# 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. The system includes approximately:

- 448 miles of sanitary sewers
- 460 miles of storm drains
- 968 miles of combined sewers
- 68 pump stations
- 90 permitted combined sewer overflow outfalls
- 342 storm drain outfalls
- 130 stormwater quality treatment facilities
- 145 flow control facilities
- 38 combined sewer overflow control detention tanks/pipes

The Drainage and Wastewater CIP is the vehicle for maintaining, upgrading, and expanding this infrastructure, as well as constructing projects that protect, conserve, and enhance the city and region's environmental resources. Planned spending in the Drainage and Wastewater (DWF) CIP is approximately \$576 million over the next six years.

Historically, the Drainage and Wastewater CIP has been funded primarily by revenue bonds serviced by ratepayers. However, DWF financial policies adopted in 2003 gradually increased 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. In late 2010 DWF rates were passed by Council for the two-year period of 2011 and 2012. The next rate proposal will be presented in mid-2012 for 2013 and beyond.

### 2012-2017 CIP

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

The City of Seattle's most recent NPDES permit for stormwater, granted by the State government in 2007, introduced more prescriptive requirements to help to 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 and green stormwater infrastructure over the next 15 years. Detention is the storage of stormwater during a rainfall event, and can be accomplished through detention ponds or underground tanks or through infiltration into the ground. Detention can be added to the drainage system to offset the impacts of larger storms that can overwhelm the conveyance capacity of the system and 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. Green stormwater infrastructure is the use of environmentally friendly and less capital intensive solutions to help reduce overflows by allowing stormwater to infiltrate slowly into the ground and cutting the volume of stormwater entering the system. Green stormwater infrastructure includes specific treatments that rely on specialized soils and plants that provide flow control and/or water quality benefits. The use of green stormwater infrastructure is required through Seattle's NPDES permit and Stormwater Code.

CIP funding is also needed to maintain and improve the existing drainage systems so that residents experience less flooding and fewer sewage backups. Sewer backups are prohibited and considered by regulators to be a violation of the City's 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 drainage system and overflow into local waterways, causing a combined sewer overflow. Annual overflows have been reduced from roughly 30 billion gallons per year in 1970 to less than 100 million gallons per year typically today. However SPU is still not meeting regulatory mandates limiting overflows to one overflow per outfall location per year. Implementation of the CSO Reduction Program is a state and federal regulatory requirement, and SPU expects to spend approximately \$160-\$170 million over the next five years (2011-2015) on CSO reduction projects. The projects will include a combination of underground storage tanks, green stormwater infrastructure, system retrofits, and the development of a long-range plan for CSO projects to be constructed from 2016-2025. One of the biggest challenges for the program is siting wastewater facilities in a dense urban environment. SPU is addressing that challenge through an early and active community/stakeholder involvement process on each of its projects. Another challenge revolves around SPU's relationship with King County and maintaining an active partnership to operate the wastewater system and plan for potential joint CSO reduction projects.

CSOs spill a mixture of raw sewage and stormwater into local waterways at 92 outfalls throughout the City of Seattle. Although expensive, improving the system to prevent overflows is important. These spills violate water quality standards, raise public health concerns, and contaminate sediment and habitat for endangered species. State and federal law require SPU 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 Washington Department of Ecology issued a draft consent decree describing measures U.S. Justice will require of SPU to remedy violations of the Clean Water Act. The proposed 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 current permit requirements including preparation of a Long Term Control Plan, accomplish required milestones to control CSOs into Lake Washington and achieve compliance with the 2025 goal.

The Drainage and Wastewater CIP must also ensure that 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 range from very serious (basement sewer back-ups) to nuisance (limited street or yard flooding). 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 Madison Valley Long Term Solution, North 107<sup>th</sup> Street and Midvale Avenue North Drainage, South Park Stormwater Pump Station, and Broadview Sewer and Stormwater Improvements projects.

Over the past several decades, there have been a number of instances of flooding and sewer backups in Madison Valley during times of heavy rainfall. Storm events that hit the city and the
Madison Valley neighborhood in 2004 and 2006 were especially severe, causing some residents
to have up to five feet of water in their basements and flooding in their backyards. The Madison

Valley Long Term Solution project will provide stormwater flood control facilities to greatly reduce the potential for flooding in the Madison Valley area, especially in the vicinity of 30th Ave East and East John Street, and in the area of 29th Avenue East and East Madison Street. Work includes construction of a large stormwater pipe in the northwest section of the Madison Valley basin, a new stormwater storage facility in Washington Park, and an expanded stormwater retention area at 30th Avenue East and East John Street.

- The South Park Pump Station project will construct a pump station and water quality facility in South Park. The pump station will allow the existing storm drain trunk to meet the level of service adopted in the 2004 Comprehensive Drainage Plan. In turn, this allows for future projects to expand the collection system to address flooding complaints. The water quality facility will treat most stormwater flows from the basin, reducing pollutant loading to the Duwamish River. The project's engineering design is complicated by the tidal flows present in the Duwamish.
- The Broadview neighborhood has experienced 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.
- The North 107<sup>th</sup> Street and Midvale Avenue North Drainage project includes the design and construction of a three million gallon stormwater detention pond on a 1.8-acre commercial site near North 107th Street and Midvale Ave North. Nearby businesses and homes have started to experience flooding at the five-year storm level. The stormwater facility will provide a 25-year 24-hour storm level of service for nearby businesses and residences.

### CIP Revenue Sources

SPU's Drainage and Wastewater CIP is funded largely by drainage and wastewater 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 three \$1 million grants from the Washington State Department of Ecology's 2011 Stormwater Retrofit Low Impact Development (SWRLID) Competitive Grants Program. These grants will help fund construction of the Venema Creek Natural Drainage System, Capitol Hill Water Quality, and South Park Pump Station projects.

In late 2010 DWF rates were passed by Council for the two-year period of 2011 and 2012. The next rate proposal will be presented in mid-2012 for 2013 and beyond.

### Thematic Priorities and Project Selection

Many Drainage and Wastewater CIP projects are outlined in the Wastewater System Plan, 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 Capitol 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, 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 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 utility relocation and betterments associated with the Alaskan Way Viaduct and Mercer Corridor projects.
- **Infrastructure:** How a project addresses infrastructure conditions or vulnerabilities. Examples of highly ranked projects in this category include the Point Sewer Pipe Rehabilitation and Emergency Rehabilitation programs.
- Level of Service: The importance of this project in providing or improving services to customers. Examples of highly ranked projects in this category include the South Park Pump Station, Localized Flood Control program, Sanitary Sewer Overflow Capacity program, Point Sewer Pipe Rehabilitation, and Emergency Rehabilitation programs.
- Other Factors: Other important factors, such as whether a project has 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 N. 107<sup>th</sup>& 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 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. In recent years, given financial constraints, SPU has made difficult choices to eliminate, defer and/or reduce projects in order to support the highest priority projects. Projects that were eliminated include Small Sewer Improvements, Bitter Lake/North 137<sup>th</sup> Stormwater, Taylor Creek Fish Habitat

Improvements, and Fish Passage Program. Projects that were deferred include Sewer Full Line Replacements and Taylor Creek Culvert Replacement. A number of projects were also reduced, including Pump Station and Force Main Improvements, No-Dig and Pipe Maintenance Rehabilitation, Localized Flood Control, Operations Control Center, Operational Facility-Construction and Operational Facility-Other. Funding for some of these projects (Localized Flood Control in particular) has since been reinstated, as resources have become available.

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

### **CIP Spending by Major Category**

(Amounts are in thousands of dollars)

Drainage and Wastewater Fund	2012	2013	2014	2015	2016	2017	Total
PROTECTION OF BENEFICIAL USES	\$4,800	\$6,135	\$2,798	\$2,702	\$4,748	\$2,617	\$23,799
SEDIMENTS	\$5,595	\$2,102	\$1,457	\$1,207	\$1,205	\$1,205	\$12,772
COMBINED SEWER OVERFLOWS	\$26,888	\$53,217	\$29,496	\$35,961	\$37,248	\$21,397	\$204,207
REHABILITATION	\$12,623	\$14,388	\$13,965	\$14,681	\$15,045	\$15,341	\$86,042
FLOODNG, SEWER BACKUP and LANDSLIDES	\$24,186	\$26,294	\$19,210	\$18,283	\$18,678	\$24,622	\$131,275
SHARED COST PROJECTS	\$14,931	\$13,289	\$12,571	\$11,141	\$15,979	\$14,999	\$82,910
TECHNOLOGY	\$4,815	\$7,331	\$7,551	\$5,302	\$4,737	\$4,788	\$34,524
Total	\$93,838	\$122,756	\$87,048	\$89,277	\$97,640	\$84,969	\$575,528

**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 2012 and 2013 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 as resources became available. Capital funding is also included to support the Street Sweeping for Water Quality project, which was initiated in 2011 and will reduce the amount of pollution that flows from roadways through SPU infrastructure into local creeks, Lake Washington, and Puget Sound.

Decreases in the **Protection of Beneficial Uses BCL** in 2012, compared to amounts endorsed for 2012 in the 2011-2016 CIP, are primarily the result of the Venema Creek Natural Drainage System project. Schedule delays driven by community and design concerns, as well as additional work being done to address these issues, has shifted costs from 2011 and 2012 to 2013. The Capitol Hill Water Quality project also contributes to slight increases in both years.

**Sediments**: The City of Seattle is named as a potentially responsible party 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 potentially responsible parties 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.

Increases in the **Sediments BCL** for 2012, compared to amounts endorsed for 2012 in the 2011-2016 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 2012 Budget include the Windermere, S. Genesee and S. 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 approximately 60 percent from current overflows. Starting in 2013, the Combined Sewer Overflows BCL will increase significantly. This upward trend reflects progress toward meeting regulatory requirements and commitments outlined in the Combined Sewer Overflow Reduction Plan.

Compared to amounts endorsed for 2012 in the 2011-2016 CIP, the **Combined Sewer Overflows BCL** is increasing. Increases totaling \$1.1 million in 2012 reflect revisions to the cash flow and schedules for the Windermere, S. Genesee and S. Henderson CSO projects. Increases for Windermere are the result of accelerating construction; during the design phase it was discovered that the construction period could be reduced from 24 months to less than 18 months, resulting in fewer impacts to the community and potential cost savings. The result is a \$10 million increase for this project compared to the Endorsed Budget in 2013, followed by a \$12 million decrease in 2014. The original estimates for Genesee were based on high-level planning work, and have been refined to reflect the chosen alternative. The need for additional mitigation work has also contributed to higher costs.

**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; 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.

Increases in the **Rehabilitation BCL** for 2012, compared to amounts endorsed for 2012 in the 2011-2016 CIP, are driven by the Pump Station and Force Main Improvements program. Delays to the start of the inspection program have impacted the number of force main replacement projects that will be completed this year, resulting in increases to support additional force main projects in 2012. Capital funding totaling \$510,000 in 2012 and \$1 million in 2013 is also proposed for the Outfall Rehabilitation Program. This work will start in 2011 as part of the No-Dig program, but will be split out as a separate program for better tracking and budgeting in 2012. This program will design and construct CSO outfall improvements that SPU has committed to completing by 2015 per the 2010 NPDES Waste Discharge Permit with the Department of Ecology.

**Flooding, Sewer Back-up, and Landslides:** This program is responsible for preventing and alleviating flooding and sewer backups in 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.

Increased funding for the **Flooding, Sewer Back-up, and Landslides BCL** in 2012 compared with amounts endorsed for 2012 in the 2011-2016 CIP will help fund two priority projects that have been delayed from 2011. Continued difficulties in procuring adjacent private and right-of-way property rights as well as investigation of soil contamination issues has delayed construction for the South Park Pump Station project until 1<sup>st</sup> Quarter 2012. Construction for the Thornton Creek Confluence project has been delayed until 2013, primarily due to staffing issues. Increases to these projects are partially offset by reductions to the Localized Flood, Sanitary Sewer Overflow Capacity, and Inflow/Infiltration programs, which can be ramped up or down depending on capacity and priorities within the Flooding, Sewer Backup, and Landslides BCL. Funding from these programs is also being shifted to support the new Broadview Long Term Plan project. This project aims to restore sanitary sewer system capacity in the Broadview neighborhood, which suffers from numerous sewer backups into residences during wet weather events.

**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 Drainage and Wastewater program includes funding for a number of interdepartmental projects including the Alaskan Way Viaduct and Seawall Replacement, Mercer Corridor and Bridging the Gap projects. 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 2012, compared to amounts endorsed for 2012 in the 2011-2016 CIP, are driven by the Alaskan Way Viaduct (AWV) and Integrated Control Monitoring (I-SCADA) programs. The proposed budget for AWV reflects the latest schedule and more refined cost estimates, which includes design in 2011 for the seawall and bored tunnel portals and associated utility relocation, followed by construction in 2012. I-SCADA reductions in 2012 and 2013 are the result of work being accelerated to 2011; funding is available due to delays to the South Park Pump Station and Thornton Confluence projects.

**Technology:** This program category is presented in the separate "Technology CIP" section of SPU's 2012-2017 CIP. The 2012-2017 Proposed CIP reduces technology CIP spending by 10% annually, which is equivalent to a \$1.37 million reduction compared to the 2012 Endorsed Budget in the 2011-2016 Adopted CIP. The Drainage and Wastewater Utility's share of the 2012 Technology CIP reduction is 14% or \$186,000 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/Asset Data Initiative), budget and financial management (Budget Planning and Forecasting, Financial Data Mart), customer service improvements (Web Application Redesign, online chat and contact tools), and project delivery (Enterprise Project Management System). Other technology investments will be cancelled or deferred as a result of this funding reduction, which is part of a set of initiatives intended to continue restraining costs across the utility.

# **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 CSO facilities, both structural and green, will require growing levels of O&M support for inspection and maintenance.

# **Project Summary**

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BCL/Program Name/									
Project Title & ID	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
<b>Protection of Beneficial Uses</b>					BC	L/Progra	m Code:		С333В
Best Management Practice Program (C3313)	1,715	2,916	50	20	689	2,352	2,539	2,252	12,534
Capitol Hill Water Quality Project (C3373)	979	306	2,724	2,445	330	225	2,208	365	9,581
Street Sweeping for Water Quality (C3363)	0	314	825	0	0	0	0	0	1,139
Taylor Creek Culvert Replacement (C3353)	769	0	100	550	1,200	125	0	0	2,744
Venema Creek Natural Drainage System (C3333)	1,193	1,489	1,101	3,120	579	0	0	0	7,482
<b>Protection of Beneficial Uses</b>	4,656	5,025	4,800	6,135	2,798	2,702	4,748	2,617	33,480
Sediments					BC	L/Progra	m Code:		C350B
Sediment Remediation - DWF (C3503)	24,946	6,350	5,595	2,102	1,457	1,207	1,205	1,205	44,068
Sediments	24,946	6,350	5,595	2,102	1,457	1,207	1,205	1,205	44,068
<b>Combined Sewer Overflows</b>					BC	L/Progra	m Code:		C360B
Ballard Roadside Raingardens Phase I - ARRA-CWSRF (C3603)	1,138	371	129	119	0	0	0	0	1,756
Combined Sewer Overflow Facility Retrofit (C3611)	7,029	2,040	2,040	4,731	6,037	6,320	1,104	1,126	30,428
Green Stormwater Infrastructure Program (C3610)	454	1,836	2,603	3,793	4,996	4,225	4,561	1,126	23,594
Long Term Control Plan (C3604)	17,240	7,726	5,029	7,410	4,101	2,438	2,208	2,252	48,404
S Genesee Combined Sewer Overflow (C3608)	5,573	704	1,507	8,914	9,092	106	200	0	26,095
S Henderson Combined Sewer Overflow Storage (C3609)	6,526	2,142	1,908	4,323	4,705	22,276	29,175	16,892	87,948
Windermere Combined Sewer Overflow Storage (C3605)	10,542	3,244	13,672	23,928	566	595	0	0	52,546
<b>Combined Sewer Overflows</b>	48,501	18,062	26,888	53,217	29,496	35,961	37,248	21,397	270,771
Rehabilitation					BC	L/Progra	m Code:		C370B
Emergency Rehabilitation (C3705)	5,400	1,020	2,640	2,020	1,881	2,165	2,208	2,252	19,587
No Dig Pipe & Maintenance Rehabilitation (C3707)	12,567	714	1,530	1,561	1,592	1,624	1,656	1,689	22,932
Outfall Rehabilitation Program (C3708)	0	0	510	1,040	1,061	1,082	1,104	1,126	5,924
Point Sewer Pipe Rehabilitation (C3704)	31,948	3,162	4,947	6,659	6,792	6,928	7,066	7,207	74,709

<sup>\*</sup>Amounts in thousands of dollars

2012 - 2017 Proposed Capital Improvement Program

# **Project Summary**

BCL/Program Name/									
Project Title & ID	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
Pump Station and Force Main Improvements (C3703)	3,991	1,270	2,766	2,858	2,389	2,633	2,760	2,815	21,482
Sewer Full Line Replacements (C3702)	190	306	230	250	250	250	250	250	1,976
Rehabilitation	54,096	6,472	12,623	14,388	13,965	14,681	15,045	15,341	146,610
Flooding, Sewer Back-up, and	Landslides				BC	L/Progra	m Code:		C380B
Broadview Long Term Plan (C3812)	0	0	2,000	5,000	5,000	5,000	5,000	0	22,000
Culvert Replacement Program (C3810)	1,570	1,476	405	3,000	3,000	3,000	3,000	3,000	18,451
Densmore Basin Drainage Improvements (C3803)	5,069	5,306	4,241	200	0	0	0	0	14,816
Inflow/Infiltration Control (C3807)	0	510	377	1,641	1,958	2,254	2,416	5,631	14,788
Localized Flood Control Program (C3802)	1,588	2,621	4,689	4,219	6,064	5,700	5,845	10,361	41,087
Madison Valley Long Term Solution (C3805)	16,581	12,724	317	0	0	0	0	0	29,622
Meadowbrook Pond Sediment Management (C3808)	65	0	1,500	50	0	0	0	0	1,615
Sanitary Sewer Overflow Capacity (C3804)	2,505	2,040	3,080	2,162	2,245	2,330	2,416	5,631	22,409
South Park Pump Station (C3806)	4,682	8,818	6,778	6,022	943	0	0	0	27,243
Thornton Confluence Improvement (C3811)	615	4,375	800	4,000	0	0	0	0	9,789
Flooding, Sewer Back-up, and Landslides	32,676	37,870	24,186	26,294	19,210	18,283	18,678	24,622	201,820
<b>Shared Cost Projects</b>					BC	L/Progra	m Code:		C410B
1% for Art – DWF (C4118- DWF)	1,100	526	452	648	643	676	616	629	5,290
Alaskan Way Viaduct & Seawall Replacement Program - DWF (C4102-DWF)	7,488	4,100	1,530	3,955	4,449	3,700	8,523	9,829	43,574
Bridging the Gap - DWF (C4119-DWF)	2	1,224	1,137	1,161	1,273	1,299	1,325	1,351	8,772
Emergency Storms - DWF (C4120-DWF)	4,505	589	0	0	0	0	0	0	5,094
First Hill Streetcar - DWF (C4130-DWF)	0	149	0	0	0	0	0	0	149
Heavy Equipment Purchases - DWF (C4116-DWF)	7,764	1,612	1,436	1,131	1,894	2,517	3,097	1,634	21,085
Integrated Control Monitoring Program - DWF (C4108- DWF)	9,664	1,233	1,392	277	0	0	0	0	12,565

<sup>\*</sup>Amounts in thousands of dollars

2012 - 2017 Proposed Capital Improvement Program

# **Project Summary**

BCL/Program Name/									
Project Title & ID	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
Mercer Corridor Project East Phase - DWF (C4114-DWF)	1,230	1,050	1,010	895	0	0	0	0	4,184
Mercer Corridor Project West Phase - DWF (C4133-DWF)	9	370	335	1,234	982	143	0	0	3,073
Meter Replacement - DWF (C4101-DWF)	3,533	565	567	656	588	599	610	627	7,743
Operational Facility - Construction - DWF (C4106- DWF)	4,308	453	263	769	2,061	1,998	1,652	672	12,175
Operational Facility - Other - DWF (C4115-DWF)	329	0	6,381	1,991	372	0	0	0	9,073
Operations Control Center - DWF (C4105-DWF)	2,351	52	85	96	14	14	120	242	2,973
Other Major Transportation Projects - DWF (C4123-DWF)	1	10	10	10	11	11	11	11	76
Security Improvements - DWF (C4113-DWF)	978	23	148	149	146	133	25	4	1,606
Sound Transit - North Link - DWF (C4135-DWF)	0	0	88	88	0	0	0	0	175
Sound Transit – University Link - DWF (C4110-DWF)	250	69	98	232	138	52	0	0	839
<b>Shared Cost Projects</b>	43,512	12,025	14,931	13,289	12,571	11,141	15,979	14,999	138,447
Technology					BC	L/Progra	m Code:		C510B
Asset Information Management (C5407)	444	1,235	1,737	1,449	1,059	866	866	883	8,539
Customer Contact & Billing (C5402)	0	469	626	3,470	4,218	1,966	1,306	1,332	13,386
Enterprise Information Management (C5403)	0	171	218	371	238	209	240	172	1,619
IT Infrastructure (C5404)	23	769	600	544	565	583	648	689	4,422
Project Delivery & Performance (C5405)	155	829	1,047	772	937	950	950	969	6,608
Science & System Performance (C5406)	2	590	588	724	535	728	728	742	4,636
Technology	624	4,062	4,815	7,331	7,551	5,302	4,737	4,788	39,210
Department Total*:	209,011	89,866	93,838	122,756	87,048	89,277	97,640	84,970	874,406

<sup>\*</sup>Amounts in thousands of dollars

# **Fund Summary**

Fund Name & Code	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
Drainage and Wastewater Fund (44010)	209,011	89,866	93,838	122,756	87,048	89,277	97,640	84,970	874,406
Department Total*:	209,011	89,866	93,838	122,756	87,048	89,277	97,640	84,970	874,406

<sup>\*</sup>Amounts in thousands of dollars

### 1% for Art – DWF

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2001Project ID:C4118-DWFEnd Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	1,100	526	452	648	643	676	616	629	5,290
Total:	1,100	526	452	648	643	676	616	629	5,290
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	1,100	526	452	648	643	676	616	629	5,290
Total*:	1,100	526	452	648	643	676	616	629	5,290
O & M Costs (Savings)			5	6	6	7	6	6	37
Spending Plan by Fund									
Drainage and Wastewater Fund		516	452	648	643	676	616	629	4,180
Total:		516	452	648	643	676	616	629	4,180

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

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

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:New FacilityStart Date:Q1/2004Project ID:C4102-DWFEnd Date:Q4/2018

**Location:** SR 99 / Battery St

Neighborhood Plan: In more than one Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: In more than one District Urban Village: In more than one

Urban Village

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	7,488	4,100	1,530	3,955	4,449	3,700	8,523	9,829	43,574
Total:	7,488	4,100	1,530	3,955	4,449	3,700	8,523	9,829	43,574
Fund Appropriations/Alloc	eations								
Drainage and Wastewater Fund	7,488	4,100	1,530	3,955	4,449	3,700	8,523	9,829	43,574
Total*:	7,488	4,100	1,530	3,955	4,449	3,700	8,523	9,829	43,574
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Drainage and Wastewater Fund		3,123	1,530	3,955	4,449	3,700	8,523	9,829	35,109
Total:		3,123	1,530	3,955	4,449	3,700	8,523	9,829	35,109

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

### Ballard Roadside Raingardens Phase I - ARRA-CWSRF

**BCL/Program Name:** Combined Sewer Overflows **BCL/Program Code:** C360B **Project Type:** New Facility **Start Date:** Q4/2009 **Project ID:** C3603 **End Date:** Q4/2013 **Location:** Ballard Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix: Neighborhood District:** Ballard **Urban Village:** Ballard

This establishes a separate project to track the American Recovery and Reinvestment Act (ARRA) funding for the Ballard Roadside Raingardens Phase I project, which is a component of the Ballard Combined Sewer Overflow project (C303101). SPU was awarded \$1.4M from the Washington State Department of Ecology as a low interest loan. The separate project complies with the requirements of ARRA reporting. In addition to reducing a portion of the combined sewer overflow volumes in the Ballard area, this project will develop the design templates and inform the cost and performance data for bioretention cells in the right-of-way. This information will be used to better evaluate, and provide a higher level of confidence for, the role of this green stormwater infrastructure strategy in achieving Seattle's combined sewer system compliance.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Federal ARRA Funds: Clean Water State Revolving Fund	1,138	371	129	119	0	0	0	0	1,756
Total:	1,138	371	129	119	0	0	0	0	1,756
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	1,138	371	129	119	0	0	0	0	1,756
Total*:	1,138	371	129	119	0	0	0	0	1,756
O & M Costs (Savings)			0	0	18	18	18	18	70
Spending Plan by Fund									
Drainage and Wastewater Fund		401	129	119	0	0	0	0	648
Total:		401	129	119	0	0	0	0	648

<sup>\*</sup>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 UsesBCL/Program Code:C333BProject Type:New FacilityStart Date:Q2/2000Project ID:C3313End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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. Budget for 2012 will primarily fund work on the Norfolk Basin Water Quality project.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	1,715	2,916	50	20	689	2,352	2,539	2,252	12,534
Total:	1,715	2,916	50	20	689	2,352	2,539	2,252	12,534
Fund Appropriations/Alloc	eations								
Drainage and Wastewater Fund	1,715	2,916	50	20	689	2,352	2,539	2,252	12,534
Total*:	1,715	2,916	50	20	689	2,352	2,539	2,252	12,534
O & M Costs (Savings)			125	125	125	125	125	125	752
Spending Plan by Fund									
Drainage and Wastewater Fund		2,730	50	20	689	2,352	2,539	2,252	10,633
Total:		2,730	50	20	689	2,352	2,539	2,252	10,633

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2008Project ID:C4119-DWFEnd Date:Q4/2017

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	2	1,224	1,137	1,161	1,273	1,299	1,325	1,351	8,772
Total:	2	1,224	1,137	1,161	1,273	1,299	1,325	1,351	8,772
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	2	1,224	1,137	1,161	1,273	1,299	1,325	1,351	8,772
Total*:	2	1,224	1,137	1,161	1,273	1,299	1,325	1,351	8,772
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Drainage and Wastewater Fund		1,200	1,137	1,161	1,273	1,299	1,325	1,351	8,746
Total:		1,200	1,137	1,161	1,273	1,299	1,325	1,351	8,746

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

Q4/2016

### **Broadview Long Term Plan**

**BCL/Program Name:** Flooding, Sewer Back-up, and

Landslides

**BCL/Program Code:** C380B

Rehabilitation or Restoration **Project Type:** 

Q1/2012 **Start Date:** 

Project ID: C3812

**Location:** 

Neighborhood Plan:

Broadview

Broadview-Bitter Lake-Haller Lake Neighborhood Plan

**Matrix:** 

**End Date:** 

**Neighborhood District:** Northwest **Urban Village:** Not in an Urban Village

This program will develop and implement a plan to restore sanitary sewer system capacity in the Broadview neighborhood, likely through some combination of restoration, replacement, and new facilities to reduce backup events. Typical improvements may include, but are not limited to, sealing of sanitary sewers to groundwater infiltration, disconnection of inflow sources from sanitary sewers, rehabilitation of sanitary sewer lines, and potentially upsizing certain sections of the sanitary sewer system. Drainage improvements may be required in support of this goal and may include improvements to the existing ditch and culvert system, construction of new drainage systems including water quality and flow management features, and may include Green Stormwater Infrastructure (GSI) technologies.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	2,000	5,000	5,000	5,000	5,000	0	22,000
Total:	0	0	2,000	5,000	5,000	5,000	5,000	0	22,000
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	0	0	2,000	5,000	5,000	5,000	5,000	0	22,000
Total*:	0	0	2,000	5,000	5,000	5,000	5,000	0	22,000
O & M Costs (Savings)			0	0	0	0	0	220	220
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

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

N/A

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

BCL/Program Name:Protection of Beneficial UsesBCL/Program Code:C333BProject Type:New FacilityStart Date:Q1/2006Project ID:C3373End Date:Q4/2017

**Location:** Yale Ave N/Pontius Ave N/Thomas

Street

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: Lake Union Urban Village: South Lake Union

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	979	306	2,724	2,445	330	225	2,208	365	9,581
Total:	979	306	2,724	2,445	330	225	2,208	365	9,581
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	979	306	2,724	2,445	330	225	2,208	365	9,581
Total*:	979	306	2,724	2,445	330	225	2,208	365	9,581
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Drainage and Wastewater Fund		801	2,724	2,445	330	225	2,208	365	9,097
Total:		801	2,724	2,445	330	225	2,208	365	9,097

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

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

BCL/Program Name:Combined Sewer OverflowsBCL/Program Code:C360BProject Type:Rehabilitation or RestorationStart Date:Q1/2002Project ID:C3611End Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: In more than one District Urban Village: Not in an Urban

Village

This ongoing project retrofits, upgrades, and modifies existing Combined Sewer Overflows (CSO) reduction facilities in Seattle CSO basins. Retrofit projects cost-effectively optimize system operation and storage, mitigate the extent of CSOs, and postpone and/or downsize large CSO reduction projects. This project assists in achieving State Department of Ecology's requirement of an average of no more than one wet-weather overflow event per outfall per year.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	7,029	2,040	2,040	4,731	6,037	6,320	1,104	1,126	30,428
Total:	7,029	2,040	2,040	4,731	6,037	6,320	1,104	1,126	30,428
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	7,029	2,040	2,040	4,731	6,037	6,320	1,104	1,126	30,428
Total*:	7,029	2,040	2,040	4,731	6,037	6,320	1,104	1,126	30,428
O & M Costs (Savings)			304	304	304	304	304	304	1,826
Spending Plan by Fund									
Drainage and Wastewater Fund		3,184	2,040	4,731	6,037	6,320	1,104	1,126	24,542
Total:		3,184	2,040	4,731	6,037	6,320	1,104	1,126	24,542

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

### **Culvert Replacement Program**

**BCL/Program Name:** Flooding, Sewer Back-up, and **BCL/Program Code:** C380B

Landslides

**Project Type:** Rehabilitation or Restoration **Start Date:** Q2/2008 C3810 **End Date:** Project ID: **ONGOING** 

**Location:** Various

Neighborhood Plan: Neighborhood Plan Not in a Neighborhood Plan

Matrix:

**Neighborhood District:** In more than one District **Urban Village:** In more than one

Urban Village

N/A

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.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	1,570	1,476	405	3,000	3,000	3,000	3,000	3,000	18,451
Total:	1,570	1,476	405	3,000	3,000	3,000	3,000	3,000	18,451
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	1,570	1,476	405	3,000	3,000	3,000	3,000	3,000	18,451
Total*:	1,570	1,476	405	3,000	3,000	3,000	3,000	3,000	18,451
O & M Costs (Savings)			184	184	184	184	184	184	1,102
Spending Plan by Fund									
Drainage and Wastewater Fund		478	405	3,000	3,000	3,000	3,000	3,000	15,883
Total:		478	405	3,000	3,000	3,000	3,000	3,000	15,883

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

N/A

### **Densmore Basin Drainage Improvements**

BCL/Program Name: Flooding, Sewer Back-up, and BCL/Program Code: C380B

Landslides

 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:

Neighborhood District: Northwest Urban Village: Bitter Lake Village

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	5,069	5,306	4,241	200	0	0	0	0	14,816
Total:	5,069	5,306	4,241	200	0	0	0	0	14,816
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	5,069	5,306	4,241	200	0	0	0	0	14,816
Total*:	5,069	5,306	4,241	200	0	0	0	0	14,816
O & M Costs (Savings)			0	0	148	148	148	148	593
Spending Plan by Fund									
Drainage and Wastewater Fund		4,389	4,241	200	0	0	0	0	8,830
Total:		4,389	4,241	200	0	0	0	0	8,830

<sup>\*</sup>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:RehabilitationBCL/Program Code:C370BProject Type:Rehabilitation or RestorationStart Date:Q1/1998Project ID:C3705End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	5,400	1,020	2,640	2,020	1,881	2,165	2,208	2,252	19,587
Total:	5,400	1,020	2,640	2,020	1,881	2,165	2,208	2,252	19,587
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	5,400	1,020	2,640	2,020	1,881	2,165	2,208	2,252	19,587
Total*:	5,400	1,020	2,640	2,020	1,881	2,165	2,208	2,252	19,587
O & M Costs (Savings)			196	196	196	196	196	196	1,175
Spending Plan by Fund									
Drainage and Wastewater Fund		1,200	2,640	2,020	1,881	2,165	2,208	2,252	14,367
Total:		1,200	2,640	2,020	1,881	2,165	2,208	2,252	14,367

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Rehabilitation or RestorationStart Date:Q3/2007Project ID:C4120-DWFEnd Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	4,505	589	0	0	0	0	0	0	5,094
Total:	4,505	589	0	0	0	0	0	0	5,094
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	4,505	589	0	0	0	0	0	0	5,094
Total*:	4,505	589	0	0	0	0	0	0	5,094
O & M Costs (Savings)			53	53	53	53	53	53	321
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

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2010Project ID:C4130-DWFEnd Date:Q4/2013Location:First Hill

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

N/A

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 2012-2017 timeframe but if they are, necessary funding will be requested.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	0	149	0	0	0	0	0	0	149
Total:	0	149	0	0	0	0	0	0	149
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	0	149	0	0	0	0	0	0	149
Total*:	0	149	0	0	0	0	0	0	149
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Drainage and Wastewater Fund		150	0	0	0	0	0	0	150
Total:		150	0	0	0	0	0	0	150

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

### **Green Stormwater Infrastructure Program**

BCL/Program Name:Combined Sewer OverflowsBCL/Program Code:C360BProject Type:New FacilityStart Date:Q1/2011Project ID:C3610End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: In more than one District Urban Village: In more than one

Urban Village

This ongoing program provides construction of Green Stormwater Infrastructure 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. The Rainwise program provides financial incentives to private property owners within the City's uncontrolled CSO basins for construction of properly sized and installed raingardens, cisterns or downspout disconnections. The program supports the City's current regulatory strategy for compliance with its CSO National Pollutant Discharge Elimination System (NPDES) permit.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	454	1,836	2,603	3,793	4,996	4,225	4,561	1,126	23,594
Total:	454	1,836	2,603	3,793	4,996	4,225	4,561	1,126	23,594
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	454	1,836	2,603	3,793	4,996	4,225	4,561	1,126	23,594
Total*:	454	1,836	2,603	3,793	4,996	4,225	4,561	1,126	23,594
O & M Costs (Savings)			236	236	236	236	236	236	1,416
Spending Plan by Fund									
Drainage and Wastewater Fund		1,634	2,603	3,793	4,996	4,225	4,561	1,126	22,938
Total:		1,634	2,603	3,793	4,996	4,225	4,561	1,126	22,938

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:New InvestmentStart Date:ONGOINGProject ID:C4116-DWFEnd Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

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

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	7,764	1,612	1,436	1,131	1,894	2,517	3,097	1,634	21,085
Total:	7,764	1,612	1,436	1,131	1,894	2,517	3,097	1,634	21,085
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	7,764	1,612	1,436	1,131	1,894	2,517	3,097	1,634	21,085
Total*:	7,764	1,612	1,436	1,131	1,894	2,517	3,097	1,634	21,085
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Drainage and Wastewater Fund		863	1,436	1,131	1,894	2,517	3,097	1,634	12,572
Total:		863	1,436	1,131	1,894	2,517	3,097	1,634	12,572

<sup>\*</sup>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**

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 Neighborho

Neighborhood Plan N/A Matrix:

**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.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	0	510	377	1,641	1,958	2,254	2,416	5,631	14,788
Total:	0	510	377	1,641	1,958	2,254	2,416	5,631	14,788
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	0	510	377	1,641	1,958	2,254	2,416	5,631	14,788
Total*:	0	510	377	1,641	1,958	2,254	2,416	5,631	14,788
O & M Costs (Savings)			148	148	148	148	148	148	889
Spending Plan by Fund									
Drainage and Wastewater Fund		1,110	377	1,641	1,958	2,254	2,416	5,631	15,388
Total:		1,110	377	1,641	1,958	2,254	2,416	5,631	15,388

<sup>\*</sup>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:** Q4/2013 **Location:** Various Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix:** 

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	9,664	1,233	1,392	277	0	0	0	0	12,565
Total:	9,664	1,233	1,392	277	0	0	0	0	12,565
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	9,664	1,233	1,392	277	0	0	0	0	12,565
Total*:	9,664	1,233	1,392	277	0	0	0	0	12,565
O & M Costs (Savings)			126	126	126	126	126	126	754
Spending Plan by Fund									
Drainage and Wastewater Fund		2,822	1,392	277	0	0	0	0	4,491
Total:		2,822	1,392	277	0	0	0	0	4,491

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

### **Localized Flood Control Program**

BCL/Program Name: Flooding, Sewer Back-up, and BCL/Program Code: C380B

Landslides

Project Type:New FacilityStart Date:Q1/2007Project ID:C3802End Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: Northwest Urban Village: Bitter Lake Village

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

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	1,588	2,621	4,689	4,219	6,064	5,700	5,845	10,361	41,087
Total:	1,588	2,621	4,689	4,219	6,064	5,700	5,845	10,361	41,087
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	1,588	2,621	4,689	4,219	6,064	5,700	5,845	10,361	41,087
Total*:	1,588	2,621	4,689	4,219	6,064	5,700	5,845	10,361	41,087
O & M Costs (Savings)			411	411	411	411	411	411	2,465
Spending Plan by Fund									
Drainage and Wastewater Fund		2,655	4,689	4,219	6,064	5,700	5,845	10,361	39,532
Total:		2,655	4,689	4,219	6,064	5,700	5,845	10,361	39,532

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

### **Long Term Control Plan**

BCL/Program Name:Combined Sewer OverflowsBCL/Program Code:C360BProject Type:New FacilityStart Date:Q3/2008Project ID:C3604End Date:Q4/2030

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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. SPU is required to develop and implement the plan to reduce the number and volume of its CSO overflows, meet receiving water quality standards, and protect designated beneficial uses. The program includes establishing tools for managing the plan, flow characterization, monitoring, and hydraulic modeling; consideration and prioritization of sensitive CSO locations; development and analysis of CSO control alternatives; development of a comprehensive set of reasonable control alternatives that takes into consideration overall cost and performance; operational plan revisions to include agreed-upon long-term CSO controls; public participation process; implementation schedule; and post-construction monitoring program to verify compliance. The Plan will be submitted to the 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. This Program also lays the groundwork for CSO program management activities through 2030. Program management activities include the development and implementation of a Program Management Implementation Plan (PMIP) that will define the CSO Program organization, governance, scope, schedule, communications management plan, quality assurance/quality control plan, and environmental review/permitting plan. Implementation of the PMIP will include monitoring and control of the CSO Program's scope, schedule, budget, and risks, and adherence to the procedures and plans laid out in the PMIP.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	17,240	7,726	5,029	7,410	4,101	2,438	2,208	2,252	48,404
Total:	17,240	7,726	5,029	7,410	4,101	2,438	2,208	2,252	48,404
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	17,240	7,726	5,029	7,410	4,101	2,438	2,208	2,252	48,404
Total*:	17,240	7,726	5,029	7,410	4,101	2,438	2,208	2,252	48,404
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Drainage and Wastewater Fund		8,400	5,029	7,410	4,101	2,438	2,208	2,252	31,839
Total:		8,400	5,029	7,410	4,101	2,438	2,208	2,252	31,839

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

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

**BCL/Program Name:** Flooding, Sewer Back-up, and **BCL/Program Code:** C380B Landslides **Start Date:** Q1/2007 **Project Type:** New Facility Project ID: C3805 **End Date:** Q4/2012 **Location:** Various Neighborhood Plan Neighborhood Plan: Not in a Neighborhood Plan N/A **Matrix: Neighborhood District:** Central **Urban Village:** Not in an Urban Village

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 includes 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	16,581	12,724	317	0	0	0	0	0	29,622
Total:	16,581	12,724	317	0	0	0	0	0	29,622
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	16,581	12,724	317	0	0	0	0	0	29,622
Total*:	16,581	12,724	317	0	0	0	0	0	29,622
O & M Costs (Savings)			0	296	296	296	296	296	1,481
Spending Plan by Fund									
Drainage and Wastewater Fund		12,715	317	0	0	0	0	0	13,032
Total:		12,715	317	0	0	0	0	0	13,032

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

#### **Meadowbrook Pond Sediment Management**

BCL/Program Name: Flooding, Sewer Back-up, and BCL/Program Code: C380B

Landslides

Project Type:Improved FacilityStart Date:Q1/2012Project ID:C3808End Date:Q1/2013

**Location:** 35th AVE NE/NE 105th ST/NE 110th

ST

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Neighborhood Plan N/A Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	65	0	1,500	50	0	0	0	0	1,615
Total:	65	0	1,500	50	0	0	0	0	1,615
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	65	0	1,500	50	0	0	0	0	1,615
Total*:	65	0	1,500	50	0	0	0	0	1,615
O & M Costs (Savings)			0	0	16	16	16	16	65
Spending Plan by Fund									
Drainage and Wastewater Fund		239	1,500	50	0	0	0	0	1,789
Total:		239	1,500	50	0	0	0	0	1,789

<sup>\*</sup>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 N/A **Matrix: 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	1,230	1,050	1,010	895	0	0	0	0	4,184
Total:	1,230	1,050	1,010	895	0	0	0	0	4,184
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	1,230	1,050	1,010	895	0	0	0	0	4,184
Total*:	1,230	1,050	1,010	895	0	0	0	0	4,184
O & M Costs (Savings)			0	0	60	60	60	60	238
Spending Plan by Fund									
Drainage and Wastewater Fund		1,844	1,010	895	0	0	0	0	3,749
Total:		1,844	1,010	895	0	0	0	0	3,749

<sup>\*</sup>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 T01, T02, T03, T11 **Matrix:** 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 two-way street with on-road bicycle lanes.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	9	370	335	1,234	982	143	0	0	3,073
Total:	9	370	335	1,234	982	143	0	0	3,073
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	9	370	335	1,234	982	143	0	0	3,073
Total*:	9	370	335	1,234	982	143	0	0	3,073
O & M Costs (Savings)			0	0	0	0	31	31	61

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Rehabilitation or RestorationStart Date:Q1/2004Project ID:C4101-DWFEnd Date:ONGOING

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan** N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	3,533	565	567	656	588	599	610	627	7,743
Total:	3,533	565	567	656	588	599	610	627	7,743
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	3,533	565	567	656	588	599	610	627	7,743
Total*:	3,533	565	567	656	588	599	610	627	7,743
O & M Costs (Savings)			77	77	77	77	77	77	465
Spending Plan by Fund									
Drainage and Wastewater Fund		554	567	656	588	599	610	627	4,200
Total:		554	567	656	588	599	610	627	4,200

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

# No Dig Pipe & Maintenance Rehabilitation

BCL/Program Name:RehabilitationBCL/Program Code:C370BProject Type:Rehabilitation or RestorationStart Date:Q1/1998Project ID:C3707End Date:ONGOING

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan** N/A

Matrix:

Neighborhood District: In more than one District Urban Village: In more than one

Urban Village

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

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	12,567	714	1,530	1,561	1,592	1,624	1,656	1,689	22,932
Total:	12,567	714	1,530	1,561	1,592	1,624	1,656	1,689	22,932
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	12,567	714	1,530	1,561	1,592	1,624	1,656	1,689	22,932
Total*:	12,567	714	1,530	1,561	1,592	1,624	1,656	1,689	22,932
O & M Costs (Savings)			229	229	229	229	229	229	1,376
Spending Plan by Fund									
Drainage and Wastewater Fund		400	1,530	1,561	1,592	1,624	1,656	1,689	10,051
Total:		400	1,530	1,561	1,592	1,624	1,656	1,689	10,051

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2004Project ID:C4106-DWFEnd Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	4,308	453	263	769	2,061	1,998	1,652	672	12,175
Total:	4,308	453	263	769	2,061	1,998	1,652	672	12,175
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	4,308	453	263	769	2,061	1,998	1,652	672	12,175
Total*:	4,308	453	263	769	2,061	1,998	1,652	672	12,175
O & M Costs (Savings)			152	152	152	152	152	152	911
Spending Plan by Fund									
Drainage and Wastewater Fund		486	263	769	2,061	1,998	1,652	672	7,900
Total:		486	263	769	2,061	1,998	1,652	672	7,900

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2006Project ID:C4115-DWFEnd Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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 2015-2017.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	329	0	6,381	1,991	372	0	0	0	9,073
Total:	329	0	6,381	1,991	372	0	0	0	9,073
Fund Appropriations/Allo	ocations								
Drainage and Wastewater Fund	329	0	6,381	1,991	372	0	0	0	9,073
Total*:	329	0	6,381	1,991	372	0	0	0	9,073
O & M Costs (Savings)			91	91	91	91	91	91	544

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2003Project ID:C4105-DWFEnd Date:ONGOING

**Location:** 2700 Airport Way S

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan** N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	2,351	52	85	96	14	14	120	242	2,973
Total:	2,351	52	85	96	14	14	120	242	2,973
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	2,351	52	85	96	14	14	120	242	2,973
Total*:	2,351	52	85	96	14	14	120	242	2,973
O & M Costs (Savings)			30	30	30	30	30	30	178
Spending Plan by Fund									
Drainage and Wastewater Fund		81	85	96	14	14	120	242	651
Total:		81	85	96	14	14	120	242	651

<sup>\*</sup>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 - DWF**

**BCL/Program Name: Shared Cost Projects BCL/Program Code:** C410B **Project Type:** Rehabilitation or Restoration **Start Date:** Q2/2008 Project ID: C4123-DWF **End Date:** ONGOING **Location:** Various Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix:** 

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

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

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	1	10	10	10	11	11	11	11	76
Total:	1	10	10	10	11	11	11	11	76
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	1	10	10	10	11	11	11	11	76
Total*:	1	10	10	10	11	11	11	11	76
O & M Costs (Savings)			1	1	1	1	1	1	5
Spending Plan by Fund									
Drainage and Wastewater Fund		10	10	10	11	11	11	11	74
Total:		10	10	10	11	11	11	11	74

<sup>\*</sup>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:RehabilitationBCL/Program Code:C370BProject Type:Rehabilitation or RestorationStart Date:Q1/2012Project ID:C3708End 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. Initially this program will focus on eight CSO outfalls that SPU has committed to completing by November 2015 per the City's 2010 National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit with the Department of Ecology.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	510	1,040	1,061	1,082	1,104	1,126	5,924
Total:	0	0	510	1,040	1,061	1,082	1,104	1,126	5,924
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	0	0	510	1,040	1,061	1,082	1,104	1,126	5,924
Total*:	0	0	510	1,040	1,061	1,082	1,104	1,126	5,924
O & M Costs (Savings)			59	59	59	59	59	59	355

<sup>\*</sup>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:RehabilitationBCL/Program Code:C370BProject Type:Rehabilitation or RestorationStart Date:Q1/2003Project ID:C3704End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	31,948	3,162	4,947	6,659	6,792	6,928	7,066	7,207	74,709
Total:	31,948	3,162	4,947	6,659	6,792	6,928	7,066	7,207	74,709
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	31,948	3,162	4,947	6,659	6,792	6,928	7,066	7,207	74,709
Total*:	31,948	3,162	4,947	6,659	6,792	6,928	7,066	7,207	74,709
O & M Costs (Savings)			200	200	200	200	200	200	1,200
Spending Plan by Fund									
Drainage and Wastewater Fund		4,600	4,947	6,659	6,792	6,928	7,066	7,207	44,198
Total:		4,600	4,947	6,659	6,792	6,928	7,066	7,207	44,198

<sup>\*</sup>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:RehabilitationBCL/Program Code:C370BProject Type:New FacilityStart Date:Q1/2008Project ID:C3703End Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									_
Drainage and Wastewater Rates	3,991	1,270	2,766	2,858	2,389	2,633	2,760	2,815	21,482
Total:	3,991	1,270	2,766	2,858	2,389	2,633	2,760	2,815	21,482
Fund Appropriations/Alloc	eations								
Drainage and Wastewater Fund	3,991	1,270	2,766	2,858	2,389	2,633	2,760	2,815	21,482
Total*:	3,991	1,270	2,766	2,858	2,389	2,633	2,760	2,815	21,482
O & M Costs (Savings)			215	215	215	215	215	215	1,289
Spending Plan by Fund									
Drainage and Wastewater Fund		1,667	2,766	2,858	2,389	2,633	2,760	2,815	17,888
Total:		1,667	2,766	2,858	2,389	2,633	2,760	2,815	17,888

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

# **S Genesee Combined Sewer Overflow**

BCL/Program Name:Combined Sewer OverflowsBCL/Program Code:C360BProject Type:New FacilityStart Date:Q1/2005Project ID:C3608End Date:Q4/2016

**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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	5,573	704	1,507	8,914	9,092	106	200	0	26,095
Total:	5,573	704	1,507	8,914	9,092	106	200	0	26,095
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	5,573	704	1,507	8,914	9,092	106	200	0	26,095
Total*:	5,573	704	1,507	8,914	9,092	106	200	0	26,095
O & M Costs (Savings)			0	0	0	0	0	261	261
Spending Plan by Fund									
Drainage and Wastewater Fund		850	1,507	8,914	9,092	106	200	0	20,669
Total:		850	1,507	8,914	9,092	106	200	0	20,669

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

#### S Henderson Combined Sewer Overflow Storage

BCL/Program Name:Combined Sewer OverflowsBCL/Program Code:C360BProject Type:New FacilityStart Date:Q1/2005Project ID:C3609End Date:Q4/2018

**Location:** S Henderson St.

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: Southeast Urban Village: Not in an Urban

Village

This project provides construction of combined sewer overflows (CSO) facilities in the Henderson area in the southeast part of Seattle. Facilities will be built to meet level of service requirements for CSOs and comply with state and federal regulations. The project will meet requirements of the City's current National Pollutant Discharge Elimination System (NPDES) Wastewater Discharge Permit. Maintenance costs will not begin until after 2018, when the project completes construction

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	6,526	2,142	1,908	4,323	4,705	22,276	29,175	16,892	87,948
Total:	6,526	2,142	1,908	4,323	4,705	22,276	29,175	16,892	87,948
Fund Appropriations/Alloc	eations								
Drainage and Wastewater Fund	6,526	2,142	1,908	4,323	4,705	22,276	29,175	16,892	87,948
Total*:	6,526	2,142	1,908	4,323	4,705	22,276	29,175	16,892	87,948
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Drainage and Wastewater Fund		2,100	1,908	4,323	4,705	22,276	29,175	16,892	81,379
Total:		2,100	1,908	4,323	4,705	22,276	29,175	16,892	81,379

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

# **Sanitary Sewer Overflow Capacity**

BCL/Program Name: Flooding, Sewer Back-up, and BCL

Landslides

BCL/Program Code: C380B

**Project Type:** New Investment

**Start Date:** Q2/2002

Project ID: C3804

**End Date:** 

ONGOING

Location:

Various

Neighborhood Plan

N/A

Neighborhood Plan:

Not in a Neighborhood Plan

Matrix:

In more than one

Neighborhood District:

In more than one District

**Urban Village:** 

Urban Village

This ongoing project provides capacity improvements to the existing Seattle wastewater conveyance system. Typical improvements may include, but are not limited to, increasing the diameter of existing pipes or installing additional relief pipes to eliminate or avoid sewer backups and overflows.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	2,505	2,040	3,080	2,162	2,245	2,330	2,416	5,631	22,409
Total:	2,505	2,040	3,080	2,162	2,245	2,330	2,416	5,631	22,409
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	2,505	2,040	3,080	2,162	2,245	2,330	2,416	5,631	22,409
Total*:	2,505	2,040	3,080	2,162	2,245	2,330	2,416	5,631	22,409
O & M Costs (Savings)			224	224	224	224	224	224	1,345
Spending Plan by Fund									
Drainage and Wastewater Fund		2,000	3,080	2,162	2,245	2,330	2,416	5,631	19,863
Total:		2,000	3,080	2,162	2,245	2,330	2,416	5,631	19,863

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2007Project ID:C4113-DWFEnd Date:Q4/2016Location:Citywide

Neighborhood Plan: Not in a Neighborhood Plan

Neighborhood Plan

Matrix:

Neighborhood District: In more than one District Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	978	23	148	149	146	133	25	4	1,606
Total:	978	23	148	149	146	133	25	4	1,606
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	978	23	148	149	146	133	25	4	1,606
Total*:	978	23	148	149	146	133	25	4	1,606
O & M Costs (Savings)			16	16	16	16	16	16	96
Spending Plan by Fund									
Drainage and Wastewater Fund		23	148	149	146	133	25	4	627
Total:		23	148	149	146	133	25	4	627

<sup>\*</sup>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:SedimentsBCL/Program Code:C350BProject Type:Rehabilitation or RestorationStart Date:Q4/2000Project ID:C3503End Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: In more than one District Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	24,946	6,350	5,595	2,102	1,457	1,207	1,205	1,205	44,068
Total:	24,946	6,350	5,595	2,102	1,457	1,207	1,205	1,205	44,068
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	24,946	6,350	5,595	2,102	1,457	1,207	1,205	1,205	44,068
Total*:	24,946	6,350	5,595	2,102	1,457	1,207	1,205	1,205	44,068
O & M Costs (Savings)			441	441	441	441	441	441	2,644
Spending Plan by Fund									
Drainage and Wastewater Fund		5,377	5,595	2,102	1,457	1,207	1,205	1,205	18,149
Total:		5,377	5,595	2,102	1,457	1,207	1,205	1,205	18,149

<sup>\*</sup>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:RehabilitationBCL/Program Code:C370BProject Type:Rehabilitation or RestorationStart Date:Q1/2001Project ID:C3702End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: In more than one District Urban Village: In more than one

Urban Village

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

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	190	306	230	250	250	250	250	250	1,976
Total:	190	306	230	250	250	250	250	250	1,976
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	190	306	230	250	250	250	250	250	1,976
Total*:	190	306	230	250	250	250	250	250	1,976
O & M Costs (Savings)			20	20	20	20	20	20	119
Spending Plan by Fund									
Drainage and Wastewater Fund		150	230	250	250	250	250	250	1,630
Total:		150	230	250	250	250	250	250	1,630

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:New FacilityStart Date:Q1/2012Project ID:C4135-DWFEnd 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. Amounts shown are for the design phase only; budget for the construction phase will be included in future budget submittals.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									_
Drainage and Wastewater Rates	0	0	88	88	0	0	0	0	175
Total:	0	0	88	88	0	0	0	0	175
Fund Appropriations/Alloca	ations								
Drainage and Wastewater Fund	0	0	88	88	0	0	0	0	175
Total*:	0	0	88	88	0	0	0	0	175

<sup>\*</sup>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 N/A

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 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	250	69	98	232	138	52	0	0	839
Total:	250	69	98	232	138	52	0	0	839
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	250	69	98	232	138	52	0	0	839
Total*:	250	69	98	232	138	52	0	0	839
O & M Costs (Savings)			0	0	0	0	8	8	17
Spending Plan by Fund									
Drainage and Wastewater Fund		68	98	232	138	52	0	0	588
Total:		68	98	232	138	52	0	0	588

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

C380B

#### **South Park Pump Station**

BCL/Program Name: Flooding, Sewer Back-up, and BCL/Program Code:

Landslides

 Project Type:
 New Facility
 Start Date:
 Q3/2008

 Project ID:
 C3806
 End Date:
 Q4/2014

**Location:** 698 S Riverside DR/Holden/Austin

Neighborhood Plan: South Park Neighborhood Plan

Matrix:

Neighborhood District: Greater Duwamish Urban Village: Duwamish

This project provides for the construction of 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. High flows (over 11 CFS) will bypass the water quality facility and be pumped directly to the river.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	4,682	8,818	6,778	6,022	943	0	0	0	27,243
Total:	4,682	8,818	6,778	6,022	943	0	0	0	27,243
Fund Appropriations/Alloc	eations								
Drainage and Wastewater Fund	4,682	8,818	6,778	6,022	943	0	0	0	27,243
Total*:	4,682	8,818	6,778	6,022	943	0	0	0	27,243
O & M Costs (Savings)			0	0	0	272	272	272	817
Spending Plan by Fund									
Drainage and Wastewater Fund		1,553	6,778	6,022	943	0	0	0	15,297
Total:		1,553	6,778	6,022	943	0	0	0	15,297

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

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

**BCL/Program Name:** Protection of Beneficial Uses **BCL/Program Code:** C333B **Project Type:** New Investment **Start Date:** Q1/2011 Project ID: C3363 **End Date:** Q4/2012 **Location:** Various Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix:** 

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 toxic pollutant load carried by stormwater runoff discharged by SPU's storm drain system to Puget Sound using new, high efficiency street sweeping technology. This program will leverage the existing Seattle Department of Transportation (SDOT) street sweeping program expertise and equipment. SDOT will be responsible for managing the sweeper fleet and staff and delivering street sweeping for water quality services, while SPU will be responsible for selecting the water quality routes, sweeping frequency, and performance standards. SPU's capital costs for this program will include sweepers and/or signs, license plate recognition equipment and program start up. Requested funding represents total costs for the capital portion of the street sweeping program, though timing of these investments may vary.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	0	314	825	0	0	0	0	0	1,139
Total:	0	314	825	0	0	0	0	0	1,139
Fund Appropriations/Allo	ocations								
Drainage and Wastewater Fund	0	314	825	0	0	0	0	0	1,139
Total*:	0	314	825	0	0	0	0	0	1,139
O & M Costs (Savings)			1,050	1,071	1,091	1,113	1,124	1,146	6,595

<sup>\*</sup>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 UsesBCL/Program Code:C333BProject Type:New FacilityStart Date:Q4/1999Project ID:C3353End Date:Q4/2015Location:Taylor Creek at Rainier Ave S

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	769	0	100	550	1,200	125	0	0	2,744
Total:	769	0	100	550	1,200	125	0	0	2,744
Fund Appropriations/Allo	cations								
Drainage and Wastewater Fund	769	0	100	550	1,200	125	0	0	2,744
Total*:	769	0	100	550	1,200	125	0	0	2,744
O & M Costs (Savings)			0	0	0	0	27	27	55

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

#### **Thornton Confluence Improvement**

BCL/Program Name: Flooding, Sewer Back-up, and BCL/Program Code: C380B

Landslides

Project Type:Improved FacilityStart Date:Q1/2008Project ID:C3811End Date:Q4/2013

**Location:** Thornton Creek

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

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

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	615	4,375	800	4,000	0	0	0	0	9,789
Total:	615	4,375	800	4,000	0	0	0	0	9,789
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	615	4,375	800	4,000	0	0	0	0	9,789
Total*:	615	4,375	800	4,000	0	0	0	0	9,789
O & M Costs (Savings)			0	0	98	98	98	98	392
Spending Plan by Fund									
Drainage and Wastewater Fund		600	800	4,000	0	0	0	0	5,400
Total:		600	800	4,000	0	0	0	0	5,400

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

# Venema Creek Natural Drainage System

BCL/Program Name:Protection of Beneficial UsesBCL/Program Code:C333BProject Type:New FacilityStart Date:Q1/2003Project ID:C3333End Date:Q4/2014

**Location:** 1st and 2nd Ave NW/NW 120th St/NW

122nd St

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: Northwest Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	1,193	1,489	1,101	3,120	579	0	0	0	7,482
Total:	1,193	1,489	1,101	3,120	579	0	0	0	7,482
Fund Appropriations/Alloc	cations								
Drainage and Wastewater Fund	1,193	1,489	1,101	3,120	579	0	0	0	7,482
Total*:	1,193	1,489	1,101	3,120	579	0	0	0	7,482
O & M Costs (Savings)			0	0	0	75	75	75	224
Spending Plan by Fund									
Drainage and Wastewater Fund		1,447	1,101	3,120	579	0	0	0	6,247
Total:		1,447	1,101	3,120	579	0	0	0	6,247

<sup>\*</sup>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 Overflow Storage**

**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 N/A **Matrix:** 

Neighborhood District: Northeast Urban Village: Not in an Urban Village 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Drainage and Wastewater Rates	10,542	3,244	13,672	23,928	566	595	0	0	52,546
Total:	10,542	3,244	13,672	23,928	566	595	0	0	52,546
Fund Appropriations/Alloc	ations								
Drainage and Wastewater Fund	10,542	3,244	13,672	23,928	566	595	0	0	52,546
Total*:	10,542	3,244	13,672	23,928	566	595	0	0	52,546
O & M Costs (Savings)			0	0	0	0	525	525	1,051
Spending Plan by Fund									
Drainage and Wastewater Fund		3,697	13,672	23,928	566	595	0	0	42,458
Total:		3,697	13,672	23,928	566	595	0	0	42,458

<sup>\*</sup>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. Solid waste rates were adopted by Council in 2010 for the period 2011-2012, and support the 2012-2017 Proposed CIP.

#### 2012-2017 CIP

Planned spending in the Solid Waste CIP is \$166.2 million over the next six years. By far the largest projects over this time period are construction of a new south transfer station in 2012 and a new north transfer station between 2012 and 2015, and construction of a new recycling/re-use facility on the grounds of the old south transfer station between 2015 and 2017. These projects comprise roughly two thirds of the total CIP. Other significant projects are the South Park Development project, which funds the investigation and safe closure of the old South Park Landfill, and replacement of the South Household Hazardous Waste facility.

The north transfer station in Wallingford and the south transfer station in South Park are at the end of their useful lives. 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 completed in 2014.

Completing both station rebuild projects at a time of slowing revenue growth poses a financial challenge to the utility. Revenues have been slowing since 2008 due to the economic downturn, which curbed the volume of waste and recyclables, and caused prices for recyclable materials to dip considerably for several months. SPU responded in 2010 and 2011 budgets by reducing headcount, identifying efficiencies that allowed budgets for fleets, overtime, and other support costs to be reduced, and reducing funding for customer education, community waste prevention grants, and enforcement for recycling requirements. Despite these reductions, however, the challenge of constructing two new major generational assets, the north and south transfer stations, required rate increases in the 2011-2012 period.

As of summer 2011, construction on the south transfer station was well underway. About \$20 million worth of spending planned for 2012 in the 2011-2016 CIP was accelerated into 2011 during that year, reflecting the latest construction schedules. The 2012-2017 CIP reflects this funding shift.

The original schedule for the north transfer station has been extended somewhat in the 2012-2017 CIP. SPU staff worked closely during 2010 and 2011 with a stakeholder group to develop a preferred conceptual layout for the new north station. After an 11-month process during which the project team met with stakeholders to share a variety of design alternatives and obtain their feedback, in June 2011 the

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stakeholders provided SPU with their recommendations for a preferred conceptual layout. SPU has accepted the stakeholder recommendations.

The schedules for the cleanup of the South Park landfill and the redevelopment of the existing 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 older south transfer station will not occur until the north transfer station is rebuilt. This will allow the older 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 to ensure that two transfer stations 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 existing south transfer station will be demolished. Following demolition, landfill closure as defined by the South Park Landfill Cleanup Action Plan will be completed on the existing 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 older south transfer station. SPU previously operated the landfill and owns a portion of the site. Thus the City is among the potentially liable parties in the clean up. The final cost allocation among parties will not be known until later in the project. In addition, the scope of the remediation has yet to be finalized. Thus 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, and these bonds fund up to 90% of the CIP. The remainder of the CIP is funded by cash. SPU also actively seeks grants, low interest loans, and other funding sources whenever possible. 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. As a result, reductions to customer education, community waste prevention grants, and enforcement for recycling requirements were implemented in the 2010 and 2011 operating budgets. In addition, rate increases were instituted in 2010 for the period 2011-2012, and included increases for the average residential customer of 6.5% or \$2.25 per month in 2012. The rate increases were 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 CIP 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.

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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 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 highly ranked 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, such as whether a project has 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 2010 Solid Waste Comp Plan Update.

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 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. For example, the Kent Highlands Storm Drain Repair project was re-scoped based on the closer analysis and review. Rather than replacing approximately 600 lineal feet of pipe, the project was reduced to the replacement of 80 feet of failing pipe. Costs were reduced from over \$700,000 to under \$80,000.

# **CIP Expenditures by Major Category**

Solid Waste Fund	2012	2013	2014	2015	2016	2017	Total
New Facilities	\$13,845	\$11,322	\$45,822	\$36,301	\$25,481	\$2,429	\$135,200
Rehabilitation & Heavy Eqpmt	\$397	\$224	\$42	\$54	\$44	\$45	\$806
Shared Cost Projects	\$2,536	\$2,208	\$1,954	\$1,918	\$2,126	\$1,530	\$12,272
Technology	\$1,665	\$4,334	\$5,126	\$2,658	\$2,042	\$2,069	\$17,894
Total	\$18,443	\$18,088	\$52,944	\$40,930	\$29,693	\$6,073	\$166,172

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.

Schedule shifts have caused the New Facilities BCL to decrease by \$21.6 million in 2012 and \$21 million in 2013 compared to amounts planned for those years in the 2011-2016 Adopted CIP. As noted above, \$19.9 million in funding originally planned for 2012 for the south transfer station was shifted into 2011 to support current construction timing. The schedule for the north transfer station has been moved out by roughly a year, so that expenditures previously planned for 2012-2014 are now expected between 2013 and 2015.

In terms of total project costs, the south transfer station's total budget is currently estimated to be roughly \$6 million lower than in the 2011-2016 Adopted CIP, primarily due to savings in preparing the site for construction. In contrast, as a result of updated cost estimates including final contingency amounts and the new preferred design concept as recommended by stakeholders and approved by SPU, the north transfer station cost estimates have increased by just under \$12 million.

**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.

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The Shared Cost Projects BCL proposed budget increased by \$241,000 in 2012 and \$110,000 in 2013. The key drivers are shifts in the Heavy Equipment Purchases project based on the completion schedule for the south transfer station and the addition of the new SWF SCADA program to monitor flare performance at the closed landfills, which was not in the previously Endorsed amounts.

**Technology:** This program category is presented in the separate "Technology CIP" section of SPU's 2012-2017 CIP. The 2012-2017 Proposed CIP reduces technology CIP spending by 10% annually, which is equivalent to a \$1.37 million reduction compared to the 2012 Endorsed Budget in the 2011-2016 Adopted CIP. The Solid Waste Utility's share of the 2012 Technology CIP reduction is 35% or \$473,000 based on the Solid Waste 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/Asset Data Initiative), budget and financial management (Budget Planning and Forecasting, Financial Data Mart), customer service improvements (Web Application Redesign, online chat & contact tools), and project delivery (Enterprise Project Management System). Other technology investments will be cancelled or deferred as a result of this funding reduction, which is part of a set of initiatives intended to continue restraining costs across the utility.

# **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.

# **Project Summary**

BCL/Program Name/									
Project Title & ID	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
New Facilities					BC	L/Progra	m Code:		C230B
Miscellaneous Station Improvements (C2303)	2,711	306	346	300	300	200	0	0	4,162
North Transfer Station Rebuild (C2306)	2,212	1,479	1,761	8,000	32,144	27,041	30	0	72,667
South Park Development (C2304)	1,141	690	468	1,046	12,317	7,800	5,161	0	28,623
South Recycling Disposal Station Household Hazardous Waste Relocation (C2305)	0	0	0	0	0	177	2,072	177	2,425
South Transfer Station Rebuild (C2302)	24,284	43,160	11,271	1,977	1,061	1,082	18,217	2,252	103,305
New Facilities	30,348	45,635	13,845	11,322	45,822	36,301	25,481	2,429	211,182
Rehabilitation and Heavy Equi	pment				BC	L/Progra	m Code:		C240B
2010 Solid Waste Comprehensive Plan Update (C2407)	168	97	50	0	0	0	0	0	315
Kent Highlands Landfill (C2402)	468	195	282	203	21	22	22	23	1,234
Midway Landfill (C2403)	108	51	65	21	21	32	22	23	344
Rehabilitation and Heavy Equipment	744	343	397	224	42	54	44	45	1,893
<b>Shared Cost Projects</b>					BC	L/Progra	m Code:		C410B
1% for Art – SWF (C4118- SWF)	280	252	345	332	322	134	298	315	2,279
Heavy Equipment Purchases - SWF (C4116-SWF)	4,553	1,952	2,000	1,500	1,500	1,500	1,500	938	15,443
Integrated Control Monitoring Program - SWF (C4108-SWF)	0	0	75	250	0	0	0	0	325
Operational Facility - Construction - SWF (C4106- SWF)	2,478	0	0	79	100	263	274	198	3,393
Operational Facility - Other - SWF (C4115-SWF)	637	0	0	0	0	0	0	0	637
Operations Control Center - SWF (C4105-SWF)	667	17	27	31	5	5	37	76	865
Security Improvements - SWF (C4113-SWF)	835	15	89	16	27	16	17	3	1,018
<b>Shared Cost Projects</b>	9,451	2,236	2,536	2,208	1,954	1,918	2,126	1,530	23,959
Technology					BC	L/Progra	m Code:		C510B
Asset Information Management (C5407)	222	384	645	525	455	372	372	379	3,354

<sup>\*</sup>Amounts in thousands of dollars

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# **Project Summary**

BCL/Program Name/									
Project Title & ID	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
Customer Contact & Billing (C5402)	0	296	258	2,989	3,694	1,221	561	572	9,589
Enterprise Information Management (C5403)	0	73	87	149	100	88	100	74	671
IT Infrastructure (C5404)	12	291	135	237	252	257	289	309	1,782
Project Delivery & Performance (C5405)	77	371	460	331	396	408	408	416	2,868
Science & System Performance (C5406)	13	0	80	103	230	312	312	319	1,370
Technology	324	1,415	1,665	4,334	5,126	2,658	2,042	2,069	19,634
Department Total*:	40,867	49,629	18,443	18,088	52,944	40,930	29,693	6,073	256,667

<sup>\*</sup>Amounts in thousands of dollars

# **Fund Summary**

Fund Name & Code	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
Solid Waste Fund (45010)	40,867	49,629	18,443	18,088	52,944	40,930	29,693	6,073	256,667
Department Total*:	40,867	49,629	18,443	18,088	52,944	40,930	29,693	6,073	256,667

<sup>\*</sup>Amounts in thousands of dollars

#### 1% for Art - SWF

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2001Project ID:C4118-SWFEnd Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	280	252	345	332	322	134	298	315	2,279
Total:	280	252	345	332	322	134	298	315	2,279
Fund Appropriations/Allo	cations								
Solid Waste Fund	280	252	345	332	322	134	298	315	2,279
Total*:	280	252	345	332	322	134	298	315	2,279
O & M Costs (Savings)			3	3	3	1	3	3	17
Spending Plan by Fund									
Solid Waste Fund		247	345	332	322	134	298	315	1,994
Total:		247	345	332	322	134	298	315	1,994

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

#### 2010 Solid Waste Comprehensive Plan Update

BCL/Program Name:Rehabilitation and Heavy EquipmentBCL/Program Code:C240BProject Type:New InvestmentStart Date:Q1/2009Project ID:C2407End Date:Q4/2012

**Location:** Citywide

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

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	168	97	50	0	0	0	0	0	315
Total:	168	97	50	0	0	0	0	0	315
Fund Appropriations/Allo	cations								
Solid Waste Fund	168	97	50	0	0	0	0	0	315
Total*:	168	97	50	0	0	0	0	0	315
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Solid Waste Fund		140	50	0	0	0	0	0	190
Total:		140	50	0	0	0	0	0	190

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:New InvestmentStart Date:ONGOINGProject ID:C4116-SWFEnd Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	4,553	1,952	2,000	1,500	1,500	1,500	1,500	938	15,443
Total:	4,553	1,952	2,000	1,500	1,500	1,500	1,500	938	15,443
Fund Appropriations/Alloc	eations								
Solid Waste Fund	4,553	1,952	2,000	1,500	1,500	1,500	1,500	938	15,443
Total*:	4,553	1,952	2,000	1,500	1,500	1,500	1,500	938	15,443
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Solid Waste Fund		1,405	2,000	1,500	1,500	1,500	1,500	938	10,343
Total:		1,405	2,000	1,500	1,500	1,500	1,500	938	10,343

<sup>\*</sup>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:** Q4/2013 **Location:** Kent, WA Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix: 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	0	0	75	250	0	0	0	0	325
Total:	0	0	75	250	0	0	0	0	325
Fund Appropriations/Alloc	ations								
Solid Waste Fund	0	0	75	250	0	0	0	0	325
Total*:	0	0	75	250	0	0	0	0	325
O & M Costs (Savings)			3	3	3	3	3	3	20

<sup>\*</sup>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 EquipmentBCL/Program Code:C240BProject Type:Improved FacilityStart Date:Q1/2005Project ID:C2402End Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	468	195	282	203	21	22	22	23	1,234
Total:	468	195	282	203	21	22	22	23	1,234
Fund Appropriations/Alloc	ations								
Solid Waste Fund	468	195	282	203	21	22	22	23	1,234
Total*:	468	195	282	203	21	22	22	23	1,234
O & M Costs (Savings)			12	12	12	12	12	12	74
Spending Plan by Fund									
Solid Waste Fund		520	282	203	21	22	22	23	1,092
Total:		520	282	203	21	22	22	23	1,092

<sup>\*</sup>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 EquipmentBCL/Program Code:C240BProject Type:Improved FacilityStart Date:Q1/2005Project ID:C2403End Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	108	51	65	21	21	32	22	23	344
Total:	108	51	65	21	21	32	22	23	344
Fund Appropriations/Alloc	eations								
Solid Waste Fund	108	51	65	21	21	32	22	23	344
Total*:	108	51	65	21	21	32	22	23	344
O & M Costs (Savings)			3	3	3	3	3	3	21
Spending Plan by Fund									
Solid Waste Fund		70	65	21	21	32	22	23	255
Total:		70	65	21	21	32	22	23	255

<sup>\*</sup>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 FacilitiesBCL/Program Code:C230BProject Type:Improved FacilityStart Date:Q4/2003Project ID:C2303End Date:Q4/2015

**Location:** 8101 2nd Ave S

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	2,711	306	346	300	300	200	0	0	4,162
Total:	2,711	306	346	300	300	200	0	0	4,162
Fund Appropriations/Allo	cations								
Solid Waste Fund	2,711	306	346	300	300	200	0	0	4,162
Total*:	2,711	306	346	300	300	200	0	0	4,162
O & M Costs (Savings)			0	0	0	0	42	42	83
Spending Plan by Fund									
Solid Waste Fund		150	346	300	300	200	0	0	1,296
Total:		150	346	300	300	200	0	0	1,296

<sup>\*</sup>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 FacilitiesBCL/Program Code:C230BProject Type:New FacilityStart Date:Q1/2006Project ID:C2306End Date:Q4/2016

**Location:** 1350 N 34th St

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: Lake Union Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	2,212	1,479	1,761	8,000	32,144	27,041	30	0	72,667
Total:	2,212	1,479	1,761	8,000	32,144	27,041	30	0	72,667
Fund Appropriations/Alloc	ations								
Solid Waste Fund	2,212	1,479	1,761	8,000	32,144	27,041	30	0	72,667
Total*:	2,212	1,479	1,761	8,000	32,144	27,041	30	0	72,667
O & M Costs (Savings)			0	0	0	0	727	727	1,453
Spending Plan by Fund									
Solid Waste Fund		1,300	1,761	8,000	32,144	27,041	30	0	70,276
Total:		1,300	1,761	8,000	32,144	27,041	30	0	70,276

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2004Project ID:C4106-SWFEnd Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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. No work is currently planned until 2013.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	2,478	0	0	79	100	263	274	198	3,393
Total:	2,478	0	0	79	100	263	274	198	3,393
Fund Appropriations/Alloc	cations								
Solid Waste Fund	2,478	0	0	79	100	263	274	198	3,393
Total*:	2,478	0	0	79	100	263	274	198	3,393
O & M Costs (Savings)			0	0	34	34	34	34	136
Spending Plan by Fund									
Solid Waste Fund		0	0	79	100	263	274	198	914
Total:		0	0	79	100	263	274	198	914

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2006Project ID:C4115-SWFEnd Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

N/A

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 2012-2017 timeframe but as future projects are identified, necessary funding will be requested.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	637	0	0	0	0	0	0	0	637
Total:	637	0	0	0	0	0	0	0	637
Fund Appropriations/Alle	ocations								
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)			0	0	0	0	0	0	0

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2003Project ID:C4105-SWFEnd Date:ONGOING

**Location:** 2700 Airport Way S

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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. Minimal spending is planned for 2014 and 2015.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	667	17	27	31	5	5	37	76	865
Total:	667	17	27	31	5	5	37	76	865
Fund Appropriations/Allo	cations								
Solid Waste Fund	667	17	27	31	5	5	37	76	865
Total*:	667	17	27	31	5	5	37	76	865
O & M Costs (Savings)			9	9	9	9	9	9	52
Spending Plan by Fund									
Solid Waste Fund		16	27	31	5	5	37	76	197
Total:		16	27	31	5	5	37	76	197

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2007Project ID:C4113-SWFEnd Date:Q4/2017

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: In more than one District Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	835	15	89	16	27	16	17	3	1,018
Total:	835	15	89	16	27	16	17	3	1,018
Fund Appropriations/Alloc	cations								
Solid Waste Fund	835	15	89	16	27	16	17	3	1,018
Total*:	835	15	89	16	27	16	17	3	1,018
O & M Costs (Savings)			10	10	10	10	10	10	61
Spending Plan by Fund									
Solid Waste Fund		15	89	16	27	16	17	3	182
Total:		15	89	16	27	16	17	3	182

<sup>\*</sup>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 FacilitiesBCL/Program Code:C230BProject Type:Improved FacilityStart Date:Q2/2006Project ID:C2304End Date:Q4/2016Location:8100 2nd Ave S

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	1,141	690	468	1,046	12,317	7,800	5,161	0	28,623
Total:	1,141	690	468	1,046	12,317	7,800	5,161	0	28,623
Fund Appropriations/Alloc	ations								
Solid Waste Fund	1,141	690	468	1,046	12,317	7,800	5,161	0	28,623
Total*:	1,141	690	468	1,046	12,317	7,800	5,161	0	28,623
O & M Costs (Savings)			0	0	0	50	50	50	150
Spending Plan by Fund									
Solid Waste Fund		795	468	1,046	12,317	7,800	5,161	0	27,587
Total:		795	468	1,046	12,317	7,800	5,161	0	27,587

<sup>\*</sup>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:** Q4/2017 **Location:** 8105 5th Ave S Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix:** 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Solid Waste Rates	0	0	0	0	0	177	2,072	177	2,425
Total:	0	0	0	0	0	177	2,072	177	2,425
Fund Appropriations/Allo	cations								
Solid Waste Fund	0	0	0	0	0	177	2,072	177	2,425
Total*:	0	0	0	0	0	177	2,072	177	2,425
O & M Costs (Savings)			0	0	0	0	0	0	0

<sup>\*</sup>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 FacilitiesBCL/Program Code:C230BProject Type:New FacilityStart Date:Q1/2006Project ID:C2302End Date:Q4/2016

**Location:** 8100 2nd AVE S

**Neighborhood Plan:** Duwamish **Neighborhood Plan** N/A

Matrix:

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. This program also allows for clean up at the bus-yard facility. This program provides essential facilities for solid waste management in the city and enhances recycling capability. The 2011 revised budget and 2011 spending plan include funding that was moved from 2012 to 2011 to support anticipated construction phasing.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									_
Solid Waste Rates	24,284	43,160	11,271	1,977	1,061	1,082	18,217	2,252	103,305
Total:	24,284	43,160	11,271	1,977	1,061	1,082	18,217	2,252	103,305
Fund Appropriations/Alloc	ations								
Solid Waste Fund	24,284	43,160	11,271	1,977	1,061	1,082	18,217	2,252	103,305
Total*:	24,284	43,160	11,271	1,977	1,061	1,082	18,217	2,252	103,305
O & M Costs (Savings)			834	834	834	834	834	834	5,003
Spending Plan by Fund									
Solid Waste Fund		42,654	11,271	1,977	1,061	1,082	18,217	2,252	78,515
Total:		42,654	11,271	1,977	1,061	1,082	18,217	2,252	78,515

<sup>\*</sup>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

# **Project Summary**

BCL/Program Name/									
Project Title & ID	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
Technology					BC	L/Prograi	m Code:		C510B
Asset Information Management (C5407)	1,387	3,258	4,663	3,569	2,823	2,309	2,309	2,356	22,675
Customer Contact & Billing (C5402)	0	1,311	1,627	10,184	12,448	5,482	3,482	3,552	38,086
Enterprise Information Management (C5403)	0	455	555	950	626	550	630	459	4,225
IT Infrastructure (C5404)	72	2,137	1,445	1,488	1,565	1,600	1,800	1,926	12,032
Project Delivery & Performance (C5405)	484	2,350	2,880	2,059	2,472	2,534	2,534	2,584	17,896
Science & System Performance (C5406)	15	737	668	1,125	1,427	1,940	1,940	1,979	9,832
Technology	1,959	10,248	11,838	19,374	21,362	14,415	12,696	12,856	104,747
Department Total*:	1,959	10,248	11,838	19,374	21,362	14,415	12,696	12,856	104,747

<sup>\*</sup>Amounts in thousands of dollars

## **Fund Summary**

Fund Name & Code	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
Drainage and Wastewater Fund (44010)	624	4,062	4,815	7,331	7,551	5,302	4,737	4,788	39,210
Solid Waste Fund (45010)	324	1,415	1,665	4,334	5,126	2,658	2,042	2,069	19,634
Water Fund (43000)	1,011	4,770	5,358	7,709	8,685	6,456	5,916	5,999	45,903
Department Total*:	1,959	10,248	11,838	19,374	21,362	14,415	12,696	12,856	104,747

<sup>\*</sup>Amounts in thousands of dollars

#### **Asset Information Management**

BCL/Program Name:TechnologyBCL/Program Code:C510BProject Type:New InvestmentStart Date:ONGOINGProject ID:C5407End Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

This ongoing program provides technology applications, upgrades and data management tools in support of SPU's field operations and asset maintenance 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 (central repository of asset data), dispatch and emergency response systems, vehicle location tracking tools, and essential upgrades to the Work Management System. Other related, but as yet undetermined projects will be undertaken to further enhance safety and improve responsiveness of SPU's utility operations.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	721	1,640	2,281	1,594	1,310	1,072	1,072	1,093	10,783
Drainage and Wastewater Rates	444	1,235	1,737	1,449	1,059	866	866	883	8,539
Solid Waste Rates	222	384	645	525	455	372	372	379	3,354
Total:	1,387	3,258	4,663	3,569	2,823	2,309	2,309	2,356	22,675
Fund Appropriations/Allo	cations								
Water Fund	721	1,640	2,281	1,594	1,310	1,072	1,072	1,093	10,783
Drainage and Wastewater Fund	444	1,235	1,737	1,449	1,059	866	866	883	8,539
Solid Waste Fund	222	384	645	525	455	372	372	379	3,354
Total*:	1,387	3,258	4,663	3,569	2,823	2,309	2,309	2,356	22,675
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		1,770	2,281	1,594	1,310	1,072	1,072	1,093	10,192
Drainage and Wastewater Fund		1,356	1,737	1,449	1,059	866	866	883	8,216
Solid Waste Fund		424	645	525	455	372	372	379	3,172
Total:		3,550	4,663	3,569	2,823	2,309	2,309	2,356	21,580

<sup>\*</sup>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:TechnologyBCL/Program Code:C510BProject Type:New InvestmentStart Date:ONGOINGProject ID:C5402End Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

N/A

This ongoing 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, an upgrade to the Consolidated Customer Service System and new technology solutions for enhanced customer contact management, which includes the Web Application Redesign project. This program is intended to enhance customer service, ensure accurate billing, and improve efficiency in the Call Center. This program includes funding for SPU's portion of the CCSS Replacement project, a joint project with Seattle City Light. SPU's share of the project is currently estimated to be \$20 million between 2013-2015.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	0	547	744	3,725	4,536	2,296	1,616	1,648	15,110
Drainage and Wastewater Rates	0	469	626	3,470	4,218	1,966	1,306	1,332	13,386
Solid Waste Rates	0	296	258	2,989	3,694	1,221	561	572	9,589
Total:	0	1,311	1,627	10,184	12,448	5,482	3,482	3,552	38,086
Fund Appropriations/Alloc	ations								
Water Fund	0	547	744	3,725	4,536	2,296	1,616	1,648	15,110
Drainage and Wastewater Fund	0	469	626	3,470	4,218	1,966	1,306	1,332	13,386
Solid Waste Fund	0	296	258	2,989	3,694	1,221	561	572	9,589
Total*:	0	1,311	1,627	10,184	12,448	5,482	3,482	3,552	38,086
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		450	744	3,725	4,536	2,296	1,616	1,648	15,014
Drainage and Wastewater Fund		363	626	3,470	4,218	1,966	1,306	1,332	13,280
Solid Waste Fund		306	258	2,989	3,694	1,221	561	572	9,600
Total:		1,119	1,627	10,184	12,448	5,482	3,482	3,552	37,894

<sup>\*</sup>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:TechnologyBCL/Program Code:C510BProject Type:New InvestmentStart Date:ONGOINGProject ID:C5403End Date:ONGOING

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan** N/A

**Matrix:** 

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

This ongoing program will provide several 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	0	211	250	430	288	254	289	213	1,935
Drainage and Wastewater Rates	0	171	218	371	238	209	240	172	1,619
Solid Waste Rates	0	73	87	149	100	88	100	74	671
Total:	0	455	555	950	626	550	630	459	4,225
Fund Appropriations/Allo	cations								
Water Fund	0	211	250	430	288	254	289	213	1,935
Drainage and Wastewater Fund	0	171	218	371	238	209	240	172	1,619
Solid Waste Fund	0	73	87	149	100	88	100	74	671
Total*:	0	455	555	950	626	550	630	459	4,225
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		100	250	430	288	254	289	213	1,824
Drainage and Wastewater Fund		81	218	371	238	209	240	172	1,529
Solid Waste Fund		35	87	149	100	88	100	74	633
Total:		216	555	950	626	550	630	459	3,986

<sup>\*</sup>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:TechnologyBCL/Program Code:C510BProject Type:New InvestmentStart Date:ONGOINGProject ID:C5404End Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Neighborhood Plan N/A Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	37	1,076	709	707	748	759	863	927	5,828
Drainage and Wastewater Rates	23	769	600	544	565	583	648	689	4,422
Solid Waste Rates	12	291	135	237	252	257	289	309	1,782
Total:	72	2,137	1,445	1,488	1,565	1,600	1,800	1,926	12,032
Fund Appropriations/Alloc	eations								
Water Fund	37	1,076	709	707	748	759	863	927	5,828
Drainage and Wastewater Fund	23	769	600	544	565	583	648	689	4,422
Solid Waste Fund	12	291	135	237	252	257	289	309	1,782
Total*:	72	2,137	1,445	1,488	1,565	1,600	1,800	1,926	12,032
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		909	709	707	748	759	863	927	5,623
Drainage and Wastewater Fund		710	600	544	565	583	648	689	4,339
Solid Waste Fund		210	135	237	252	257	289	309	1,689
Total:		1,829	1,445	1,488	1,565	1,600	1,800	1,926	11,652

<sup>\*</sup>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:TechnologyBCL/Program Code:C510BProject Type:New InvestmentStart Date:ONGOINGProject ID:C5405End Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Neighborhood Plan N/A Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	252	1,150	1,373	955	1,140	1,176	1,176	1,199	8,420
Drainage and Wastewater Rates	155	829	1,047	772	937	950	950	969	6,608
Solid Waste Rates	77	371	460	331	396	408	408	416	2,868
Total:	484	2,350	2,880	2,059	2,472	2,534	2,534	2,584	17,896
Fund Appropriations/Allo	ocations								
Water Fund	252	1,150	1,373	955	1,140	1,176	1,176	1,199	8,420
Drainage and Wastewater Fund	155	829	1,047	772	937	950	950	969	6,608
Solid Waste Fund	77	371	460	331	396	408	408	416	2,868
Total*:	484	2,350	2,880	2,059	2,472	2,534	2,534	2,584	17,896
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		1,275	1,373	955	1,140	1,176	1,176	1,199	8,294
Drainage and Wastewater Fund		932	1,047	772	937	950	950	969	6,556
Solid Waste Fund		422	460	331	396	408	408	416	2,840
Total:		2,628	2,880	2,059	2,472	2,534	2,534	2,584	17,690

<sup>\*</sup>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:TechnologyBCL/Program Code:C510BProject Type:New InvestmentStart Date:ONGOINGProject ID:C5406End Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	0	147	0	298	662	900	900	918	3,826
Drainage and Wastewater Rates	2	590	588	724	535	728	728	742	4,636
Solid Waste Rates	13	0	80	103	230	312	312	319	1,370
Total:	15	737	668	1,125	1,427	1,940	1,940	1,979	9,832
Fund Appropriations/Allo	cations								
Water Fund	0	147	0	298	662	900	900	918	3,826
Drainage and Wastewater Fund	2	590	588	724	535	728	728	742	4,636
Solid Waste Fund	13	0	80	103	230	312	312	319	1,370
Total*:	15	737	668	1,125	1,427	1,940	1,940	1,979	9,832
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		147	0	298	662	900	900	918	3,826
Drainage and Wastewater Fund		652	588	724	535	728	728	742	4,696
Solid Waste Fund		107	80	103	230	312	312	319	1,464
Total:		906	668	1,125	1,427	1,940	1,940	1,979	9,986

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

# SPU - WATER

#### 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. The capital program also includes investments in watershed stewardship projects, Cedar River Watershed Habitat Conservation Plan implementation, water conservation programs, vehicles, heavy equipment, and technology.

Planned spending in the Water CIP is \$379.7 million over the next six years. This includes covering open reservoirs to ensure water purity as required by state regulations; the Morse Lake Pump Plant, which will increase 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. The Proposed CIP also includes many ongoing programs, such as improving the distribution system of watermains, valves, and pump stations. By the time the Morse Lake Pump Plant project has been built in 2017, however, investments in major generational assets will have been completed, and the overall CIP will be reduced. Spending will be substantially focused on maintaining, 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. In the spring of 2011, the Executive proposed new rates for the period 2012 to 2014, which the Council will review and adopt by the fall of 2011. SPU is currently drafting the update of its Water System Plan, a Washington Department of Health regulatory requirement due every six years. It will be finalized and approved by the Washington Department of Health by April 2013.

#### 2012-2017 CIP

Three important trends have converged to put financial pressure on the Water Utility and shape this proposed 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 roughly every year since 1990 and in 2010 was 33% below 1990 levels, despite serving a larger population, and is projected to further decline. Seattle currently has some of the lowest per capita water consumption in the nation. While this accomplishment helps contribute to a sustainable future for the region, it puts financial pressure on the utility because fixed costs including the costs of the CIP need to be distributed across fewer units of water sold. This trend also puts pressure on SPU management and employees to deliver services as efficiently as possible. In 2010 and 2011, unusually cool and wet summer weather further depressed water sales.

The second major trend shaping the 2012-2017 CIP is recent economic history. Since water rates were last adopted in 2008, the slowdown in the economy has adversely impacted both water demand and new development. Revenues in the Water Fund were a cumulative \$56.5 million lower between 2009 and 2011 than forecast in the last rate study. To respond to this changing economic climate, SPU unfunded 85 FTE across the department in 2010 and 2011, reduced programmatic spending and deferred capital investments, and identified operational efficiencies leading to savings in overtime, fleets and other central

costs. As a result, the Executive's 2012-2014 rate study proposes capital and operating expenditures for 2012 that are lower than amounts assumed for 2011 in the 2009-2011 rate study.

The third trend is the recent history of major infrastructure investments. The Water CIP is transitioning from a period of constructing large capital projects responding to regulatory requirements to a period focused on the maintenance of physical infrastructure. The investments include water treatment facilities on the Tolt and Cedar River sources, coverings for five open reservoirs in response to state regulations, and investments to meet federal requirements embodied in the Cedar River Watershed Habitat Conservation Program. These investments helped secure the supply and distribution of pure 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 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 the investments.

The 2012-2017 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 2012-2017 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 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 2012-2017 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 70% 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. SPU issues bonds, serviced by ratepayers, covering between 80-85% 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. 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 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 utility relocation and betterments associated with 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, such as whether a project has 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.

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 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.

#### **CIP Expenditures by Major Category**

Water Fund	2012	2013	2014	2015	2016	2017	Total
Distribution	\$ 15,194	\$ 19,778	\$ 20,394	\$ 22,751	\$ 24,085	\$ 25,279	\$ 127,481
Transmission	\$ 1,343	\$ 3,027	\$ 3,076	\$ 3,137	\$ 3,195	\$ 3,393	\$ 17,172
Watershed Stewardship	\$ 1,828	\$ 1,035	\$ 729	\$ 600	\$ 600	\$ 600	\$ 5,392
Water Quality and Treatment	\$ 6,613	\$ 5,293	\$ 1,547	\$ 202	\$ 210	\$ 113	\$ 13,978
Water Resources	\$ 5,617	\$ 5,576	\$ 8,743	\$ 8,741	\$ 12,223	\$ 10,301	\$ 51,201
Habitat Conservation Program	\$ 4,913	\$ 3,372	\$ 3,649	\$ 2,945	\$ 2,489	\$ 1,809	\$ 19,176
Shared Cost Projects	\$ 14,641	\$ 18,164	\$ 17,696	\$ 17,590	\$ 16,643	\$ 20,472	\$ 105,205
Technology	\$ 5,358	\$ 7,709	\$ 8,685	\$ 6,456	\$ 5,916	\$ 5,999	\$ 40,123
Total	\$ 55,506	\$ 63,954	\$ 64,519	\$ 62,421	\$ 65,360	\$ 67,965	\$ 379,725

\$ in thousands

The 2012 expenditures proposed in the 2012-2017 CIP are roughly \$10.9 million lower than expenditures contemplated for 2012 in the 2011-2016 CIP, due to reductions and deferrals in investments in distribution, transmission, and support to various transportation projects, as described below.

**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.

Reductions in the **Distribution BCL** of \$5.6 million in 2012 and \$1.8 million in 2013 compared to the same years in the Adopted 2011-2016 CIP reflect the continued slowdown in real estate development, which has resulted in decreased demand for new taps. While this BCL will be the focus of many asset management investments by the Water Fund in the coming years, it is also part of the larger reprioritization of the CIP to maximize accomplishments within the Fund's financial limitations during the current economic conditions. Thus, many projects in this BCL have been deferred until later years, leading to reductions when compared to Endorsed Budget amounts.

**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. After the completion of the second Tolt Pipeline and repairs to the first Tolt Pipeline, this category of CIP expenditures has fallen sharply.

Reductions in the **Transmission BCL** of \$1.7 million in 2012 compared to the same year in the Adopted 2011-2016 CIP were due primarily to a shift in the timing of the Business Case presentation for the Cathodic Protection program to late 2011, which has affected the expected construction start date for that project.

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

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 highest quality drinking 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 hydroelectric facility. The South Fork Tolt River Watershed can provide up to 100 million gallons of drinking water per day.

Increases of \$931,000 in 2012 and \$149,000 in 2013 in the **Watershed Stewardship BCL**, compared to the same years in the Adopted 2011-2016 CIP, occurred because all bridge projects in this BCL were previously removed pending Business Case approval within SPU. The Business Case has now been approved and a number of bridge projects are moving ahead. In addition, the 2012-2017 CIP proposes a new project to fund drainage and vegetation improvements along water transmission rights of way and in the Lake Youngs Reserve. This new project will improve water quality and reduce long term maintenance 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 for drinking purposes.

Consistent with the approach of closing out major CIP projects in the near term, there is a proposed reduction of \$1.5 million in the **Water Quality & Treatment BCL** for 2012 compared to the same year in the Adopted 2011-2016 CIP. An increase of \$3.1 million in 2013 is due to a placeholder for any actions that may be needed to address structural needs for the reservoirs that have been identified and are being evaluated during 2011-2012.

Water Resources: The purpose of this program category is to manage water resources to meet anticipated demands at the supply-reliability standard and instream flow requirement, and to promote residential and commercial water conservation. 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.

The **Water Resources BCL** is \$847,000 higher in 2012 than was anticipated in the Adopted 2011-2016 CIP, largely because Council removed the Morse Lake Pump Plant project from the 2011-2016 CIP

2012 - 2017 Proposed Capital Improvement Program

pending a final determination on project design. That decision has now been made, and the project is therefore included in the 2012-2017 CIP.

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 Operations and Maintenance (O&M) activities in three areas: management of instream 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 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.

While the size of the **Habitat Conservation Program BCL** decreases over the course of the six-year CIP, an increase of \$676,000 in 2012, compared to the same year in the Adopted 2011-2016 CIP, appears largely because some costs in the Downstream Fish Habitat protection program are being pushed from 2011 into 2012 due to limited land acquisition opportunities in 2011. A decrease of \$782,000 in 2013 was due to minor shifts in a number of different projects.

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 2011, the Water program includes funding for utility relocations associated with several transportation-driven projects (e.g., the Alaskan Way Viaduct & Seawall Replacement, First Hill Streetcar, Bridging the Gap), Heavy Equipment Purchases, and Security, Facilities and Supervisory Control and Data Acquisition (SCADA) Improvements. SCADA uses technology to centrally monitor and control the drinking water system, including flow and pressure sensors, remote control pumps, and valves.

Reductions to the **Shared Cost Projects BCL** totaling \$3.8 million in 2012 and an increase of \$617,000 in 2013 compared to the same years in the Adopted 2011-2016 CIP are driven by the Alaskan Way Viaduct (AWV) program and the Landsburg Facilities Development project. The proposed budget for AWV reflects the latest schedule and more refined cost estimates, which include design in 2011 for the seawall and bored tunnel portals and associated utility relocations, followed by construction in 2012. The proposed budget for the Landsburg Facilities Development project decreased by \$1.7 million in 2012 due to delays in presentation of the Business Case which has affected project timing. In addition, the First Hill Streetcar project has been moved from the CIP to the Operating Budget given the Utility's capitalization guidelines.

**Technology:** This program category is presented in the separate "Technology CIP" section of SPU's 2012-2017 CIP. The 2012-2017 Proposed CIP reduces technology CIP spending by 10% annually, which is equivalent to a \$1.37 million reduction compared to the 2012 Endorsed Budget in the 2011-2016 Adopted CIP. The Water Utility's share of the 2012 Technology CIP reduction is 52% or \$709,000, based on the Water 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/Asset Data Initiative), budget and financial management (Budget Planning and Forecasting, Financial Data Mart), customer service improvements (Web Application Redesign, online chat & contact tools), and project

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delivery (Enterprise Project Management System). Other technology investments will be cancelled or deferred as a result of this funding reduction, which is part of a set of initiatives intended to continue restraining costs across the utility.

# **Anticipated Operating Expenses Associated with Capital Facilities Projects**

When appropriate, the projects in the Water 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	2011	2012	2013	2014	2015	2016	2017	Total
Distribution					BC	L/Progra	m Code:		C110B
Chamber Upgrades - Distribution (C1137)	684	26	26	26	27	27	28	28	870
Distribution System Improvements (C1128)	404	816	1,125	4,125	4,900	6,000	7,000	8,000	32,370
Distribution System In-Line Gate Valves (C1136)	114	765	306	312	318	108	110	113	2,147
Multiple Utility Relocation (C1133)	1,178	510	835	1,760	106	812	828	845	6,874
Pump Station Improvements (C1135)	77	79	510	520	531	541	552	563	3,373
Tank Improvements (C1134)	1,935	1,123	901	350	1,500	1	1	1	5,813
Water Infrastructure - Hydrant Replacement/Relocation (C1110)	4,221	177	410	419	427	362	368	318	6,701
Water Infrastructure - New Hydrants (C1112)	514	114	102	104	106	122	125	127	1,314
Water Infrastructure - New Taps (C1113)	78,387	7,650	4,080	4,162	4,245	4,330	4,416	4,416	111,686
Water Infrastructure - Service Renewal (C1109)	84,658	7,854	5,610	5,722	5,837	6,386	6,514	6,644	129,226
Water Infrastructure - Watermain Extensions (C1111)	11,971	612	663	676	796	812	828	845	17,203
Water Infrastructure-Seismic Upgrade Pipelines (C1102)	9,546	1	1	1	1	1	1	0	9,552
Watermain Rehabilitation (C1129)	5,104	765	626	1,601	1,601	3,248	3,313	3,379	19,638
Distribution	198,793	20,492	15,194	19,778	20,394	22,751	24,085	25,279	346,766
Transmission					BC	L/Progra	m Code:		C120B
Cathodic Protection Program (C1208)	586	357	632	1,665	1,698	1,732	1,767	1,802	10,238
Purveyor Meters Replace - SPU (C1206)	534	102	100	100	100	100	100	225	1,362
Replace Air Valve Chambers (C1209)	1,617	107	109	112	117	122	125	127	2,437
Transmission Pipelines Rehabilitation (C1207)	2,920	1,018	402	1,050	1,061	1,082	1,104	1,126	9,764
Water System Dewatering (C1205)	179	102	100	100	100	100	100	113	893
Transmission	5,837	1,686	1,343	3,027	3,076	3,137	3,195	3,393	24,694
Watershed Stewardship					BC	L/Progra	m Code:		C130B
Cedar Bridges (C1307)	465	0	625	150	0	0	0	0	1,240

<sup>\*</sup>Amounts in thousands of dollars

2012 - 2017 Proposed Capital Improvement Program

		•			•				
BCL/Program Name/									
Project Title & ID	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
Cedar River - Boundary Land Acquisition (C1312)	368	265	180	235	129	0	0	0	1,177
Cedar River Watershed Cultural Resource Information Management System (C1315)	18	102	100	50	0	0	0	0	270
Endangered Species Act Snohomish River Basin (C1313)	292	53	0	0	0	0	0	0	345
Kerriston Road (C1314)	37	612	600	600	600	600	600	600	4,249
Muckleshoot Agreement Implementation Plan (C1309)	2,606	0	160	0	0	0	0	0	2,766
Tolt Watershed Restoration (C1310)	133	109	83	0	0	0	0	0	325
Transmission Right-of-Way Improvements (C1316)	0	0	80	0	0	0	0	0	80
Watershed Stewardship	3,918	1,142	1,828	1,035	729	600	600	600	10,451
Water Quality & Treatment					BCI	_/Progran	n Code:		C140B
Cedar Treatment Screening Improvements (C1415)	67	153	0	0	0	0	0	0	220
Landsburg Chlorination Upgrades (C1417)	0	20	255	728	1,204	1	0	0	2,209
Reservoir Covering - Beacon (C1408)	41,750	255	10	0	0	0	0	0	42,015
Reservoir Covering - Maple Leaf (C1411)	16,421	16,728	6,000	4,300	100	0	0	0	43,549
Reservoir Covering - Myrtle (C1410)	12,001	102	10	0	0	0	0	0	12,113
Reservoir Covering - Volunteer (C1407)	94	0	0	0	0	100	110	0	304
Reservoir Covering - West Seattle (C1409)	32,617	510	100	25	0	0	0	0	33,252
Treatment Facility/Water Quality Improvements (C1413)	179	102	100	100	100	100	100	113	894
Water Quality Equipment (C1414)	180	51	138	140	143	1	0	0	653
Water Quality & Treatment	103,310	17,921	6,613	5,293	1,547	202	210	113	135,210
Water Resources					BCI	_/Progran	n Code:		C150B
Dam Safety Program (C1506)	6,607	689	181	304	1,027	625	125	25	9,582
Morse Lake Pump Plant (C1508)	10,814	2,826	2,600	2,000	1,900	5,410	9,227	6,920	41,697
Regional Water Conservation Program (C1504)	14,412	3,366	1,887	1,925	1,963	2,002	2,043	2,083	29,681

<sup>\*</sup>Amounts in thousands of dollars

2012 - 2017 Proposed Capital Improvement Program

		U			•				
BCL/Program Name/									
Project Title & ID	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
Seattle Direct Service Additional Conservation (C1505)	4,664	663	663	676	690	704	718	732	9,509
Water Supply Flexibility Program (C1507)	191	0	25	644	3,163	0	0	0	4,024
Water System Plan - 2013 (C1509)	27	473	261	26	0	0	0	0	787
Water System Plan - 2019 (C1510)	0	0	0	0	0	0	110	541	651
Water Resources	36,715	8,016	5,617	5,576	8,743	8,741	12,223	10,301	95,931
<b>Habitat Conservation Program</b>					BCI	_/Program	m Code:		C160B
Ballard Locks Improvements (C1606)	1,059	8	0	0	1,362	0	0	0	2,430
Cedar Sockeye Hatchery (C1605)	9,145	5,669	320	45	35	9	0	0	15,223
Downstream Fish Habitat (C1607)	1,059	2,474	2,200	958	50	539	370	0	7,650
Instream Flow Management Studies (C1608)	1,616	516	200	200	200	470	468	200	3,869
Stream & Riparian Restoration (C1602)	6,212	375	442	403	411	316	316	269	8,745
Upland Reserve Forest Restoration (C1603)	6,162	599	588	588	588	588	290	275	9,676
Watershed Road Improvement/Decommissionin g (C1601)	9,251	1,482	1,163	1,178	1,004	1,024	1,044	1,065	17,211
Habitat Conservation Program	34,505	11,123	4,913	3,372	3,649	2,945	2,489	1,809	64,804
<b>Shared Cost Projects</b>					BCI	_/Program	m Code:		C410B
1% for Art – WF (C4118-WF)	871	200	127	181	237	250	211	252	2,330
Alaskan Way Viaduct & Seawall Replacement Program - WF (C4102-WF)	2,992	3,216	1,694	3,381	2,607	2,222	1,395	343	17,850
Bridging the Gap - WF (C4119 -WF)	4,634	2,020	1,455	1,485	1,604	1,636	1,668	2,365	16,865
Emergency Storms - WF (C4120-WF)	51	51	50	50	50	50	50	0	352
First Hill Streetcar - WF (C4130-WF)	0	732	0	0	0	0	0	0	732
Heavy Equipment Purchases - WF (C4116-WF)	6,326	2,276	2,663	3,070	2,052	3,225	2,380	2,175	24,168
Integrated Control Monitoring Program - WF (C4108-WF)	7,294	582	465	485	485	480	450	400	10,641

<sup>\*</sup>Amounts in thousands of dollars

2012 - 2017 Proposed Capital Improvement Program

BCL/Program Name/									
Project Title & ID	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
Mercer Corridor Project East Phase - WF (C4114-WF)	706	800	600	602	0	0	0	0	2,708
Mercer Corridor Project West Phase - WF (C4133-WF)	7	251	364	627	108	0	0	0	1,357
Meter Replacement - WF (C4101-WF)	3,827	612	614	710	637	649	660	679	8,389
Operational Facility - Construction - WF (C4106- WF)	14,309	278	561	1,184	4,323	2,756	2,556	2,159	28,128
Operational Facility - Other - WF (C4115-WF)	12	379	339	276	21	0	0	0	1,027
Operations Control Center - WF (C4105-WF)	4,398	118	192	215	32	32	255	529	5,771
Other Major Transportation Projects - WF (C4123-WF)	7	20	372	260	265	54	55	0	1,034
Regional Facility - WF (C4107 -WF)	2,515	1,961	2,682	3,329	3,148	4,196	4,962	9,550	32,343
Security Improvements - WF (C4113-WF)	4,270	1,441	2,000	2,000	2,000	2,000	2,000	2,019	17,729
Sound Transit - North Link - WF (C4135-WF)	0	0	88	88	0	0	0	0	175
Sound Transit - Water Betterment (C4125)	1,502	204	120	0	0	0	0	0	1,826
Sound Transit – University Link - WF (C4110-WF)	238	71	106	222	127	41	0	0	804
Spokane Street Viaduct - WF (C4134-WF)	4,471	70	150	0	0	0	0	0	4,691
<b>Shared Cost Projects</b>	58,432	15,282	14,641	18,164	17,696	17,590	16,643	20,472	178,918
Technology					BC	L/Progra	m Code:		C510B
Asset Information Management (C5407)	721	1,640	2,281	1,594	1,310	1,072	1,072	1,093	10,783
Customer Contact & Billing (C5402)	0	547	744	3,725	4,536	2,296	1,616	1,648	15,110
Enterprise Information Management (C5403)	0	211	250	430	288	254	289	213	1,935
IT Infrastructure (C5404)	37	1,076	709	707	748	759	863	927	5,828
Project Delivery & Performance (C5405)	252	1,150	1,373	955	1,140	1,176	1,176	1,199	8,420
Science & System Performance (C5406)	0	147	0	298	662	900	900	918	3,826
Technology	1,011	4,770	5,358	7,709	8,685	6,456	5,916	5,999	45,903
Department Total*:	442,519	80,432	55,506	63,954	64,519	62,421	65,360	67,965	902,676

<sup>\*</sup>Amounts in thousands of dollars

2012 - 2017 Proposed Capital Improvement Program

# **SPU-Water**

# **Fund Summary**

Fund Name & Code	LTD Actuals	2011	2012	2013	2014	2015	2016	2017	Total
Water Fund (43000)	442,519	80,432	55,506	63,954	64,519	62,421	65,360	67,965	902,676
Department Total*:	442,519	80,432	55,506	63,954	64,519	62,421	65,360	67,965	902,676

<sup>\*</sup>Amounts in thousands of dollars

#### 1% for Art – WF

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2001Project ID:C4118-WFEnd Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	871	200	127	181	237	250	211	252	2,330
Total:	871	200	127	181	237	250	211	252	2,330
Fund Appropriations/Allo	cations								
Water Fund	871	200	127	181	237	250	211	252	2,330
Total*:	871	200	127	181	237	250	211	252	2,330
O & M Costs (Savings)			1	2	2	2	2	3	13
Spending Plan by Fund									
Water Fund		196	127	181	237	250	211	252	1,454
Total:		196	127	181	237	250	211	252	1,454

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

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

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:New FacilityStart Date:Q1/2004Project ID:C4102-WFEnd Date:Q4/2018

**Location:** SR 99 / Battery St

Neighborhood Plan: In more than one Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	2,992	3,216	1,694	3,381	2,607	2,222	1,395	343	17,850
Total:	2,992	3,216	1,694	3,381	2,607	2,222	1,395	343	17,850
Fund Appropriations/Alloc	eations								
Water Fund	2,992	3,216	1,694	3,381	2,607	2,222	1,395	343	17,850
Total*:	2,992	3,216	1,694	3,381	2,607	2,222	1,395	343	17,850
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		3,589	2,015	3,381	2,607	2,222	1,395	343	15,551
Total:		3,589	2,015	3,381	2,607	2,222	1,395	343	15,551

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

#### **Ballard Locks Improvements**

BCL/Program Name:Habitat Conservation ProgramBCL/Program Code:C160BProject Type:Improved FacilityStart Date:Q1/2000Project ID:C1606End Date:Q4/2014Location:NW 54th St /30th Ave NW

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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. No work is currently planned for the 2012-2013 timeframe. This program is a requirement of the Cedar River Habitat Conservation Plan (HCP.)

	LTD	2011	2012	2013	2014	2015	2016	2017	Total
·	Actuals	Rev							
Revenue Sources									
Water Rates	1,059	8	0	0	1,362	0	0	0	2,430
Total:	1,059	8	0	0	1,362	0	0	0	2,430
Fund Appropriations/Alloc	cations								
Water Fund	1,059	8	0	0	1,362	0	0	0	2,430
Total*:	1,059	8	0	0	1,362	0	0	0	2,430
O & M Costs (Savings)			0	0	0	19	19	19	56
Spending Plan by Fund									
Water Fund		8	0	0	1,362	0	0	0	1,370
Total:		8	0	0	1,362	0	0	0	1,370

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2008Project ID:C4119-WFEnd Date:Q4/2017

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan** N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	4,634	2,020	1,455	1,485	1,604	1,636	1,668	2,365	16,865
Total:	4,634	2,020	1,455	1,485	1,604	1,636	1,668	2,365	16,865
Fund Appropriations/Alloc	cations								
Water Fund	4,634	2,020	1,455	1,485	1,604	1,636	1,668	2,365	16,865
Total*:	4,634	2,020	1,455	1,485	1,604	1,636	1,668	2,365	16,865
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		1,800	1,455	1,485	1,604	1,636	1,668	2,365	12,012
Total:		1,800	1,455	1,485	1,604	1,636	1,668	2,365	12,012

<sup>\*</sup>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:TransmissionBCL/Program Code:C120BProject Type:Rehabilitation or RestorationStart Date:Q1/2004Project ID:C1208End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	586	357	632	1,665	1,698	1,732	1,767	1,802	10,238
Total:	586	357	632	1,665	1,698	1,732	1,767	1,802	10,238
Fund Appropriations/Alloc	cations								
Water Fund	586	357	632	1,665	1,698	1,732	1,767	1,802	10,238
Total*:	586	357	632	1,665	1,698	1,732	1,767	1,802	10,238
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan by Fund									
Water Fund		350	632	1,665	1,698	1,732	1,767	1,802	9,645
Total:		350	632	1,665	1,698	1,732	1,767	1,802	9,645

<sup>\*</sup>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 StewardshipBCL/Program Code:C130BProject Type:Improved FacilityStart Date:Q1/2007Project ID:C1307End Date:ONGOING

**Location:** Cedar River Watershed

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

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

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									_
Water Rates	465	0	625	150	0	0	0	0	1,240
Total:	465	0	625	150	0	0	0	0	1,240
Fund Appropriations/Alloc	cations								
Water Fund	465	0	625	150	0	0	0	0	1,240
Total*:	465	0	625	150	0	0	0	0	1,240
O & M Costs (Savings)			0	0	12	12	12	12	50
Spending Plan by Fund									
Water Fund		120	625	150	0	0	0	0	895
Total:		120	625	150	0	0	0	0	895

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

#### **SPU-Water**

# **Cedar River - Boundary Land Acquisition**

BCL/Program Name:Watershed StewardshipBCL/Program Code:C130BProject Type:New InvestmentStart Date:Q1/1999Project ID:C1312End Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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 2015-2017.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									_
Water Rates	368	265	180	235	129	0	0	0	1,177
Total:	368	265	180	235	129	0	0	0	1,177
Fund Appropriations/Alloc	cations								
Water Fund	368	265	180	235	129	0	0	0	1,177
Total*:	368	265	180	235	129	0	0	0	1,177
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		10	180	235	129	0	0	0	554
Total:		10	180	235	129	0	0	0	554

<sup>\*</sup>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 Watershed Cultural Resource Information Management System**

**BCL/Program Name:** Watershed Stewardship **BCL/Program Code:** C130B **Project Type:** New Investment **Start Date:** Q1/2007 **Project ID:** C1315 **End Date:** Q4/2013 **Location:** N/ANeighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix: Neighborhood District:** Not in a Neighborhood District **Urban Village:** Not in an Urban Village

This project provides a comprehensive information management system to preserve and archive archaeological artifacts from the Cedar River and South Fork Tolt River Municipal Watersheds housed in the Gale Archives at the Cedar River Watershed Education Center. It also enhances accessibility, protection, and security for irreplaceable cultural resources and artifacts held in trust for Native Tribes, as well as other historic artifacts and historic documents as part of SPU's watershed stewardship mandate.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	18	102	100	50	0	0	0	0	270
Total:	18	102	100	50	0	0	0	0	270
Fund Appropriations/Allo	ocations								
Water Fund	18	102	100	50	0	0	0	0	270
Total*:	18	102	100	50	0	0	0	0	270
O & M Costs (Savings)			0	0	3	3	3	3	11
Spending Plan by Fund									
Water Fund		100	100	50	0	0	0	0	250
Total:		100	100	50	0	0	0	0	250

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

# **Cedar Sockeye Hatchery**

**BCL/Program Name:** Habitat Conservation Program **BCL/Program Code:** C160B **Project Type:** New Facility **Start Date:** Q1/2000 **Project ID:** C1605 **End Date:** Q3/2014 **Location:** Cedar River Watershed Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix: 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	9,145	5,669	320	45	35	9	0	0	15,223
Total:	9,145	5,669	320	45	35	9	0	0	15,223
Fund Appropriations/Alloc	eations								
Water Fund	9,145	5,669	320	45	35	9	0	0	15,223
Total*:	9,145	5,669	320	45	35	9	0	0	15,223
O & M Costs (Savings)			0	197	197	197	197	197	983
Spending Plan by Fund									
Water Fund		7,055	320	45	35	0	0	0	7,455
Total:		7,055	320	45	35	0	0	0	7,455

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

#### **Cedar Treatment Screening Improvements**

**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 N/A

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

**Matrix:** 

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 2012-2017 timeframe but as projects are identified, necessary funding will be requested.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	67	153	0	0	0	0	0	0	220
Total:	67	153	0	0	0	0	0	0	220
Fund Appropriations/Alloc	eations								
Water Fund	67	153	0	0	0	0	0	0	220
Total*:	67	153	0	0	0	0	0	0	220
O & M Costs (Savings)			0	0	15	15	15	0	44
Spending Plan by Fund									
Water Fund		0	0	0	0	0	0	0	0
Total:		0	0	0	0	0	0	0	0

<sup>\*</sup>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:DistributionBCL/Program Code:C110BProject Type:Rehabilitation or RestorationStart Date:Q1/2003Project ID:C1137End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	684	26	26	26	27	27	28	28	870
Total:	684	26	26	26	27	27	28	28	870
Fund Appropriations/Alloc	cations								
Water Fund	684	26	26	26	27	27	28	28	870
Total*:	684	26	26	26	27	27	28	28	870
O & M Costs (Savings)			10	10	10	10	10	10	61
Spending Plan by Fund									
Water Fund		25	26	26	27	27	28	28	186
Total:		25	26	26	27	27	28	28	186

<sup>\*</sup>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/ANeighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix: 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	6,607	689	181	304	1,027	625	125	25	9,582
Total:	6,607	689	181	304	1,027	625	125	25	9,582
Fund Appropriations/Allo	cations								
Water Fund	6,607	689	181	304	1,027	625	125	25	9,582
Total*:	6,607	689	181	304	1,027	625	125	25	9,582
O & M Costs (Savings)			96	96	96	96	96	96	575
Spending Plan by Fund									
Water Fund		325	181	304	1,027	625	125	25	2,611
Total:		325	181	304	1,027	625	125	25	2,611

<sup>\*</sup>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:DistributionBCL/Program Code:C110BProject Type:Improved FacilityStart Date:Q1/2003Project ID:C1128End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	404	816	1,125	4,125	4,900	6,000	7,000	8,000	32,370
Total:	404	816	1,125	4,125	4,900	6,000	7,000	8,000	32,370
Fund Appropriations/Alloc	cations								
Water Fund	404	816	1,125	4,125	4,900	6,000	7,000	8,000	32,370
Total*:	404	816	1,125	4,125	4,900	6,000	7,000	8,000	32,370
O & M Costs (Savings)			50	50	50	50	50	50	300
Spending Plan by Fund									
Water Fund		1,080	1,125	4,125	4,900	6,000	7,000	8,000	32,230
Total:		1,080	1,125	4,125	4,900	6,000	7,000	8,000	32,230

<sup>\*</sup>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:DistributionBCL/Program Code:C110BProject Type:Rehabilitation or RestorationStart Date:Q1/1999Project ID:C1136End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									_
Water Rates	114	765	306	312	318	108	110	113	2,147
Total:	114	765	306	312	318	108	110	113	2,147
Fund Appropriations/Alloc	cations								
Water Fund	114	765	306	312	318	108	110	113	2,147
Total*:	114	765	306	312	318	108	110	113	2,147
O & M Costs (Savings)			31	31	31	31	31	31	184
Spending Plan by Fund									
Water Fund		750	306	312	318	108	110	113	2,018
Total:		750	306	312	318	108	110	113	2,018

<sup>\*</sup>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 Rehabilitation or Restoration **Project Type: Start Date:** Q1/2001 **Project ID:** C1607 **End Date:** ONGOING **Location:** Cedar River Watershed Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix:** 

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 2017. This program is a requirement of the Cedar River Habitat Conservation Plan (HCP.)

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	1,059	2,474	2,200	958	50	539	370	0	7,650
Total:	1,059	2,474	2,200	958	50	539	370	0	7,650
Fund Appropriations/Alloc	eations								
Water Fund	1,059	2,474	2,200	958	50	539	370	0	7,650
Total*:	1,059	2,474	2,200	958	50	539	370	0	7,650
O & M Costs (Savings)			76	76	76	76	76	76	459
Spending Plan by Fund									
Water Fund		2,425	2,200	958	50	539	370	0	6,542
Total:		2,425	2,200	958	50	539	370	0	6,542

<sup>\*</sup>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 N/A

**Matrix:** 

**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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	51	51	50	50	50	50	50	0	352
Total:	51	51	50	50	50	50	50	0	352
Fund Appropriations/Allo	cations								
Water Fund	51	51	50	50	50	50	50	0	352
Total*:	51	51	50	50	50	50	50	0	352
O & M Costs (Savings)			1	1	1	1	1	1	6
Spending Plan by Fund									
Water Fund		50	50	50	50	50	50	0	300
Total:		50	50	50	50	50	50	0	300

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

#### **Endangered Species Act Snohomish River Basin**

**BCL/Program Name:** Watershed Stewardship **BCL/Program Code:** C130B **Project Type:** Rehabilitation or Restoration **Start Date:** Q2/2000 **Project ID:** C1313 **End Date:** Q4/2011 **Location:** Lower Tolt River Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix: Neighborhood District:** Not in a Neighborhood District **Urban Village:** Not in an Urban Village

This program acquires and permanently protects critical stream habitat for Chinook and other salmon in the Lower Tolt River. The program is coordinated with similar efforts by Seattle City Light in the lower Tolt River basin. Similar to the Endangered Species Act (ESA) Tolt Levee Modifications Project, this project is a component of the ESA Early Action Response Program.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	292	53	0	0	0	0	0	0	345
Total:	292	53	0	0	0	0	0	0	345
Fund Appropriations/Alloc	cations								
Water Fund	292	53	0	0	0	0	0	0	345
Total*:	292	53	0	0	0	0	0	0	345
O & M Costs (Savings)			3	3	3	3	3	0	17
Spending Plan by Fund									
Water Fund		0	0	0	0	0	0	0	0
Total:		0	0	0	0	0	0	0	0

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2010Project ID:C4130-WFEnd Date:Q4/2013

**Location:** First Hill

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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 2012-2017 timeframe but if they are, necessary funding will be requested.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	0	732	0	0	0	0	0	0	732
Total:	0	732	0	0	0	0	0	0	732
Fund Appropriations/Alloc	cations								
Water Fund	0	732	0	0	0	0	0	0	732
Total*:	0	732	0	0	0	0	0	0	732
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		717	0	0	0	0	0	0	717
Total:		717	0	0	0	0	0	0	717

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:New InvestmentStart Date:ONGOINGProject ID:C4116-WFEnd Date:ONGOING

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	6,326	2,276	2,663	3,070	2,052	3,225	2,380	2,175	24,168
Total:	6,326	2,276	2,663	3,070	2,052	3,225	2,380	2,175	24,168
Fund Appropriations/Alloc	cations								
Water Fund	6,326	2,276	2,663	3,070	2,052	3,225	2,380	2,175	24,168
Total*:	6,326	2,276	2,663	3,070	2,052	3,225	2,380	2,175	24,168
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		1,406	2,663	3,070	2,052	3,225	2,380	2,175	16,971
Total:		1,406	2,663	3,070	2,052	3,225	2,380	2,175	16,971

<sup>\*</sup>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 ProgramBCL/Program Code:C160BProject Type:Improved FacilityStart Date:Q4/2003Project ID:C1608End Date:Q4/2017

**Location:** Cedar River Watershed

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	1,616	516	200	200	200	470	468	200	3,869
Total:	1,616	516	200	200	200	470	468	200	3,869
Fund Appropriations/Alloc	cations								
Water Fund	1,616	516	200	200	200	470	468	200	3,869
Total*:	1,616	516	200	200	200	470	468	200	3,869
O & M Costs (Savings)			53	53	53	53	53	53	321
Spending Plan by Fund									
Water Fund		506	200	200	200	470	468	200	2,243
Total:		506	200	200	200	470	468	200	2,243

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:New InvestmentStart Date:Q1/2002Project ID:C4108-WFEnd Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	7,294	582	465	485	485	480	450	400	10,641
Total:	7,294	582	465	485	485	480	450	400	10,641
Fund Appropriations/Alloc	cations								
Water Fund	7,294	582	465	485	485	480	450	400	10,641
Total*:	7,294	582	465	485	485	480	450	400	10,641
O & M Costs (Savings)			105	105	105	105	105	105	631
Spending Plan by Fund									
Water Fund		399	465	485	485	480	450	400	3,164
Total:		399	465	485	485	480	450	400	3,164

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

### **Kerriston Road**

BCL/Program Name:Watershed StewardshipBCL/Program Code:C130BProject Type:Rehabilitation or RestorationStart Date:Q1/2009Project ID:C1314End Date:ONGOING

**Location:** Cedar River Watershed

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

This project acquires properties adjacent to the lower Cedar River Municipal Watershed that are accessed via Kerriston Road which runs through the lower municipal watershed. Acquisition of these lands minimizes the risk to water quality from access through the watershed by the public.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	37	612	600	600	600	600	600	600	4,249
Total:	37	612	600	600	600	600	600	600	4,249
Fund Appropriations/Allo	cations								
Water Fund	37	612	600	600	600	600	600	600	4,249
Total*:	37	612	600	600	600	600	600	600	4,249
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		1,200	600	600	600	600	600	600	4,800
Total:		1,200	600	600	600	600	600	600	4,800

<sup>\*</sup>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 & TreatmentBCL/Program Code:C140BProject Type:Improved FacilityStart Date:Q1/2011Project ID:C1417End Date:Q4/2015

**Location:** Cedar River Watershed

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	0	20	255	728	1,204	1	0	0	2,209
Total:	0	20	255	728	1,204	1	0	0	2,209
Fund Appropriations/Alloc	ations								
Water Fund	0	20	255	728	1,204	1	0	0	2,209
Total*:	0	20	255	728	1,204	1	0	0	2,209
O & M Costs (Savings)			0	0	0	63	31	31	125
Spending Plan by Fund									
Water Fund		20	255	728	1,204	1	0	0	2,209
Total:		20	255	728	1,204	1	0	0	2,209

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2007Project ID:C4114-WFEnd Date:Q4/2013Location:South Lake Union

Neighborhood Plan: South Lake Union Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	706	800	600	602	0	0	0	0	2,708
Total:	706	800	600	602	0	0	0	0	2,708
Fund Appropriations/Alloc	cations								
Water Fund	706	800	600	602	0	0	0	0	2,708
Total*:	706	800	600	602	0	0	0	0	2,708
O & M Costs (Savings)			0	0	29	29	29	29	116
Spending Plan by Fund									
Water Fund		784	600	511	0	0	0	0	1,896
Total:		784	600	511	0	0	0	0	1,896

<sup>\*</sup>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 - WF

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2010Project ID:C4133-WFEnd Date:Q4/2014

**Location:** Mercer ST /Elliot AVE W/Dexter AVE

N

Neighborhood Plan: In more than one Plan Neighborhood Plan T01, T02, T03, T11,

Matrix: T15

Neighborhood District: In more than one District Urban Village: In more than one

Urban Village

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

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	7	251	364	627	108	0	0	0	1,357
Total:	7	251	364	627	108	0	0	0	1,357
Fund Appropriations/Alloc	ations								
Water Fund	7	251	364	627	108	0	0	0	1,357
Total*:	7	251	364	627	108	0	0	0	1,357
O & M Costs (Savings)			0	0	0	14	14	14	41
Spending Plan by Fund									
Water Fund		246	364	627	108	0	0	0	1,345
Total:		246	364	627	108	0	0	0	1,345

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Rehabilitation or RestorationStart Date:Q1/2004Project ID:C4101-WFEnd Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	3,827	612	614	710	637	649	660	679	8,389
Total:	3,827	612	614	710	637	649	660	679	8,389
Fund Appropriations/Alloc	cations								
Water Fund	3,827	612	614	710	637	649	660	679	8,389
Total*:	3,827	612	614	710	637	649	660	679	8,389
O & M Costs (Savings)			84	84	84	84	84	84	503
Spending Plan by Fund									
Water Fund		600	614	710	637	649	660	679	4,550
Total:		600	614	710	637	649	660	679	4,550

<sup>\*</sup>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 ResourcesBCL/Program Code:C150BProject Type:Improved FacilityStart Date:Q1/2003Project ID:C1508End Date:Q4/2017

**Location:** Cedar River Watershed

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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-2011 costs are deferred costs that will be amortized over ten years.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	10,814	2,826	2,600	2,000	1,900	5,410	9,227	6,920	41,697
Total:	10,814	2,826	2,600	2,000	1,900	5,410	9,227	6,920	41,697
Fund Appropriations/Alloc	eations								
Water Fund	10,814	2,826	2,600	2,000	1,900	5,410	9,227	6,920	41,697
Total*:	10,814	2,826	2,600	2,000	1,900	5,410	9,227	6,920	41,697
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		5,300	2,600	2,000	1,900	5,410	9,227	6,920	33,357
Total:		5,300	2,600	2,000	1,900	5,410	9,227	6,920	33,357

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

## **Muckleshoot Agreement Implementation Plan**

**BCL/Program Name:** Watershed Stewardship **BCL/Program Code:** C130B **Project Type:** New Investment **Start Date:** Q1/2007 **Project ID:** C1309 **End Date:** Q4/2012 **Location:** Cedar River Watershed Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix: Neighborhood District:** Not in a Neighborhood District **Urban Village:** Not in an Urban Village

This program supports implementation of specific provisions of the Muckleshoot Indian Tribe (MIT) Settlement Agreement with the City authorized by City of Seattle Ordinance 122131. This commitment may include, but is not limited to, land transfer, implementation management, trail access improvements, and development of an information management system for new access protocols for tribal access into the closed Cedar River Municipal Watershed.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	2,606	0	160	0	0	0	0	0	2,766
Total:	2,606	0	160	0	0	0	0	0	2,766
Fund Appropriations/All	locations								
Water Fund	2,606	0	160	0	0	0	0	0	2,766
Total*:	2,606	0	160	0	0	0	0	0	2,766
O & M Costs (Savings)			118	122	127	131	135	139	772

<sup>\*</sup>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:DistributionBCL/Program Code:C110BProject Type:Rehabilitation or RestorationStart Date:Q1/2007Project ID:C1133End Date:ONGOING

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan** N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									,
Water Rates	1,178	510	835	1,760	106	812	828	845	6,874
Total:	1,178	510	835	1,760	106	812	828	845	6,874
Fund Appropriations/Allo	cations								
Water Fund	1,178	510	835	1,760	106	812	828	845	6,874
Total*:	1,178	510	835	1,760	106	812	828	845	6,874
O & M Costs (Savings)			10	10	10	10	10	0	50
Spending Plan by Fund									
Water Fund		562	835	1,760	106	812	828	845	5,748
Total:		562	835	1,760	106	812	828	845	5,748

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

#### **SPU-Water**

# **Operational Facility - Construction - WF**

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2004Project ID:C4106-WFEnd Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	14,309	278	561	1,184	4,323	2,756	2,556	2,159	28,128
Total:	14,309	278	561	1,184	4,323	2,756	2,556	2,159	28,128
Fund Appropriations/Alloc	eations								
Water Fund	14,309	278	561	1,184	4,323	2,756	2,556	2,159	28,128
Total*:	14,309	278	561	1,184	4,323	2,756	2,556	2,159	28,128
O & M Costs (Savings)			281	281	281	281	281	281	1,688
Spending Plan by Fund									
Water Fund		273	561	1,184	4,323	2,756	2,556	2,159	13,812
Total:		273	561	1,184	4,323	2,756	2,556	2,159	13,812

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q4/2006Project ID:C4115-WFEnd Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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 2014. As future projects are identified, necessary funding will be requested.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	12	379	339	276	21	0	0	0	1,027
Total:	12	379	339	276	21	0	0	0	1,027
Fund Appropriations/Alloc	cations								
Water Fund	12	379	339	276	21	0	0	0	1,027
Total*:	12	379	339	276	21	0	0	0	1,027
O & M Costs (Savings)			17	17	17	17	17	17	99
Spending Plan by Fund									
Water Fund		200	339	276	21	0	0	0	836
Total:		200	339	276	21	0	0	0	836

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2003Project ID:C4105-WFEnd Date:ONGOING

**Location:** 2700 Airport Way S

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	4,398	118	192	215	32	32	255	529	5,771
Total:	4,398	118	192	215	32	32	255	529	5,771
Fund Appropriations/Alloc	cations								
Water Fund	4,398	118	192	215	32	32	255	529	5,771
Total*:	4,398	118	192	215	32	32	255	529	5,771
O & M Costs (Savings)			52	52	52	52	52	0	259
Spending Plan by Fund									
Water Fund		165	192	215	32	32	255	529	1,420
Total:		165	192	215	32	32	255	529	1,420

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

#### **SPU-Water**

## Other Major Transportation Projects - WF

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Rehabilitation or RestorationStart Date:Q2/2008Project ID:C4123-WFEnd Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	7	20	372	260	265	54	55	0	1,034
Total:	7	20	372	260	265	54	55	0	1,034
Fund Appropriations/Alloc	eations								
Water Fund	7	20	372	260	265	54	55	0	1,034
Total*:	7	20	372	260	265	54	55	0	1,034
O & M Costs (Savings)			7	7	7	7	7	7	43
Spending Plan by Fund									
Water Fund		20	51	260	265	54	55	0	706
Total:		20	51	260	265	54	55	0	706

<sup>\*</sup>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:DistributionBCL/Program Code:C110BProject Type:Rehabilitation or RestorationStart Date:Q3/2008Project ID:C1135End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	77	79	510	520	531	541	552	563	3,373
Total:	77	79	510	520	531	541	552	563	3,373
Fund Appropriations/Allo	cations								
Water Fund	77	79	510	520	531	541	552	563	3,373
Total*:	77	79	510	520	531	541	552	563	3,373
O & M Costs (Savings)			34	34	34	34	34	34	203
Spending Plan by Fund									
Water Fund		274	510	520	531	541	552	563	3,491
Total:		274	510	520	531	541	552	563	3,491

<sup>\*</sup>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:TransmissionBCL/Program Code:C120BProject Type:Rehabilitation or RestorationStart Date:Q1/2000Project ID:C1206End Date:ONGOING

**Location:** Regional

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: In more than one District Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	534	102	100	100	100	100	100	225	1,362
Total:	534	102	100	100	100	100	100	225	1,362
Fund Appropriations/Allo	cations								
Water Fund	534	102	100	100	100	100	100	225	1,362
Total*:	534	102	100	100	100	100	100	225	1,362
O & M Costs (Savings)			9	9	9	9	9	9	55
Spending Plan by Fund									
Water Fund		201	100	100	100	100	100	225	926
Total:		201	100	100	100	100	100	225	926

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2007Project ID:C4107-WFEnd Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	2,515	1,961	2,682	3,329	3,148	4,196	4,962	9,550	32,343
Total:	2,515	1,961	2,682	3,329	3,148	4,196	4,962	9,550	32,343
Fund Appropriations/Alloc	cations								
Water Fund	2,515	1,961	2,682	3,329	3,148	4,196	4,962	9,550	32,343
Total*:	2,515	1,961	2,682	3,329	3,148	4,196	4,962	9,550	32,343
O & M Costs (Savings)			323	323	323	323	323	323	1,941
Spending Plan by Fund									
Water Fund		1,336	2,682	3,329	3,148	4,196	4,962	9,550	29,202
Total:		1,336	2,682	3,329	3,148	4,196	4,962	9,550	29,202

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

#### **SPU-Water**

## **Regional Water Conservation Program**

BCL/Program Name:Water ResourcesBCL/Program Code:C150BProject Type:Improved FacilityStart Date:Q1/1999Project ID:C1504End Date:ONGOING

**Location:** Citywide Plus Wholesale

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	14,412	3,366	1,887	1,925	1,963	2,002	2,043	2,083	29,681
Total:	14,412	3,366	1,887	1,925	1,963	2,002	2,043	2,083	29,681
Fund Appropriations/Alloc	eations								
Water Fund	14,412	3,366	1,887	1,925	1,963	2,002	2,043	2,083	29,681
Total*:	14,412	3,366	1,887	1,925	1,963	2,002	2,043	2,083	29,681
O & M Costs (Savings)			518	527	522	522	522	522	3,133
Spending Plan by Fund									
Water Fund		1,850	1,887	1,925	1,963	2,002	2,043	2,083	13,753
Total:		1,850	1,887	1,925	1,963	2,002	2,043	2,083	13,753

<sup>\*</sup>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:TransmissionBCL/Program Code:C120BProject Type:Rehabilitation or RestorationStart Date:Q3/1999Project ID:C1209End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	1,617	107	109	112	117	122	125	127	2,437
Total:	1,617	107	109	112	117	122	125	127	2,437
Fund Appropriations/Allo	cations								
Water Fund	1,617	107	109	112	117	122	125	127	2,437
Total*:	1,617	107	109	112	117	122	125	127	2,437
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan by Fund									
Water Fund		105	109	112	117	122	125	127	818
Total:		105	109	112	117	122	125	127	818

<sup>\*</sup>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 & TreatmentBCL/Program Code:C140BProject Type:Improved FacilityStart Date:Q1/2001Project ID:C1408End Date:Q4/2012

**Location:** S Spokane St/Beacon Ave S

Neighborhood Plan: North Beacon Hill Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									_
Water Rates	41,750	255	10	0	0	0	0	0	42,015
Total:	41,750	255	10	0	0	0	0	0	42,015
Fund Appropriations/Alloc	eations								
Water Fund	41,750	255	10	0	0	0	0	0	42,015
Total*:	41,750	255	10	0	0	0	0	0	42,015
O & M Costs (Savings)			0	420	420	420	420	420	2,101
Spending Plan by Fund									
Water Fund		50	10	0	0	0	0	0	60
Total:		50	10	0	0	0	0	0	60

<sup>\*</sup>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 & TreatmentBCL/Program Code:C140BProject Type:Improved FacilityStart Date:Q4/2001Project ID:C1411End Date:Q2/2014

**Location:** NE 86th St/Roosevelt Wy NE

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: North Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	16,421	16,728	6,000	4,300	100	0	0	0	43,549
Total:	16,421	16,728	6,000	4,300	100	0	0	0	43,549
Fund Appropriations/Alloc	ations								
Water Fund	16,421	16,728	6,000	4,300	100	0	0	0	43,549
Total*:	16,421	16,728	6,000	4,300	100	0	0	0	43,549
O & M Costs (Savings)			0	0	0	435	435	435	1,306
Spending Plan by Fund									
Water Fund		14,400	6,000	4,300	100	0	0	0	24,800
Total:		14,400	6,000	4,300	100	0	0	0	24,800

<sup>\*</sup>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:** Q4/2012 **Location:** SW Myrtle St/35th Ave SW Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix:** 

Neighborhood District: Southwest Urban Village: Not in an Urban Village 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	12,001	102	10	0	0	0	0	0	12,113
Total:	12,001	102	10	0	0	0	0	0	12,113
Fund Appropriations/Allo	cations								
Water Fund	12,001	102	10	0	0	0	0	0	12,113
Total*:	12,001	102	10	0	0	0	0	0	12,113
O & M Costs (Savings)			0	121	121	121	121	121	606
<b>Spending Plan by Fund</b>									
Water Fund		25	10	0	0	0	0	0	35
Total:		25	10	0	0	0	0	0	35

<sup>\*</sup>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 & TreatmentBCL/Program Code:C140BProject Type:Improved FacilityStart Date:Q4/2001Project ID:C1407End Date:Q2/2016Location:E Prospect St./12th Ave. E

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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. 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 2012 and 2014. 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	94	0	0	0	0	100	110	0	304
Total:	94	0	0	0	0	100	110	0	304
Fund Appropriations/Allo	cations								
Water Fund	94	0	0	0	0	100	110	0	304
Total*:	94	0	0	0	0	100	110	0	304
O & M Costs (Savings)			0	0	0	0	0	3	3
Spending Plan by Fund									
Water Fund		54	0	0	0	100	110	0	264
Total:		54	0	0	0	100	110	0	264

<sup>\*</sup>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 & TreatmentBCL/Program Code:C140BProject Type:Improved FacilityStart Date:Q4/2001Project ID:C1409End Date:Q1/2013

**Location:** SW Henderson St/8th Ave SW

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	32,617	510	100	25	0	0	0	0	33,252
Total:	32,617	510	100	25	0	0	0	0	33,252
Fund Appropriations/Alloc	cations								
Water Fund	32,617	510	100	25	0	0	0	0	33,252
Total*:	32,617	510	100	25	0	0	0	0	33,252
O & M Costs (Savings)			0	0	333	333	333	333	1,330
Spending Plan by Fund									
Water Fund		400	100	25	0	0	0	0	525
Total:		400	100	25	0	0	0	0	525

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

#### **SPU-Water**

## **Seattle Direct Service Additional Conservation**

BCL/Program Name:Water ResourcesBCL/Program Code:C150BProject Type:Improved FacilityStart Date:Q1/2001Project ID:C1505End Date:ONGOING

**Location:** Citywide & Direct Service

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	4,664	663	663	676	690	704	718	732	9,509
Total:	4,664	663	663	676	690	704	718	732	9,509
Fund Appropriations/Alloc	cations								
Water Fund	4,664	663	663	676	690	704	718	732	9,509
Total*:	4,664	663	663	676	690	704	718	732	9,509
O & M Costs (Savings)			95	95	95	95	95	95	571
Spending Plan by Fund									
Water Fund		650	663	676	690	704	718	732	4,832
Total:		650	663	676	690	704	718	732	4,832

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2005Project ID:C4113-WFEnd Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: In more than one District Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	4,270	1,441	2,000	2,000	2,000	2,000	2,000	2,019	17,729
Total:	4,270	1,441	2,000	2,000	2,000	2,000	2,000	2,019	17,729
Fund Appropriations/Alloc	ations								
Water Fund	4,270	1,441	2,000	2,000	2,000	2,000	2,000	2,019	17,729
Total*:	4,270	1,441	2,000	2,000	2,000	2,000	2,000	2,019	17,729
O & M Costs (Savings)			177	177	177	177	177	177	1,064
Spending Plan by Fund									
Water Fund		1,413	2,000	2,000	2,000	2,000	2,000	2,019	13,430
Total:		1,413	2,000	2,000	2,000	2,000	2,000	2,019	13,430

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

#### **SPU-Water**

## Sound Transit - North Link - WF

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:New FacilityStart Date:Q1/2012Project ID:C4135-WFEnd 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. Amounts shown are for the design phase only; budget for the construction phase will be included in future budget submittals.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	0	0	88	88	0	0	0	0	175
Total:	0	0	88	88	0	0	0	0	175
Fund Appropriations/Alloc	ations								
Water Fund	0	0	88	88	0	0	0	0	175
Total*:	0	0	88	88	0	0	0	0	175

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:Q1/2005Project ID:C4125End Date:Q4/2012

**Location:** Central & South areas of Seattle

Neighborhood Plan: In more than one Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: In more than one District Urban Village: In more than one

Urban Village

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

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	1,502	204	120	0	0	0	0	0	1,826
Total:	1,502	204	120	0	0	0	0	0	1,826
Fund Appropriations/Alloc	eations								
Water Fund	1,502	204	120	0	0	0	0	0	1,826
Total*:	1,502	204	120	0	0	0	0	0	1,826
O & M Costs (Savings)			0	18	18	18	18	18	91
Spending Plan by Fund									
Water Fund		200	120	0	0	0	0	0	320
Total:		200	120	0	0	0	0	0	320

<sup>\*</sup>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 ProjectsBCL/Program Code:C410BProject Type:New FacilityStart Date:Q1/2007Project ID:C4110-WFEnd Date:Q4/2015

**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

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	238	71	106	222	127	41	0	0	804
Total:	238	71	106	222	127	41	0	0	804
Fund Appropriations/Allo	cations								
Water Fund	238	71	106	222	127	41	0	0	804
Total*:	238	71	106	222	127	41	0	0	804
O & M Costs (Savings)			0	0	0	0	8	8	16
<b>Spending Plan by Fund</b>									
Water Fund		69	106	222	127	41	0	0	565
Total:		69	106	222	127	41	0	0	565

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

## **Spokane Street Viaduct - WF**

**BCL/Program Name: Shared Cost Projects BCL/Program Code:** C410B Rehabilitation or Restoration **Project Type: Start Date:** Q1/2007 **Project ID:** C4134-WF **End Date:** Q4/2012 **Location:** Spokane St Viaduct Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix:** 

Neighborhood District: In more than one District Urban Village: West Seattle Junction

In mid-2008, SDOT began construction of the new 4th Avenue South off ramp from the South Spokane Street Viaduct. SPU must relocate approximately 600 linear feet of 30" watermain between the BNSF railroad tracks and 4th Avenue South to make way for the new ramp. SPU is expected to complete the relocation project in time to allow the SDOT project to be built on schedule. SPU will design, advertise and construct the relocations in a separate contract from the SDOT project.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	4,471	70	150	0	0	0	0	0	4,691
Total:	4,471	70	150	0	0	0	0	0	4,691
Fund Appropriations/Alloc	cations								
Water Fund	4,471	70	150	0	0	0	0	0	4,691
Total*:	4,471	70	150	0	0	0	0	0	4,691
O & M Costs (Savings)			22	22	22	22	22	22	133
Spending Plan by Fund									
Water Fund		569	150	0	0	0	0	0	719
Total:		569	150	0	0	0	0	0	719

<sup>\*</sup>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 Rehabilitation or Restoration **Project Type: Start Date:** Q2/2000 **Project ID:** C1602 **End Date:** ONGOING **Location:** Cedar River Watershed Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

**Matrix:** 

**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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	6,212	375	442	403	411	316	316	269	8,745
Total:	6,212	375	442	403	411	316	316	269	8,745
Fund Appropriations/Allo	cations								
Water Fund	6,212	375	442	403	411	316	316	269	8,745
Total*:	6,212	375	442	403	411	316	316	269	8,745
O & M Costs (Savings)			87	87	87	87	87	87	525
Spending Plan by Fund									
Water Fund		447	442	403	411	316	316	269	2,605
Total:		447	442	403	411	316	316	269	2,605

<sup>\*</sup>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 **Start Date: Project Type:** Rehabilitation or Restoration Q1/2008 **Project ID:** C1134 **End Date:** ONGOING **Location:** Citywide Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

**Matrix:** 

In more than one District

**Neighborhood 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	1,935	1,123	901	350	1,500	1	1	1	5,813
Total:	1,935	1,123	901	350	1,500	1	1	1	5,813
Fund Appropriations/Allo	cations								
Water Fund	1,935	1,123	901	350	1,500	1	1	1	5,813
Total*:	1,935	1,123	901	350	1,500	1	1	1	5,813
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan by Fund									
Water Fund		1,774	901	350	1,500	1	1	1	4,528
Total:		1,774	901	350	1,500	1	1	1	4,528

<sup>\*</sup>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 Rehabilitation or Restoration **Project Type: Start Date:** Q2/2009 **Project ID:** C1310 **End Date:** Q4/2012 **Location:** Tolt River Watershed Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix: Neighborhood District:** Not in a Neighborhood District **Urban Village:** Not in an Urban Village

This program provides aquatic and riparian restoration, improves roads for access to restoration areas, and watershed security and protection improvements 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. Restoration and improvements are based upon recommendations of the 2008 Tolt Watershed Management Plan.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	133	109	83	0	0	0	0	0	325
Total:	133	109	83	0	0	0	0	0	325
Fund Appropriations/Allo	ocations								
Water Fund	133	109	83	0	0	0	0	0	325
Total*:	133	109	83	0	0	0	0	0	325
O & M Costs (Savings)			0	5	5	5	5	5	26
Spending Plan by Fund									
Water Fund		107	83	0	0	0	0	0	190
Total:		107	83	0	0	0	0	0	190

<sup>\*</sup>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:TransmissionBCL/Program Code:C120BProject Type:Rehabilitation or RestorationStart Date:Q1/2005Project ID:C1207End Date:ONGOING

**Location:** Regional

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	2,920	1,018	402	1,050	1,061	1,082	1,104	1,126	9,764
Total:	2,920	1,018	402	1,050	1,061	1,082	1,104	1,126	9,764
Fund Appropriations/Alloc	cations								
Water Fund	2,920	1,018	402	1,050	1,061	1,082	1,104	1,126	9,764
Total*:	2,920	1,018	402	1,050	1,061	1,082	1,104	1,126	9,764
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan by Fund									
Water Fund		824	402	1,050	1,061	1,082	1,104	1,126	6,650
Total:		824	402	1,050	1,061	1,082	1,104	1,126	6,650

<sup>\*</sup>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:** Q4/2012 **Location:** Various Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix: Urban Village: Neighborhood District:** Not in a Neighborhood District 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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	0	0	80	0	0	0	0	0	80
Total:	0	0	80	0	0	0	0	0	80
Fund Appropriations/Al	locations								
Water Fund	0	0	80	0	0	0	0	0	80
Total*:	0	0	80	0	0	0	0	0	80
O & M Costs (Savings)			0	1	1	1	1	1	4

<sup>\*</sup>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 & TreatmentBCL/Program Code:C140BProject Type:Rehabilitation or RestorationStart Date:Q1/2007Project ID:C1413End Date:ONGOING

**Location:** Various

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	179	102	100	100	100	100	100	113	894
Total:	179	102	100	100	100	100	100	113	894
Fund Appropriations/Allo	cations								
Water Fund	179	102	100	100	100	100	100	113	894
Total*:	179	102	100	100	100	100	100	113	894
O & M Costs (Savings)			9	9	9	9	9	9	54
Spending Plan by Fund									
Water Fund		100	100	100	100	100	100	113	713
Total:		100	100	100	100	100	100	113	713

<sup>\*</sup>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 ProgramBCL/Program Code:C160BProject Type:Rehabilitation or RestorationStart Date:Q2/2000Project ID:C1603End Date:ONGOINGLocation:Cedar River Watershed

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan** N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	6,162	599	588	588	588	588	290	275	9,676
Total:	6,162	599	588	588	588	588	290	275	9,676
Fund Appropriations/Allo	cations								
Water Fund	6,162	599	588	588	588	588	290	275	9,676
Total*:	6,162	599	588	588	588	588	290	275	9,676
O & M Costs (Savings)			97	97	97	97	97	97	581
Spending Plan by Fund									
Water Fund		567	588	588	588	588	290	275	3,482
Total:		567	588	588	588	588	290	275	3,482

<sup>\*</sup>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 - Hydrant Replacement/Relocation

 BCL/Program Name:
 Distribution
 BCL/Program Code:
 C110B

 Project Type:
 Rehabilitation or Restoration
 Start Date:
 Q4/1998

 Project ID:
 C1110
 End Date:
 ONGOING

 Leastion:
 Citywide

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

Neighborhood District: In more than one District Urban Village: In more than one

Urban Village

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	2011	2012	2013	2014	2015	2016	2017	Total
	Actuals	Rev							
Revenue Sources									
Water Rates	4,221	177	410	419	427	362	368	318	6,701
Total:	4,221	177	410	419	427	362	368	318	6,701
Fund Appropriations/Alloc	cations								
Water Fund	4,221	177	410	419	427	362	368	318	6,701
Total*:	4,221	177	410	419	427	362	368	318	6,701
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan by Fund									
Water Fund		159	410	419	427	362	368	318	2,462
Total:		159	410	419	427	362	368	318	2,462

<sup>\*</sup>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:DistributionBCL/Program Code:C110BProject Type:New FacilityStart Date:Q2/1999Project ID:C1112End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	514	114	102	104	106	122	125	127	1,314
Total:	514	114	102	104	106	122	125	127	1,314
Fund Appropriations/Alloc	cations								
Water Fund	514	114	102	104	106	122	125	127	1,314
Total*:	514	114	102	104	106	122	125	127	1,314
O & M Costs (Savings)			10	10	10	10	10	10	62
Spending Plan by Fund									
Water Fund		112	102	104	106	122	125	127	799
Total:		112	102	104	106	122	125	127	799

<sup>\*</sup>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:DistributionBCL/Program Code:C110BProject Type:New FacilityStart Date:Q4/1998Project ID:C1113End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	78,387	7,650	4,080	4,162	4,245	4,330	4,416	4,416	111,686
Total:	78,387	7,650	4,080	4,162	4,245	4,330	4,416	4,416	111,686
Fund Appropriations/Alloc	eations								
Water Fund	78,387	7,650	4,080	4,162	4,245	4,330	4,416	4,416	111,686
Total*:	78,387	7,650	4,080	4,162	4,245	4,330	4,416	4,416	111,686
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan by Fund									
Water Fund		7,500	4,080	4,162	4,245	4,330	4,416	4,416	33,149
Total:		7,500	4,080	4,162	4,245	4,330	4,416	4,416	33,149

<sup>\*</sup>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:DistributionBCL/Program Code:C110BProject Type:Rehabilitation or RestorationStart Date:Q4/1998Project ID:C1109End Date:ONGOING

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	84,658	7,854	5,610	5,722	5,837	6,386	6,514	6,644	129,226
Total:	84,658	7,854	5,610	5,722	5,837	6,386	6,514	6,644	129,226
Fund Appropriations/Alloc	cations								
Water Fund	84,658	7,854	5,610	5,722	5,837	6,386	6,514	6,644	129,226
Total*:	84,658	7,854	5,610	5,722	5,837	6,386	6,514	6,644	129,226
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan by Fund									
Water Fund		7,700	5,610	5,722	5,837	6,386	6,514	6,644	44,414
Total:		7,700	5,610	5,722	5,837	6,386	6,514	6,644	44,414

<sup>\*</sup>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:DistributionBCL/Program Code:C110BProject Type:New FacilityStart Date:Q1/1998Project ID:C1111End Date:ONGOING

**Location:** Citywide

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

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									_
Water Rates	11,971	612	663	676	796	812	828	845	17,203
Total:	11,971	612	663	676	796	812	828	845	17,203
Fund Appropriations/Alloc	cations								
Water Fund	11,971	612	663	676	796	812	828	845	17,203
Total*:	11,971	612	663	676	796	812	828	845	17,203
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan by Fund									
Water Fund		600	663	676	796	812	828	845	5,220
Total:		600	663	676	796	812	828	845	5,220

<sup>\*</sup>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-Seismic Upgrade Pipelines

BCL/Program Name:DistributionBCL/Program Code:C110BProject Type:Improved FacilityStart Date:Q1/2009Project ID:C1102End Date:ONGOING

**Location:** Citywide

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

N/A

This ongoing program provides seismic upgrades to strengthen existing and/or install new elements and structures for improved performance of the water distribution system throughout the City of Seattle in the event of a large earthquake. The benefit is a reduction in frequency and duration of water outages after an earthquake.

	LTD Actuals	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	9,546	1	1	1	1	1	1	0	9,552
Total:	9,546	1	1	1	1	1	1	0	9,552
Fund Appropriations/Allo	cations								
Water Fund	9,546	1	1	1	1	1	1	0	9,552
Total*:	9,546	1	1	1	1	1	1	0	9,552
O & M Costs (Savings)			26	26	26	26	26	0	129
Spending Plan by Fund									
Water Fund		6	1	1	1	1	1	0	11
Total:		6	1	1	1	1	1	0	11

<sup>\*</sup>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 Q1/2007 **Project Type:** Improved Facility **Start Date: Project ID:** C1414 **End Date:** Q4/2015 **Location:** Various Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A **Matrix:** 

**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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									_
Water Rates	180	51	138	140	143	1	0	0	653
Total:	180	51	138	140	143	1	0	0	653
Fund Appropriations/Alloc	cations								
Water Fund	180	51	138	140	143	1	0	0	653
Total*:	180	51	138	140	143	1	0	0	653
O & M Costs (Savings)			0	0	0	7	7	7	20
Spending Plan by Fund									
Water Fund		25	138	140	143	1	0	0	447
Total:		25	138	140	143	1	0	0	447

<sup>\*</sup>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 ResourcesBCL/Program Code:C150BProject Type:New InvestmentStart Date:Q1/2008Project ID:C1507End Date:Q4/2014

**Location:** Multiple

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									_
Water Rates	191	0	25	644	3,163	0	0	0	4,024
Total:	191	0	25	644	3,163	0	0	0	4,024
Fund Appropriations/Alloc	ations								
Water Fund	191	0	25	644	3,163	0	0	0	4,024
Total*:	191	0	25	644	3,163	0	0	0	4,024
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		75	25	644	3,163	0	0	0	3,907
Total:		75	25	644	3,163	0	0	0	3,907

<sup>\*</sup>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:TransmissionBCL/Program Code:C120BProject Type:Rehabilitation or RestorationStart Date:Q1/2007Project ID:C1205End Date:ONGOING

**Location:** Regional

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	179	102	100	100	100	100	100	113	893
Total:	179	102	100	100	100	100	100	113	893
Fund Appropriations/Allo	cations								
Water Fund	179	102	100	100	100	100	100	113	893
Total*:	179	102	100	100	100	100	100	113	893
O & M Costs (Savings)			8	8	8	8	8	8	51
Spending Plan by Fund									
Water Fund		100	100	100	100	100	100	113	713
Total:		100	100	100	100	100	100	113	713

<sup>\*</sup>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 ResourcesBCL/Program Code:C150BProject Type:New InvestmentStart Date:Q2/2010Project ID:C1509End Date:Q3/2013

**Location:** N/A

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan

Matrix:

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban

Village

N/A

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	27	473	261	26	0	0	0	0	787
Total:	27	473	261	26	0	0	0	0	787
Fund Appropriations/Allo	cations								
Water Fund	27	473	261	26	0	0	0	0	787
Total*:	27	473	261	26	0	0	0	0	787
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan by Fund									
Water Fund		480	261	26	0	0	0	0	767
Total:		480	261	26	0	0	0	0	767

<sup>\*</sup>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 N/A **Matrix:** 

Neighborhood District: Not in a Neighborhood District Urban Village: Not in an Urban Village

, mage

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	0	0	0	0	0	0	110	541	651
Total:	0	0	0	0	0	0	110	541	651
Fund Appropriations/All	ocations								
Water Fund	0	0	0	0	0	0	110	541	651
Total*:	0	0	0	0	0	0	110	541	651
O & M Costs (Savings)			0	0	0	0	0	0	0

<sup>\*</sup>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:DistributionBCL/Program Code:C110BProject Type:Rehabilitation or RestorationStart Date:Q1/2004Project ID:C1129End Date:ONGOING

**Location:** Regional

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan N/A

Matrix:

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	5,104	765	626	1,601	1,601	3,248	3,313	3,379	19,638
Total:	5,104	765	626	1,601	1,601	3,248	3,313	3,379	19,638
Fund Appropriations/Alloc	cations								
Water Fund	5,104	765	626	1,601	1,601	3,248	3,313	3,379	19,638
Total*:	5,104	765	626	1,601	1,601	3,248	3,313	3,379	19,638
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan by Fund									
Water Fund		300	626	1,601	1,601	3,248	3,313	3,379	14,068
Total:		300	626	1,601	1,601	3,248	3,313	3,379	14,068

<sup>\*</sup>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 N/A **Matrix:** 

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	2011 Rev	2012	2013	2014	2015	2016	2017	Total
Revenue Sources									
Water Rates	9,251	1,482	1,163	1,178	1,004	1,024	1,044	1,065	17,211
Total:	9,251	1,482	1,163	1,178	1,004	1,024	1,044	1,065	17,211
Fund Appropriations/Alloc	cations								
Water Fund	9,251	1,482	1,163	1,178	1,004	1,024	1,044	1,065	17,211
Total*:	9,251	1,482	1,163	1,178	1,004	1,024	1,044	1,065	17,211
O & M Costs (Savings)			172	172	172	172	172	172	1,033
Spending Plan by Fund									
Water Fund		1,340	1,163	1,178	1,004	1,024	1,044	1,065	7,818
Total:		1,340	1,163	1,178	1,004	1,024	1,044	1,065	7,818

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