

# SPU - Drainage & Wastewater

## 1% for Art – DWF

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** Improved Facility **Start Date:** 1st Quarter 2001  
**Project ID:** C4118 - DWF **End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan Matrix:** N/A  
**Neighborhood District:** Not in a Neighborhood District **Urban Village:** Not in an Urban Village

This program provides the budget for the Drainage and Wastewater Fund portion of the 1% for Arts contribution to the Municipal Arts Fund (MAF) for use in public art projects. The 1% funds deposited in the MAF shall be spent by the Office of Arts and Cultural Affairs (OACA) on art projects that are in the City's Municipal Arts Plan (MAP), which is prepared annually by OACA and approved by the Mayor. Seattle Public Utilities (SPU) contributes 1% of all eligible CIP project budget annually.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	595	564	282	399	294	164	205	152	2,655
<b>Project Total:</b>	595	564	282	399	294	164	205	152	2,655
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	595	564	282	399	294	164	205	152	2,655
<b>Appropriations Total*</b>	595	564	282	399	294	164	205	152	2,655
<b>O &amp; M Costs (Savings)</b>			11	11	11	11	11	11	65

## 14th Ave S Drainage Improvements

**BCL/Program Name:** Stormwater & Flood Control **BCL/Program Code:** C332B  
**Project Type:** Improved Facility **Start Date:** 1st Quarter 2008  
**Project ID:** C308006 **End Date:** 4th Quarter 2009

**Location:** 14th Ave. S.

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan Matrix:** N/A  
**Neighborhood District:** Southwest **Urban Village:** South Park

This project will identify and implement a solution to meet Stormwater Flow Control requirements for the SDOT 14th Avenue South Street Improvement project. Work will include design and installation of new catch basins and drainage inlet where no such existing facilities existed with the SDOT project footprint.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	500	151	0	0	0	0	651
<b>Project Total:</b>	0	0	500	151	0	0	0	0	651
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	500	151	0	0	0	0	651
<b>Appropriations Total*</b>	0	0	500	151	0	0	0	0	651
<b>O &amp; M Costs (Savings)</b>			0	0	3	3	3	3	13

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# SPU - Drainage & Wastewater

## 1500 - 2600 Aurora N Landslide

**BCL/Program Name:** Landslide Mitigation & Special Programs      **BCL/Program Code:** C335B  
**Project Type:** New Facility      **Start Date:** 1st Quarter 2006  
**Project ID:** C363401      **End Date:** 4th Quarter 2012

**Location:** Aurora Ave. N

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Magnolia/Queen Anne

**Urban Village:** Not in an Urban Village

Three combined sewer lines traverse a steep slope down to Aurora Ave. N at the northeast corner of Queen Anne Hill. Preliminary analysis determined these three lines were at risk of damage due to landslides. This project installs the combined sewer lines deeper in the hillside to protect them from landslide damage, possibly using directional drilling techniques. The project also improves the method for collecting stormwater from the nearby streets to reduce the risk of landslides. This project is in a preliminary phase of development, and cost estimates will be revised over time. This project is delayed until 2009.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	7	1	1	53	65	198	1,129	0	1,454
<b>Project Total:</b>	7	1	1	53	65	198	1,129	0	1,454
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	7	1	1	53	65	198	1,129	0	1,454
<b>Appropriations Total*</b>	7	1	1	53	65	198	1,129	0	1,454
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	7	7

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# SPU - Drainage & Wastewater

## 2006 Storms Capital Program - DWF

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** Rehabilitation or Restoration **Start Date:** 3rd Quarter 2007  
**Project ID:** C4120-DWF **End Date:** 4th Quarter 2008

**Location:** Multiple

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This program makes capital improvements to drainage and wastewater infrastructure damaged by the 2006 winter storms, which were declared a federal emergency. The majority of this work will repair and mitigate landslides that occurred and that may occur in the future, as well as restore a detention pond damaged by the storm. This work will be reimbursed by the Federal Emergency Management Agency (FEMA).

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	100	100	0	0	0	0	0	200
<b>Project Total:</b>	0	100	100	0	0	0	0	0	200
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	100	100	0	0	0	0	0	200
<b>Appropriations Total*</b>	0	100	100	0	0	0	0	0	200
<b>O &amp; M Costs (Savings)</b>			1	1	1	1	1	1	6

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# SPU - Drainage & Wastewater

## 3rd Ave. NW & NW 107th Street Natural System

**BCL/Program Name:** Low Impact Development

**BCL/Program Code:** C334B

**Project Type:** Improved Facility

**Start Date:** 4th Quarter 2000

**Project ID:** C300329

**End Date:** 1st Quarter 2008

**Location:** NW 107th St./3rd Ave. NW

**Neighborhood Plan:** Broadview-Bitter Lake-Haller Lake

**Neighborhood Plan Matrix:** A-9,A-10, A-11

**Neighborhood District:** Northwest

**Urban Village:** Not in an Urban Village

This project addresses stormwater management using a "natural system" approach that promotes sustainable drainage design. The project minimizes the use of standard engineered stormwater infrastructure, using the unimproved right-of-way as a starting point for design. The project includes construction of an engineered system of stepped pools to detain runoff, filter pollutants, and allow maximum opportunity for infiltration; construction of a sidewalk on the south side of 3rd Ave. NW and NW 107th to provide safe pedestrian access to a nearby elementary school; creation of natural drainage system features within the right-of-way; and the use of vegetation for both stormwater management and aesthetic appeal. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. It was scheduled to be complete at the end of 2007, but with potential delays, it is being included in the 2008-2013 CIP.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	5,093	94	1	0	0	0	0	0	5,188
<b>Project Total:</b>	5,093	94	1	0	0	0	0	0	5,188
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	5,093	94	1	0	0	0	0	0	5,188
<b>Appropriations Total*</b>	5,093	94	1	0	0	0	0	0	5,188
<b>O &amp; M Costs (Savings)</b>			7	7	7	7	7	7	42
<b>Spending Plan</b>		87	1	0	0	0	0	0	88

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# SPU - Drainage & Wastewater

## 47 SW & SW Maplewood Place Landslide

**BCL/Program Name:** Landslide Mitigation & Special Programs

**BCL/Program Code:** C335B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2006

**Project ID:** C363402

**End Date:** 4th Quarter 2012

**Location:** 47th Ave. SW

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Southwest

**Urban Village:** Not in an Urban Village

This project, which was identified during the Comprehensive Drainage Planning process, evaluates an existing storm drain system that traverses a steep slope between 47th Ave. SW and SW Maplewood Pl., and street runoff that is currently routed through a private drainage system. The project constructs measures to stabilize the slope where the storm drain is located, while rerouting street runoff from a private drainage system and outfall to an existing SPU storm drain system. This project is in a preliminary phase of development, and cost estimates will be revised over time. This project is delayed until 2009.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	9	1	1	43	111	116	650	0	931
<b>Project Total:</b>	9	1	1	43	111	116	650	0	931
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	9	1	1	43	111	116	650	0	931
<b>Appropriations Total*</b>	9	1	1	43	111	116	650	0	931
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	5	5

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# SPU - Drainage & Wastewater

## 4th Avenue S/S Trenton Storm Drain

**BCL/Program Name:** Stormwater & Flood Control

**BCL/Program Code:** C332B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C353202

**End Date:** 4th Quarter 2012

**Location:** 4th Ave S & S Trenton St. / 7th Ave S & S Director St.

**Neighborhood Plan:** South Park

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Greater Duwamish

**Urban Village:** South Park

This project installs approximately 1,400 linear feet of conveyance improvements along S Trenton St., 3rd Ave. S and 4th Ave. S, and approximately 2,700 linear feet of conveyance improvements along S Director St. and 7th Ave. S, to resolve a number of documented flooding problems in these areas. The project reduces flows to the combined sewer system in the area by rerouting the drainage from the combined and sanitary system to an existing storm drain on 5th Ave S. A pump station will be installed as a separate construction contract to convey storm water runoff to the Duwamish River during high tide events. The pump station addresses flooding in the primarily industrial neighborhood south of the Duwamish River. This project has been approved by SPU's Asset Management Committee. The confidence level in the current cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	777	793	3,618	4,641	1,258	79	81	0	11,247
<b>Project Total:</b>	777	793	3,618	4,641	1,258	79	81	0	11,247
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	777	793	3,618	4,641	1,258	79	81	0	11,247
<b>Appropriations Total*</b>	777	793	3,618	4,641	1,258	79	81	0	11,247
<b>O &amp; M Costs (Savings)</b>			0	36	72	72	36	36	252
<b>Spending Plan</b>		700	3,618	4,641	1,258	79	81	0	10,377

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### 2008-2013 Proposed Capital Improvement Program

# SPU - Drainage & Wastewater

## Aquatic Habitat Matching Grant Project

<b>BCL/Program Name:</b> Landslide Mitigation & Special Programs	<b>BCL/Program Code:</b> C335B
<b>Project Type:</b> New Facility	<b>Start Date:</b> 1st Quarter 2005
<b>Project ID:</b> C353301	<b>End Date:</b> Ongoing

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This matching grant program provides funding to support community-based projects that improve, preserve and restore aquatic habitat in creeks or along creek, marine or lake shorelines. Projects must provide a direct public benefit to aquatic habitat affected by the City's drainage system operation, and be matched dollar-for-dollar with volunteer labor, cash, donated materials and services, and/or non-City funds. This project was added to the 2005-2010 Adopted CIP by Council action. Grant projects must meet legal requirements for use of drainage and wastewater funds. Resolution 30719 describes grant application criteria and procedures, as well as eligible projects, which may include removal of fish passage blockages, removal of non-native invasive plant species from aquatic habitats, restoration of native plant species, riparian vegetation and natural aquatic habitat features and complexity, removal of bank armoring, and re-establishment of creek connectivity.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	54	556	424	436	447	458	468	480	3,323
<b>Project Total:</b>	54	556	424	436	447	458	468	480	3,323
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	54	556	424	436	447	458	468	480	3,323
<b>Appropriations Total*</b>	54	556	424	436	447	458	468	480	3,323
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		200	424	436	447	458	468	480	2,913

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# SPU - Drainage & Wastewater

## Ballard Combined Sewer Overflow

**BCL/Program Name:** Control Structures

**BCL/Program Code:** C310B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2008

**Project ID:** C303101

**End Date:** 1st Quarter 2020

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Ballard

**Urban Village:** Not in an Urban Village

This project constructs Combined Sewer Overflow (CSO) reduction facilities in the Ballard area, at Basins 150/151 and 152, which discharge to Salmon Bay. Major work includes flow monitoring, system modeling, facility planning, preliminary engineering, design, permits, land acquisition (if necessary), and construction. The project was proposed in the 1988 CSO Control Plan as a joint project with King County. The project began in 2004 but is on hold until 2008; the project budget and schedule have been revised to account for project development and potential coordination with King County. Other work performed under SPU's CSO Facility Retrofit project (C302102) may reduce the size of the necessary facilities in this basin. This project is in a preliminary phase of development and cost estimates will be revised over time. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	309	282	239	589	1,017	407	2,843
<b>Project Total:</b>	0	0	309	282	239	589	1,017	407	2,843
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	309	282	239	589	1,017	407	2,843
<b>Appropriations Total*</b>	0	0	309	282	239	589	1,017	407	2,843
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# SPU - Drainage & Wastewater

## Beer Sheva Habitat Improvement

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 4th Quarter 2001

**Project ID:** C301319

**End Date:** 4th Quarter 2012

**Location:** Seward Park Ave. S/S Henderson St.

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Southeast

**Urban Village:** Not in an Urban Village

This project makes several improvements to create a high-quality fish refuge and rearing habitat at the mouth of Mapes Creek, and a natural creek channel in the lower portion of the creek. The project includes creating a natural creek mouth by placing the creek in an open, meandering creek channel in Beer Sheva Park, and relocating its discharge point into Lake Washington at the edge of the shoreline rather than offshore in deeper water. The middle portion of the creek is re-piped to separate its flow from stormwater and Combined Sewer Overflow discharges, and to improve downstream water quality. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	159	23	45	37	11	11	11	0	297
<b>Project Total:</b>	159	23	45	37	11	11	11	0	297
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	159	23	45	37	11	11	11	0	297
<b>Appropriations Total*</b>	159	23	45	37	11	11	11	0	297
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	1	1

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# SPU - Drainage & Wastewater

## Best Management Practice Program

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 2nd Quarter 2000

**Project ID:** C3313

**End Date:** 4th Quarter 2013

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This program identifies, develops, and implements high-priority water quality improvement projects incorporating Best Management Practices (BMP) as identified by ongoing water quality basin investigations in the Norfolk, South Park, and Densmore drainage basins. In addition, efforts include work in the Lake Washington Drainage basin in order to address SPU's Seattle Housing Authority Integrated Drainage Plan water quality BMP requirements. These projects are designed to improve the quality of stormwater runoff discharged to nearby receiving water bodies (e.g. streams or lakes) from City-owned storm drains. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,033	595	1,429	7,543	2,160	2,133	2,183	1,964	19,040
<b>Project Total:</b>	1,033	595	1,429	7,543	2,160	2,133	2,183	1,964	19,040
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1,033	595	1,429	7,543	2,160	2,133	2,183	1,964	19,040
<b>Appropriations Total*</b>	1,033	595	1,429	7,543	2,160	2,133	2,183	1,964	19,040
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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## 2008-2013 Proposed Capital Improvement Program

# SPU - Drainage & Wastewater

## Bitter Lake/N 137th Stormwater

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 2nd Quarter 2001

**Project ID:** C301322

**End Date:** 4th Quarter 2013

**Location:** Bitter Lake Drainage Basin N 145th St./N 145th St.

**Neighborhood Plan:** Broadview-Bitter Lake-Haller Lake

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest

**Urban Village:** Bitter Lake Village

This project designs and constructs a stormwater treatment facility to improve the quality of stormwater discharging to Bitter Lake and to reduce the frequency of required dredging offshore of the Greenwood Ave. N storm drain outfall in the lake. A preliminary engineering report, completed by a Seattle University civil engineering senior design team in 2000, evaluated options for treating runoff from the Greenwood Ave. N storm drain. Treatment options include wet vaults and media filters with swirl concentrators for pretreatment. Additional work may include evaluation of natural drainage system designs, updating the preliminary engineering analysis to determine the most cost-effective option, and constructing the selected project(s). This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. This project is delayed until 2009.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	14	26	1	26	27	132	452	1,000	1,678
<b>Project Total:</b>	14	26	1	26	27	132	452	1,000	1,678
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	14	26	1	26	27	132	452	1,000	1,678
<b>Appropriations Total*</b>	14	26	1	26	27	132	452	1,000	1,678
<b>O &amp; M Costs (Savings)</b>			2	2	2	2	2	2	12
<b>Spending Plan</b>		1	1	26	27	132	452	1,000	1,639

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# SPU - Drainage & Wastewater

## Bridging the Gap Program-DWF

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** Improved Facility **Start Date:** 1st Quarter 2008  
**Project ID:** C4119-DWF **End Date:** 4th Quarter 2016

**Location:** Multiple

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan Matrix:** A-2, A-3, A-6

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

This program relocates and improves SPU infrastructure as part of the Seattle Department of Transportation's (SDOT) "Bridging the Gap" program. SPU will deliver a variety of drainage and wastewater utility improvements and relocations throughout the City. Typical improvements and relocations may include water and sewer mains, storm detention facilities, natural drainage systems, catch basins, culverts, and inlets. This program protects existing SPU infrastructure, relocates infrastructure as needed, and takes advantage of opportunities to construct priority improvements and enhancements more cost effectively by coordinating projects with SDOT work.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	1,560	1,609	455	470	485	501	5,080
<b>Project Total:</b>	0	0	1,560	1,609	455	470	485	501	5,080
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	1,560	1,609	455	470	485	501	5,080
<b>Appropriations Total*</b>	0	0	1,560	1,609	455	470	485	501	5,080
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# SPU - Drainage & Wastewater

## Capital Planning - CSO Plan Implementation

**BCL/Program Name:** Control Structures

**BCL/Program Code:** C310B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C305101

**End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This project supports implementation of the 2001 Combined Sewer Overflow (CSO) Reduction Plan Update. It conducts project studies and engineering to comply with the City's National Pollutant Discharge Elimination System (NPDES) permit, supports Asset Management Committee presentations for projects, and studies and develops small capital projects necessary to implement the plan. This project is in a preliminary phase of development, and cost estimates will be revised over time. The SPU Asset Management Committee reviewed and approved the project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	588	385	189	263	269	276	282	289	2,541
<b>Project Total:</b>	588	385	189	263	269	276	282	289	2,541
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	588	385	189	263	269	276	282	289	2,541
<b>Appropriations Total*</b>	588	385	189	263	269	276	282	289	2,541
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		150	189	263	269	276	282	289	1,718

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

# SPU - Drainage & Wastewater

## Capital Planning - Flood Control & Local Drainage

**BCL/Program Name:** Stormwater & Flood Control

**BCL/Program Code:** C332B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C343201

**End Date:** Ongoing

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This project develops Flood Control and Local Drainage program projects. Work includes evaluation of potential projects (primarily those identified in the Comprehensive Drainage Plan), including investigation of reported drainage problems. The evaluation includes field verification and technical analysis to obtain information on benefits and level of service. A project proposal, including cost-benefit analysis, is reviewed and approved by SPU's Capital Planning Committee. Staff then develop a Project Development Plan, including documentation and budget input, for approval by SPU's Asset Management Committee. This is an ongoing project and estimates for the out years will be revised over time.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,364	414	289	316	323	331	339	347	3,723
<b>Project Total:</b>	1,364	414	289	316	323	331	339	347	3,723
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1,364	414	289	316	323	331	339	347	3,723
<b>Appropriations Total*</b>	1,364	414	289	316	323	331	339	347	3,723
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	289	316	323	331	339	347	1,945

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# SPU - Drainage & Wastewater

## Capital Planning – Low Impact Development

**BCL/Program Name:** Low Impact Development

**BCL/Program Code:** C334B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2007

**Project ID:** C307017

**End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project creates Low Impact Development program projects. Work includes evaluation of potential projects including investigation of Natural Drainage System facilities or other stormwater treatment/detention strategies to solve problems identified within the stormwater line of business. The evaluation includes field verification and technical analysis to obtain information on benefits and levels of service. A project proposal, including cost-benefit analysis, is reviewed and approved by SPU's Capital Planning Committee. Staff then develops a Project Development Plan, including documentation and budget input, for approval by SPU's Asset Management Committee. This is an ongoing project, and cost estimates for the out years will be revised over time.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	321	141	131	135	138	141	144	1,151
<b>Project Total:</b>	0	321	141	131	135	138	141	144	1,151
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	321	141	131	135	138	141	144	1,151
<b>Appropriations Total*</b>	0	321	141	131	135	138	141	144	1,151
<b>O &amp; M Costs (Savings)</b>			8	8	8	8	8	8	48
<b>Spending Plan</b>		125	141	131	135	138	141	144	955

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

# SPU - Drainage & Wastewater

## Capital Planning - Protection of Beneficial Uses

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C343301

**End Date:** Ongoing

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This project develops other projects in the Protection of Beneficial Uses program. Work includes evaluation of potential projects (primarily those identified in the Comprehensive Drainage Plan) for water quality and habitat benefits. The evaluation of potential projects includes field verification and technical analysis. Analysis to explore solutions, including cost-benefit information, is reviewed and approved by SPU's Capital Planning Committee. A Project Development Plan, including documentation and budget input, is then developed by SPU staff for approval by SPU's Asset Management Committee. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environment. This is an ongoing project, and estimates for the out years will be revised over time.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	904	285	356	415	48	44	45	46	2,143
<b>Project Total:</b>	904	285	356	415	48	44	45	46	2,143
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	904	285	356	415	48	44	45	46	2,143
<b>Appropriations Total*</b>	904	285	356	415	48	44	45	46	2,143
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	356	415	48	44	45	46	954

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

# SPU - Drainage & Wastewater

## Capital Planning - Public Asset Protection

**BCL/Program Name:** Landslide Mitigation & Special Programs                      **BCL/Program Code:** C335B  
**Project Type:** New Facility    **Start Date:** 1st Quarter 2004  
**Project ID:** C343401    **End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This project develops other projects in the Public Asset Protection program. Work includes evaluation of potential projects (primarily those identified in the Comprehensive Drainage Plan), including investigation of reported drainage problems. The evaluation includes field verification and technical analysis to obtain information on benefits and levels of service. A project proposal, including cost-benefit analysis, is reviewed and approved by SPU's Capital Planning Committee. Staff then develops a Project Development Plan, including documentation and budget input, for approval by SPU's Asset Management Committee. This is an ongoing project, and cost estimates will be revised over time.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	251	463	181	502	431	193	790	251	3,062
<b>Project Total:</b>	251	463	181	502	431	193	790	251	3,062
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	251	463	181	502	431	193	790	251	3,062
<b>Appropriations Total*</b>	251	463	181	502	431	193	790	251	3,062
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		175	181	502	431	193	790	251	2,523

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

# SPU - Drainage & Wastewater

## Capital Planning Pump Stations

**BCL/Program Name:** Control Structures

**BCL/Program Code:** C310B

**Project Type:** New Investment

**Start Date:** 1st Quarter 2007

**Project ID:** C307011

**End Date:** Ongoing

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project develops other projects in the Pump Station program. Work includes evaluation of potential improvement, optimization, and rehabilitation projects. Analysis to explore solutions, including cost-benefit information, is reviewed and approved by SPU's Capital Planning Committee. A Project Development Plan, including documentation and budget input, is then developed by SPU staff for approval by SPU's Asset Management Committee. This project is in a preliminary phase of development, and cost estimates will be revised over time.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	267	72	74	75	77	79	1	645
<b>Project Total:</b>	0	267	72	74	75	77	79	1	645
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	267	72	74	75	77	79	1	645
<b>Appropriations Total*</b>	0	267	72	74	75	77	79	1	645
<b>O &amp; M Costs (Savings)</b>			70	70	70	70	70	70	420

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

# SPU - Drainage & Wastewater

## Capitol Hill Water Quality Project

**BCL/Program Name:** Low Impact Development

**BCL/Program Code:** C334B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2006

**Project ID:** C306001

**End Date:** 4th Quarter 2013

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

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Lake Union

**Urban Village:** South Lake Union

This project will construct four blocks of swales and associated drainage infrastructure to treat runoff from over 200 acres of Capitol Hill. This project is in a preliminary phase of development, and cost estimates will be revised during preliminary engineering. SPU's Asset Management Committee will review for cost-benefit impacts and to ensure the appropriate use of drainage funds. The project is dependent on a Memorandum of Agreement with the adjacent property owner.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1	1,653	1,963	1,177	833	882	181	173	6,863
<b>Project Total:</b>	1	1,653	1,963	1,177	833	882	181	173	6,863
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1	1,653	1,963	1,177	833	882	181	173	6,863
<b>Appropriations Total*</b>	1	1,653	1,963	1,177	833	882	181	173	6,863
<b>O &amp; M Costs (Savings)</b>			0	0	8	8	8	12	36
<b>Spending Plan</b>		595	1,963	1,177	833	882	181	173	5,804

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# SPU - Drainage & Wastewater

## Citywide Source Control

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2006

**Project ID:** C363501

**End Date:** 4th Quarter 2008

**Location:**

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project inspects City facilities to observe the implementation of the City stormwater manual. A consultant will identify potential source control problems and possible corrective actions that City departments can undertake to improve water quality and stormwater management. The project's first phase developed criteria to prioritize City facilities, which considered the number of high-pollution-generating activities occurring on the site and the sensitivity of the receiving water bodies. Thirty-four priority facilities were identified and site inspections were conducted on 15 of those sites. Phase two will inspect approximately 100 additional facilities. This assessment is funded through reimbursements from the Cumulative Reserve Subfund to the Drainage and Wastewater Fund.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	74	103	0	0	0	0	0	0	177
<b>Project Total:</b>	74	103	0	0	0	0	0	0	177
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	74	103	0	0	0	0	0	0	177
<b>Appropriations Total*</b>	74	103	0	0	0	0	0	0	177
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# SPU - Drainage & Wastewater

## Combined Sewer Overflow Facility Retrofit

<b>BCL/Program Name:</b> Control Structures	<b>BCL/Program Code:</b> C310B
<b>Project Type:</b> Rehabilitation or Restoration	<b>Start Date:</b> 1st Quarter 2002
<b>Project ID:</b> C302102	<b>End Date:</b> Ongoing

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This project retrofits, upgrades, and modifies existing Combined Sewer Overflow (CSO) reduction facilities in priority CSO basins to optimize system operation and storage. Projects may include weir modifications, construction of system modifications to remove hydraulic constraints or improve system hydraulics, and replacement of tide gates or flow restrictor devices. The project was evaluated during the development of the 2001 CSO Reduction Plan Amendment and provides a cost-effective approach to complying with CSO regulations. SPU's Asset Management Committee has approved the adoption of a formal retrofit program which will design and construct several small retrofit projects each year. The certainty of the cost estimate has a medium confidence level.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	3,532	709	2,092	2,209	2,263	2,316	2,370	1	15,492
<b>Project Total:</b>	3,532	709	2,092	2,209	2,263	2,316	2,370	1	15,492
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	3,532	709	2,092	2,209	2,263	2,316	2,370	1	15,492
<b>Appropriations Total*</b>	3,532	709	2,092	2,209	2,263	2,316	2,370	1	15,492
<b>O &amp; M Costs (Savings)</b>			77	77	77	77	77	77	465
<b>Spending Plan</b>		1,000	2,092	2,209	2,263	2,316	2,370	1	12,251

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# SPU - Drainage & Wastewater

## Combined Sewer Overflow Operations & Maintenance Plan

<b>BCL/Program Name:</b> Control Structures	<b>BCL/Program Code:</b> C310B
<b>Project Type:</b> New Investment	<b>Start Date:</b> 1st Quarter 2007
<b>Project ID:</b> C307005	<b>End Date:</b> 4th Quarter 2011

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project reviews and updates the Operations & Maintenance (O&M) Plan for combined sewer overflows, per requirement of the National Pollutant Discharge Elimination System (NPDES) permit. The plan may include detailed information on standard operations and maintenance procedures as well as manufacturer-recommended O&M procedures. SPU's Asset Management Committee will review and approve the project. The certainty of the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	411	298	368	377	386	0	0	1,840
<b>Project Total:</b>	0	411	298	368	377	386	0	0	1,840
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	411	298	368	377	386	0	0	1,840
<b>Appropriations Total*</b>	0	411	298	368	377	386	0	0	1,840
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	9	9	18
<b>Spending Plan</b>		215	298	368	377	386	0	0	1,644

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

# SPU - Drainage & Wastewater

## Combined Sewer Overflow Plan Update

<b>BCL/Program Name:</b> Control Structures	<b>BCL/Program Code:</b> C310B
<b>Project Type:</b> Improved Facility	<b>Start Date:</b> 1st Quarter 1999
<b>Project ID:</b> C3AA103	<b>End Date:</b> 4th Quarter 2011

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

Combined Sewer Overflow (CSO) reduction plans are required by the Department of Ecology. This project funds preparation of the next plan update, development of the Environmental Impact Statement, and public participation activities. Work involved in the project includes flow monitoring, hydraulic/hydrologic modeling, statistical analysis of historical rainfall patterns, development of performance standards to incorporate uncertainty and probability of compliance with regulations, capital planning, and development/refinement of the CSO Capital Improvement Plan for implementing CSO projects from 2010 through 2020. The consequence of not completing this project is non-compliance with the CSO NPDES permit, which may result in fines or other consequences (e.g., consent decree, administrative order). SPU's Asset Management Committee reviewed and approved development of the plan. The certainty of the cost estimate has a medium confidence level.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,472	703	491	105	108	55	0	0	3,934
<b>Project Total:</b>	2,472	703	491	105	108	55	0	0	3,934
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	2,472	703	491	105	108	55	0	0	3,934
<b>Appropriations Total*</b>	2,472	703	491	105	108	55	0	0	3,934
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		720	491	105	108	55	0	0	1,479

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

# SPU - Drainage & Wastewater

## Combined Sewer Overflow Reporting/Public Notice

**BCL/Program Name:** Control Structures

**BCL/Program Code:** C310B

**Project Type:** New Investment

**Start Date:** 1st Quarter 2007

**Project ID:** C307008

**End Date:** 4th Quarter 2008

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project develops a Public Notification Feasibility Study, per requirement of the National Pollutant Discharge Elimination System (NPDES) permit. The study may survey methods for providing more immediate information to the public regarding combined sewer overflow events, including a possible web-based notification system. The project will involve meeting with constituents and community groups to discuss notification needs. Various notification technologies will be studied and cost-estimated, and a plan for implementing the recommended notification method will be developed. The consequence of not completing this project is non-compliance with the CSO NPDES permit, which may result in fines or other consequences (e.g., consent decree, administrative order). The confidence in the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	115	45	0	0	0	0	0	160
<b>Project Total:</b>	0	115	45	0	0	0	0	0	160
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	115	45	0	0	0	0	0	160
<b>Appropriations Total*</b>	0	115	45	0	0	0	0	0	160
<b>O &amp; M Costs (Savings)</b>			0	1	1	1	1	1	4
<b>Spending Plan</b>		58	45	0	0	0	0	0	103

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

## 2008-2013 Proposed Capital Improvement Program

# SPU - Drainage & Wastewater

## Combined Sewer Overflow Structure Configuration Management

<b>BCL/Program Name:</b> Control Structures	<b>BCL/Program Code:</b> C310B
<b>Project Type:</b> Rehabilitation or Restoration	<b>Start Date:</b> 1st Quarter 2006
<b>Project ID:</b> C306101	<b>End Date:</b> 4th Quarter 2008

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project surveys the condition and configuration of the existing CSO overflow structures. It identifies limitations or deficiencies with the existing structures and makes recommendations for replacement or rehabilitation of the structure. This project will result in a capital plan for rehabilitating/upgrading the CSO overflow structures to ensure that they are functioning properly and meeting their performance objectives. Failure to implement the project may result in failed assets which do not achieve the CSO targets specified in the City's NPDES permit. SPU's Asset Management Committee will review and approve the project. The confidence in the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	116	71	0	0	0	0	0	187
<b>Project Total:</b>	0	116	71	0	0	0	0	0	187
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	116	71	0	0	0	0	0	187
<b>Appropriations Total*</b>	0	116	71	0	0	0	0	0	187
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		101	71	0	0	0	0	0	172

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

# SPU - Drainage & Wastewater

## Combined Sewer Overflow Supplemental Characterization

<b>BCL/Program Name:</b> Control Structures	<b>BCL/Program Code:</b> C310B
<b>Project Type:</b> New Investment	<b>Start Date:</b> 1st Quarter 2007
<b>Project ID:</b> C307006	<b>End Date:</b> 1st Quarter 2010

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project develops and implements a Combined Sewer Overflow (CSO) Supplemental Characterization Sampling and Analysis Plan, per requirement of the National Pollutant Discharge Elimination System (NPDES) permit. The plan will include selection of sampling sites, protocols, sampling, and analysis of CSO flows. Implementation of the Plan will occur in 2007 to 2009 as specified by the NPDES permit. SPU's Asset Management Committee will review and approve the project. The confidence in the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	80	445	421	5	0	0	0	951
<b>Project Total:</b>	0	80	445	421	5	0	0	0	951
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	80	445	421	5	0	0	0	951
<b>Appropriations Total*</b>	0	80	445	421	5	0	0	0	951
<b>O &amp; M Costs (Savings)</b>			0	0	0	5	5	5	14
<b>Spending Plan</b>		406	445	421	5	0	0	0	1,277

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

# SPU - Drainage & Wastewater

## Creek Flow Control Implementation

**BCL/Program Name:** Low Impact Development

**BCL/Program Code:** C334B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2009

**Project ID:** C310001

**End Date:** 1st Quarter 2016

**Location:** Citywide

**Neighborhood Plan:** Delridge

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This project builds flow control projects in targeted Seattle creek areas. High stormwater flows have resulted in aquatic ecosystem degradation. The project's objectives include the reduction of stormwater discharge entering creeks, the reduction of associated habitat degradation, and the potential associated reduction of water quality pollutants. The project's benefits include improving creek ecosystems and potentially protecting property from flooding. Projects to be constructed are determined by the results of preliminary engineering. This project is in a preliminary phase of development, and cost estimates will be revised over time. Specific proposed projects are evaluated by SPU's Asset Management Committee for cost-benefit impacts and to ensure the appropriate use of drainage funds. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	0	526	539	3,308	2,427	347	7,147
<b>Project Total:</b>	0	0	0	526	539	3,308	2,427	347	7,147
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	0	526	539	3,308	2,427	347	7,147
<b>Appropriations Total*</b>	0	0	0	526	539	3,308	2,427	347	7,147
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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

# SPU - Drainage & Wastewater

## Creeks Habitat Complexity Program

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C353302

**End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This program addresses altered stream and shoreline habitat. The program increases in-stream habitat complexity and establishes conditions that result in increased pools, riffles, and fish refuge habitat, by adding large, woody debris or boulders to creeks and creek mouths. Different sites are designed and constructed each year, with an initial focus on land owned by the Seattle Department of Parks and Recreation (Parks). Individual projects are identified and prioritized based on expected habitat benefits and ease of implementation. The project results in costs to Parks to operate and maintain the habitat improvements, but these costs have not yet been determined. The SPU Asset Management Committee approved this project and the confidence level of current cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	383	97	79	87	91	116	119	116	1,088
<b>Project Total:</b>	383	97	79	87	91	116	119	116	1,088
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	383	97	79	87	91	116	119	116	1,088
<b>Appropriations Total*</b>	383	97	79	87	91	116	119	116	1,088
<b>O &amp; M Costs (Savings)</b>			5	5	5	5	5	5	30
<b>Spending Plan</b>		77	79	87	91	116	119	116	685

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

# SPU - Drainage & Wastewater

## Creeks Vegetation Program

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C353304

**End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Aurora Licton

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This project established the first six years of a 20-year effort to protect and restore more than 300 acres of publicly-owned forest located along riparian corridors. This project removes invasive plants from selected sites each year, adds native trees and shrubs, and provides maintenance for the first three years. SPU is working in partnership with the Seattle Department of Parks and Recreation and the City's Office of Sustainability and Environment. Restoring the riparian forest helps ensure creeks have cooler water with more oxygen and creek banks remain stable. The project also reduces the amount of runoff reaching creeks during storm events. This project supports both the Mayor's Green Seattle Initiative to reforest riparian areas along urban creeks, and the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environment.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	267	185	161	168	178	185	191	185	1,520
<b>Project Total:</b>	267	185	161	168	178	185	191	185	1,520
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	267	185	161	168	178	185	191	185	1,520
<b>Appropriations Total*</b>	267	185	161	168	178	185	191	185	1,520
<b>O &amp; M Costs (Savings)</b>			8	8	8	8	8	8	46
<b>Spending Plan</b>		155	161	168	178	185	191	185	1,223

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

# SPU - Drainage & Wastewater

## Demand Management

**BCL/Program Name:** Shared Cost Projects  
**Project Type:** Improved Facility  
**Project ID:** C407019

**BCL/Program Code:** C410B  
**Start Date:** 1st Quarter 2007  
**End Date:** 4th Quarter 2012

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This project aims to reduce the amount of stormwater going into the wastewater system, part of a program to manage demand for wastewater capital facilities. Phase 1 will identify and evaluate promising stormwater and wastewater strategies for citywide application and build a toolkit. Potential solutions include downtown building detention facilities, strategic source separation, natural systems, green roofs, porous pavement, cisterns, and landscaping opportunities. Phase 1 also includes an in-depth analysis of what, if any, demand management strategies should be implemented in the Alaskan Way Viaduct project area. Phase 2 of this project is anticipated to identify and implement small capital projects across the city. The confidence level of the cost estimates is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	600	600	600	1,923	2,040	2,166	0	7,929
<b>Project Total:</b>	0	600	600	600	1,923	2,040	2,166	0	7,929
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	600	600	600	1,923	2,040	2,166	0	7,929
<b>Appropriations Total*</b>	0	600	600	600	1,923	2,040	2,166	0	7,929
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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

# SPU - Drainage & Wastewater

## Design Standards & Guidelines - DRN

**BCL/Program Name:** Landslide Mitigation & Special Programs

**BCL/Program Code:** C335B

**Project Type:** New Investment

**Start Date:** 1st Quarter 2005

**Project ID:** C353501

**End Date:** 4th Quarter 2008

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This program creates detailed design standards and guidelines for the development of various types of drainage facilities to streamline future design efforts, reduce costs, and increase the quality of future facilities. This program is conducted with staff from the SPU Engineering and Operations divisions. The project supports benchmarking efforts by SPU's Asset Management Committee and implementation of SPU's Strategic Business Plan. Also incorporated into this project is the regulatory requirement to update Seattle's thresholds, performance standards, and design criteria in its municipal codes to comply with the NPDES permit issued by Ecology under the federal Clean Water Act. Confidence level in the cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	666	449	350	0	0	0	0	0	1,465
<b>Project Total:</b>	666	449	350	0	0	0	0	0	1,465
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	666	449	350	0	0	0	0	0	1,465
<b>Appropriations Total*</b>	666	449	350	0	0	0	0	0	1,465
<b>O &amp; M Costs (Savings)</b>			100	100	100	100	100	100	600
<b>Spending Plan</b>		1,000	350	0	0	0	0	0	1,350

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

# SPU - Drainage & Wastewater

## Design Standards & Guidelines - WW

**BCL/Program Name:** Wastewater Conveyance

**BCL/Program Code:** C320B

**Project Type:** New Investment

**Start Date:** 1st Quarter 2005

**Project ID:** C305201

**End Date:** 4th Quarter 2008

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This program creates detailed design standards and guidelines for the development of various types of wastewater facilities to streamline future design efforts, reduce costs, and increase the quality of future facilities. This program is conducted with staff from the SPU Engineering and Operations divisions. The project supports benchmarking efforts by SPU's Asset Management Committee and implementation of SPU's Strategic Business Plan. Confidence level in the cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	130	281	416	0	0	0	0	0	827
<b>Project Total:</b>	130	281	416	0	0	0	0	0	827
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	130	281	416	0	0	0	0	0	827
<b>Appropriations Total*</b>	130	281	416	0	0	0	0	0	827
<b>O &amp; M Costs (Savings)</b>			100	100	100	100	100	100	600
<b>Spending Plan</b>		275	416	0	0	0	0	0	691

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

# SPU - Drainage & Wastewater

## Drainage & Wastewater Partnership Program - DRN

**BCL/Program Name:** Landslide Mitigation & Special Programs                      **BCL/Program Code:** C335B  
**Project Type:** New Facility    **Start Date:** 1st Quarter 2007  
**Project ID:** C3335    **End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This program funds selected projects that use stormwater management systems or technologies to provide benefits to the drainage and wastewater ratepayers. Proposed projects must be constructed over and above basic regulatory compliance and meet specific criteria to be eligible for funding. SPU is responsible for selecting the projects that will participate in the program. 2007 and 2008 will be pilot years for the program. Cost estimates may be revised over time. The intent is for this program to be open to other customers as well as to all City departments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	350	359	158	162	198	1,467	1,502	4,196
<b>Project Total:</b>	0	350	359	158	162	198	1,467	1,502	4,196
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	350	359	158	162	198	1,467	1,502	4,196
<b>Appropriations Total*</b>	0	350	359	158	162	198	1,467	1,502	4,196
<b>O &amp; M Costs (Savings)</b>			21	21	21	21	21	21	126

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

# SPU - Drainage & Wastewater

## Drainage & Wastewater Partnership Program - WW

**BCL/Program Name:** Wastewater Conveyance **BCL/Program Code:** C320B  
**Project Type:** New Facility **Start Date:** 1st Quarter 2007  
**Project ID:** C3203 **End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan Matrix:** N/A  
**Neighborhood District:** Not in a Neighborhood District **Urban Village:** Not in an Urban Village

This program funds selected projects that use stormwater management systems or technologies to provide benefits to the drainage and wastewater ratepayers. Proposed projects must be constructed over and above basic regulatory compliance and meet specific criteria to be eligible for funding. SPU is responsible for selecting the projects that will participate in the program. 2007-2008 will be pilot years for the program. Cost estimates may be revised over time. The intent is for this program to be open to other customers as well as to all City departments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	50	17	1	1	1	1	1	72
<b>Project Total:</b>	0	50	17	1	1	1	1	1	72
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	50	17	1	1	1	1	1	72
<b>Appropriations Total*</b>	0	50	17	1	1	1	1	1	72
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

## Drainage Spot Improvements

**BCL/Program Name:** Landslide Mitigation & Special Programs **BCL/Program Code:** C335B  
**Project Type:** Rehabilitation or Restoration **Start Date:** 2nd Quarter 1998  
**Project ID:** C333201 **End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan Matrix:** N/A  
**Neighborhood District:** In more than one District **Urban Village:** In more than one Urban Village

This program makes a number of spot improvements to drainage systems throughout Seattle. Projects increase the capacity of the drainage systems and prevent flooding. Typical improvements include installation of inlets and catch-basins, construction of ditches and grassed swales, and installation of culverts. Funding to maintain the improvements made under this program is included SPU's Operating Budget. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,072	296	219	263	269	276	282	289	2,966
<b>Project Total:</b>	1,072	296	219	263	269	276	282	289	2,966
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1,072	296	219	263	269	276	282	289	2,966
<b>Appropriations Total*</b>	1,072	296	219	263	269	276	282	289	2,966
<b>O &amp; M Costs (Savings)</b>			3	3	3	3	3	3	18
<b>Spending Plan</b>		275	219	263	269	276	282	289	1,873

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## 2008-2013 Proposed Capital Improvement Program

# SPU - Drainage & Wastewater

## Fecal TMDL Feasibility

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 4th Quarter 2004

**Project ID:** C343302

**End Date:** 4th Quarter 2008

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This project investigates bacteria problems identified in Seattle's creeks and evaluates options for reducing bacteria levels, including treatment. Work focuses on watersheds that are affected by Total Maximum Daily Loadwater quality regulations. This includes Pipers, Thornton, and Longfellow creeks, after completion of additional work to identify sources of fecal coliform bacteria in these three basins. The project includes funding for development of a pilot project to test performance of some of the alternatives identified during the investigation. Understanding of bacteria sources is key to developing solutions and identifying potential sites for pilot testing. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	108	100	41	0	0	0	0	0	249
<b>Project Total:</b>	108	100	41	0	0	0	0	0	249
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	108	100	41	0	0	0	0	0	249
<b>Appropriations Total*</b>	108	100	41	0	0	0	0	0	249
<b>O &amp; M Costs (Savings)</b>			0	1	1	1	1	1	6

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# SPU - Drainage & Wastewater

## Fish Passage Program

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C353305

**End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** In more than one Plan

**Neighborhood Plan Matrix:** Multiple

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

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

This program removes top-priority fish passage barriers in the city that meet requirements for the use of drainage funds. Within the five fish-bearing creeks in Seattle, there are nearly 90 documented barriers to fish passage. The prioritized list of barriers that this project addresses changes as fish move into new areas, fish populations increase or decrease, and downstream barriers are modified or removed by SPU or others. SPU's Asset Management Committee approved this project. This project is in a preliminary phase of development, and cost estimates will be revised over time. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. This project is delayed until 2009.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	137	7	1	60	81	165	169	185	805
<b>Project Total:</b>	137	7	1	60	81	165	169	185	805
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	137	7	1	60	81	165	169	185	805
<b>Appropriations Total*</b>	137	7	1	60	81	165	169	185	805
<b>O &amp; M Costs (Savings)</b>			4	4	4	4	4	4	24
<b>Spending Plan</b>		6	1	60	81	165	169	185	667

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# SPU - Drainage & Wastewater

## Fremont-Wallingford Combined Sewer Overflow

<b>BCL/Program Name:</b> Control Structures	<b>BCL/Program Code:</b> C310B
<b>Project Type:</b> Improved Facility	<b>Start Date:</b> 1st Quarter 2008
<b>Project ID:</b> C303102	<b>End Date:</b> 1st Quarter 2020

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project constructs Combined Sewer Overflow (CSO) reduction facilities in the Fremont/Wallingford area, at Basins 147 and 174. Major work includes flow monitoring, system modeling, facility planning, preliminary engineering, design, permits, land acquisition (if necessary), and construction. Work performed in the initial planning phase collects additional data and re-evaluates alternatives prior to allocating and spending additional funds. The project budget and schedule have been revised from the 2001 CSO Plan to account for project development, CSO Retrofit Implementation (which may reduce the size of the necessary facilities in this basin), and potential coordination with King County. The proposed allocation for 2008 would provide funds for initial planning work, with future allocations to be determined after the study is completed. This project is in a preliminary phase of development, and cost estimates will be revised over time. SPU's Asset Management Committee will review the project in 2008.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	348	265	222	1,077	1,828	1,024	4,764
<b>Project Total:</b>	0	0	348	265	222	1,077	1,828	1,024	4,764
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	348	265	222	1,077	1,828	1,024	4,764
<b>Appropriations Total*</b>	0	0	348	265	222	1,077	1,828	1,024	4,764
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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

# SPU - Drainage & Wastewater

## Future Combined Sewer Overflow Reduction

<b>BCL/Program Name:</b> Control Structures	<b>BCL/Program Code:</b> C310B
<b>Project Type:</b> New Investment	<b>Start Date:</b> 1st Quarter 2008
<b>Project ID:</b> C309002	<b>End Date:</b> Ongoing

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project is a placeholder for Combined Sewer Overflow (CSO) reduction projects that have yet to be identified in detail. It will be utilized to reduce CSOs to less than one overflow per year in basins that are exceeding this service level, yet do not currently have specific projects identified by the CSO reduction plan.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	1	789	808	1,103	3,386	5,778	11,865
<b>Project Total:</b>	0	0	1	789	808	1,103	3,386	5,778	11,865
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	1	789	808	1,103	3,386	5,778	11,865
<b>Appropriations Total*</b>	0	0	1	789	808	1,103	3,386	5,778	11,865
<b>O &amp; M Costs (Savings)</b>			62	62	62	62	62	62	371

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

# SPU - Drainage & Wastewater

## Georgetown Flume Drainage Improvements

**BCL/Program Name:** Stormwater & Flood Control

**BCL/Program Code:** C332B

**Project Type:** Improved Facility

**Start Date:** 1st Quarter 2007

**Project ID:** C307019

**End Date:** 4th Quarter 2008

**Location:** S Willow St/E Marginal Way S at Slip 4

**Neighborhood Plan:** Georgetown

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Greater Duwamish

**Urban Village:** Not in an Urban Village

This project designs and constructs a new drainage system to replace the existing Georgetown flume system. The Georgetown flume currently functions as a storm drain, serving an approximately 10-acre basin at the north end of the King County Airport and discharges to the head of Slip 4. This area has been designated as an early action cleanup site as part of the Lower Duwamish Waterway Superfund project due to the presence of elevated levels of Polychlorinated Biphenyls (PCBs), phthalates (plasticizers), and other chemicals in the waterway sediment. The flume is owned by Seattle City Light and historically was used to convey cooling water from the Georgetown Steamplant, as well as numerous industrial discharges. It now collects runoff from City rights-of-way and private properties along S. Myrtle and S. Willow Streets, as well as runoff from areas immediately adjacent to the flume. The flume consists of a combination of pipes and wood or concrete-lined flumes that run about 2,500 feet across the north end of the King County Airport.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	3	209	1,023	0	0	0	0	0	1,235
<b>Project Total:</b>	3	209	1,023	0	0	0	0	0	1,235
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	3	209	1,023	0	0	0	0	0	1,235
<b>Appropriations Total*</b>	3	209	1,023	0	0	0	0	0	1,235
<b>O &amp; M Costs (Savings)</b>			0	0	15	15	15	15	60
<b>Spending Plan</b>		460	1,023	0	0	0	0	0	1,483

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

# SPU - Drainage & Wastewater

## Golden Gardens/View Avenue Landslide

**BCL/Program Name:** Landslide Mitigation & Special Programs

**BCL/Program Code:** C335B

**Project Type:** New Facility

**Start Date:** 2nd Quarter 2004

**Project ID:** C343403

**End Date:** 4th Quarter 2008

**Location:** Golden Garden Dr. NW/View Dr. NW

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest

**Urban Village:** Not in an Urban Village

This project performs preliminary engineering, initial design of a landslide mitigation project, and the design and construction of the SPU-only portion of the mitigation project in the area of Golden Gardens Drive NW and View Ave. NW. There is uncontrolled stormwater discharging off of View Ave. NW onto private properties and an eight inch sewer line and pump station on a steep slope that has experienced several landslides in the past. The Seattle Department of Parks and Recreation (Parks) owns property down slope of both streets, and Golden Gardens Drive NW has been damaged from past slides. This project has been identified as a potential joint project between SPU, Parks, and the Seattle Department of Transportation. The project is in the design phase, and cost estimates will be revised over time. The SPU Asset Management Committee (AMC) approved this project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	160	293	1	0	0	0	0	0	454
<b>Project Total:</b>	160	293	1	0	0	0	0	0	454
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	160	293	1	0	0	0	0	0	454
<b>Appropriations Total*</b>	160	293	1	0	0	0	0	0	454
<b>O &amp; M Costs (Savings)</b>			3	3	3	3	3	3	18
<b>Spending Plan</b>		229	1	0	0	0	0	0	230

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

### 2008-2013 Proposed Capital Improvement Program

# SPU - Drainage & Wastewater

## Greenwood Peat Bog

**BCL/Program Name:** Landslide Mitigation & Special Programs

**BCL/Program Code:** C335B

**Project Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2003

**Project ID:** C333207

**End Date:** 4th Quarter 2009

**Location:** NW 85th St. & NW 97th St. & Greenwood Ave. N & 8th Av. N

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest

**Urban Village:** Not in an Urban Village

This project monitors the physical features of the Greenwood Peat Bog basin for a five-year period, including groundwater levels, stormwater and creek flows (one year only), precipitation, and ground elevations. The purpose of this project is to characterize the groundwater hydrology of the area, and in particular the response of groundwater to variations in precipitation and other factors (e.g., dewatering) and the corresponding impact on ground settlement. The confidence level of the current cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	254	25	25	114	0	0	0	0	418
<b>Project Total:</b>	254	25	25	114	0	0	0	0	418
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	254	25	25	114	0	0	0	0	418
<b>Appropriations Total*</b>	254	25	25	114	0	0	0	0	418
<b>O &amp; M Costs (Savings)</b>			0	0	2	2	2	2	8
<b>Spending Plan</b>		76	25	114	0	0	0	0	215

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

### 2008-2013 Proposed Capital Improvement Program

# SPU - Drainage & Wastewater

## Greenwood Water Quality Best Management Practice

**BCL/Program Name:** Protection of Beneficial Uses **BCL/Program Code:** C333B  
**Project Type:** New Facility **Start Date:** 1st Quarter 2006  
**Project ID:** C353306 **End Date:** 4th Quarter 2008

**Location:** N 105th St./N 112th St.

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan Matrix:** N/A  
**Neighborhood District:** North **Urban Village:** Not in an Urban Village

This project designs and constructs a stormwater treatment facility to meet code requirements for a portion of the Seattle Department of Transportation (SDOT) roadway improvement project on Greenwood Ave. N between N 105th and N 112th Streets. See SDOT project TC36638 for more transportation-related information. SPU and SDOT have agreed that the existing natural drainage system on NW 110th St can be modified to meet most of the drainage requirements. This project provides treatment for the section of Greenwood Ave. N between NW 105th and NW 107th via a media filtration vault or other conventional stormwater treatment system. The project also includes grant funding for the SDOT roadway improvement project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	23	0	410	0	0	0	0	0	433
<b>Project Total:</b>	23	0	410	0	0	0	0	0	433
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	23	0	410	0	0	0	0	0	433
<b>Appropriations Total*</b>	23	0	410	0	0	0	0	0	433
<b>O &amp; M Costs (Savings)</b>			0	2	2	2	2	2	11

## Heavy Equipment Purchases - DWF

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** New Investment **Start Date:** 1st Quarter 2007  
**Project ID:** C4116-DWF **End Date:** Ongoing

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan Matrix:** N/A  
**Neighborhood District:** In more than one District **Urban Village:** Not in an Urban Village

This project replaces existing heavy equipment (such as vactors, loaders, and bulldozers) used by SPU field crews, purchases new equipment, and retrofits existing equipment to meet SPU operational needs and initiatives.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	1,824	4,534	1,645	1,233	1,555	1,799	1,666	14,256
<b>Project Total:</b>	0	1,824	4,534	1,645	1,233	1,555	1,799	1,666	14,256
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	1,824	4,534	1,645	1,233	1,555	1,799	1,666	14,256
<b>Appropriations Total*</b>	0	1,824	4,534	1,645	1,233	1,555	1,799	1,666	14,256
<b>O &amp; M Costs (Savings)</b>			71	71	71	71	71	71	428
<b>Spending Plan</b>		1,137	4,534	1,645	1,233	1,555	1,799	1,666	13,569

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

## 2008-2013 Proposed Capital Improvement Program

# SPU - Drainage & Wastewater

## High Point Drainage System

**BCL/Program Name:** Low Impact Development

**BCL/Program Code:** C334B

**Project Type:** New Facility

**Start Date:** 4th Quarter 2001

**Project ID:** C301303

**End Date:** 4th Quarter 2011

**Location:** SW Juneau St./SW Myrtle St./High Point Drive SW/32nd Ave SW

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Southwest

**Urban Village:** Not in an Urban Village

This project funds SPU's share of a partnership with the Seattle Housing Authority (SHA) to construct 34 blocks of natural drainage system in SHA's High Point 120-acre redevelopment. The natural drainage system project retrofits 9% of the Longfellow Creek Watershed to meet the pre-developed pasture runoff conditions for the two-year design storm, as well as provide a distributed, block-scale water quality treatment system. The drainage system also includes construction of porous pavement sidewalks and one block of porous pavement street. The project enables SPU to achieve flood control and water quality objectives in the project area at a lower cost than through either development of a large regional drainage and water quality facility, or through retrofit of currently-developed streets to include natural drainage systems.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,654	1,376	721	168	108	83	0	0	5,110
<b>Project Total:</b>	2,654	1,376	721	168	108	83	0	0	5,110
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	2,654	1,376	721	168	108	83	0	0	5,110
<b>Appropriations Total*</b>	2,654	1,376	721	168	108	83	0	0	5,110
<b>O &amp; M Costs (Savings)</b>			15	64	65	65	65	65	339
<b>Spending Plan</b>		750	721	168	108	83	0	0	1,830

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

# SPU - Drainage & Wastewater

## I-5 Pavement Reconstruction - DWF

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** Improved Facility **Start Date:** 1st Quarter 2007  
**Project ID:** C407022-DWF **End Date:** 4th Quarter 2020

**Location:** I-5

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan Matrix:** N/A  
**Neighborhood District:** In more than one District **Urban Village:** In more than one Urban Village

This program relocates or replaces drainage and wastewater related facilities affected by the Washington State Department of Transportation's (WSDOT) I-5 Pavement Reconstruction Project. WSDOT plans to reconstruct 16 miles of I-5 pavement from Tukwila/Seattle city limits north to NE 145th. Interstate 5, the only north-south interstate freeway in Washington state, carries 280,000 vehicles through Seattle per day, and the pavement is wearing out. I-5 was built in the 1960s, and its use has exceeded its lifespan. The concrete is now 40 years old and needs to be replaced. Repairing I-5 offers a unique opportunity to improve traffic flow and meet current drainage code requirements. The projects will be coordinated with other transportation projects in the area including the Alaskan Way Viaduct project, the SR 520 Bridge Replacement project, Light Rail, and I-405 and SR 509 improvements. The confidence level of the cost estimate is low due to the early planning stage for this project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	132	139	150	163	167	180	168	1,099
<b>Project Total:</b>	0	132	139	150	163	167	180	168	1,099
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	132	139	150	163	167	180	168	1,099
<b>Appropriations Total*</b>	0	132	139	150	163	167	180	168	1,099
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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

# SPU - Drainage & Wastewater

## Integrated Control Monitoring Program - DWF

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** New Investment **Start Date:** 1st Quarter 2002  
**Project ID:** C4108-DWF **End Date:** 4th Quarter 2013

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This program integrates drainage and wastewater field data into the new Supervisory Control and Data Acquisition (SCADA) system installed as part of CIP project C195008. This program is broken down into two concurrent projects. Project One will integrate wastewater and surface water field monitoring systems into the new SCADA system at the Operations Control Center. This will upgrade approximately 85 combined sewer overflow sites, 68 wastewater lift stations, 17 rain gauge sites, and the communication infrastructure. The project defines and implements processes, procedures, and interfaces to make quality-validated SCADA measurement data available to operators, planners, and management. This data will be used to assist in capacity planning, validating repairs, assessing new permits, and prioritizing planned maintenance. Project Two integrates SCADA with SPU asset and maintenance information management systems. SCADA measurement data will be used to assist in capacity planning, validating repairs, and identifying blockages.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2	1,446	3,775	2,980	3,297	3,727	3,934	4,157	23,318
<b>Project Total:</b>	2	1,446	3,775	2,980	3,297	3,727	3,934	4,157	23,318
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	2	1,446	3,775	2,980	3,297	3,727	3,934	4,157	23,318
<b>Appropriations Total*</b>	2	1,446	3,775	2,980	3,297	3,727	3,934	4,157	23,318
<b>O &amp; M Costs (Savings)</b>			319	499	594	689	784	784	3,669

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# SPU - Drainage & Wastewater

## Intergovernmental Shares - DRN

**BCL/Program Name:** Landslide Mitigation & Special Programs      **BCL/Program Code:** C335B  
**Project Type:** New Facility      **Start Date:** 1st Quarter 2004  
**Project ID:** C3355      **End Date:** 4th Quarter 2008

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This program provides funding to enable SPU to collaborate with other City departments that are implementing projects that have a drainage fund nexus and create a benefit for the drainage system. Proposed projects must meet specific criteria to be eligible for funding. SPU is responsible for selecting the projects that will participate in the program. By 2009, this project will transition to the Drainage & Wastewater Partnership Program (C3335), which has a broader pool of applicants.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	375	1,975	1,873	0	0	0	0	0	4,223
<b>Project Total:</b>	375	1,975	1,873	0	0	0	0	0	4,223
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	375	1,975	1,873	0	0	0	0	0	4,223
<b>Appropriations Total*</b>	375	1,975	1,873	0	0	0	0	0	4,223
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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

# SPU - Drainage & Wastewater

## Intergovernmental Shares - WW

**BCL/Program Name:** Wastewater Conveyance

**BCL/Program Code:** C320B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C3205

**End Date:** 4th Quarter 2008

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This program provides funding to enable SPU to collaborate with other City departments that are implementing projects that have a wastewater fund nexus and that create a benefit for the wastewater system. Proposed projects must meet specific criteria to be eligible for funding. SPU is responsible for selecting the projects that will participate in the program. By 2009, this project will transition to the Drainage & Wastewater Partnership Program (C3203), which has a broader pool of applicants.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	251	300	308	0	0	0	0	0	859
<b>Project Total:</b>	251	300	308	0	0	0	0	0	859
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	251	300	308	0	0	0	0	0	859
<b>Appropriations Total*</b>	251	300	308	0	0	0	0	0	859
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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

# SPU - Drainage & Wastewater

## Jackson Park Detention - Phase 2

**BCL/Program Name:** Stormwater & Flood Control **BCL/Program Code:** C332B  
**Project Type:** New Facility **Start Date:** 2nd Quarter 1999  
**Project ID:** C399305 **End Date:** 4th Quarter 2009

**Location:** Jackson Park Golf Course

**Neighborhood Plan:** Broadview-Bitter Lake-Haller Lake **Neighborhood Plan Matrix:** N/A  
**Neighborhood District:** North **Urban Village:** Not in an Urban Village

The project constructed three detention ponds in the Jackson Park golf course, rerouted 1,600 feet of Thornton Creek channel and improved habitat for fish and wildlife. This project was substantially completed in 2003 and physical completion notice was issued in April 2004. Remaining work includes post-construction monitoring, reporting to external agencies and riparian plant establishment to meet Federal permitting requirements. This project is in the close out phase.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	10,664	123	38	53	0	0	0	0	10,878
<b>Project Total:</b>	10,664	123	38	53	0	0	0	0	10,878
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	10,664	123	38	53	0	0	0	0	10,878
<b>Appropriations Total*</b>	10,664	123	38	53	0	0	0	0	10,878
<b>O &amp; M Costs (Savings)</b>			45	45	45	45	45	45	270
<b>Spending Plan</b>		67	38	53	0	0	0	0	158

## King Street Station Rehabilitation

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** Rehabilitation or Restoration **Start Date:** 1st Quarter 2008  
**Project ID:** C408S05 **End Date:** 4th Quarter 2008

**Location:** King Street

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan Matrix:** N/A  
**Neighborhood District:** Not in a Neighborhood District **Urban Village:** Not in an Urban Village

This project will replace or relocate SPU drainage and wastewater facilities impacted by SDOT work at King Street Station. In addition, SPU will evaluate opportunities for low-impact development treatment, such as disconnecting roof drains and creating mini-swales for drainage. The SDOT project is to rehabilitate the historically-designated King Street Station structure that is being acquired from Burlington Northern Santa Fe Railway.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	308	0	0	0	0	0	308
<b>Project Total:</b>	0	0	308	0	0	0	0	0	308
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	308	0	0	0	0	0	308
<b>Appropriations Total*</b>	0	0	308	0	0	0	0	0	308
<b>O &amp; M Costs (Savings)</b>			0	2	2	2	2	2	8

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# SPU - Drainage & Wastewater

## Lakewood Raincatcher Pilot Project

**BCL/Program Name:** Wastewater Conveyance

**BCL/Program Code:** C320B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C305202

**End Date:** 4th Quarter 2013

**Location:** Lakewood Avenue South

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Southeast

**Urban Village:** Columbia City

This project studies decentralized alternatives to manage the collection, conveyance, and disposal of stormwater in combined sewer or partially separated sewer basins. The project also implements a stormwater cistern and rain garden demonstration project in the Lakewood Avenue SE neighborhood, which includes conducting pre- and post-project monitoring, marketing, and modeling. The project was created in 2004 by Ordinance 121553, and is partially funded by a \$1.3 million grant from the EPA. The confidence in the budget is low as this project is still in preliminary engineering.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	428	851	523	170	60	64	49	58	2,203
<b>Project Total:</b>	428	851	523	170	60	64	49	58	2,203
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	428	851	523	170	60	64	49	58	2,203
<b>Appropriations Total*</b>	428	851	523	170	60	64	49	58	2,203
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		235	523	170	60	64	49	58	1,159

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**2008-2013 Proposed Capital Improvement Program**

# SPU - Drainage & Wastewater

## Localized Flood Control Program

**BCL/Program Name:** Stormwater & Flood Control

**BCL/Program Code:** C332B

**Project Type:** New Facility

**Start Date:** Ongoing

**Project ID:** C3312

**End Date:** 4th Quarter 2013

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This program reduces flooding and the impacts of stormwater associated with the local collection and conveyance system. This local system is a secondary system of pipes, ditches, creek tributaries, culverts, inlets, and catch basins that collect and convey stormwater runoff to the primary (a.k.a. trunk) conveyance system, though in some instances the secondary system discharges directly to a receiving water body. This program will bridge the gap between Spot Drainage projects and Major CIP projects. The construction of these medium-size projects will help reduce flooding throughout the City. The confidence level in the current cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	684	250	1,081	216	1,137	868	4,874	4,738	13,848
<b>Project Total:</b>	684	250	1,081	216	1,137	868	4,874	4,738	13,848
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	684	250	1,081	216	1,137	868	4,874	4,738	13,848
<b>Appropriations Total*</b>	684	250	1,081	216	1,137	868	4,874	4,738	13,848
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		442	1,081	216	1,137	868	4,874	4,738	13,356

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

# SPU - Drainage & Wastewater

## Madison Valley Long Term Solution

**BCL/Program Name:** Stormwater & Flood Control

**BCL/Program Code:** C332B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2007

**Project ID:** C307014

**End Date:** 4th Quarter 2013

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Central

**Urban Village:** Not in an Urban Village

This project (Phase IV) will implement a permanent solution to stormwater flooding and side sewer backups in the Madison Valley area. Earlier phases of the project, including the Madison Valley Interim Solution Project (Madison Valley Phase III) constructed emergency and temporary solutions. These include storage of up to one million gallons of stormwater and flow control gates to reduce side sewer backups. However, computer flow modeling and additional basin and rainfall analysis has indicated that the required stormwater capacity during intense storm events could exceed three million gallons, necessitating further analysis and planning for a long-term solution. The initial project development plan was approved by SPU's Asset Management Committee. SPU is evaluating a range of solutions, with costs from \$15 million to \$80 million. The budget shown below reflects a mid-range estimate for rate-planning purposes and will be updated when a final concept is selected.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1	1,032	3,725	15,776	12,931	110	56	58	33,689
<b>Project Total:</b>	1	1,032	3,725	15,776	12,931	110	56	58	33,689
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1	1,032	3,725	15,776	12,931	110	56	58	33,689
<b>Appropriations Total*</b>	1	1,032	3,725	15,776	12,931	110	56	58	33,689
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		1,300	3,725	15,776	12,931	110	56	58	33,956

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

# SPU - Drainage & Wastewater

## Meadowbrook Outfall Rehabilitation

**BCL/Program Name:** Stormwater & Flood Control

**BCL/Program Code:** C332B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C353206

**End Date:** 2nd Quarter 2008

**Location:** Riviera Pl. NE & NE 105th & NE 106th St.

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** North

**Urban Village:** Not in an Urban Village

This project repairs or replaces three damaged outfall pipes discharging overflow stormwater from Meadowbrook Pond to Lake Washington at Riviera Place NE between NE 106th St. and NE 105th St. Alternatives to repairing or replacing the three outfall pipes were investigated, and the conditions of related structures, including a seawall, were assessed. Investigation has shown that since just two of the three outfall pipes could handle the design flow, only those pipes will be repaired, and the third outfall pipe will be abandoned.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	446	1,243	22	0	0	0	0	0	1,711
<b>Project Total:</b>	446	1,243	22	0	0	0	0	0	1,711
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	446	1,243	22	0	0	0	0	0	1,711
<b>Appropriations Total*</b>	446	1,243	22	0	0	0	0	0	1,711
<b>O &amp; M Costs (Savings)</b>			0	12	12	12	12	12	60
<b>Spending Plan</b>		1,715	22	0	0	0	0	0	1,737

## Meter Replacement - DWF

**BCL/Program Name:** Shared Cost Projects

**BCL/Program Code:** C410B

**Project Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2004

**Project ID:** C4101-DWF

**End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This program replaces customer meters that are not performing within the American Water Works Association's standards of accuracy due to obsolescence, incorrect application, or inability to repair. It is currently more cost effective to replace two-inch and smaller meters than it is to repair them. Three-inch and larger meters are repaired, if possible. SPU's Asset Management Committee has approved the program. The confidence level of the cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,038	530	577	505	517	529	542	556	5,794
<b>Project Total:</b>	2,038	530	577	505	517	529	542	556	5,794
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	2,038	530	577	505	517	529	542	556	5,794
<b>Appropriations Total*</b>	2,038	530	577	505	517	529	542	556	5,794
<b>O &amp; M Costs (Savings)</b>			5	5	5	5	5	5	30

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

# SPU - Drainage & Wastewater

## Minor Facility Upgrades - Rehabilitation

**BCL/Program Name:** Wastewater Conveyance **BCL/Program Code:** C320B  
**Project Type:** Rehabilitation or Restoration **Start Date:** 1st Quarter 1998  
**Project ID:** C3AA402 **End Date:** Ongoing

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This project makes minor upgrades and replacements to sewer infrastructure by setting castings to grade on repaving projects, replacing existing castings with larger diameter castings to meet safety standards, and installing maintenance holes on existing sewer mainlines. Improvements are made after notification by SPU Field Operations or Construction Management staff. If these improvements are not done, surface water, groundwater infiltration, or stormwater inflow into the collection system will occur. This project was reviewed by SPU's Asset Management Committee as part of the overall Sewer Rehabilitation Programmatic Plan. The confidence level in this cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	103	96	90	100	108	116	124	116	853
<b>Project Total:</b>	103	96	90	100	108	116	124	116	853
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	103	96	90	100	108	116	124	116	853
<b>Appropriations Total*</b>	103	96	90	100	108	116	124	116	853
<b>O &amp; M Costs (Savings)</b>			4	4	4	4	4	4	26
<b>Spending Plan</b>		85	90	100	108	116	124	116	739

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

# SPU - Drainage & Wastewater

## MLK Way/Norfolk Street Storm Improvement

**BCL/Program Name:** Stormwater & Flood Control

**BCL/Program Code:** C332B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C333205

**End Date:** 4th Quarter 2011

**Location:** Norfolk Drainage Basin East Of I-5

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Greater Duwamish

**Urban Village:** Not in an Urban Village

This project reduces flooding problems along Martin Luther King, Jr. Way S and adjacent streets by rehabilitating the existing system, eliminating bypasses to the sanitary sewer system, and providing a functioning conveyance system for future roadway and drainage improvements proposed by Sound Transit in 2008. The project removes petroleum-contaminated sediments from the existing system, provides improved maintenance access for future cleaning, increases the carrying capacity of the system to meet a 25-year performance level of service, improves storm water quality treatment using portion of the funding from Sound Transit, and reduces overall long-term maintenance costs. This project was initially reviewed by SPU's Asset Management Committee and will be reviewed again in 2008 during the design phase when more accurate construction estimates become available. The confidence level in the current cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,081	285	3,059	68	48	50	0	0	4,591
<b>Project Total:</b>	1,081	285	3,059	68	48	50	0	0	4,591
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1,081	285	3,059	68	48	50	0	0	4,591
<b>Appropriations Total*</b>	1,081	285	3,059	68	48	50	0	0	4,591
<b>O &amp; M Costs (Savings)</b>			2	2	2	2	2	2	12
<b>Spending Plan</b>		800	3,059	68	48	50	0	0	4,025

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

# SPU - Drainage & Wastewater

## Mobility Improvement

**BCL/Program Name:** Landslide Mitigation & Special Programs

**BCL/Program Code:** C335B

**Project Type:** Improved Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C333514

**End Date:** Ongoing

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project funds drainage designers to work on Seattle Department of Transportation (SDOT) design functions and assist with cost estimates for transportation capital project grant applications. This coordination allows SPU to improve drainage in concert with transportation capital projects.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	900	308	309	316	323	331	339	347	3,173
<b>Project Total:</b>	900	308	309	316	323	331	339	347	3,173
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	900	308	309	316	323	331	339	347	3,173
<b>Appropriations Total*</b>	900	308	309	316	323	331	339	347	3,173
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		300	309	316	323	331	339	347	2,265

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

# SPU - Drainage & Wastewater

## N 125th & Aurora N Storm Drain

**BCL/Program Name:** Stormwater & Flood Control

**BCL/Program Code:** C332B

**Project Type:** New Facility

**Start Date:** 3rd Quarter 2002

**Project ID:** C302313

**End Date:** 4th Quarter 2010

**Location:** Stone Ave N/N 120th St/N 125th St

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest

**Urban Village:** Bitter Lake Village

This project will coordinate with the Seattle Department of Transportation (SDOT) Aurora Transit, Pedestrian and Safety Improvements project TC36625, which installs new curbs, gutters, sidewalks, and a bus lane on Aurora Ave. N from N 110th St. to N 145th St. Stormwater facilities are associated with the SDOT project. The SDOT project will be required to meet City of Seattle stormwater requirements for the applicable project areas. SPU is analyzing potential stormwater improvements to augment the SDOT project improvements to match existing conditions in the downstream trunk drainage system. The SPU stormwater improvements may include new and/or modified existing stormwater flow control facilities (i.e., detention), conveyance, and water quality facilities. This project was reviewed by SPU's Asset Management Committee. The confidence level in the current cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	916	403	567	484	460	0	0	0	2,830
<b>Project Total:</b>	916	403	567	484	460	0	0	0	2,830
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	916	403	567	484	460	0	0	0	2,830
<b>Appropriations Total*</b>	916	403	567	484	460	0	0	0	2,830
<b>O &amp; M Costs (Savings)</b>			0	0	2	2	2	2	8
<b>Spending Plan</b>		120	567	484	460	0	0	0	1,631

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

### 2008-2013 Proposed Capital Improvement Program

# SPU - Drainage & Wastewater

## Natural Drainage System Improvements

**BCL/Program Name:** Low Impact Development

**BCL/Program Code:** C334B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C333206

**End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Broadview-Bitter Lake-Haller Lake

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This ongoing project assesses unimproved right-of-way and right-of-way redevelopment opportunities within the city and identifies areas suitable for enhancing existing drainage systems. In addition to identifying natural system drainage areas based on surface water management goals, the project assesses neighborhood, land use, and transportation objectives for the right-of-way. The project produces a suitability map for natural system surface water management in the right-of-way. The project also identifies a menu of options for natural system enhancement based on local condition criteria and drainage basin performance goals relative to conveyance, detention, or treatment. Each option is developed for consideration in the City's Street Improvement Manual, and includes right-of-way elements, configuration, and dimensions. For each option, associated standard plans are developed for consideration in the Standard Plans update to assist SPU in prioritizing drainage improvements.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	527	169	122	421	539	551	2,709	3,467	8,505
<b>Project Total:</b>	527	169	122	421	539	551	2,709	3,467	8,505
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	527	169	122	421	539	551	2,709	3,467	8,505
<b>Appropriations Total*</b>	527	169	122	421	539	551	2,709	3,467	8,505
<b>O &amp; M Costs (Savings)</b>			43	43	43	43	43	43	255
<b>Spending Plan</b>		134	122	421	539	551	2,709	3,467	7,943

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



# SPU - Drainage & Wastewater

## Operational Facility - Construction - DWF

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** Improved Facility **Start Date:** 1st Quarter 2004  
**Project ID:** C4106-DWF **End Date:** Ongoing

**Location:** Multiple

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This program improves operational facilities within the city limits that support SPU management, operations and maintenance business functions, workforce, material, and equipment. Sub-projects within this program will go to the SPU's Asset Management Committee for approval.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,457	1,823	867	885	907	869	890	913	9,611
<b>Project Total:</b>	2,457	1,823	867	885	907	869	890	913	9,611
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	2,457	1,823	867	885	907	869	890	913	9,611
<b>Appropriations Total*</b>	2,457	1,823	867	885	907	869	890	913	9,611
<b>O &amp; M Costs (Savings)</b>			48	48	48	48	48	48	288
<b>Spending Plan</b>		870	867	885	907	869	890	913	6,201

## Operational Facility - Other - DWF

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** Improved Facility **Start Date:** 1st Quarter 2006  
**Project ID:** C4115-DWF **End Date:** Ongoing

**Location:** Multiple

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This program conducts studies, assessments, planning, design, and purchases for operational facility assets within the city limits. In 2011-2012, SPU is planning to focus improvements on water-funded projects. This focus may change over time as projects are prioritized. Sub-projects within this program will go to SPU's Asset Management Committee for approval.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	146	626	71	65	67	10	10	10	1,005
<b>Project Total:</b>	146	626	71	65	67	10	10	10	1,005
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	146	626	71	65	67	10	10	10	1,005
<b>Appropriations Total*</b>	146	626	71	65	67	10	10	10	1,005
<b>O &amp; M Costs (Savings)</b>			5	5	5	5	5	5	29
<b>Spending Plan</b>		790	71	65	67	10	10	10	1,023

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

# SPU - Drainage & Wastewater

## Operations Control Center - DWF

<b>BCL/Program Name:</b> Shared Cost Projects	<b>BCL/Program Code:</b> C410B
<b>Project Type:</b> Improved Facility	<b>Start Date:</b> 1st Quarter 2003
<b>Project ID:</b> C4105-DWF	<b>End Date:</b> 4th Quarter 2010

**Location:** 2700 Airport Way South/Forest Street/Lander Street

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Greater Duwamish

**Urban Village:** Not in an Urban Village

This program rehabilitates, replaces, and constructs new improvements at the Operations Control Center complex to support the business needs of SPU's operational work force. Projects within this program include proposed Main Warehouse roof replacement, Main Warehouse lighting improvements, Operations Control Center public space improvements and Main Warehouse office space improvements. These proposed projects are necessary to address deferred maintenance of the Main Warehouse and other structures at the Operations Control Center complex. Sub-projects within this program will go to the SPU Asset Management Committee for approval.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,610	640	85	377	45	0	0	0	2,757
<b>Project Total:</b>	1,610	640	85	377	45	0	0	0	2,757
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1,610	640	85	377	45	0	0	0	2,757
<b>Appropriations Total*</b>	1,610	640	85	377	45	0	0	0	2,757
<b>O &amp; M Costs (Savings)</b>			0	0	0	14	14	14	41
<b>Spending Plan</b>		706	85	377	45	0	0	0	1,213

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

# SPU - Drainage & Wastewater

## Pinehurst Natural Drainage System

**BCL/Program Name:** Low Impact Development

**BCL/Program Code:** C334B

**Project Type:** New Facility

**Start Date:** 4th Quarter 2002

**Project ID:** C333202

**End Date:** 4th Quarter 2009

**Location:** Thornton Creek Watershed/NE 113th St and 23rd Ave. NE/NE 117th St. and 16th Ave. NE

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northeast

**Urban Village:** Not in an Urban Village

This project constructs natural drainage system improvements to convey stormwater, using the unimproved right-of-way as a starting point for design. Construction of the project is complete, and it is currently in the first of a three year landscape establishment period. The project scope includes constructing an engineered system of swales or other design alternatives to detain runoff, filter pollutants, and allow maximum opportunity for infiltration; using native vegetation as a stormwater management element, as well as for aesthetic appeal; and constructing a sidewalk on one side of each street within the project area. The project installs natural drainage systems on approximately 11.5 blocks (330 ft. per block) in the project area. In addition, some ditch and culvert systems are installed to mitigate existing spot drainage problems. The project is partially funded with a \$3.7 million state Public Works Trust Fund loan, which was approved by Ordinance 121464 in 2004.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	4,986	30	85	50	0	0	0	0	5,151
<b>Project Total:</b>	4,986	30	85	50	0	0	0	0	5,151
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	4,986	30	85	50	0	0	0	0	5,151
<b>Appropriations Total*</b>	4,986	30	85	50	0	0	0	0	5,151
<b>O &amp; M Costs (Savings)</b>			3	3	7	7	7	7	34
<b>Spending Plan</b>		167	85	50	0	0	0	0	302

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# SPU - Drainage & Wastewater

## Point Sewer Pipe Rehabilitation - Contract

**BCL/Program Name:** Wastewater Conveyance **BCL/Program Code:** C320B  
**Project Type:** Rehabilitation or Restoration **Start Date:** 1st Quarter 2003  
**Project ID:** C303401 **End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This program rehabilitates and/or replaces failing and misaligned sewer pipes throughout the city. An ongoing closed circuit television inspection program identifies pipes to be replaced. This program prevents complete pipe collapse by providing small repairs at numerous sites throughout the city, avoiding more costly full-line failures or repairs. This rehabilitation program is performed by outside contractors.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,908	1,078	1,218	889	1,078	1,103	1,129	1,078	9,481
<b>Project Total:</b>	1,908	1,078	1,218	889	1,078	1,103	1,129	1,078	9,481
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1,908	1,078	1,218	889	1,078	1,103	1,129	1,078	9,481
<b>Appropriations Total*</b>	1,908	1,078	1,218	889	1,078	1,103	1,129	1,078	9,481
<b>O &amp; M Costs (Savings)</b>			25	25	25	25	25	25	150
<b>Spending Plan</b>		734	1,218	889	1,078	1,103	1,129	1,078	7,229

## Point Sewer Pipe Rehabilitation - Crews

**BCL/Program Name:** Wastewater Conveyance **BCL/Program Code:** C320B  
**Project Type:** Rehabilitation or Restoration **Start Date:** 1st Quarter 2003  
**Project ID:** C303402 **End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This program rehabilitates and/or replaces failing and misaligned sewer pipes throughout the city. An ongoing closed circuit television inspection program identifies pipes to be replaced. This program prevents complete pipe collapse by providing small repairs at numerous sites throughout the city, avoiding more costly full-line failures or repairs. This rehabilitation program is performed by City crews.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	11,534	2,410	2,830	3,210	3,718	4,399	4,177	3,582	35,860
<b>Project Total:</b>	11,534	2,410	2,830	3,210	3,718	4,399	4,177	3,582	35,860
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	11,534	2,410	2,830	3,210	3,718	4,399	4,177	3,582	35,860
<b>Appropriations Total*</b>	11,534	2,410	2,830	3,210	3,718	4,399	4,177	3,582	35,860
<b>O &amp; M Costs (Savings)</b>			50	50	50	50	50	50	300

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# SPU - Drainage & Wastewater

## Post-Construction Monitoring

**BCL/Program Name:** Control Structures

**BCL/Program Code:** C310B

**Project Type:** New Investment

**Start Date:** 1st Quarter 2007

**Project ID:** C307003

**End Date:** 4th Quarter 2013

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project develops a Post-Construction Compliance Monitoring Plan, a requirement of the National Pollutant Discharge Elimination System (NPDES) permit. The plan may detail measures for the effectiveness of Combined Sewer Overflow (CSO) controls, and may be used to demonstrate attainment of water quality standards. The plan may include monitoring protocols for biological assessments, ambient monitoring, and related activities. SPU's Asset Management Committee will review and approve the project in 2008. Confidence in the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	59	129	0	108	110	113	116	635
<b>Project Total:</b>	0	59	129	0	108	110	113	116	635
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	59	129	0	108	110	113	116	635
<b>Appropriations Total*</b>	0	59	129	0	108	110	113	116	635
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		50	129	0	108	110	113	116	626

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# SPU - Drainage & Wastewater

## Pump Station and Force Main Improvements

**BCL/Program Name:** Control Structures **BCL/Program Code:** C310B  
**Project Type:** New Facility **Start Date:** 1st Quarter 2008  
**Project ID:** C3102 **End Date:** Ongoing

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan Matrix:** N/A  
**Neighborhood District:** In more than one District **Urban Village:** Not in an Urban Village

This ongoing program provides wastewater pump station and force main improvements, upgrades, repairs and rehabilitation. Typical improvements may include design and installation of emergency generators, and material and labor costs for equipment replacement (pumps and valves), as well as equipment for the remote monitoring system. This program implements the Pump Station Asset Management Plan. This program combines C3102 Pump Station Improvements and C3103 Force Main Improvements, which were listed separately in the 2007-2012 Adopted CIP.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	853	661	1,353	1,798	1,832	1,875	1,919	1,964	12,255
<b>Project Total:</b>	853	661	1,353	1,798	1,832	1,875	1,919	1,964	12,255
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	853	661	1,353	1,798	1,832	1,875	1,919	1,964	12,255
<b>Appropriations Total*</b>	853	661	1,353	1,798	1,832	1,875	1,919	1,964	12,255
<b>O &amp; M Costs (Savings)</b>			61	61	61	61	61	61	368
<b>Spending Plan</b>		750	1,353	1,798	1,832	1,875	1,919	1,964	11,491

## Pump Station Optimization Study

**BCL/Program Name:** Control Structures **BCL/Program Code:** C310B  
**Project Type:** New Investment **Start Date:** 1st Quarter 2009  
**Project ID:** C307012 **End Date:** 4th Quarter 2010

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan **Neighborhood Plan Matrix:** N/A  
**Neighborhood District:** Not in a Neighborhood District **Urban Village:** Not in an Urban Village

This study examines the optimal methods and timing for operating and maintaining the pump stations. It may include evaluation of alternative technologies for cleaning or assessment of force mains, pumps, or ancillary equipment/infrastructure. SPU's Asset Management Committee will review and approve the project. Confidence in the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	0	105	54	0	0	0	159
<b>Project Total:</b>	0	0	0	105	54	0	0	0	159
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	0	105	54	0	0	0	159
<b>Appropriations Total*</b>	0	0	0	105	54	0	0	0	159
<b>O &amp; M Costs (Savings)</b>			0	100	50	1	1	1	153

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

# SPU - Drainage & Wastewater

## S Genesee Combined Sewer Overflow

**BCL/Program Name:** Control Structures

**BCL/Program Code:** C310B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C303103

**End Date:** 3rd Quarter 2016

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Southeast

**Urban Village:** Not in an Urban Village

This project constructs facilities for Combined Sewer Overflow (CSO) reduction in the S Genesee area. Major work includes flow monitoring, system modeling, facility planning, preliminary engineering, design, permitting, land acquisition (if necessary) and construction. The project schedule has been revised from the 2001 CSO Plan to account for project development; work performed under the CSO Facility Retrofit project (C302102), which may reduce the size of the necessary facilities in this basin; and potential coordination with King County. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	533	1,183	1,349	1,104	1,024	5,955	9,482	3,582	24,212
<b>Project Total:</b>	533	1,183	1,349	1,104	1,024	5,955	9,482	3,582	24,212
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	533	1,183	1,349	1,104	1,024	5,955	9,482	3,582	24,212
<b>Appropriations Total*</b>	533	1,183	1,349	1,104	1,024	5,955	9,482	3,582	24,212
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		1,101	1,349	1,104	1,024	5,955	9,482	3,582	23,597

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

# SPU - Drainage & Wastewater

## S Henderson Combined Sewer Overflow Storage

<b>BCL/Program Name:</b> Control Structures	<b>BCL/Program Code:</b> C310B
<b>Project Type:</b> New Facility	<b>Start Date:</b> 1st Quarter 2005
<b>Project ID:</b> C304102	<b>End Date:</b> 4th Quarter 2017

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Southeast

**Urban Village:** Not in an Urban Village

This project constructs facilities for Combined Sewer Overflow (CSO) reduction in the S Henderson/Rainier Avenue S area. Major work includes flow monitoring, system modeling, facility planning, preliminary engineering, design, permits, land acquisition (if necessary), and construction. The project schedule has been revised from the 2001 CSO Plan to account for project development; work performed under the CSO Facility Retrofit project (C302102), which may reduce the size of the necessary facilities in this basin; and potential coordination with King County. This project is in a preliminary phase of development and cost estimates will be revised over time. This project has been approved by SPU's Asset Management Committee. In addition, this project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	622	577	1,283	833	3,318	4,784	13,559	8,851	33,827
<b>Project Total:</b>	622	577	1,283	833	3,318	4,784	13,559	8,851	33,827
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	622	577	1,283	833	3,318	4,784	13,559	8,851	33,827
<b>Appropriations Total*</b>	622	577	1,283	833	3,318	4,784	13,559	8,851	33,827
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		573	1,283	833	3,318	4,784	13,559	8,851	33,201

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

# SPU - Drainage & Wastewater

## Salmon Bay Phase 2 Acquisition & Restoration

**BCL/Program Name:** Landslide Mitigation & Special Programs      **BCL/Program Code:** C335B  
**Project Type:** Improved Facility      **Start Date:** 2nd Quarter 2003  
**Project ID:** C333307      **End Date:** 1st Quarter 2010

**Location:** Salmon Bay

**Neighborhood Plan:** Crown Hill/Ballard

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest

**Urban Village:** Not in an Urban Village

The project is a community-driven public access and habitat restoration project spearheaded by Groundswell Northwest and carried forth by Seattle Public Utilities. Most of the improvements will occur within the 34th Avenue Street end, while remaining improvements will occur on neighboring City property to the west. The Salmon Bay Natural Area is the only remaining wooded shoreline in Ballard that provides refuge and rearing habitat for juvenile salmon as they migrate to Puget Sound. The project goal is to improve shoreline habitat at the site. Another aspect of the project is to create opportunities to improve public access by building pedestrian paths and installing a public “viewing area” with interpretive signage. The interpretive signage captures the details of the unique natural and cultural history of the site. It also highlights the importance of the area for salmon use, the historical alterations of the estuary, and present and historic Native American use of the area.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	580	106	1	1	1	0	0	0	689
<b>Project Total:</b>	580	106	1	1	1	0	0	0	689
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	580	106	1	1	1	0	0	0	689
<b>Appropriations Total*</b>	580	106	1	1	1	0	0	0	689
<b>O &amp; M Costs (Savings)</b>			0	0	0	3	3	3	10
<b>Spending Plan</b>		310	1	1	1	0	0	0	313

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

# SPU - Drainage & Wastewater

## Sanitary Sewer Overflow Capacity

**BCL/Program Name:** Wastewater Conveyance

**BCL/Program Code:** C320B

**Project Type:** New Investment

**Start Date:** 2nd Quarter 2002

**Project ID:** C302205

**End Date:** Ongoing

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project identifies utility gaps in complying with proposed federal Sanitary Sewer Overflow (SSO) regulations and promotes programs and projects that improve collection system practices. Key priority goals for achieving collection system compliance may include control of Fats, Oils, and Grease (FOG); developing an Overflow Emergency Response Plan; providing adequate conveyance capacity; and eliminating and mitigating SSOs via configuration management.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	569	243	1,071	1,133	1,190	1,199	1,227	1,271	7,903
<b>Project Total:</b>	569	243	1,071	1,133	1,190	1,199	1,227	1,271	7,903
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	569	243	1,071	1,133	1,190	1,199	1,227	1,271	7,903
<b>Appropriations Total*</b>	569	243	1,071	1,133	1,190	1,199	1,227	1,271	7,903
<b>O &amp; M Costs (Savings)</b>			40	40	40	40	40	40	237
<b>Spending Plan</b>		354	1,071	1,133	1,190	1,199	1,227	1,271	7,445

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

# SPU - Drainage & Wastewater

## Seattle Housing Authority Integrated Drainage Plan

<b>BCL/Program Name:</b> Protection of Beneficial Uses	<b>BCL/Program Code:</b> C333B
<b>Project Type:</b> New Investment	<b>Start Date:</b> 1st Quarter 2006
<b>Project ID:</b> C363301	<b>End Date:</b> 4th Quarter 2010

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project provides stormwater treatment facilities to mitigate more than eight acres of new roadway in Southeast Seattle created as part of the Seattle Housing Authority's (SHA) low-income housing redevelopments, Rainier Vista and New Holly Phase 3. The Seattle Municipal Code requires water quality treatment for runoff from new or replaced vehicular surfaces and allows off-site mitigation when approved by the SPU Director. SHA has agreed to reimburse the capital costs for SPU to identify and construct a water quality project or projects that provide equivalent or greater benefits to the Lake Washington drainage basin than facilities built at the project site. In 2006, Ordinance 122018 authorized SPU to enter into a Memorandum of Agreement with SHA to accept voluntary contributions for these stormwater treatment facilities.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	95	356	337	652	280	0	0	0	1,720
<b>Project Total:</b>	95	356	337	652	280	0	0	0	1,720
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	95	356	337	652	280	0	0	0	1,720
<b>Appropriations Total*</b>	95	356	337	652	280	0	0	0	1,720
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		218	337	652	280	0	0	0	1,487

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

# SPU - Drainage & Wastewater

## Security Improvements - DWF

<b>BCL/Program Name:</b> Shared Cost Projects	<b>BCL/Program Code:</b> C410B
<b>Project Type:</b> Improved Facility	<b>Start Date:</b> 1st Quarter 2007
<b>Project ID:</b> C4113-DWF	<b>End Date:</b> 4th Quarter 2012

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This project improves security and protection of SPU's drainage and wastewater facilities. This is a programmatic project that includes analysis of system vulnerabilities and implementation of security improvements to increase emergency response capabilities and reduce security risks to critical SPU assets. Improvements include integration of security access control systems, alarms, and procedures; physical improvements to facilities (card readers, cameras, monitoring systems, fence upgrades, gate improvements, and hardening of critical infrastructure); and technology improvements to increase communications, response and investigation capabilities.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	7	768	518	631	647	662	677	0	3,910
<b>Project Total:</b>	7	768	518	631	647	662	677	0	3,910
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	7	768	518	631	647	662	677	0	3,910
<b>Appropriations Total*</b>	7	768	518	631	647	662	677	0	3,910
<b>O &amp; M Costs (Savings)</b>			97	97	97	97	97	97	582
<b>Spending Plan</b>		867	518	631	647	662	677	0	4,002

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

# SPU - Drainage & Wastewater

## Sediment Remediation - DRN

**BCL/Program Name:** Sediments

**BCL/Program Code:** C350B

**Project Type:** Rehabilitation or Restoration

**Start Date:** 4th Quarter 2000

**Project ID:** C3501

**End Date:** Ongoing

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This program studies and analyzes the cleanup of contaminated sediment sites in which the City is a participant, performs the actual cleanup of contaminated sites, performs preliminary engineering for future cleanup efforts, and conducts 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. This program supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. Seattle Public Utilities (SPU) is planning on deferring the costs of this project under the Financial Accounting Standards Board Statement 71 (FAS 71).

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	4,513	3,393	3,254	3,020	1,740	108	8	16	16,052
<b>Project Total:</b>	4,513	3,393	3,254	3,020	1,740	108	8	16	16,052
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	4,513	3,393	3,254	3,020	1,740	108	8	16	16,052
<b>Appropriations Total*</b>	4,513	3,393	3,254	3,020	1,740	108	8	16	16,052
<b>O &amp; M Costs (Savings)</b>			80	80	80	80	80	80	482
<b>Spending Plan</b>		2,262	3,254	3,020	1,740	108	8	16	10,408

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

# SPU - Drainage & Wastewater

## Sediment Remediation - WW

**BCL/Program Name:** Sediments

**BCL/Program Code:** C350B

**Project Type:** Rehabilitation or Restoration

**Start Date:** 4th Quarter 2000

**Project ID:** C3502

**End Date:** Ongoing

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This program studies and analyzes the cleanup of contaminated sediment sites in which the City is a participant, performs the actual cleanup of contaminated sites, performs preliminary engineering for future clean-up efforts, and conducts 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. This program supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. Seattle Public Utilities (SPU) is planning on deferring the costs of this project under the Financial Accounting Standards Board Statement 71 (FAS 71).

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	3,635	1,416	992	549	51	6	5	1	6,655
<b>Project Total:</b>	3,635	1,416	992	549	51	6	5	1	6,655
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	3,635	1,416	992	549	51	6	5	1	6,655
<b>Appropriations Total*</b>	3,635	1,416	992	549	51	6	5	1	6,655
<b>O &amp; M Costs (Savings)</b>			33	33	33	33	33	33	200
<b>Spending Plan</b>		1,025	992	549	51	6	5	1	2,629

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

# SPU - Drainage & Wastewater

## Sediment Survey

**BCL/Program Name:** Control Structures

**BCL/Program Code:** C310B

**Project Type:** New Investment

**Start Date:** 1st Quarter 2007

**Project ID:** C307007

**End Date:** 4th Quarter 2008

**Location:** Various

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project will develop a sediment survey report to meet National Pollutant Discharge Elimination System (NPDES) permit requirements. The study may include a summary of sediment data and findings. The project will conduct a literature search of all relevant sediment data in the area of the City's CSO outfalls. The consequence of not completing this project is non-compliance with the CSO NPDES permit, which may result in fines or other consequences (e.g., consent decree, administrative order). SPU's Asset Management Committee reviewed and approved the project. Confidence in the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	107	8	0	0	0	0	0	115
<b>Project Total:</b>	0	107	8	0	0	0	0	0	115
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	107	8	0	0	0	0	0	115
<b>Appropriations Total*</b>	0	107	8	0	0	0	0	0	115
<b>O &amp; M Costs (Savings)</b>			0	1	1	1	1	1	3
<b>Spending Plan</b>		100	8	0	0	0	0	0	108

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

# SPU - Drainage & Wastewater

## Sewage System Model

**BCL/Program Name:** Wastewater Conveyance

**BCL/Program Code:** C320B

**Project Type:** New Investment

**Start Date:** 1st Quarter 2007

**Project ID:** C308005

**End Date:** 4th Quarter 2012

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This project develops a system-wide model of Seattle's sewage system, including the King County trunk conveyance system within the city limits. A full understanding of the hydraulic performance of the City conveyance system and the relationship to various storm flow-influenced factors will provide the factual basis for capital, operational and maintenance decisions and expenditures. The model will also be integrated with SCADA in order to obtain information on wastewater levels, flows and volumes in the system, overflows and backups, and downstream constraints in the County system.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	1,275	968	560	353	124	0	3,280
<b>Project Total:</b>	0	0	1,275	968	560	353	124	0	3,280
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	1,275	968	560	353	124	0	3,280
<b>Appropriations Total*</b>	0	0	1,275	968	560	353	124	0	3,280
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	16	16

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

# SPU - Drainage & Wastewater

## Sewer Emergency Rehabilitation

<b>BCL/Program Name:</b> Wastewater Conveyance	<b>BCL/Program Code:</b> C320B
<b>Project Type:</b> Rehabilitation or Restoration	<b>Start Date:</b> 1st Quarter 1998
<b>Project ID:</b> C3AA404	<b>End Date:</b> Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This program performs emergency rehabilitation of sewer lines that collapse, cause surface problems, or otherwise endanger public health or welfare. Once reports of surface subsidence or overflows from ratepayers or SPU Field Operations staff are received, a CCTV inspection is completed or attempted. The inspection is followed by a DWF pipeline condition assessment by SPU Engineering staff or SPU Field Operations First Response Crews. Field Operations crews may then perform an emergency repair of a pipeline. If the location is more complicated or in a critical location, SPU will declare the location an emergency and contract the repair with the assistance of SPU's Construction Management division and the Department of Executive Administration (DEA). This effort relieves the burden of a potential service interruption to the customer. This program was reviewed by SPU's Asset Management Committee as part of the overall Sewer Rehabilitation Programmatic Plan. The confidence level in the current cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	3,882	677	641	631	700	717	734	751	8,733
<b>Project Total:</b>	3,882	677	641	631	700	717	734	751	8,733
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	3,882	677	641	631	700	717	734	751	8,733
<b>Appropriations Total*</b>	3,882	677	641	631	700	717	734	751	8,733
<b>O &amp; M Costs (Savings)</b>			44	44	44	44	44	44	262
<b>Spending Plan</b>		500	641	631	700	717	734	751	4,674

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# SPU - Drainage & Wastewater

## Sewer Full Line Replacements

**BCL/Program Name:** Wastewater Conveyance **BCL/Program Code:** C320B  
**Project Type:** Rehabilitation or Restoration **Start Date:** 1st Quarter 2001  
**Project ID:** C3202 **End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This program replaces existing sewer lines citywide with pipes of the same diameter and capacity. Closed circuit television inspections identify defects in sewer mainlines. Each mainline defect is catalogued in an SPU database and assigned a priority that reflects the urgency of repair. SPU uses a criticality analysis as part of an asset management approach to evaluating life cycle costs.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	371	145	357	375	404	434	458	462	3,006
<b>Project Total:</b>	371	145	357	375	404	434	458	462	3,006
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	371	145	357	375	404	434	458	462	3,006
<b>Appropriations Total*</b>	371	145	357	375	404	434	458	462	3,006
<b>O &amp; M Costs (Savings)</b>			15	15	15	15	15	15	90
<b>Spending Plan</b>		109	357	375	404	434	458	462	2,599

## Small Landslide Projects

**BCL/Program Name:** Landslide Mitigation & Special Programs **BCL/Program Code:** C335B  
**Project Type:** Improved Facility **Start Date:** 1st Quarter 2004  
**Project ID:** C3325 **End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This program makes spot improvements in landslide-prone areas throughout Seattle. Typical improvements include installing berms, swales, catch basins, storm drains, subsurface drains, and small slope stability improvement projects. The cost estimates will be revised over time as projects are determined.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	999	578	504	947	1,138	448	1,869	718	7,201
<b>Project Total:</b>	999	578	504	947	1,138	448	1,869	718	7,201
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	999	578	504	947	1,138	448	1,869	718	7,201
<b>Appropriations Total*</b>	999	578	504	947	1,138	448	1,869	718	7,201
<b>O &amp; M Costs (Savings)</b>			36	36	36	36	36	36	216
<b>Spending Plan</b>		400	504	947	1,138	448	1,869	718	6,024

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# SPU - Drainage & Wastewater

## Small Sewer Improvements

**BCL/Program Name:** Wastewater Conveyance

**BCL/Program Code:** C320B

**Project Type:** Improved Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C303299

**End Date:** Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This project makes spot improvements and supports project development for small-capacity sewer systems throughout Seattle. Typical improvements include rerouting of a sewer line or relocation of a maintenance hole. The cost estimates will be revised over time as projects are determined.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	280	175	179	452	679	713	730	289	3,497
<b>Project Total:</b>	280	175	179	452	679	713	730	289	3,497
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	280	175	179	452	679	713	730	289	3,497
<b>Appropriations Total*</b>	280	175	179	452	679	713	730	289	3,497
<b>O &amp; M Costs (Savings)</b>			17	17	17	17	17	17	105
<b>Spending Plan</b>		271	179	452	679	713	730	289	3,313

## Sound Transit – University Link - DWF

**BCL/Program Name:** Shared Cost Projects

**BCL/Program Code:** C410B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2007

**Project ID:** C4110-DWF

**End Date:** 4th Quarter 2009

**Location:** North Seattle

**Neighborhood Plan:** In more than one Plan

**Neighborhood Plan Matrix:** Multiple

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

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

This program relocates or replaces drainage and wastewater related facilities affected by the extension of the Sound Transit Central Link light rail system to the University District.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	9	95	237	233	0	0	0	0	574
<b>Project Total:</b>	9	95	237	233	0	0	0	0	574
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	9	95	237	233	0	0	0	0	574
<b>Appropriations Total*</b>	9	95	237	233	0	0	0	0	574
<b>O &amp; M Costs (Savings)</b>			0	0	50	50	50	50	200

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

# SPU - Drainage & Wastewater

## Sound Transit Central Link - DWF

**BCL/Program Name:** Shared Cost Projects

**BCL/Program Code:** C410B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C4104-DWF

**End Date:** 4th Quarter 2008

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

**Neighborhood Plan:** In more than one Plan

**Neighborhood Plan Matrix:** Multiple

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

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

This program relocates or replaces drainage and wastewater-related facilities affected by Sound Transit's Central Link project. Sound Transit proposes to construct an electrical light rail transit system that includes more than 14 miles of alignment from the Convention Place Station to South 154th Street near Seattle/Tacoma Airport. The City of Seattle, including SPU, has an ongoing agreement for partial reimbursement from Sound Transit. Seattle Public Utilities pays for water betterments that are being done in conjunction with the Sound Transit Central Link Project. Sound Transit Water Betterments are listed as a separate capital project in the SPU Water Fund CIP (C405430).

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,911	435	323	0	0	0	0	0	2,669
<b>Project Total:</b>	1,911	435	323	0	0	0	0	0	2,669
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1,911	435	323	0	0	0	0	0	2,669
<b>Appropriations Total*</b>	1,911	435	323	0	0	0	0	0	2,669
<b>O &amp; M Costs (Savings)</b>			50	50	50	50	50	50	300

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

# SPU - Drainage & Wastewater

## Sound Transit Integrated Drainage Plan

**BCL/Program Name:** Shared Cost Projects

**BCL/Program Code:** C410B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C405001

**End Date:** 4th Quarter 2010

**Location:** South East Neighborhood District

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Southeast

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

This project will construct off-site stormwater treatment facilities to meet the requirements in the Lake Washington basin of the Integrated Drainage Plan (IDP) agreed to by SPU and Sound Transit for the Sound Transit South Corridor Project. An IDP is an option in Seattle's code that substitutes on-site stormwater quality treatment with off-site stormwater quality treatment within a basin draining to the same receiving water body. Sound Transit has agreed to pay SPU the estimated cost of providing on-site treatment, and SPU has agreed to construct equivalent facilities off-site. SPU's Asset Management Committee reviewed and approved this project. The confidence level in the current cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	86	242	360	484	480	0	0	0	1,652
<b>Project Total:</b>	86	242	360	484	480	0	0	0	1,652
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	86	242	360	484	480	0	0	0	1,652
<b>Appropriations Total*</b>	86	242	360	484	480	0	0	0	1,652
<b>O &amp; M Costs (Savings)</b>			0	0	0	60	60	60	180

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

# SPU - Drainage & Wastewater

## South Lake Union - DWF

**BCL/Program Name:** Shared Cost Projects  
**Project Type:** Improved Facility  
**Project ID:** C4114-DWF

**BCL/Program Code:** C410B  
**Start Date:** 1st Quarter 2007  
**End Date:** 4th Quarter 2009

**Location:** South Lake Union

**Neighborhood Plan:** South Lake Union

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Lake Union

**Urban Village:** South Lake Union

This project relocates or replaces drainage and wastewater related facilities affected by City-sponsored projects in the South Lake Union Area. Project work also includes 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 project also funds planning-level coordination with other City departments on projects within the South Lake Union area. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	137	144	8	0	0	0	0	289
<b>Project Total:</b>	0	137	144	8	0	0	0	0	289
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	137	144	8	0	0	0	0	289
<b>Appropriations Total*</b>	0	137	144	8	0	0	0	0	289
<b>O &amp; M Costs (Savings)</b>			0	0	2	2	2	2	8

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

# SPU - Drainage & Wastewater

## South Lander Grade Separation - DWF

<b>BCL/Program Name:</b> Shared Cost Projects	<b>BCL/Program Code:</b> C410B
<b>Project Type:</b> Improved Facility	<b>Start Date:</b> 1st Quarter 2008
<b>Project ID:</b> C408S03 - DWF	<b>End Date:</b> 4th Quarter 2011

**Location:** S. Lander St./1st Ave. S./4th Ave. S.

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Greater Duwamish

**Urban Village:** Not in an Urban Village

This project protects and/or replaces drainage and wastewater assets affected by SDOT work to create a grade-separated crossing of the railroad tracks on S. Lander, south of downtown. The project is part of Bridging the Gap and needs to be completed prior to demolition of the Alaskan Way Viaduct. SDOT plans to begin construction in mid 2009. The project will impact a 90" cast-in-place concrete storm drain and some smaller diameter combined sewer. Costs, scheduling and contracting modes are in preliminary planning stages. SPU will consider options including replacement, abandonment or protection in place.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	206	211	217	222	0	0	856
<b>Project Total:</b>	0	0	206	211	217	222	0	0	856
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	206	211	217	222	0	0	856
<b>Appropriations Total*</b>	0	0	206	211	217	222	0	0	856
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	4	4	9

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

# SPU - Drainage & Wastewater

## Spokane Street Viaduct - DWF

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** Rehabilitation or Restoration **Start Date:** 1st Quarter 2007  
**Project ID:** C407023-DWF **End Date:** 4th Quarter 2008

**Location:** Spokane Street Viaduct

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** West Seattle Junction

This project relocates or replaces drainage and wastewater assets affected by SDOT work on the Spokane St. Viaduct. In mid-2008, SDOT will begin construction of the new 4th Ave S off ramp from the the S Spokane St Viaduct. SPU must relocate approximately 600 linear feet of 30" watermain between the BNSF railroad tracks and 4th Ave S to make way for the new ramp, and the project may also require relocation of drianage and wastewater assets. 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	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	132	600	0	0	0	0	0	732
<b>Project Total:</b>	0	132	600	0	0	0	0	0	732
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	132	600	0	0	0	0	0	732
<b>Appropriations Total*</b>	0	132	600	0	0	0	0	0	732
<b>O &amp; M Costs (Savings)</b>			0	50	50	50	50	50	250

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

# SPU - Drainage & Wastewater

## SR 519 Interchange - DWF

<b>BCL/Program Name:</b> Shared Cost Projects	<b>BCL/Program Code:</b> C410B
<b>Project Type:</b> Improved Facility	<b>Start Date:</b> 1st Quarter 2008
<b>Project ID:</b> C408S04 - DWF	<b>End Date:</b> 4th Quarter 2011

**Location:** S. Royal Brougham Way & 1st Ave. S./S. Atlantic St./ 5th Ave. S.

<b>Neighborhood Plan:</b> Duwamish	<b>Neighborhood Plan Matrix:</b> N/A
<b>Neighborhood District:</b> Greater Duwamish	<b>Urban Village:</b> Not in an Urban Village

This project will replace or relocate SPU drainage and wastewater facilities affected by an SDOT/WSDOT project. The SDOT/WSDOT SR-519 Interchange project is a joint effort by the SDOT and others to address the growing congestion in the South Downtown area. It includes street reconstruction to allow waterfront traffic to bypass the majority of the rail switching tracks and a truck-only access road between Terminal 46 and the BNSF Inter-modal yard to improve freight movement. Project design integrates with Alaskan Way Viaduct and Port of Seattle Terminal 46 redevelopment. In addition, SPU will evaluate opportunities for low-impact development and regional solutions.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	206	211	217	222	0	0	856
<b>Project Total:</b>	0	0	206	211	217	222	0	0	856
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	206	211	217	222	0	0	856
<b>Appropriations Total*</b>	0	0	206	211	217	222	0	0	856
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	4	4	9

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

# SPU - Drainage & Wastewater

## SR-520 Bridge Replacement - DWF

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** Rehabilitation or Restoration **Start Date:** 1st Quarter 2007  
**Project ID:** C407021-DWF **End Date:** 4th Quarter 2020

**Location:** SR 520

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** University Campus

This program relocates or replaces drainage and wastewater related facilities affected by the Washington State Department of Transportation's replacement of the SR 520 floating bridge. SR 520 is one of two east-west crossings across Lake Washington. Approximately 155,000-160,000 people cross the SR 520 floating bridge (Evergreen Point Bridge) each day. Built in the 1960s, without the benefit of today's design standards or drainage code requirements, the Evergreen Point Bridge and the Portage Bay Bridge are vulnerable to windstorms and earthquakes and are at risk of collapse if they are not replaced. The six-mile project area begins at I-5 in Seattle and extends to 108th Avenue Northeast in Bellevue (just west of I-405). The confidence level of the cost estimate is low due to the early planning stage for this project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	132	139	150	163	176	191	168	1,119
<b>Project Total:</b>	0	132	139	150	163	176	191	168	1,119
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	132	139	150	163	176	191	168	1,119
<b>Appropriations Total*</b>	0	132	139	150	163	176	191	168	1,119
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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

# SPU - Drainage & Wastewater

## SW Prescott/Admiral Landslide

**BCL/Program Name:** Landslide Mitigation & Special Programs

**BCL/Program Code:** C335B

**Project Type:** New Facility

**Start Date:** 3rd Quarter 2002

**Project ID:** C302353

**End Date:** 4th Quarter 2010

**Location:** SW Admiral Wy./SW Spokane Wy.

**Neighborhood Plan:** Admiral

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Southwest

**Urban Village:** Not in an Urban Village

This project investigates and develops a long-range plan to address flooding and slope instability problems in the SW Prescott Place/Admiral Way Landslide Mitigation Study area. The project includes researching historical information, drilling soil samples, performing slope stability analyses, and identifying and implementing solutions to problem areas. Currently nine landslide and three flooding areas have been identified in the study area. Three of the landslide problem areas in the study area are joint projects with the Seattle Department of Transportation (SDOT) and the Seattle Department of Parks and Recreation. See SDOT project TC36551 for more transportation-related information. There is a low degree of confidence in the cost estimate. SPU's Asset Management Committee has approved the project. This project is delayed until 2009.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	636	1	1	316	22	0	0	0	976
<b>Project Total:</b>	636	1	1	316	22	0	0	0	976
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	636	1	1	316	22	0	0	0	976
<b>Appropriations Total*</b>	636	1	1	316	22	0	0	0	976
<b>O &amp; M Costs (Savings)</b>			0	0	0	5	5	5	15

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

# SPU - Drainage & Wastewater

## Taylor Creek Culverts Phase 2

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 4th Quarter 1999

**Project ID:** C399315

**End Date:** 4th Quarter 2011

**Location:** Taylor Creek/Rainier Ave. S

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Greater Duwamish

**Urban Village:** Not in an Urban Village

This project designs and constructs fish passage improvements at the culvert that conveys Taylor Creek under Rainier Avenue S. Currently, three different types of culverts make up the system under Rainier Avenue S: a short 42 inch diameter section crossing a 20-foot side street; a 3x4 foot box culvert running under Rainier Avenue S.; and a corrugated metal culvert running under an adjacent apartment building. The points where these three culverts connect have eight- to 10-inch drops impeding fish passage. In addition, the culverts are velocity barriers during most rainstorms. The project is currently in the design phase/permitting. Confidence in the cost estimate is medium. SPU's Asset Management Committee has approved the construction phase of the project. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	739	221	601	26	11	11	0	0	1,609
<b>Project Total:</b>	739	221	601	26	11	11	0	0	1,609
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	739	221	601	26	11	11	0	0	1,609
<b>Appropriations Total*</b>	739	221	601	26	11	11	0	0	1,609
<b>O &amp; M Costs (Savings)</b>			6	6	6	6	6	6	36
<b>Spending Plan</b>		285	601	26	11	11	0	0	934

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### 2008-2013 Proposed Capital Improvement Program

# SPU - Drainage & Wastewater

## Taylor Creek Fish Habitat Improvements

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 2nd Quarter 2008

**Project ID:** C308003

**End Date:** 4th Quarter 2008

**Location:** Taylor Creek/Renton Ave. S./Rainier Ave. S.

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Greater Duwamish

**Urban Village:** Not in an Urban Village

This project evaluates and potentially constructs engineered log jams in Taylor Creek. Such jams are designed to store sediment and slow the energy of high flows in the creek, thus increasing creek health. This project enhances the condition of Taylor Creek, storing sediment and reducing scour, and the resultant creek bed will be healthier for fish and other creatures. This project is part of SPU's Protection of Beneficial Uses Program related to Taylor Creek Enhancement and Restoration initiative. Please see SPU project C399315 Taylor Creek Culverts Phase II for more information. Due to uncertainty, the project is being given minimal budget allocations, which will be revised over time.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	1	0	0	0	0	0	1
<b>Project Total:</b>	0	0	1	0	0	0	0	0	1
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	1	0	0	0	0	0	1
<b>Appropriations Total*</b>	0	0	1	0	0	0	0	0	1
<b>O &amp; M Costs (Savings)</b>			0	1	1	1	1	1	5

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

# SPU - Drainage & Wastewater

## Taylor Creek Sewer Facility Stabilization

**BCL/Program Name:** Wastewater Conveyance

**BCL/Program Code:** C320B

**Project Type:** New Facility

**Start Date:** 2nd Quarter 2008

**Project ID:** C308004

**End Date:** 4th Quarter 2008

**Location:** Taylor Creek/Renton Ave. S./Rainier Ave. S.

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Greater Duwamish

**Urban Village:** Not in an Urban Village

This project evaluates and potentially conducts maintenance work on sewer structures in the east fork of Taylor Creek. Taylor Creek flows through an area that once had a sewer facility. Cement walls of the facility remain embedded in the east fork of the watercourse. This project will evaluate the stability of the walls and stabilize them if necessary. This project enhances the condition of Taylor Creek by reducing the likelihood that the old walls in the creek will fail, allowing stored sediments to flow down Taylor Creek. This project is part of the SPU's Protection of Beneficial Uses Program related to Taylor Creek Enhancement and Restoration initiative. Please see SPU project C399315 Taylor Creek Culverts Phase II for more information. Due to uncertainty, the project is being given minimal budget allocations, which will be revised over time.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	1	0	0	0	0	0	1
<b>Project Total:</b>	0	0	1	0	0	0	0	0	1
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	0	0	1	0	0	0	0	0	1
<b>Appropriations Total*</b>	0	0	1	0	0	0	0	0	1
<b>O &amp; M Costs (Savings)</b>			0	1	1	1	1	1	5

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

# SPU - Drainage & Wastewater

## Thornton Creek Water Quality Channel Project

**BCL/Program Name:** Protection of Beneficial Uses

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 4th Quarter 2004

**Project ID:** C343306

**End Date:** 4th Quarter 2011

**Location:** 330 NE 100th Street

**Neighborhood Plan:** Northgate

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** North

**Urban Village:** Northgate

This project conducts preliminary engineering, design, and construction of a water quality facility on the south lot of Northgate Mall. The facility is located between 3rd Ave. and 5th Ave. NE and between NE 100th St. and NE 103rd St., and provides water quality treatment for public drainage. The project includes excavation of fill material and creation of a water quality channel for storm flow from the existing public drainage system under NE 100th St. at 3rd Ave. NE. The project also includes improvements to pedestrian access and landscaping. SPU's Asset Management Committee has approved the project. The confidence level of the current cost estimate is medium. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. The balance of the \$10.6 million total project budget will be carried forward each year until it is spent. SPU plans to carry forward \$5.3 million from 2007 to 2008. This year, \$3 million in additional budget authority is being requested to cover construction delays and increased cost projections, as shown in years 2008-2011.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,451	6,481	3,257	1,136	185	95	0	0	13,605
<b>Project Total:</b>	2,451	6,481	3,257	1,136	185	95	0	0	13,605
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	2,451	6,481	3,257	1,136	185	95	0	0	13,605
<b>Appropriations Total*</b>	2,451	6,481	3,257	1,136	185	95	0	0	13,605
<b>O &amp; M Costs (Savings)</b>			0	0	71	71	71	71	284
<b>Spending Plan</b>		1,200	8,538	1,136	185	95	0	0	11,154

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

# SPU - Drainage & Wastewater

## Utility Relocation due to Alaskan Way Viaduct and Seawall Replacement – DWF

<b>BCL/Program Name:</b> Shared Cost Projects	<b>BCL/Program Code:</b> C410B
<b>Project Type:</b> New Facility	<b>Start Date:</b> 1st Quarter 2004
<b>Project ID:</b> C4102-DWF	<b>End Date:</b> 4th Quarter 2017

**Location:** SR 99 / Battery St.

<b>Neighborhood Plan:</b> In more than one Plan	<b>Neighborhood Plan Matrix:</b> Multiple
<b>Neighborhood District:</b> In more than one District	<b>Urban Village:</b> In more than one Urban Village

This project relocates, replaces, and protects drainage- and wastewater-related facilities affected by work on the Alaskan Way Viaduct and Seawall. The Alaskan Way Viaduct is part of State Route 99, which carries 25 percent of the north-south traffic through downtown Seattle and is a major truck route serving the city's industrial areas. The seawall supports the soils under Alaskan Way and the Viaduct. Both facilities were damaged on February 28, 2001 by the Nisqually Earthquake. The Washington State Department of Transportation (WSDOT) is the lead for the project. SPU has substantial drainage and wastewater infrastructure along the approximately four-mile project corridor which must be relocated one or more times during the project. This project designs and constructs these relocations according to the transportation project scope and schedule. Only 2008 and 2009 are budgeted in this CIP. Further budgeting will take place when the scope and timing are further defined.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,476	3,347	2,310	2,882	0	0	0	0	10,015
<b>Project Total:</b>	1,476	3,347	2,310	2,882	0	0	0	0	10,015
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1,476	3,347	2,310	2,882	0	0	0	0	10,015
<b>Appropriations Total*</b>	1,476	3,347	2,310	2,882	0	0	0	0	10,015
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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

# SPU - Drainage & Wastewater

## Venema Creek Natural Drainage System

**BCL/Program Name:** Low Impact Development

**BCL/Program Code:** C334B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C302317

**End Date:** 2nd Quarter 2014

**Location:** Venema Creek Drainage Basin

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest

**Urban Village:** Not in an Urban Village

This project reduces the stormwater runoff and pollutants from an approximately 105-acre sub-basin of Piper's Creek to protect downstream aquatic resources. The unimproved right-of-way is a starting point for design. The project scope includes constructing an engineered system of swales or other design alternatives to detain runoff, filter pollutants, and allow maximum opportunity for infiltration; using native vegetation as a stormwater management element, as well as for aesthetic appeal; and constructing a sidewalk on one side of each that uses the Street Edge Alternatives (SEA) or Cascade design approach. Funding to operate and maintain the project is expected to be included in SPU's operating budget starting in 2011 although maintenance responsibility is shared along some of the project streets with property owners. Property owners and residents adjacent to the SEA street designs are expected to provide the majority of vegetation maintenance; however all maintenance of the Cascade design, which has higher volumes of water and few properties facing the system, is the responsibility of SPU. The confidence level for the current cost estimate is low. SPU's Asset Management Committee approval is required prior to the start of the design phase. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	657	309	151	253	2,780	1,812	124	127	6,213
<b>Project Total:</b>	657	309	151	253	2,780	1,812	124	127	6,213
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	657	309	151	253	2,780	1,812	124	127	6,213
<b>Appropriations Total*</b>	657	309	151	253	2,780	1,812	124	127	6,213
<b>O &amp; M Costs (Savings)</b>			0	0	0	40	80	80	200
<b>Spending Plan</b>		289	151	253	2,780	1,812	124	127	5,536

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

# SPU - Drainage & Wastewater

## Wastewater Rehabilitation Evaluation

<b>BCL/Program Name:</b> Wastewater Conveyance	<b>BCL/Program Code:</b> C320B
<b>Project Type:</b> Rehabilitation or Restoration	<b>Start Date:</b> 1st Quarter 1998
<b>Project ID:</b> C3AA401	<b>End Date:</b> Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This program plans upcoming sewer rehabilitation projects. This is done by investigating existing records, reports, and plans; obtaining field data from closed circuit television inspection; and reviewing flow monitoring data. The project team then develops alternatives and cost estimates and makes recommendations for work to be included in the annual rehab program. The team determines whether each project should be done as a no-dig, point rehab, or full line replacement project. This program will include the development of a decision model to prioritize wastewater rehab projects based on maximization of the benefit/cost ratio. This program goes through an annual review with the Asset Management Committee as part of the overall Sewer Rehabilitation Programmatic Plan. The confidence in the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,614	258	252	526	323	358	395	578	4,304
<b>Project Total:</b>	1,614	258	252	526	323	358	395	578	4,304
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1,614	258	252	526	323	358	395	578	4,304
<b>Appropriations Total*</b>	1,614	258	252	526	323	358	395	578	4,304
<b>O &amp; M Costs (Savings)</b>			22	22	22	22	22	22	129
<b>Spending Plan</b>		255	252	526	323	358	395	578	2,687

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

# SPU - Drainage & Wastewater

## Water Reuse - Wastewater

**BCL/Program Name:** Wastewater Conveyance

**BCL/Program Code:** C320B

**Project Type:** New Facility

**Start Date:** 4th Quarter 2001

**Project ID:** C301203

**End Date:** 4th Quarter 2008

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Not in a Neighborhood District

**Urban Village:** Not in an Urban Village

This pilot project disconnects residences from combined sewer systems and evaluates on-site methods of detention and infiltration of residential site stormwater. The project involves ten properties in the Fremont-Ballard neighborhood, with performance monitors on three of the properties per the approved Water Quality Assurance Project Plan. The monitoring period extends through two wet seasons and includes flow and water quality parameters. This project was reviewed and approved by SPU's Asset Management Committee. The confidence level in the current cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	476	97	44	0	0	0	0	0	617
<b>Project Total:</b>	476	97	44	0	0	0	0	0	617
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	476	97	44	0	0	0	0	0	617
<b>Appropriations Total*</b>	476	97	44	0	0	0	0	0	617
<b>O &amp; M Costs (Savings)</b>			0	3	3	3	3	3	15

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

# SPU - Drainage & Wastewater

## Watershed Base Creek Flow Control

**BCL/Program Name:** Low Impact Development

**BCL/Program Code:** C334B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C353310

**End Date:** 4th Quarter 2009

**Location:** Citywide/Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

**Urban Village:** Not in an Urban Village

This project develops concepts and preliminary engineering for improvements to stormwater flow control in targeted creeks at which operation of the City's drainage system has resulted in ecosystem degradation. Under this project, SPU identifies flow control techniques (such as natural drainage system elements, by-pass facilities, and detention), evaluates alternatives, and prepares cost-benefit analyses on identified alternatives. A benefit of these preliminary engineering efforts is identification of the most cost-effective capital project options while considering other objectives such as flood control, environmental, and economic benefits. The confidence level of the current cost estimate is medium. Proposed projects are subject to approval by SPU's Asset Management Committee. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	109	71	282	210	0	0	0	0	672
<b>Project Total:</b>	109	71	282	210	0	0	0	0	672
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	109	71	282	210	0	0	0	0	672
<b>Appropriations Total*</b>	109	71	282	210	0	0	0	0	672
<b>O &amp; M Costs (Savings)</b>			0	0	3	3	3	3	13
<b>Spending Plan</b>		125	282	210	0	0	0	0	617

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

# SPU - Drainage & Wastewater

## Windermere Combined Sewer Overflow Storage

<b>BCL/Program Name:</b> Control Structures	<b>BCL/Program Code:</b> C310B
<b>Project Type:</b> New Facility	<b>Start Date:</b> 2nd Quarter 2002
<b>Project ID:</b> C302103	<b>End Date:</b> 4th Quarter 2012

**Location:** N/A

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northeast

**Urban Village:** Not in an Urban Village

This project constructs facilities for Combined Sewer Overflow (CSO) reduction in the Windermere area. Major work includes a feasibility study for assessing potential coordination with King County, flow monitoring, system modeling, facility planning, preliminary engineering, design, permitting, and construction. The project schedule has been revised from the 2001 CSO Plan to account for project development; SPU's CSO Facility Retrofit project (C302102), which may reduce the size of the necessary facilities in this basin; and potential coordination with King County. This project is in a preliminary phase of development and cost estimates will be revised over time as the scope of the plan is clarified. This project has been approved by SPU's Asset Management Committee.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,339	1,055	2,260	5,167	5,416	244	60	0	15,541
<b>Project Total:</b>	1,339	1,055	2,260	5,167	5,416	244	60	0	15,541
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	1,339	1,055	2,260	5,167	5,416	244	60	0	15,541
<b>Appropriations Total*</b>	1,339	1,055	2,260	5,167	5,416	244	60	0	15,541
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	78	78
<b>Spending Plan</b>		1,106	2,260	5,167	5,416	244	60	0	14,253

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

# SPU - Drainage & Wastewater

## Works Progress Administration Drains Study & Repair

<b>BCL/Program Name:</b> Landslide Mitigation & Special Programs	<b>BCL/Program Code:</b> C335B
<b>Project Type:</b> Rehabilitation or Restoration	<b>Start Date:</b> 3rd Quarter 2000
<b>Project ID:</b> C3315	<b>End Date:</b> Ongoing

**Location:** Citywide

**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood Plan Matrix:** N/A

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

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

This program evaluates, prioritizes and makes necessary repairs on subsurface landslide control drains and tunnels installed as a result of extensive landslide damage during the winter of 1933-1934. The Works Progress Administration sponsored the construction of landslide mitigation projects at 29 sites around the city between 1935-1941. This program was one of the recommended activities from the Landslide Policy Paper adopted by the City Council in 1998. This program is in a preliminary phase of development and cost estimates will be revised over time as comprehensive site-specific evaluations are completed. SPU's Asset Management Committee has approved the programmatic approach.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	724	301	257	473	539	276	282	359	3,211
<b>Project Total:</b>	724	301	257	473	539	276	282	359	3,211
<b>Fund Appropriations/Allocations</b>									
Drainage and Wastewater Fund	724	301	257	473	539	276	282	359	3,211
<b>Appropriations Total*</b>	724	301	257	473	539	276	282	359	3,211
<b>O &amp; M Costs (Savings)</b>			16	16	16	16	16	16	96
<b>Spending Plan</b>		200	257	473	539	276	282	359	2,386

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

