring Program - SWF (C4108-SWF)	0	75	50	250	0	0	0	0	375
Operational Facility - Construction - SWF (C4106- SWF)	2,478	0	158	59	242	242	35	12	3,227
Operational Facility - Other - SWF (C4115-SWF)	637	0	0	0	0	0	0	0	637
Operations Control Center - SWF (C4105-SWF)	667	27	24	101	1	35	88	4	948
Security Improvements - SWF (C4113-SWF)	854	89	114	124	115	133	133	133	1,695
Shared Cost Projects	9,712	3,177	2,179	2,357	1,492	2,207	1,951	1,879	24,955
Technology					BC	L/Program	m Code:		C510B
Asset Information Management (C5407)	520	645	541	455	364	363	379	389	3,655

# **Project Summary**

\*Amounts in thousands of dollars

BCL/Program Name/									
Project Title & ID	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Customer Contact & Billing (C5402)	108	258	4,151	3,382	737	548	572	586	10,342
Enterprise Information Management (C5403)	18	87	101	100	97	94	74	76	646
IT Infrastructure (C5404)	337	135	359	245	285	333	310	318	2,321
Project Delivery & Performance (C5405)	431	460	461	529	528	399	416	426	3,651
Science & System Performance (C5406)	75	80	0	181	305	305	319	327	1,593
Technology	1,490	1,665	5,612	4,892	2,316	2,042	2,070	2,122	22,208
Department Total*:	83,451	19,378	16,760	39,370	39,116	27,407	24,924	6,222	256,629

# **Project Summary**

\*Amounts in thousands of dollars

i and caninary									
Fund Name & Code	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Solid Waste Fund (45010)	83,451	19,378	16,760	39,370	39,116	27,407	24,924	6,222	256,629
Department Total*:	83,451	19,378	16,760	39,370	39,116	27,407	24,924	6,222	256,629

## **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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Solid Waste Rates	522	345	332	322	134	298	196	200	2,349
Total:	522	345	332	322	134	298	196	200	2,349
Fund Appropriations/All	ocations								
Solid Waste Fund	522	345	332	322	134	298	196	200	2,349
Total*:	522	345	332	322	134	298	196	200	2,349
O & M Costs (Savings)			23	23	23	23	23	23	141

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

<b>BCL/Program Name:</b>	Rehabilitation and Heavy Equipment	<b>BCL/Program Code:</b>	C240B
Project Type:	New Investment	Start Date:	Q1/2009
Project ID:	C2407	End Date:	Q4/2017
Location:	Citywide		
Neighborhood Plan:	In more than one Plan	Neighborhood Plan Matrix:	N/A
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

## 2010 Solid Waste Comprehensive Plan Update

This project updates Seattle's Solid Waste Comprehensive Plan, which is required by the State of Washington every five years. The Comprehensive Plan guides the City's solid waste management.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Solid Waste Rates	363	50	3	0	100	100	50	0	666
Total:	363	50	3	0	100	100	50	0	666
Fund Appropriations/Alloc	cations								
Solid Waste Fund	363	50	3	0	100	100	50	0	666
Total*:	363	50	3	0	100	100	50	0	666
O & M Costs (Savings)			7	7	7	7	7	7	40
Spending Plan by Fund									
Solid Waste Fund		100	3	0	100	100	50	0	353
Total:		100	3	0	100	100	50	0	353

\*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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Solid Waste Rates	4,553	2,641	1,500	1,500	1,000	1,500	1,500	1,530	15,725
Total:	4,553	2,641	1,500	1,500	1,000	1,500	1,500	1,530	15,725
Fund Appropriations/Allocations									
Solid Waste Fund	4,553	2,641	1,500	1,500	1,000	1,500	1,500	1,530	15,725
Total*:	4,553	2,641	1,500	1,500	1,000	1,500	1,500	1,530	15,725
O & M Costs (Savings)			165	165	165	165	165	165	989
Spending Plan by Fund									
Solid Waste Fund		1,952	1,500	1,500	1,000	1,500	1,500	1,530	10,482
Total:		1,952	1,500	1,500	1,000	1,500	1,500	1,530	10,482

\*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:	Q1/2012
Project ID:	C4108-SWF	End Date:	Q4/2014
Location:	Kent, WA		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Solid Waste Rates	0	75	50	250	0	0	0	0	375
Total:	0	75	50	250	0	0	0	0	375
Fund Appropriations/All	locations								
Solid Waste Fund	0	75	50	250	0	0	0	0	375
Total*:	0	75	50	250	0	0	0	0	375
O & M Costs (Savings)			4	4	4	4	4	4	23

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Solid Waste Rates	515	429	52	20	20	20	20	20	1,096
Total:	515	429	52	20	20	20	20	20	1,096
Fund Appropriations/Alloc	Fund Appropriations/Allocations								
Solid Waste Fund	515	429	52	20	20	20	20	20	1,096
Total*:	515	429	52	20	20	20	20	20	1,096
O & M Costs (Savings)			11	11	11	11	11	11	66
Spending Plan by Fund									
Solid Waste Fund		867	52	20	20	20	20	20	1,019
Total:		867	52	20	20	20	20	20	1,019

\*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:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Solid Waste Rates	109	65	25	25	25	25	25	25	324
Total:	109	65	25	25	25	25	25	25	324
Fund Appropriations/Allo	cations								
Solid Waste Fund	109	65	25	25	25	25	25	25	324
Total*:	109	65	25	25	25	25	25	25	324
O & M Costs (Savings)			3	3	3	3	3	3	19
Spending Plan by Fund									
Solid Waste Fund		70	25	25	25	25	25	25	220
Total:		70	25	25	25	25	25	25	220

\*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	<b>BCL/Program Code:</b>	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Solid Waste Rates	2,757	346	300	400	100	0	0	0	3,902
Total:	2,757	346	300	400	100	0	0	0	3,902
Fund Appropriations/Allo	cations								
Solid Waste Fund	2,757	346	300	400	100	0	0	0	3,902
Total*:	2,757	346	300	400	100	0	0	0	3,902
O & M Costs (Savings)			39	39	39	39	39	39	234
Spending Plan by Fund									
Solid Waste Fund		300	300	400	100	0	0	0	1,100
Total:		300	300	400	100	0	0	0	1,100

\*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:	Q4/2017
Location:	1350 N 34th St		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Solid Waste Rates	3,718	1,761	7,049	29,477	33,000	748	200	0	75,953
Total:	3,718	1,761	7,049	29,477	33,000	748	200	0	75,953
Fund Appropriations/Allo	cations								
Solid Waste Fund	3,718	1,761	7,049	29,477	33,000	748	200	0	75,953
Total*:	3,718	1,761	7,049	29,477	33,000	748	200	0	75,953
O & M Costs (Savings)			760	760	760	760	760	760	4,557

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Solid Waste Rates	2,478	0	158	59	242	242	35	12	3,227
Total:	2,478	0	158	59	242	242	35	12	3,227
Fund Appropriations/All	ocations								
Solid Waste Fund	2,478	0	158	59	242	242	35	12	3,227
Total*:	2,478	0	158	59	242	242	35	12	3,227
O & M Costs (Savings)			31	31	31	31	31	31	185

\*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 - SWF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2006
Project ID:	C4115-SWF	End Date:	ONGOING
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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 solid waste systems, prefabricated buildings, storage buildings, and fencing. No spending is currently anticipated in the 2013-2018 timeframe but as future projects are identified, necessary funding will be requested.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Solid Waste Rates	637	0	0	0	0	0	0	0	637
Total:	637	0	0	0	0	0	0	0	637
Fund Appropriations/All	locations								
Solid Waste Fund	637	0	0	0	0	0	0	0	637
Total*:	637	0	0	0	0	0	0	0	637
O & M Costs (Savings)			1	1	1	1	1	1	6

\*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 - SWF**

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2003
Project ID:	C4105-SWF	End Date:	ONGOING
Location:	2700 Airport Way S		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Solid Waste Rates	667	27	24	101	1	35	88	4	948
Total:	667	27	24	101	1	35	88	4	948
Fund Appropriations/Alloc	cations								
Solid Waste Fund	667	27	24	101	1	35	88	4	948
Total*:	667	27	24	101	1	35	88	4	948
O & M Costs (Savings)			9	9	9	9	9	9	55
Spending Plan by Fund									
Solid Waste Fund		25	24	101	1	35	88	4	278
Total:		25	24	101	1	35	88	4	278

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Solid Waste Rates	854	89	114	124	115	133	133	133	1,695
Total:	854	89	114	124	115	133	133	133	1,695
Fund Appropriations/Alloc	cations								
Solid Waste Fund	854	89	114	124	115	133	133	133	1,695
Total*:	854	89	114	124	115	133	133	133	1,695
O & M Costs (Savings)			15	15	15	15	15	15	93
Spending Plan by Fund									
Solid Waste Fund		149	114	124	115	133	133	133	901
Total:		149	114	124	115	133	133	133	901

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Solid Waste Rates	2,089	468	540	700	385	13,228	9,572	0	26,982
Total:	2,089	468	540	700	385	13,228	9,572	0	26,982
Fund Appropriations/Alloc	ations								
Solid Waste Fund	2,089	468	540	700	385	13,228	9,572	0	26,982
Total*:	2,089	468	540	700	385	13,228	9,572	0	26,982
O & M Costs (Savings)			270	270	270	270	270	270	1,619
Spending Plan by Fund									
Solid Waste Fund		2,333	540	700	385	13,228	9,572	0	26,758
Total:		2,333	540	700	385	13,228	9,572	0	26,758

\*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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Solid Waste Rates	0	0	0	0	177	1,036	1,036	177	2,425
Total:	0	0	0	0	177	1,036	1,036	177	2,425
Fund Appropriations/Allo	ocations								
Solid Waste Fund	0	0	0	0	177	1,036	1,036	177	2,425
Total*:	0	0	0	0	177	1,036	1,036	177	2,425
O & M Costs (Savings)			24	24	24	24	24	24	146

\*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	BCL/Program Code:	C230B
Project Type:	New Facility	Start Date:	Q1/2006
Project ID:	C2302	End Date:	Q4/2018
Location:	8100 2nd AVE S		
Neighborhood Plan:	Duwamish	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Solid Waste Rates	62,698	11,418	1,000	1,500	1,500	8,000	10,000	2,000	98,116
Total:	62,698	11,418	1,000	1,500	1,500	8,000	10,000	2,000	98,116
Fund Appropriations/Alloc	ations								
Solid Waste Fund	62,698	11,418	1,000	1,500	1,500	8,000	10,000	2,000	98,116
Total*:	62,698	11,418	1,000	1,500	1,500	8,000	10,000	2,000	98,116
O & M Costs (Savings)			980	980	980	980	980	980	5,878
Spending Plan by Fund									
Solid Waste Fund		15,818	1,000	1,500	1,500	8,000	10,000	2,000	39,818
Total:		15,818	1,000	1,500	1,500	8,000	10,000	2,000	39,818

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

# SPU -TECHNOLOGY PROJECTS

BCL/Program Name/									
Project Title & ID	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Technology					BC	L/Program	n Code:		C510B
Asset Information Management (C5407)	3,666	4,663	3,569	2,757	2,258	2,258	2,356	2,415	23,940
Customer Contact & Billing (C5402)	695	1,627	13,343	11,445	3,978	3,404	3,552	3,641	41,684
Enterprise Information Management (C5403)	109	555	650	614	607	590	459	470	4,054
IT Infrastructure (C5404)	2,300	1,445	2,288	1,538	1,771	2,071	1,926	1,974	15,313
Project Delivery & Performance (C5405)	2,744	2,880	2,941	3,350	3,314	2,477	2,584	2,649	22,937
Science & System Performance (C5406)	471	668	876	1,398	1,897	1,897	1,979	2,029	11,215
Technology	9,984	11,838	23,667	21,101	13,825	12,696	12,856	13,177	119,143
Department Total*:	9,984	11,838	23,667	21,101	13,825	12,696	12,856	13,177	119,143

# **Project Summary**

\*Amounts in thousands of dollars

		i ui		mai	<b>y</b>				
Fund Name & Code	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Drainage and Wastewater Fund (44010)	3,853	4,815	8,880	7,613	5,154	4,720	4,821	4,941	44,798
Solid Waste Fund (45010)	1,490	1,665	5,612	4,892	2,316	2,042	2,070	2,122	22,208
Water Fund (43000)	4,642	5,358	9,174	8,596	6,355	5,933	5,965	6,114	52,137
Department Total*:	9,984	11,838	23,667	21,101	13,825	12,696	12,856	13,177	119,143

## **Fund Summary**

\*Amounts in thousands of dollars

#### **Asset Information Management**

BCL/Program Name:	Technology	BCL/Program Code:	C510B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C5407	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	1,849	2,281	1,782	1,310	1,048	1,048	1,093	1,120	11,532
Drainage and Wastewater Rates	1,296	1,737	1,246	992	847	847	883	905	8,753
Solid Waste Rates	520	645	541	455	364	363	379	389	3,655
Total:	3,666	4,663	3,569	2,757	2,258	2,258	2,356	2,415	23,940
Fund Appropriations/Allo	ocations								
Water Fund	1,849	2,281	1,782	1,310	1,048	1,048	1,093	1,120	11,532
Drainage and Wastewater Fund	1,296	1,737	1,246	992	847	847	883	905	8,753
Solid Waste Fund	520	645	541	455	364	363	379	389	3,655
Total*:	3,666	4,663	3,569	2,757	2,258	2,258	2,356	2,415	23,940
O & M Costs (Savings)			239	239	239	239	239	239	1,434
Spending Plan by Fund									
Water Fund		1,640	1,782	1,310	1,048	1,048	1,093	1,120	9,041
Drainage and Wastewater Fund		1,420	1,246	992	847	847	883	905	7,140
Solid Waste Fund		384	525	455	372	372	379	0	2,487
Total:		3,444	3,554	2,757	2,266	2,266	2,356	2,026	18,668

\*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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	311	744	4,691	4,214	1,775	1,579	1,648	1,689	16,651
Drainage and Wastewater Rates	276	626	4,501	3,848	1,466	1,276	1,332	1,365	14,691
Solid Waste Rates	108	258	4,151	3,382	737	548	572	586	10,342
Total:	695	1,627	13,343	11,445	3,978	3,404	3,552	3,641	41,684
Fund Appropriations/Alloc	cations								
Water Fund	311	744	4,691	4,214	1,775	1,579	1,648	1,689	16,651
Drainage and Wastewater Fund	276	626	4,501	3,848	1,466	1,276	1,332	1,365	14,691
Solid Waste Fund	108	258	4,151	3,382	737	548	572	586	10,342
Total*:	695	1,627	13,343	11,445	3,978	3,404	3,552	3,641	41,684
O & M Costs (Savings)			402	402	402	402	402	402	2,409
Spending Plan by Fund									
Water Fund		386	4,691	4,214	1,775	1,579	1,648	1,689	15,982
Drainage and Wastewater Fund		343	4,501	3,848	1,466	1,276	1,332	1,365	14,132
Solid Waste Fund		134	4,151	3,382	737	548	572	586	10,110
Total:		863	13,343	11,445	3,978	3,404	3,552	3,641	40,225

\*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	<b>BCL/Program Code:</b>	C510B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C5403	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	50	250	291	288	279	271	213	218	1,861
Drainage and Wastewater Rates	41	218	259	226	231	225	172	176	1,548
Solid Waste Rates	18	87	101	100	97	94	74	76	646
Total:	109	555	650	614	607	590	459	470	4,054
Fund Appropriations/Allo	ocations								
Water Fund	50	250	291	288	279	271	213	218	1,861
Drainage and Wastewater Fund	41	218	259	226	231	225	172	176	1,548
Solid Waste Fund	18	87	101	100	97	94	74	76	646
Total*:	109	555	650	614	607	590	459	470	4,054
O & M Costs (Savings)			41	41	41	41	41	41	243
Spending Plan by Fund									
Water Fund		102	291	288	279	271	213	218	1,662
Drainage and Wastewater Fund		90	259	226	231	225	172	176	1,379
Solid Waste Fund		35	101	100	97	94	74	76	577
Total:		227	650	614	607	590	459	470	3,618

\*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	BCL/Program Code:	C510B
Project Type:	New Investment	Start Date:	ONGOING
Project ID:	C5404	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	1,055	709	1,081	736	850	1,006	894	916	7,246
Drainage and Wastewater Rates	909	600	848	557	637	733	722	740	5,746
Solid Waste Rates	337	135	359	245	285	333	310	318	2,321
Total:	2,300	1,445	2,288	1,538	1,771	2,071	1,926	1,974	15,313
Fund Appropriations/Allo	cations								
Water Fund	1,055	709	1,081	736	850	1,006	894	916	7,246
Drainage and Wastewater Fund	909	600	848	557	637	733	722	740	5,746
Solid Waste Fund	337	135	359	245	285	333	310	318	2,321
Total*:	2,300	1,445	2,288	1,538	1,771	2,071	1,926	1,974	15,313
O & M Costs (Savings)			164	164	164	164	164	164	984
Spending Plan by Fund									
Water Fund		723	1,081	736	850	1,006	894	916	6,205
Drainage and Wastewater Fund		601	848	557	637	733	722	740	4,838
Solid Waste Fund		138	359	245	285	333	310	318	1,987
Total:		1,462	2,288	1,538	1,771	2,071	1,926	1,974	13,030

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

#### **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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	1,371	1,373	1,330	1,525	1,523	1,149	1,199	1,229	10,700
Drainage and Wastewater Rates	941	1,047	1,150	1,296	1,262	929	969	993	8,586
Solid Waste Rates	431	460	461	529	528	399	416	426	3,651
Total:	2,744	2,880	2,941	3,350	3,314	2,477	2,584	2,649	22,937
Fund Appropriations/Alloc	cations								
Water Fund	1,371	1,373	1,330	1,525	1,523	1,149	1,199	1,229	10,700
Drainage and Wastewater Fund	941	1,047	1,150	1,296	1,262	929	969	993	8,586
Solid Waste Fund	431	460	461	529	528	399	416	426	3,651
Total*:	2,744	2,880	2,941	3,350	3,314	2,477	2,584	2,649	22,937
O & M Costs (Savings)			210	210	210	210	210	210	1,260
Spending Plan by Fund									
Water Fund		1,792	1,330	1,525	1,523	1,149	1,199	1,229	9,747
Drainage and Wastewater Fund		1,437	1,007	1,091	1,080	929	969	993	7,506
Solid Waste Fund		603	461	529	528	399	416	426	3,363
Total:		3,832	2,798	3,145	3,132	2,477	2,584	2,649	20,616

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

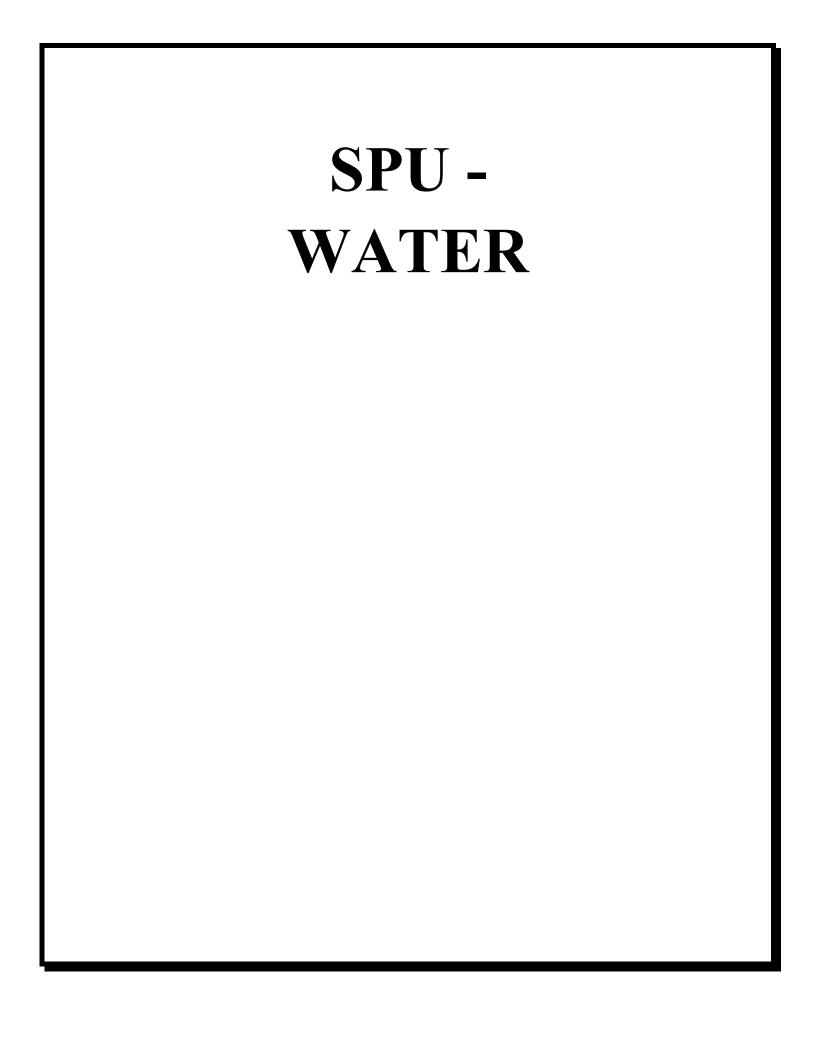
#### Science & System Performance

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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	6	0	0	522	880	880	918	941	4,148
Drainage and Wastewater Rates	390	588	876	694	711	711	742	761	5,474
Solid Waste Rates	75	80	0	181	305	305	319	327	1,593
Total:	471	668	876	1,398	1,897	1,897	1,979	2,029	11,215
Fund Appropriations/Allo	cations								
Water Fund	6	0	0	522	880	880	918	941	4,148
Drainage and Wastewater Fund	390	588	876	694	711	711	742	761	5,474
Solid Waste Fund	75	80	0	181	305	305	319	327	1,593
Total*:	471	668	876	1,398	1,897	1,897	1,979	2,029	11,215
O & M Costs (Savings)			112	112	112	112	112	112	672
Spending Plan by Fund									
Water Fund		290	0	522	880	880	918	941	4,432
Drainage and Wastewater Fund		817	876	694	711	711	742	761	5,313
Solid Waste Fund		0	0	181	305	305	319	327	1,437
Total:		1,107	876	1,398	1,897	1,897	1,979	2,029	11,183

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



## Overview

SPU delivers an average of 120-130 million gallons of drinking water per day to more than 1.3 million people and businesses in Seattle and 22 surrounding cities and water districts. The water system infrastructure includes:

- The Cedar and South Fork Tolt supply sources
- Two wellfields
- Two primary water treatment plants
- 11 booster chlorination facilities
- 400 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
- Various buildings and other related facilities

Planned spending in the Water Capital Improvement Program (CIP) is \$374 million over the next six years. Project work includes covering open reservoirs to ensure water purity as required by state regulations; changes to the Morse Lake Pump Plant, which will improve access to water stored in Morse Lake and help the utility respond to drought situations; water system improvements associated with construction projects in the City's streets, highways, and bridges; and, investments in the Cedar River watershed mandated by the federal government as embodied in the Habitat Conservation Plan (HCP).

The 2013-2018 Proposed CIP also includes many ongoing programs, such as improving the distribution system of watermains, valves, and pump stations. The capital program also includes investments in watershed stewardship projects, water conservation programs, vehicles, and heavy equipment. By 2018, 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.

Funding for Water capital projects comes predominantly from water rates charged to retail and wholesale customers in the region. Water rates were adopted in the fall of 2011 for the period 2012 through 2014. SPU is currently drafting the update of its Water System Plan, a Washington Department of Health (WDOH) regulatory requirement due every six years. The plan is expected to be finalized and approved by WDOH by April 2013.

## 2013-2018 CIP

Three important trends have converged to put financial pressure on the Water Fund and shape this CIP.

The first is conservation. The City of Seattle and Seattle residents have worked together to reduce water consumption. As a result, water consumption has declined since 1990 and is projected to further decline. 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.

The second major trend is the recent history of major infrastructure investments. The Water Fund is transitioning from a period of constructing large capital projects responding to regulatory requirements to a period focused on the rehabilitation of physical infrastructure. Past investments include water treatment facilities on the Tolt and Cedar Rivers, coverings for five open reservoirs in response to federal/state regulations, and investments to meet federal requirements embodied in the Cedar River Watershed 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, and residents, businesses and rate payers will benefit from these investments for years to come. The financial implications of the major generational investments will likewise continue to be felt for several budget cycles, as the utility pays off the bonds that were issued to finance past investments.

The third major trend shaping the 2013-2018 Proposed Water CIP is recent economic history. Though there are some signs of recovery in the national economy, the overall economic downturn continues to impact new development, which is the main source of CIP-related Water Fund revenue through the New Taps program. When new housing is brought on line, new services (e.g., New Taps) are required to supply those units with water. Since 2008, annual revenue from New Taps has decreased 64% and shows only the slightest signs of uptick in 2012.

The 2013-2018 time period will substantially close out the era of major projects in the Water Fund, including covering or decommissioning of the remaining three open reservoirs (consistent with City Ordinance 120899 which requires the covering of all of the City's reservoirs) and completing a new sockeye salmon fish hatchery, which is a requirement of the Cedar River Habitat Conservation Plan.

The 2013-2018 CIP includes only one remaining large project, the Morse Lake Pump Plant, and a few special mid-range programs, such as those related to transportation projects and improvements to SPU facilities. The Morse Lake Pump Plant project enables the Water Utility to reliably release water from Morse Lake into the Cedar River to maintain the supply of drinking water to the region and meet regulatory minimums for the amount of "instream flows" in the Cedar River to support aquatic habitat, wetlands, riparian vegetation, and water quality. Beyond these projects, emphasis is on asset management-based rehabilitation and replacement of distribution system infrastructure, including mains, valves, hydrants, and meters.

In the years outside of the 2013-2018 planning horizon, the overall CIP is anticipated to trend downwards, and investments will be focused on maintaining the physical infrastructure for distribution and transmission of clean drinking water, with continued watershed stewardship.

## **CIP** Revenue Sources

SPU's Water CIP is funded largely by Water ratepayers. About 71% of the Water Fund's overall 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 6% consists of non-rate revenue, which includes such sources as tap fees received and developer watermain reimbursements. SPU issues bonds, serviced by ratepayers, which in the current rate period cover 59% of the CIP, with the remainder funded by cash, i.e. directly by ratepayer revenue. SPU actively seeks grants, low interest loans, and other funding sources whenever possible. And, as mentioned above, SPU also receives payments from developers that are intended to offset the cost of installing new taps when they connect newly constructed buildings to the SPU watermains. These "tap fees" are a volatile revenue source, trending with the construction-related sectors of the economy.

## **Thematic Priorities and Project Selection**

The overarching goal of the Water CIP is to ensure that the water system is properly 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's capital planners identify candidate CIP projects through an awareness of ongoing planning processes (e.g., comprehensive plans, program plans), external projects and opportunities, and emergencies or other unexpected events that indicate specific investments are possibly recommended. SPU's Asset Management system then provides rigorous analysis of projects, by using a business case process that establishes whether 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 -- or is a "must do" project (e.g., required by regulation).

After candidate projects have been identified, SPU prioritizes the capital projects for inclusion in the CIP 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 Reservoir Covering programs and the Habitat Conservation Program.
- **External Drivers:** SPU's responsiveness to, or engagement with, the projects of other city departments or public jurisdictions, and the specific mandates of the City Council and Mayor. Examples of highly ranked projects in this category include the Alaskan Way Viaduct and Mercer Corridor projects.
- **Infrastructure:** How a project addresses infrastructure conditions or vulnerabilities. Examples of highly ranked projects in this category include the Watermain Rehabilitation, Distribution System Improvements and Tank Improvements programs.
- Level of Service: The importance of this 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 social or environmental benefits not otherwise captured; is already in progress or near completion; represents a limited time opportunity; has community visibility, or has outside funding. Examples of highly ranked projects in this category include the Cedar Moraine Improvements and Riverton Heights Drainage Improvements projects.

Every project is rated against each criterion. Criteria ratings are then considered in determining an overall project priority ranking, using expert judgment. Priority rankings for the CIP are determined by the leads for each Line of Business, with review by key internal stakeholders. The ranking scheme and criteria are the same for all Lines of Business, 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.

This process can also result in project scope changes, as more cost-effective approaches to meeting the business need are identified.

Water Fund	2013	2014	2015	2016	2017	2018	Total
Distribution	\$19,778	\$20,394	\$22,741	\$24,085	\$25,279	\$25,670	\$137,947
Transmission	\$1,703	\$3,076	\$3,137	\$3,195	\$3,253	\$3,314	\$17,678
Watershed Stewardship	\$3	\$2	\$2	\$2	\$2	\$2	\$13
Water Quality and Treatment	\$3,334	\$5,304	\$4,775	\$326	\$100	\$100	\$13,939
Water Resources	\$6,683	\$8,212	\$17,590	\$14,287	\$9,197	\$3,237	\$59,207
Habitat Conservation Program	\$2,507	\$2,491	\$2,030	\$1,927	\$2,718	\$1,262	\$12,934
Shared Cost Projects	\$15,795	\$19,403	\$18,513	\$13,418	\$16,429	\$6,560	\$90,118
Technology	\$9,174	\$8,596	\$6,355	\$5,933	\$5,965	\$6,114	\$42,137
Total	\$58,977	\$67,477	\$75,142	\$63,174	\$62,943	\$46,259	\$373,972

#### CIP Expenditures by Major Category (in '000s)

**Distribution:** Projects and programs in this program 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.

In total, no changes are reflected in the **Distribution BCL** as compared to the same years in the Adopted 2012-2017 CIP. However, there has been a shift from the creation of new assets to rehabilitation of existing ones. This results in a decrease in the Distribution System Improvements project in the near term and a commensurate increase in the Watermain Rehabilitation project. The total BCL amount remains unchanged.

**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** of \$1.3 million in 2013 compared to the same year in the Adopted 2012-2017 CIP were due primarily to a shift in the timing of the business case presentation for the Cathodic Protection program, which has affected the expected construction start date for that project.

**Watershed Stewardship:** Projects and programs in this program category improve protection of SPU's 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.

The **Watershed Stewardship BCL** decreased \$1 million in 2013 and \$700,000 in 2014 mostly due to elimination of the Kerriston Road project, within which SPU acquired land that is now part of the Cedar River Watershed. Further land acquisitions have been cancelled as SPU believes the benefit from additional property acquisitions does not justify the costs.

**Water Quality & 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.

The **Water Quality & Treatment BCL** decreases \$2 million in 2013 and increases \$3.8 million in 2014 due to a one-year shift in the projected timing of corrective actions that may need to be taken due to possible design issues in three of the new reservoirs and an increase in cost projections for these actions.

**Water Resources:** The purpose of this program category is to manage the City's 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** of \$1.1 million in 2013 and reductions totaling \$531,000 in 2014 are a result of two factors. First, the Morse Lake Pump Plant project increases \$1.3 million in 2013 and \$2.6 million in 2014 as selection of the floating axial pump concept for the preferred solution resulted in changes to cost and schedule projections. The 2014 increase is mostly offset, however, by the second factor, which is an almost \$3 million reduction in the Water Supply Flexibility project. This reduction occurred due to delays in the development of construction plans for overflow dike rehabilitation work because of staffing constraints.

**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.

The size of the **Habitat Conservation Program BCL** decreases over the course of the six-year CIP as major capital projects required under the Habitat Conservation Plan agreement are completed and land-acquisition commitments are satisfied. This BCL will see decreases totaling \$865,000 in 2013 and \$1.2 million in 2014, primarily for this reason.

**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 2012, the Water program includes funding for several transportation-driven projects (the Alaskan Way Viaduct & Seawall Replacement, First Hill Streetcar, Bridging the Gap), Heavy Equipment Purchases, and Security, Facilities and SCADA Improvements. The SCADA system is Supervisory Control and Data Acquisition program, which funds improvements to the centralized monitoring and control of the drinking water system and includes, but is not limited to, flow and pressure sensors, remote control pumps, and valves.

The **Shared Cost Projects BCL** decreases \$2.4 million in 2013 and increases \$1.7 million in 2014. The primary driver of the 2013 decrease is the Heavy Equipment Purchases project (C4116-WF). Spending projections are adjusted in the fall of every year after detailed interviews with end-users and assessments of existing equipment are conducted, and the result of the most recent assessment is that less new equipment is needed in this year. In addition, as part of an overall effort the keep Water Fund expenditures within the level assumed in rates, efforts are being made to extend the useful life of heavy equipment and to downsize wherever possible. The key driver of the 2014 increase is the Regional Facility–WF project (C4107-WF) in which design is now underway for Landsburg Facility Upgrades and schedule adjustments are being made. Total project costs remain unchanged.

**Technology:** The Technology capital portfolio is managed via six business-focused program areas, which provide an enterprise-wide view of technology investments in the context of SPU's strategic, business, and City-wide priorities. These areas are: Customer Contact and Billing, Enterprise Information Management, IT Infrastructure, Project Delivery & Performance, Science & System Performance and Asset Information Management. Programmatic investments in 2013 and 2014 were prioritized within the context of SPU's key initiatives, which focus on improving internal controls, improving productivity and performance, improving customer service, transitioning from data rich to knowledge rich environments, and improving project delivery.

This program category is presented in the separate "Technology CIP" section of SPU's 2013-2018 Proposed CIP. The 2013-2018 Proposed CIP increases Technology CIP spending for all utility funds by \$4.29 million in 2013 and decreases it by \$261,000 in 2014 as compared to the 2012-2017 Adopted CIP. The Water Utility's Technology CIP amount increased \$1.5 million in 2013 and decreased \$89,022 in 2014 when compared to the 2012-2017 Adopted CIP. These amounts are based on the Water Utility's share of benefit from these projects.

BCL/Program Name/									
Project Title & ID	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Distribution					BC	L/Progra	m Code:		C110B
Chamber Upgrades - Distribution (C1137)	8	26	26	27	27	28	28	29	197
Distribution System Improvements (C1128)	1,724	1,478	1,140	3,500	3,800	4,800	5,490	5,500	27,432
Distribution System In-Line Gate Valves (C1136)	392	306	300	318	325	331	338	345	2,654
Multiple Utility Relocation (C1133)	4,735	835	2,136	147	541	552	563	574	10,082
Pump Station Improvements (C1135)	166	510	200	250	541	552	563	574	3,357
Tank Improvements (C1134)	2,405	1,554	120	500	1,500	50	50	50	6,229
Water Infrastructure - Distribution System Modifications (C1138)	0	0	200	200	200	200	200	200	1,200
Water Infrastructure - Hydrant Replacement/Relocation (C1110)	4,548	410	364	371	379	386	394	402	7,255
Water Infrastructure - New Hydrants (C1112)	514	102	104	106	108	110	113	115	1,272
Water Infrastructure - New Taps (C1113)	89,389	4,080	4,800	4,900	5,000	5,100	5,200	5,300	123,769
Water Infrastructure - Service Renewal (C1109)	90,431	5,610	5,722	5,837	5,953	6,072	6,194	6,318	132,137
Water Infrastructure - Watermain Extensions (C1111)	12,315	663	800	805	812	828	845	862	17,930
Watermain Rehabilitation (C1129)	5,349	626	3,866	3,433	3,555	5,075	5,301	5,401	32,605
Distribution	211,975	16,200	19,778	20,394	22,741	24,085	25,279	25,670	366,120
Transmission					BC	L/Progra	m Code:		C120B
Cathodic Protection Program (C1208)	608	632	350	1,698	1,732	1,767	1,802	1,838	10,426
Purveyor Meters Replace - SPU (C1206)	548	100	100	100	100	100	100	100	1,248
Replace Air Valve Chambers (C1209)	1,617	109	112	117	122	125	125	127	2,455
Transmission Pipelines Rehabilitation (C1207)	2,963	402	1,040	1,061	1,082	1,104	1,126	1,149	9,928
Water System Dewatering (C1205)	179	100	100	100	100	100	100	100	879
Transmission	5,914	1,343	1,703	3,076	3,137	3,195	3,253	3,314	24,935

# **Project Summary**

\*Amounts in thousands of dollars

BCL/Program Name/									
Project Title & ID	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Watershed Stewardship					BCI	L/Progran	n Code:		C130B
Cedar Bridges (C1307)	621	625	1	1	1	1	1	1	1,252
Cedar River - Boundary Land Acquisition (C1312)	370	180	0	0	0	0	0	0	550
Tolt Bridges (C1308)	0	0	1	1	1	1	1	1	6
Tolt Watershed Restoration (C1310)	233	83	0	0	0	0	0	0	316
Transmission Right-of-Way Improvements (C1316)	0	80	1	0	0	0	0	0	81
Watershed Stewardship	1,224	968	3	2	2	2	2	2	2,204
Water Quality & Treatment					BCI	L/Progran	n Code:		C140B
Cedar Treatment Screening Improvements (C1415)	0	0	0	0	0	0	0	0	0
Landsburg Chlorination Upgrades (C1417)	12	255	524	786	524	26	0	0	2,127
Reservoir Covering - Beacon (C1408)	41,912	10	650	250	3,500	100	0	0	46,422
Reservoir Covering - Maple Leaf (C1411)	31,104	6,700	1,250	950	500	50	0	0	40,554
Reservoir Covering - Myrtle (C1410)	12,268	10	50	50	50	50	0	0	12,478
Reservoir Covering - Volunteer (C1407)	94	0	20	0	0	0	0	0	114
Reservoir Covering - West Seattle (C1409)	33,070	100	700	3,025	100	0	0	0	36,995
Treatment Facility/Water Quality Improvements (C1413)	179	100	0	100	100	100	100	100	779
Water Quality Equipment (C1414)	211	138	140	143	1	0	0	0	633
Water Quality & Treatment	118,851	7,313	3,334	5,304	4,775	326	100	100	140,103
Water Resources					BCI	L/Progran	n Code:		C150B
Dam Safety Program (C1506)	6,665	181	245	1,025	625	125	25	25	8,916
Morse Lake Pump Plant (C1508)	11,410	2,600	3,304	4,493	11,458	11,458	5,960	0	50,683
Regional Water Conservation Program (C1504)	16,200	1,887	1,769	1,804	1,840	1,877	1,939	1,953	29,269
Seattle Direct Service Additional Conservation (C1505)	5,240	663	676	690	704	718	732	747	10,169
Water Supply Flexibility Program (C1507)	209	25	669	200	2,963	0	0	0	4,067

# **Project Summary**

\*Amounts in thousands of dollars

		-			-				
BCL/Program Name/									
Project Title & ID	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Water System Plan - 2013 (C1509)	293	261	20	0	0	0	0	0	574
Water System Plan - 2019 (C1510)	0	0	0	0	0	110	541	513	1,164
Water Resources	40,017	5,617	6,683	8,212	17,590	14,287	9,197	3,237	104,841
Habitat Conservation Program					BCI	L/Program	n Code:		C160B
Ballard Locks Improvements (C1606)	9,145	0	0	0	0	0	1,375	0	10,520
Cedar Sockeye Hatchery (C1605)	20,156	320	46	36	10	0	0	0	20,568
Downstream Fish Habitat (C1607)	1,668	2,200	336	728	430	293	0	0	5,655
Instream Flow Management Studies (C1608)	4,697	200	229	258	237	241	33	33	5,929
Stream & Riparian Restoration (C1602)	6,837	442	383	392	359	367	374	275	9,429
Upland Reserve Forest Restoration (C1603)	6,534	588	530	281	183	186	80	81	8,462
Watershed Road Improvement/Decommissionin g (C1601)	10,397	1,163	984	795	811	839	856	873	16,717
Habitat Conservation Program	59,433	4,913	2,507	2,491	2,030	1,927	2,718	1,262	77,280
Shared Cost Projects					BCI	L/Program	n Code:		C410B
1% for Art – WF (C4118-WF)	1,092	127	181	237	250	211	211	211	2,521
Alaskan Way Viaduct & Seawall Replacement Program - WF (C4102-WF)	2,992	1,694	2,430	2,985	2,340	1,955	478	742	15,616
Bridging the Gap - WF (C4119 -WF)	5,946	1,455	1,572	1,604	1,636	1,668	766	781	15,427
Emergency Storms - WF (C4120-WF)	50	50	50	50	50	50	50	50	400
First Hill Streetcar - WF (C4130-WF)	0	0	0	0	0	0	0	0	0
Heavy Equipment Purchases - WF (C4116-WF)	7,093	3,303	2,000	2,000	2,000	2,000	2,000	2,000	22,396
Integrated Control Monitoring Program - WF (C4108-WF)	7,294	585	0	0	405	0	400	400	9,084
Mercer Corridor Project East Phase - WF (C4114-WF)	2,137	600	520	0	0	0	0	0	3,257
Mercer Corridor Project West Phase - WF (C4133-WF)	58	364	939	106	78	0	0	0	1,543
Meter Replacement - WF (C4101-WF)	4,291	614	707	634	645	655	348	354	8,247

# **Project Summary**

\*Amounts in thousands of dollars

BCL/Program Name/									
Project Title & ID	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Operational Facility - Construction - WF (C4106- WF)	14,309	561	1,183	3,198	2,213	1,770	343	85	23,662
Operational Facility - Other - WF (C4115-WF)	863	339	170	165	2,130	65	0	0	3,732
Operations Control Center - WF (C4105-WF)	4,398	192	170	706	8	242	601	27	6,345
Other Major Transportation Projects - WF (C4123-WF)	12	372	290	265	54	55	56	0	1,106
Regional Facility - WF (C4107 -WF)	2,515	2,682	3,321	5,059	5,439	2,902	9,300	0	31,216
Security Improvements - WF (C4113-WF)	5,240	2,000	1,988	1,980	1,111	1,744	1,776	1,809	17,648
Sound Transit - North Link - WF (C4135-WF)	0	88	72	300	125	100	100	100	884
Sound Transit - Water Betterment (C4125)	1,502	120	0	0	0	0	0	0	1,622
Sound Transit – University Link - WF (C4110-WF)	292	106	202	114	30	0	0	0	745
Shared Cost Projects	60,084	15,250	15,795	19,403	18,513	13,418	16,429	6,560	165,453
Technology					BC	L/Program	m Code:		C510B
Asset Information Management (C5407)	1,849	2,281	1,782	1,310	1,048	1,048	1,093	1,120	11,532
Customer Contact & Billing (C5402)	311	744	4,691	4,214	1,775	1,579	1,648	1,689	16,651
Enterprise Information Management (C5403)	50	250	291	288	279	271	213	218	1,861
IT Infrastructure (C5404)	1,055	709	1,081	736	850	1,006	894	916	7,246
Project Delivery & Performance (C5405)	1,371	1,373	1,330	1,525	1,523	1,149	1,199	1,229	10,700
Science & System Performance (C5406)	6	0	0	522	880	880	918	941	4,148
Technology	4,642	5,358	9,174	8,596	6,355	5,933	5,965	6,114	52,137
Department Total*:	502,141	56,962	58,977	67,477	75,142	63,174	62,943	46,259	933,074

# **Project Summary**

\*Amounts in thousands of dollars

i and outinnary									
Fund Name & Code	LTD Actuals	2012	2013	2014	2015	2016	2017	2018	Total
Water Fund (43000)	502,141	56,962	58,977	67,477	75,142	63,174	62,943	46,259	933,074
Department Total*:	502,141	56,962	58,977	67,477	75,142	63,174	62,943	46,259	933,074

# **Fund Summary**

\*Amounts in thousands of dollars

#### <u>1% for Art – WF</u>

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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	1,092	127	181	237	250	211	211	211	2,521
Total:	1,092	127	181	237	250	211	211	211	2,521
Fund Appropriations/Alloc	cations								
Water Fund	1,092	127	181	237	250	211	211	211	2,521
Total*:	1,092	127	181	237	250	211	211	211	2,521
O & M Costs (Savings)			25	25	25	25	25	25	151
Spending Plan by Fund									
Water Fund		200	181	237	250	211	211	211	1,502
Total:		200	181	237	250	211	211	211	1,502

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

<u>Alaskan Wa</u>	v Viaduct & Seawall	<b>Replacement P</b>	rogram - WF

BCL/Program Name:	Shared Cost Projects	BCL/Program Code:	C410B
Project Type:	New Facility	Start Date:	Q1/2004
Project ID:	C4102-WF	End Date:	Q4/2018
Location:	SR 99 / Battery St		
Neighborhood Plan:	In more than one Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	2,992	1,694	2,430	2,985	2,340	1,955	478	742	15,616
Total:	2,992	1,694	2,430	2,985	2,340	1,955	478	742	15,616
Fund Appropriations/Alloc	cations								
Water Fund	2,992	1,694	2,430	2,985	2,340	1,955	478	742	15,616
Total*:	2,992	1,694	2,430	2,985	2,340	1,955	478	742	15,616
O & M Costs (Savings)			168	168	168	168	168	168	1,009
Spending Plan by Fund									
Water Fund		1,616	2,430	2,985	2,340	1,955	478	742	12,546
Total:		1,616	2,430	2,985	2,340	1,955	478	742	12,546

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### **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:	Q4/2017
Location:	NW 54th St /30th Ave NW		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	9,145	0	0	0	0	0	1,375	0	10,520
Total:	9,145	0	0	0	0	0	1,375	0	10,520
Fund Appropriations/All	ocations								
Water Fund	9,145	0	0	0	0	0	1,375	0	10,520
Total*:	9,145	0	0	0	0	0	1,375	0	10,520
O & M Costs (Savings)			105	105	105	105	105	105	631

\*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	BCL/Program Code:	C410B
Project Type:	Improved Facility	Start Date:	Q1/2008
Project ID:	C4119-WF	End Date:	Q4/2020
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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 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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	5,946	1,455	1,572	1,604	1,636	1,668	766	781	15,427
Total:	5,946	1,455	1,572	1,604	1,636	1,668	766	781	15,427
Fund Appropriations/Allo	cations								
Water Fund	5,946	1,455	1,572	1,604	1,636	1,668	766	781	15,427
Total*:	5,946	1,455	1,572	1,604	1,636	1,668	766	781	15,427
O & M Costs (Savings)			173	173	173	173	173	173	1,039
Spending Plan by Fund									
Water Fund		512	1,572	1,604	1,636	1,668	766	781	8,539
Total:		512	1,572	1,604	1,636	1,668	766	781	8,539

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	608	632	350	1,698	1,732	1,767	1,802	1,838	10,426
Total:	608	632	350	1,698	1,732	1,767	1,802	1,838	10,426
Fund Appropriations/All	locations								
Water Fund	608	632	350	1,698	1,732	1,767	1,802	1,838	10,426
Total*:	608	632	350	1,698	1,732	1,767	1,802	1,838	10,426
O & M Costs (Savings)			104	104	104	104	104	104	626

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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. No projects are currently planned for the 2013-2018 timeframe but as projects are identified, necessary funding will be requested.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	621	625	1	1	1	1	1	1	1,252
Total:	621	625	1	1	1	1	1	1	1,252
Fund Appropriations/Allo	cations								
Water Fund	621	625	1	1	1	1	1	1	1,252
Total*:	621	625	1	1	1	1	1	1	1,252
O & M Costs (Savings)			13	13	13	13	13	13	75
Spending Plan by Fund									
Water Fund		989	1	1	1	1	1	1	995
Total:		989	1	1	1	1	1	1	995

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

### **Cedar River - Boundary Land Acquisition**

BCL/Program Name:	Watershed Stewardship	BCL/Program Code:	C130B
Project Type:	New Investment	Start Date:	Q1/1999
Project ID:	C1312	End Date:	ONGOING
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
Neighborhood District:	Outside Seattle City	Urban Village:	Outside Seattle City

This ongoing project enables the City to evaluate risks to protection and security of the Cedar River Municipal Watershed posed by changes in adjacent and surrounding land uses, and to respond as opportunities arise by acquiring real property. Although the City owns virtually all lands draining to the municipal water supply intake on the Cedar River, some exceptions remain along the boundary. The past decade has seen significant changes in ownership and land use of properties immediately adjoining the City's property. Although this is an ongoing project, no work is currently planned for 2013-2018.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	370	180	0	0	0	0	0	0	550
Total:	370	180	0	0	0	0	0	0	550
Fund Appropriations/Allo	cations								
Water Fund	370	180	0	0	0	0	0	0	550
Total*:	370	180	0	0	0	0	0	0	550
O & M Costs (Savings)			5	5	5	5	5	5	33
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.

### **Cedar Sockeye Hatchery**

<b>BCL/Program Name:</b>	Habitat Conservation Program	<b>BCL/Program Code:</b>	C160B
Project Type:	New Facility	Start Date:	Q1/2000
Project ID:	C1605	End Date:	Q3/2015
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	20,156	320	46	36	10	0	0	0	20,568
Total:	20,156	320	46	36	10	0	0	0	20,568
Fund Appropriations/Alloc	cations								
Water Fund	20,156	320	46	36	10	0	0	0	20,568
Total*:	20,156	320	46	36	10	0	0	0	20,568
O & M Costs (Savings)			206	206	206	206	206	206	1,234
Spending Plan by Fund									
Water Fund		540	46	36	10	0	0	0	632
Total:		540	46	36	10	0	0	0	632

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

### **<u>Cedar Treatment Screening Improvements</u>**

BCL/Program Name:	Water Quality & Treatment	BCL/Program Code:	C140B
Project Type:	Improved Facility	Start Date:	Q1/2009
Project ID:	C1415	End Date:	Q4/2013
Location:	16207 SE Petrovitsky Road, Renton		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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. No projects are currently planned for the 2013-2018 timeframe but as projects are identified, necessary funding will be requested.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	0	0	0	0	0	0	0	0	0
Total:	0	0	0	0	0	0	0	0	0
Fund Appropriations/Al	llocations								
Water Fund	0	0	0	0	0	0	0	0	0
Total*:	0	0	0	0	0	0	0	0	0
O & M Costs (Savings)			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.

### **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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	8	26	26	27	27	28	28	29	197
Total:	8	26	26	27	27	28	28	29	197
Fund Appropriations/Al	locations								
Water Fund	8	26	26	27	27	28	28	29	197
Total*:	8	26	26	27	27	28	28	29	197
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.

### **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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
<b>Revenue Sources</b>										
Water Rates	6,665	181	245	1,025	625	125	25	25	8,916	
Total:	6,665	181	245	1,025	625	125	25	25	8,916	
Fund Appropriations/Allo	Fund Appropriations/Allocations									
Water Fund	6,665	181	245	1,025	625	125	25	25	8,916	
Total*:	6,665	181	245	1,025	625	125	25	25	8,916	
O & M Costs (Savings)			89	89	89	89	89	89	535	
Spending Plan by Fund										
Water Fund		399	245	1,025	625	125	25	25	2,469	
Total:		399	245	1,025	625	125	25	25	2,469	

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
<b>Revenue Sources</b>										
Water Rates	1,724	1,478	1,140	3,500	3,800	4,800	5,490	5,500	27,432	
Total:	1,724	1,478	1,140	3,500	3,800	4,800	5,490	5,500	27,432	
Fund Appropriations/Allocations										
Water Fund	1,724	1,478	1,140	3,500	3,800	4,800	5,490	5,500	27,432	
Total*:	1,724	1,478	1,140	3,500	3,800	4,800	5,490	5,500	27,432	
O & M Costs (Savings)			274	274	274	274	274	274	1,646	
Spending Plan by Fund										
Water Fund		4,401	1,140	3,500	3,800	4,800	5,490	5,500	28,631	
Total:		4,401	1,140	3,500	3,800	4,800	5,490	5,500	28,631	

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	392	306	300	318	325	331	338	345	2,654
Total:	392	306	300	318	325	331	338	345	2,654
Fund Appropriations/All	locations								
Water Fund	392	306	300	318	325	331	338	345	2,654
Total*:	392	306	300	318	325	331	338	345	2,654
O & M Costs (Savings)			27	27	27	27	27	27	159

\*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:	ONGOING
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	1,668	2,200	336	728	430	293	0	0	5,655
Total:	1,668	2,200	336	728	430	293	0	0	5,655
Fund Appropriations/Allo	cations								
Water Fund	1,668	2,200	336	728	430	293	0	0	5,655
Total*:	1,668	2,200	336	728	430	293	0	0	5,655
O & M Costs (Savings)			57	57	57	57	57	57	339
Spending Plan by Fund									
Water Fund		1,648	336	728	430	293	0	0	3,435
Total:		1,648	336	728	430	293	0	0	3,435

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	50	50	50	50	50	50	50	50	400
Total:	50	50	50	50	50	50	50	50	400
Fund Appropriations/All	locations								
Water Fund	50	50	50	50	50	50	50	50	400
Total*:	50	50	50	50	50	50	50	50	400
O & M Costs (Savings)			4	4	4	4	4	4	24

\*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:	Q4/2013
Location:	First Hill		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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. No capitalizable betterments have been identified for the 2013-2018 timeframe but if they are, necessary funding will be requested. Operating funding for the project is currently proposed as part of the 2013-2014 Proposed Budget.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	0	0	0	0	0	0	0	0	0
Total:	0	0	0	0	0	0	0	0	0
Fund Appropriations/Allo	cations								
Water Fund	0	0	0	0	0	0	0	0	0
Total*:	0	0	0	0	0	0	0	0	0
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		732	0	0	0	0	0	0	732
Total:		732	0	0	0	0	0	0	732

\*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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
Revenue Sources										
Water Rates	7,093	3,303	2,000	2,000	2,000	2,000	2,000	2,000	22,396	
Total:	7,093	3,303	2,000	2,000	2,000	2,000	2,000	2,000	22,396	
Fund Appropriations/Allocations										
Water Fund	7,093	3,303	2,000	2,000	2,000	2,000	2,000	2,000	22,396	
Total*:	7,093	3,303	2,000	2,000	2,000	2,000	2,000	2,000	22,396	
O & M Costs (Savings)			224	224	224	224	224	224	1,344	
Spending Plan by Fund										
Water Fund		2,300	2,000	2,000	2,000	2,000	2,000	2,000	14,300	
Total:		2,300	2,000	2,000	2,000	2,000	2,000	2,000	14,300	

\*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:	Q4/2018
Location:	Cedar River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	4,697	200	229	258	237	241	33	33	5,929
Total:	4,697	200	229	258	237	241	33	33	5,929
Fund Appropriations/Allo	cations								
Water Fund	4,697	200	229	258	237	241	33	33	5,929
Total*:	4,697	200	229	258	237	241	33	33	5,929
O & M Costs (Savings)			59	59	59	59	59	59	356
Spending Plan by Fund									
Water Fund		295	229	258	237	241	33	33	1,328
Total:		295	229	258	237	241	33	33	1,328

\*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	Neighborhood Plan Matrix:	N/A
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 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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	7,294	585	0	0	405	0	400	400	9,084
Total:	7,294	585	0	0	405	0	400	400	9,084
Fund Appropriations/Allo	cations								
Water Fund	7,294	585	0	0	405	0	400	400	9,084
Total*:	7,294	585	0	0	405	0	400	400	9,084
O & M Costs (Savings)			90	90	90	90	90	90	542
Spending Plan by Fund									
Water Fund		265	0	0	405	0	400	400	1,470
Total:		265	0	0	405	0	400	400	1,470

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	12	255	524	786	524	26	0	0	2,127
Total:	12	255	524	786	524	26	0	0	2,127
Fund Appropriations/Allo	cations								
Water Fund	12	255	524	786	524	26	0	0	2,127
Total*:	12	255	524	786	524	26	0	0	2,127
O & M Costs (Savings)			21	21	21	21	21	21	128
Spending Plan by Fund									
Water Fund		262	524	786	524	26	0	0	2,122
Total:		262	524	786	524	26	0	0	2,122

\*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:	Q4/2013
Location:	South Lake Union		
Neighborhood Plan:	South Lake Union	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	2,137	600	520	0	0	0	0	0	3,257
Total:	2,137	600	520	0	0	0	0	0	3,257
Fund Appropriations/Allo	cations								
Water Fund	2,137	600	520	0	0	0	0	0	3,257
Total*:	2,137	600	520	0	0	0	0	0	3,257
O & M Costs (Savings)			33	33	33	33	33	33	195
Spending Plan by Fund									
Water Fund		500	520	0	0	0	0	0	1,020
Total:		500	520	0	0	0	0	0	1,020

\*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	<b>BCL/Program Code:</b>	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	Neighborhood Plan Matrix:	T01, T02, T03, T11, T15
Neighborhood District:	In more than one District	Urban Village:	In more than one Urban Village

### Mercer Corridor Project West Phase - WF

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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	58	364	939	106	78	0	0	0	1,543
Total:	58	364	939	106	78	0	0	0	1,543
Fund Appropriations/Allo	cations								
Water Fund	58	364	939	106	78	0	0	0	1,543
Total*:	58	364	939	106	78	0	0	0	1,543
O & M Costs (Savings)			15	15	15	15	15	15	93
Spending Plan by Fund									
Water Fund		251	939	106	78	0	0	0	1,373
Total:		251	939	106	78	0	0	0	1,373

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	4,291	614	707	634	645	655	348	354	8,247
Total:	4,291	614	707	634	645	655	348	354	8,247
Fund Appropriations/Allo	cations								
Water Fund	4,291	614	707	634	645	655	348	354	8,247
Total*:	4,291	614	707	634	645	655	348	354	8,247
O & M Costs (Savings)			89	89	89	89	89	89	534
Spending Plan by Fund									
Water Fund		613	707	634	645	655	348	354	3,956
Total:		613	707	634	645	655	348	354	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.

### 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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
Revenue Sources										
Water Rates	11,410	2,600	3,304	4,493	11,458	11,458	5,960	0	50,683	
Total:	11,410	2,600	3,304	4,493	11,458	11,458	5,960	0	50,683	
Fund Appropriations/Allocations										
Water Fund	11,410	2,600	3,304	4,493	11,458	11,458	5,960	0	50,683	
Total*:	11,410	2,600	3,304	4,493	11,458	11,458	5,960	0	50,683	
O & M Costs (Savings)			507	507	507	507	507	507	3,041	
Spending Plan by Fund										
Water Fund		1,885	3,304	4,493	11,458	11,458	5,960	0	38,558	
Total:		1,885	3,304	4,493	11,458	11,458	5,960	0	38,558	

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	4,735	835	2,136	147	541	552	563	574	10,082
Total:	4,735	835	2,136	147	541	552	563	574	10,082
Fund Appropriations/Allocations									
Water Fund	4,735	835	2,136	147	541	552	563	574	10,082
Total*:	4,735	835	2,136	147	541	552	563	574	10,082
O & M Costs (Savings)			101	101	101	101	101	101	605
Spending Plan by Fund									
Water Fund		837	2,136	147	541	552	563	574	5,350
Total:		837	2,136	147	541	552	563	574	5,350

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	14,309	561	1,183	3,198	2,213	1,770	343	85	23,662
Total:	14,309	561	1,183	3,198	2,213	1,770	343	85	23,662
Fund Appropriations/Alloc	cations								
Water Fund	14,309	561	1,183	3,198	2,213	1,770	343	85	23,662
Total*:	14,309	561	1,183	3,198	2,213	1,770	343	85	23,662
O & M Costs (Savings)			238	238	238	238	238	238	1,427
Spending Plan by Fund									
Water Fund		595	1,183	3,198	2,213	1,770	343	85	9,387
Total:		595	1,183	3,198	2,213	1,770	343	85	9,387

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	863	339	170	165	2,130	65	0	0	3,732
Total:	863	339	170	165	2,130	65	0	0	3,732
Fund Appropriations/Allo	cations								
Water Fund	863	339	170	165	2,130	65	0	0	3,732
Total*:	863	339	170	165	2,130	65	0	0	3,732
O & M Costs (Savings)			37	37	37	37	37	37	224
Spending Plan by Fund									
Water Fund		379	170	165	2,130	65	0	0	2,909
Total:		379	170	165	2,130	65	0	0	2,909

\*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	Neighborhood Plan Matrix:	N/A
Neighborhood District:	Greater Duwamish	Urban Village:	Duwamish

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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	4,398	192	170	706	8	242	601	27	6,345
Total:	4,398	192	170	706	8	242	601	27	6,345
Fund Appropriations/Allo	cations								
Water Fund	4,398	192	170	706	8	242	601	27	6,345
Total*:	4,398	192	170	706	8	242	601	27	6,345
O & M Costs (Savings)			64	64	64	64	64	64	386
Spending Plan by Fund									
Water Fund		140	170	706	8	242	601	27	1,894
Total:		140	170	706	8	242	601	27	1,894

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	12	372	290	265	54	55	56	0	1,106
Total:	12	372	290	265	54	55	56	0	1,106
Fund Appropriations/Allo	cations								
Water Fund	12	372	290	265	54	55	56	0	1,106
Total*:	12	372	290	265	54	55	56	0	1,106
O & M Costs (Savings)			11	11	11	11	11	11	65
Spending Plan by Fund									
Water Fund		51	290	265	54	55	56	0	772
Total:		51	290	265	54	55	56	0	772

\*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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	166	510	200	250	541	552	563	574	3,357
Total:	166	510	200	250	541	552	563	574	3,357
Fund Appropriations/Alloc	cations								
Water Fund	166	510	200	250	541	552	563	574	3,357
Total*:	166	510	200	250	541	552	563	574	3,357
O & M Costs (Savings)			34	34	34	34	34	34	201
Spending Plan by Fund									
Water Fund		150	200	250	541	552	563	574	2,831
Total:		150	200	250	541	552	563	574	2,831

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	548	100	100	100	100	100	100	100	1,248
Total:	548	100	100	100	100	100	100	100	1,248
Fund Appropriations/All	locations								
Water Fund	548	100	100	100	100	100	100	100	1,248
Total*:	548	100	100	100	100	100	100	100	1,248
O & M Costs (Savings)			12	12	12	12	12	12	75

\*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	<b>BCL/Program Code:</b>	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	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
Revenue Sources										
Water Rates	2,515	2,682	3,321	5,059	5,439	2,902	9,300	0	31,216	
Total:	2,515	2,682	3,321	5,059	5,439	2,902	9,300	0	31,216	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Water Fund	2,515	2,682	3,321	5,059	5,439	2,902	9,300	0	31,216	
Total*:	2,515	2,682	3,321	5,059	5,439	2,902	9,300	0	31,216	
O & M Costs (Savings)			318	318	318	318	318	318	1,908	
Spending Plan by Fund										
Water Fund		1,952	3,321	5,059	5,439	2,902	9,300	0	27,972	
Total:		1,952	3,321	5,059	5,439	2,902	9,300	0	27,972	

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

BCL/Program Name:	Water Resources	<b>BCL/Program Code:</b>	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	16,200	1,887	1,769	1,804	1,840	1,877	1,939	1,953	29,269
Total:	16,200	1,887	1,769	1,804	1,840	1,877	1,939	1,953	29,269
Fund Appropriations/All	locations								
Water Fund	16,200	1,887	1,769	1,804	1,840	1,877	1,939	1,953	29,269
Total*:	16,200	1,887	1,769	1,804	1,840	1,877	1,939	1,953	29,269
O & M Costs (Savings)			293	293	293	293	293	293	1,756

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	1,617	109	112	117	122	125	125	127	2,455
Total:	1,617	109	112	117	122	125	125	127	2,455
Fund Appropriations/All	ocations								
Water Fund	1,617	109	112	117	122	125	125	127	2,455
Total*:	1,617	109	112	117	122	125	125	127	2,455
O & M Costs (Savings)			25	25	25	25	25	25	147

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	41,912	10	650	250	3,500	100	0	0	46,422
Total:	41,912	10	650	250	3,500	100	0	0	46,422
Fund Appropriations/All	locations								
Water Fund	41,912	10	650	250	3,500	100	0	0	46,422
Total*:	41,912	10	650	250	3,500	100	0	0	46,422
O & M Costs (Savings)			464	464	464	464	464	464	2,785

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total	
Revenue Sources										
Water Rates	31,104	6,700	1,250	950	500	50	0	0	40,554	
Total:	31,104	6,700	1,250	950	500	50	0	0	40,554	
Fund Appropriations/Alloc	Fund Appropriations/Allocations									
Water Fund	31,104	6,700	1,250	950	500	50	0	0	40,554	
Total*:	31,104	6,700	1,250	950	500	50	0	0	40,554	
O & M Costs (Savings)			406	406	406	406	406	406	2,433	
Spending Plan by Fund										
Water Fund		6,500	1,250	950	500	50	0	0	9,250	
Total:		6,500	1,250	950	500	50	0	0	9,250	

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	12,268	10	50	50	50	50	0	0	12,478
Total:	12,268	10	50	50	50	50	0	0	12,478
Fund Appropriations/All	locations								
Water Fund	12,268	10	50	50	50	50	0	0	12,478
Total*:	12,268	10	50	50	50	50	0	0	12,478
O & M Costs (Savings)			125	125	125	125	125	125	749

\*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 - Volunteer**

BCL/Program Name:	Water Quality & Treatment	BCL/Program Code:	C140B
Project Type:	Improved Facility	Start Date:	Q4/2001
Project ID:	C1407	End Date:	Q1/2016
Location:	E Prospect St./12th Ave. E		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
Neighborhood District:	East District	Urban Village:	Capitol Hill

This project will either reconstruct the 20 million gallon concrete-lined reservoir in compliance with new state and federal regulations, or remove it from service and construct a bypass pipe system around the Reservoir. SPU will be taking the reservoir offline in 2013 to evaluate the impact to the water system. Pending the outcome of the evaluation, the reservoir will either be decommissioned or buried and SPU will seek appropriations for those costs when more information is available. Permanent action is not expected to occur until after Maple Leaf Reservoir is completed and the City has had an opportunity to take the Volunteer Reservoir off-line for a period of time to observe the water system's performance without it. Thus no spending is planned between 2014 and 2016. LTD expenditures in this project are related to preliminary engineering. This effort improves water quality and the security of the drinking water system and is part of the Reservoir burying program which was adopted by Ordinance 120899 in August 2002.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	94	0	20	0	0	0	0	0	114
Total:	94	0	20	0	0	0	0	0	114
Fund Appropriations/A	llocations								
Water Fund	94	0	20	0	0	0	0	0	114
Total*:	94	0	20	0	0	0	0	0	114
O & M Costs (Savings)			1	1	1	1	1	1	7

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	33,070	100	700	3,025	100	0	0	0	36,995
Total:	33,070	100	700	3,025	100	0	0	0	36,995
Fund Appropriations/All	locations								
Water Fund	33,070	100	700	3,025	100	0	0	0	36,995
Total*:	33,070	100	700	3,025	100	0	0	0	36,995
O & M Costs (Savings)			370	370	370	370	370	370	2,220

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	5,240	663	676	690	704	718	732	747	10,169
Total:	5,240	663	676	690	704	718	732	747	10,169
Fund Appropriations/Allo	cations								
Water Fund	5,240	663	676	690	704	718	732	747	10,169
Total*:	5,240	663	676	690	704	718	732	747	10,169
O & M Costs (Savings)			102	102	102	102	102	102	610
Spending Plan by Fund									
Water Fund		717	676	690	704	718	732	747	4,983
Total:		717	676	690	704	718	732	747	4,983

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	5,240	2,000	1,988	1,980	1,111	1,744	1,776	1,809	17,648
Total:	5,240	2,000	1,988	1,980	1,111	1,744	1,776	1,809	17,648
Fund Appropriations/Alloc	cations								
Water Fund	5,240	2,000	1,988	1,980	1,111	1,744	1,776	1,809	17,648
Total*:	5,240	2,000	1,988	1,980	1,111	1,744	1,776	1,809	17,648
O & M Costs (Savings)			173	173	173	173	173	173	1,040
Spending Plan by Fund									
Water Fund		2,000	1,988	1,980	1,111	1,744	1,776	1,809	12,408
Total:		2,000	1,988	1,980	1,111	1,744	1,776	1,809	12,408

\*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	Neighborhood Plan Matrix:	
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	0	88	72	300	125	100	100	100	884
Total:	0	88	72	300	125	100	100	100	884
Fund Appropriations/Allo	cations								
Water Fund	0	88	72	300	125	100	100	100	884
Total*:	0	88	72	300	125	100	100	100	884
O & M Costs (Savings)			5	5	5	5	5	5	30
Spending Plan by Fund									
Water Fund		0	72	300	125	100	100	100	797
Total:		0	72	300	125	100	100	100	797

\*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:	Q1/2005
Project ID:	C4125	End Date:	Q4/2012
Location:	Central & South areas of Seattle		
Neighborhood Plan:	In more than one Plan	Neighborhood Plan Matrix:	N/A
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. No specific betterments have been identified over the 2013-2018 time frame but once they are, spending authority will be requested.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	1,502	120	0	0	0	0	0	0	1,622
Total:	1,502	120	0	0	0	0	0	0	1,622
Fund Appropriations/All	locations								
Water Fund	1,502	120	0	0	0	0	0	0	1,622
Total*:	1,502	120	0	0	0	0	0	0	1,622
O & M Costs (Savings)			16	16	16	16	16	16	97

\*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:	Q4/2015
Location:	Various		
Neighborhood Plan:	In more than one Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	292	106	202	114	30	0	0	0	745
Total:	292	106	202	114	30	0	0	0	745
Fund Appropriations/Allo	cations								
Water Fund	292	106	202	114	30	0	0	0	745
Total*:	292	106	202	114	30	0	0	0	745
O & M Costs (Savings)			8	8	8	8	8	8	49
Spending Plan by Fund									
Water Fund		175	202	114	30	0	0	0	522
Total:		175	202	114	30	0	0	0	522

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	6,837	442	383	392	359	367	374	275	9,429
Total:	6,837	442	383	392	359	367	374	275	9,429
Fund Appropriations/All	ocations								
Water Fund	6,837	442	383	392	359	367	374	275	9,429
Total*:	6,837	442	383	392	359	367	374	275	9,429
O & M Costs (Savings)			94	94	94	94	94	94	566

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	2,405	1,554	120	500	1,500	50	50	50	6,229
Total:	2,405	1,554	120	500	1,500	50	50	50	6,229
Fund Appropriations/Allo	cations								
Water Fund	2,405	1,554	120	500	1,500	50	50	50	6,229
Total*:	2,405	1,554	120	500	1,500	50	50	50	6,229
O & M Costs (Savings)			62	62	62	62	62	62	374
Spending Plan by Fund									
Water Fund		1,816	120	500	1,500	50	50	50	4,086
Total:		1,816	120	500	1,500	50	50	50	4,086

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	0	0	1	1	1	1	1	1	6
Total:	0	0	1	1	1	1	1	1	6
Fund Appropriations/Al	llocations								
Water Fund	0	0	1	1	1	1	1	1	6
Total*:	0	0	1	1	1	1	1	1	6
O & M Costs (Savings)			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.

#### **Tolt Watershed Restoration**

BCL/Program Name:	Watershed Stewardship	BCL/Program Code:	C130B
Project Type:	Rehabilitation or Restoration	Start Date:	Q2/2009
Project ID:	C1310	End Date:	Q4/2020
Location:	Tolt River Watershed		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	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. No work has been identified over the 2013-2018 time frame but once it is appropriate spending authority will be requested.

	LTD Actuals	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	233	83	0	0	0	0	0	0	316
Total:	233	83	0	0	0	0	0	0	316
Fund Appropriations/Allo	cations								
Water Fund	233	83	0	0	0	0	0	0	316
Total*:	233	83	0	0	0	0	0	0	316
O & M Costs (Savings)			3	3	3	3	3	3	19
Spending Plan by Fund									
Water Fund		86	0	0	0	0	0	0	86
Total:		86	0	0	0	0	0	0	86

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	2,963	402	1,040	1,061	1,082	1,104	1,126	1,149	9,928
Total:	2,963	402	1,040	1,061	1,082	1,104	1,126	1,149	9,928
Fund Appropriations/Allo	cations								
Water Fund	2,963	402	1,040	1,061	1,082	1,104	1,126	1,149	9,928
Total*:	2,963	402	1,040	1,061	1,082	1,104	1,126	1,149	9,928
O & M Costs (Savings)			99	99	99	99	99	99	596
Spending Plan by Fund									
Water Fund		352	1,040	1,061	1,082	1,104	1,126	1,149	6,915
Total:		352	1,040	1,061	1,082	1,104	1,126	1,149	6,915

\*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:	Q4/2013
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	0	80	1	0	0	0	0	0	81
Total:	0	80	1	0	0	0	0	0	81
Fund Appropriations/Al	llocations								
Water Fund	0	80	1	0	0	0	0	0	81
Total*:	0	80	1	0	0	0	0	0	81
O & M Costs (Savings)			1	1	1	1	1	1	5

\*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	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	179	100	0	100	100	100	100	100	779
Total:	179	100	0	100	100	100	100	100	779
Fund Appropriations/All	ocations								
Water Fund	179	100	0	100	100	100	100	100	779
Total*:	179	100	0	100	100	100	100	100	779
O & M Costs (Savings)			8	8	8	8	8	8	47

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	6,534	588	530	281	183	186	80	81	8,462
Total:	6,534	588	530	281	183	186	80	81	8,462
Fund Appropriations/All	ocations								
Water Fund	6,534	588	530	281	183	186	80	81	8,462
Total*:	6,534	588	530	281	183	186	80	81	8,462
O & M Costs (Savings)			85	85	85	85	85	85	508

\*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	Neighborhood Plan Matrix:	
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	0	0	200	200	200	200	200	200	1,200
Total:	0	0	200	200	200	200	200	200	1,200
Fund Appropriations/A	llocations								
Water Fund	0	0	200	200	200	200	200	200	1,200
Total*:	0	0	200	200	200	200	200	200	1,200
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.

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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	4,548	410	364	371	379	386	394	402	7,255
Total:	4,548	410	364	371	379	386	394	402	7,255
Fund Appropriations/Alloc	cations								
Water Fund	4,548	410	364	371	379	386	394	402	7,255
Total*:	4,548	410	364	371	379	386	394	402	7,255
O & M Costs (Savings)			73	73	73	73	73	73	435
Spending Plan by Fund									
Water Fund		353	364	371	379	386	394	402	2,650
Total:		353	364	371	379	386	394	402	2,650

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	514	102	104	106	108	110	113	115	1,272
Total:	514	102	104	106	108	110	113	115	1,272
Fund Appropriations/Alloc	cations								
Water Fund	514	102	104	106	108	110	113	115	1,272
Total*:	514	102	104	106	108	110	113	115	1,272
O & M Costs (Savings)			13	13	13	13	13	13	76
Spending Plan by Fund									
Water Fund		210	104	106	108	110	113	115	866
Total:		210	104	106	108	110	113	115	866

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	89,389	4,080	4,800	4,900	5,000	5,100	5,200	5,300	123,769
Total:	89,389	4,080	4,800	4,900	5,000	5,100	5,200	5,300	123,769
Fund Appropriations/Alloc	cations								
Water Fund	89,389	4,080	4,800	4,900	5,000	5,100	5,200	5,300	123,769
Total*:	89,389	4,080	4,800	4,900	5,000	5,100	5,200	5,300	123,769
O & M Costs (Savings)			1,238	1,238	1,238	1,238	1,238	1,238	7,426
Spending Plan by Fund									
Water Fund		3,500	4,800	4,900	5,000	5,100	5,200	5,300	33,800
Total:		3,500	4,800	4,900	5,000	5,100	5,200	5,300	33,800

\*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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	90,431	5,610	5,722	5,837	5,953	6,072	6,194	6,318	132,137
Total:	90,431	5,610	5,722	5,837	5,953	6,072	6,194	6,318	132,137
Fund Appropriations/All	ocations								
Water Fund	90,431	5,610	5,722	5,837	5,953	6,072	6,194	6,318	132,137
Total*:	90,431	5,610	5,722	5,837	5,953	6,072	6,194	6,318	132,137
O & M Costs (Savings)			1,321	1,321	1,321	1,321	1,321	1,321	7,928

\*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 - 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	Neighborhood Plan Matrix:	N/A
Neighborhood District:	In more than one District	Urban Village:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
<b>Revenue Sources</b>									
Water Rates	12,315	663	800	805	812	828	845	862	17,930
Total:	12,315	663	800	805	812	828	845	862	17,930
Fund Appropriations/Allo	cations								
Water Fund	12,315	663	800	805	812	828	845	862	17,930
Total*:	12,315	663	800	805	812	828	845	862	17,930
O & M Costs (Savings)			179	179	179	179	179	179	1,076
Spending Plan by Fund									
Water Fund		400	800	805	812	828	845	862	5,352
Total:		400	800	805	812	828	845	862	5,352

\*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 Equipment**

BCL/Program Name:	Water Quality & Treatment	BCL/Program Code:	C140B
Project Type:	Improved Facility	Start Date:	Q1/2007
Project ID:	C1414	End Date:	Q4/2015
Location:	Various		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	211	138	140	143	1	0	0	0	633
Total:	211	138	140	143	1	0	0	0	633
Fund Appropriations/All	ocations								
Water Fund	211	138	140	143	1	0	0	0	633
Total*:	211	138	140	143	1	0	0	0	633
O & M Costs (Savings)			6	6	6	6	6	6	38

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

#### 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:	Q4/2015
Location:	Multiple		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	209	25	669	200	2,963	0	0	0	4,067
Total:	209	25	669	200	2,963	0	0	0	4,067
Fund Appropriations/Allo	cations								
Water Fund	209	25	669	200	2,963	0	0	0	4,067
Total*:	209	25	669	200	2,963	0	0	0	4,067
O & M Costs (Savings)			41	41	41	41	41	41	244
Spending Plan by Fund									
Water Fund		0	669	200	2,963	0	0	0	3,832
Total:		0	669	200	2,963	0	0	0	3,832

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

## Water System Dewatering

BCL/Program Name:	Transmission	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	179	100	100	100	100	100	100	100	879
Total:	179	100	100	100	100	100	100	100	879
Fund Appropriations/All	ocations								
Water Fund	179	100	100	100	100	100	100	100	879
Total*:	179	100	100	100	100	100	100	100	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.

## Water System Plan - 2013

BCL/Program Name:	Water Resources	BCL/Program Code:	C150B
Project Type:	New Investment	Start Date:	Q2/2010
Project ID:	C1509	End Date:	Q3/2013
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
Neighborhood District:	Not in a Neighborhood District	Urban Village:	Not in an Urban Village

This project develops the 2013 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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	293	261	20	0	0	0	0	0	574
Total:	293	261	20	0	0	0	0	0	574
Fund Appropriations/Allo	cations								
Water Fund	293	261	20	0	0	0	0	0	574
Total*:	293	261	20	0	0	0	0	0	574
O & M Costs (Savings)			6	6	6	6	6	6	34
Spending Plan by Fund									
Water Fund		238	20	0	0	0	0	0	258
Total:		238	20	0	0	0	0	0	258

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

## 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:	Q3/2019
Location:	N/A		
Neighborhood Plan:	Not in a Neighborhood Plan	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	0	0	0	0	0	110	541	513	1,164
Total:	0	0	0	0	0	110	541	513	1,164
Fund Appropriations/All	locations								
Water Fund	0	0	0	0	0	110	541	513	1,164
Total*:	0	0	0	0	0	110	541	513	1,164
O & M Costs (Savings)			12	12	12	12	12	12	70

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

### 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	Neighborhood Plan Matrix:	N/A
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	5,349	626	3,866	3,433	3,555	5,075	5,301	5,401	32,605
Total:	5,349	626	3,866	3,433	3,555	5,075	5,301	5,401	32,605
Fund Appropriations/Alloc	cations								
Water Fund	5,349	626	3,866	3,433	3,555	5,075	5,301	5,401	32,605
Total*:	5,349	626	3,866	3,433	3,555	5,075	5,301	5,401	32,605
O & M Costs (Savings)			326	326	326	326	326	326	1,956
Spending Plan by Fund									
Water Fund		1,124	3,866	3,433	3,555	5,075	5,301	5,401	27,754
Total:		1,124	3,866	3,433	3,555	5,075	5,301	5,401	27,754

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

## Watershed Road Improvement/Decommissioning

BCL/Program Name:	Habitat Conservation Program	BCL/Program Code:	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	Neighborhood Plan Matrix:	N/A	
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	2012 Rev	2013	2014	2015	2016	2017	2018	Total
Revenue Sources									
Water Rates	10,397	1,163	984	795	811	839	856	873	16,717
Total:	10,397	1,163	984	795	811	839	856	873	16,717
Fund Appropriations/Alloc	cations								
Water Fund	10,397	1,163	984	795	811	839	856	873	16,717
Total*:	10,397	1,163	984	795	811	839	856	873	16,717
O & M Costs (Savings)			167	167	167	167	167	167	1,003
Spending Plan by Fund									
Water Fund		975	984	795	811	839	856	873	6,132
Total:		975	984	795	811	839	856	873	6,132

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