

# SPU - Drainage & Wastewater

## 10718 35th NE Sediment Pond

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

**BCL/Program Code:** C333B

**Project Type:** Improved Facility

**Start Date:** 3rd Quarter 2002

**Project ID:** C302305

**End Date:** 4th Quarter 2010

**Location:** 10718 35th Ave. NE

**Neighborhood Plan:** North District/Lake City

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** North

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

This project constructs a new, efficient off-line sediment collection facility and other site improvements upstream of the Meadowbrook Pond detention facility. Meadowbrook currently has no formal maintenance access; there are no roadways or staging areas for required dredging activities, and access to trashracks is poor. The new facilities provide improved maintenance access, water quality, and habitat. The confidence level of the current cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	626	222	919	83	4	4	0	0	1,858
<b>Project Total:</b>	626	222	919	83	4	4	0	0	1,858
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	626	222	919	83	4	4	0	0	1,858
<b>Appropriations Total*</b>	626	222	919	83	4	4	0	0	1,858
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		650	919	83	4	4	0	0	1,660

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# SPU - Drainage & Wastewater

## 1500 - 2600 Aurora N Landslide

<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 2006
<b>Project ID:</b> C363401	<b>End Date:</b> 4th Quarter 2011

**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.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	31	1	57	47	155	895	0	1,186
<b>Project Total:</b>	0	31	1	57	47	155	895	0	1,186
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	31	1	57	47	155	895	0	1,186
<b>Appropriations Total*</b>	0	31	1	57	47	155	895	0	1,186
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# SPU - Drainage & Wastewater

## 20th Avenue NE Local Drainage

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

**BCL/Program Code:** C332B

**Project Type:** Improved Facility

**Start Date:** 3rd Quarter 2001

**Project ID:** C301317

**End Date:** 4th Quarter 2007

**Location:** 20th Ave. NE/NE 137th St.

**Neighborhood Plan:** North District/Lake City

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** North

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

This project develops a plan and makes improvements to resolve safety concerns related to a ditch along 20th Ave. NE. The ditch is deep and has steep side slopes, and the high-velocity flows inside it have undercut the banks near residential properties. SPU provides culverts and fill to allow formal bus stops to be constructed by King County Metro in three locations along 20th Ave. NE, to allow safe loading and off-loading of passengers. Spot improvements are also provided in several locations to repair undercut banks eroded by stormwater. All improvements have been completed. Remaining work includes landscape maintenance and repairs through 2007. SPU's Asset Management Committee has approved the project and the confidence level of the cost estimate is high.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	215	5	5	0	0	0	0	0	225
<b>Project Total:</b>	215	5	5	0	0	0	0	0	225
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	215	5	5	0	0	0	0	0	225
<b>Appropriations Total*</b>	215	5	5	0	0	0	0	0	225
<b>O &amp; M Costs (Savings)</b>			0	3	3	3	3	0	12
<b>Spending Plan</b>		5	5	0	0	0	0	0	10

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# SPU - Drainage & Wastewater

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

<b>BCL/Program Name:</b> Low Impact Development	<b>BCL/Program Code:</b> C334B
<b>Project Type:</b> Improved Facility	<b>Start Date:</b> 4th Quarter 2000
<b>Project ID:</b> C300329	<b>End Date:</b> 4th Quarter 2007

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

**Neighborhood Plan:** Broadview-Bitter Lake-Haller Lake      **Neighborhood Plan Matrix:** N/A

**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 as a stormwater management element and for aesthetic appeal. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	5,028	69	94	0	0	0	0	0	5,191
<b>Project Total:</b>	5,028	69	94	0	0	0	0	0	5,191
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	5,028	69	94	0	0	0	0	0	5,191
<b>Appropriations Total*</b>	5,028	69	94	0	0	0	0	0	5,191
<b>O &amp; M Costs (Savings)</b>			0	7	7	7	7	7	35
<b>Spending Plan</b>		82	94	0	0	0	0	0	176

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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 2011

**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.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	50	1	37	81	77	479	0	726
<b>Project Total:</b>	0	50	1	37	81	77	479	0	726
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	50	1	37	81	77	479	0	726
<b>Appropriations Total*</b>	0	50	1	37	81	77	479	0	726
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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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 at 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	298	750	793	2,502	975	728	219	33	6,299
<b>Project Total:</b>	298	750	793	2,502	975	728	219	33	6,299
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	298	750	793	2,502	975	728	219	33	6,299
<b>Appropriations Total*</b>	298	750	793	2,502	975	728	219	33	6,299
<b>O &amp; M Costs (Savings)</b>			0	0	5	5	5	5	20

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# 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:** In more than one Plan

**Neighborhood Plan Matrix:** Multiple

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

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

This matching grant project funds community-based habitat improvements that leverage SPU's drainage-related habitat efforts with a dollar-for-dollar contribution of volunteer labor and donated materials and services. This project was added to the 2005-2010 Adopted CIP by Council action. Projects must meet legal requirements for use of DWF Funds. Resolution 30719 describes grant application procedures and 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. A seven-member Aquatic Habitat Matching Grant Review Board was established in 2005 and developed the grant guidelines for implementation.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1	300	352	283	236	221	269	197	1,859
<b>Project Total:</b>	1	300	352	283	236	221	269	197	1,859
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1	300	352	283	236	221	269	197	1,859
<b>Appropriations Total*</b>	1	300	352	283	236	221	269	197	1,859
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		375	352	283	236	221	269	197	1,932

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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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	0	285	211	164	478	593	1,730
<b>Project Total:</b>	0	0	0	285	211	164	478	593	1,730
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	0	285	211	164	478	593	1,730
<b>Appropriations Total*</b>	0	0	0	285	211	164	478	593	1,730
<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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	150	50	23	40	28	7	9	7	313
<b>Project Total:</b>	150	50	23	40	28	7	9	7	313
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	150	50	23	40	28	7	9	7	313
<b>Appropriations Total*</b>	150	50	23	40	28	7	9	7	313
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		60	23	40	28	7	9	7	173

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# SPU - Drainage & Wastewater

## Best Management Practice Program Implementation

**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 2012

**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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	605	375	595	920	786	2,391	4,477	3,288	13,437
<b>Project Total:</b>	605	375	595	920	786	2,391	4,477	3,288	13,437
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	605	375	595	920	786	2,391	4,477	3,288	13,437
<b>Appropriations Total*</b>	605	375	595	920	786	2,391	4,477	3,288	13,437
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	595	920	786	2,391	4,477	3,288	12,457

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**2007-2012 Proposed Capital Improvement Program**

# SPU - Drainage & Wastewater

## Bitter Lake Dredging

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

**BCL/Program Code:** C333B

**Project Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2006

**Project ID:** C306002

**End Date:** 4th Quarter 2011

**Location:** N 137th St.

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

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest

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

This project dredges the north end of Bitter Lake, near the stormwater outfall from N 138th St. The project addresses more extensive sedimentation than is possible with existing operation and maintenance methods. The project investigates access routes, new technology, or access via the lake for those areas that are beyond the reach of the current dredging process. For the long term, another Drainage & Wastewater CIP project, Bitter Lake/N 137th St. Stormwater (C301322), reduces sedimentation and improves stormwater conveyance so that this Bitter Lake dredging project is a one-time event. The confidence level of the cost estimate is medium. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. This project was included in the 2006-2011 Adopted CIP as C3NW033-002.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	6	5	4	18	367	0	400
<b>Project Total:</b>	0	0	6	5	4	18	367	0	400
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	6	5	4	18	367	0	400
<b>Appropriations Total*</b>	0	0	6	5	4	18	367	0	400
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		75	6	5	4	18	367	0	475

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# 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 2012

**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 funds the design and construction of a stormwater treatment project 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 included 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.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	14	0	26	21	315	1,273	188	36	1,872
<b>Project Total:</b>	14	0	26	21	315	1,273	188	36	1,872
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	14	0	26	21	315	1,273	188	36	1,872
<b>Appropriations Total*</b>	14	0	26	21	315	1,273	188	36	1,872
<b>O &amp; M Costs (Savings)</b>			2	2	2	2	2	0	10
<b>Spending Plan</b>		196	26	21	315	1,273	188	36	2,054

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**2007-2012 Proposed Capital Improvement Program**

# 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 provide for compliance with the City's National Pollutant Discharge Elimination System 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	190	150	385	142	197	184	224	164	1,636
<b>Project Total:</b>	190	150	385	142	197	184	224	164	1,636
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	190	150	385	142	197	184	224	164	1,636
<b>Appropriations Total*</b>	190	150	385	142	197	184	224	164	1,636
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		235	385	142	197	184	224	164	1,531

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# 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 supports development of 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	532	320	414	178	254	305	0	0	2,003
<b>Project Total:</b>	532	320	414	178	254	305	0	0	2,003
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	532	320	414	178	254	305	0	0	2,003
<b>Appropriations Total*</b>	532	320	414	178	254	305	0	0	2,003
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		778	414	178	254	305	0	0	1,929

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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 supports the creation of 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 level 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	321	91	79	74	90	66	719
<b>Project Total:</b>	0	0	321	91	79	74	90	66	719
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	321	91	79	74	90	66	719
<b>Appropriations Total*</b>	0	0	321	91	79	74	90	66	719
<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

## Capital Planning - Protection of Beneficial Uses

<b>BCL/Program Name:</b> Protection of Beneficial Uses	<b>BCL/Program Code:</b> C333B
<b>Project Type:</b> New Facility	<b>Start Date:</b> 1st Quarter 2004
<b>Project ID:</b> C343301	<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:** In more than one Urban Village

This project supports development of Protection of Beneficial Uses program projects. 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	308	70	285	87	20	18	9	7	803
<b>Project Total:</b>	308	70	285	87	20	18	9	7	803
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	308	70	285	87	20	18	9	7	803
<b>Appropriations Total*</b>	308	70	285	87	20	18	9	7	803
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		25	285	87	20	18	9	7	450

*\*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 supports development of Public Asset Protection 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 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	167	100	419	168	375	294	157	460	2,140
<b>Project Total:</b>	167	100	419	168	375	294	157	460	2,140
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	167	100	419	168	375	294	157	460	2,140
<b>Appropriations Total*</b>	167	100	419	168	375	294	157	460	2,140
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		175	419	168	375	294	157	460	2,048

*\*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

<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> C307011	<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 supports development of Pump Station program projects. 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	267	42	79	74	90	66	617
<b>Project Total:</b>	0	0	267	42	79	74	90	66	617
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	267	42	79	74	90	66	617
<b>Appropriations Total*</b>	0	0	267	42	79	74	90	66	617
<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

## Channel Widening Project

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

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2008

**Project ID:** C308002

**End Date:** 4th Quarter 2012

**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 evaluates channel widening on creeks to provide aquatic resource benefits. Higher stormwater flows and channel confinements have resulted in adverse impacts to stream aquatic biota and habitat. This project addresses these impacts by making improvements to dissipate flow energy, reduce excessive scour of creek banks and floors, and create aquatic biota refugia. The project's benefits include improving stream ecosystems and protecting property from flooding. This project is in a preliminary phase of development and cost estimates will be revised over time. Proposed channel widening projects are evaluated by SPU's Asset Management Committee for cost-benefit impacts and to ensure the appropriate use of the drainage funds. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. This project was included in the 2006-2011 Adopted CIP as C3NW033-014.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	0	18	79	74	45	33	248
<b>Project Total:</b>	0	0	0	18	79	74	45	33	248
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	0	18	79	74	45	33	248
<b>Appropriations Total*</b>	0	0	0	18	79	74	45	33	248
<b>O &amp; M Costs (Savings)</b>			0	0	5	5	5	0	15

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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 2007

**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 begin in 2007 and inspect approximately 100 additional facilities. This assessment is funded through reimbursements from the Cumulative Reserve Fund to the Drainage and Wastewater Fund. The title for this project in the 2006-2011 CIP was City Facilities Drainage Assessment.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	100	103	0	0	0	0	0	203
<b>Project Total:</b>	0	100	103	0	0	0	0	0	203
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	100	103	0	0	0	0	0	203
<b>Appropriations Total*</b>	0	100	103	0	0	0	0	0	203
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	103	0	0	0	0	0	103

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# SPU - Drainage & Wastewater

## Climate Protection - DWF

<b>BCL/Program Name:</b> Shared Cost Projects	<b>BCL/Program Code:</b> C410B
<b>Project Type:</b> New Investment	<b>Start Date:</b> 1st Quarter 2007
<b>Project ID:</b> C407S01-DWF	<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 researches the impact of climate change on the drainage and wastewater system, and identifies adaptations or additional system resiliency that may be required. The effort is part of the Mayor's Environmental Action Agenda, which includes a City commitment to meet or beat Kyoto greenhouse gas emission targets. The Office of Sustainability & Environment leads the Citywide effort.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	77	82	0	0	0	0	159
<b>Project Total:</b>	0	0	77	82	0	0	0	0	159
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	77	82	0	0	0	0	159
<b>Appropriations Total*</b>	0	0	77	82	0	0	0	0	159
<b>O &amp; M Costs (Savings)</b>			20	0	0	0	0	0	20

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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

To optimize system operation and storage, this project retrofits, upgrades, and modifies existing Combined Sewer Overflow (CSO) reduction facilities in priority CSO basins. 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 is a medium confidence level.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	3,120	554	567	954	786	736	895	658	8,270
<b>Project Total:</b>	3,120	554	567	954	786	736	895	658	8,270
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	3,120	554	567	954	786	736	895	658	8,270
<b>Appropriations Total*</b>	3,120	554	567	954	786	736	895	658	8,270
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		1,000	567	954	786	736	895	658	5,596

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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 in 2007. The certainty of the cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	411	328	275	368	448	0	1,830
<b>Project Total:</b>	0	0	411	328	275	368	448	0	1,830
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	411	328	275	368	448	0	1,830
<b>Appropriations Total*</b>	0	0	411	328	275	368	448	0	1,830
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# SPU - Drainage & Wastewater

## Combined Sewer Overflow Optimization Study

**BCL/Program Name:** Control Structures **BCL/Program Code:** C310B  
**Project Type:** New Investment **Start Date:** 1st Quarter 2007  
**Project ID:** C307009 **End Date:** 4th Quarter 2009

**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 studies the optimal methods and timing for operating and maintaining passive control structures. The study may include evaluation of alternative technologies for cleaning or assessment of infrastructure. SPU's Asset Management Committee will review and approve the project in 2007. The confidence of the cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	0	0	39	0	0	0	39
<b>Project Total:</b>	0	0	0	0	39	0	0	0	39
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	0	0	39	0	0	0	39
<b>Appropriations Total*</b>	0	0	0	0	39	0	0	0	39
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

## Combined Sewer Overflow Plan Update

**BCL/Program Name:** Control Structures **BCL/Program Code:** C310B  
**Project Type:** Improved Facility **Start Date:** 1st Quarter 1999  
**Project ID:** C3AA103 **End Date:** 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, Environmental Impact Statement, and public participation activities. The project also prepares feasibility studies to identify potential opportunities for coordination with King County. The SPU Asset Management Committee approved the plan in 2005. The certainty of the cost estimate is a medium confidence level.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,863	550	703	349	79	74	45	0	3,662
<b>Project Total:</b>	1,863	550	703	349	79	74	45	0	3,662
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1,863	550	703	349	79	74	45	0	3,662
<b>Appropriations Total*</b>	1,863	550	703	349	79	74	45	0	3,662
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	703	349	79	74	45	0	1,249

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# SPU - Drainage & Wastewater

## Combined Sewer Overflow Reporting/Public Notice

<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> C307008	<b>End Date:</b> 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 confidence in the cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	115	45	0	0	0	0	161
<b>Project Total:</b>	0	0	115	45	0	0	0	0	161
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	115	45	0	0	0	0	161
<b>Appropriations Total*</b>	0	0	115	45	0	0	0	0	161
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# 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. SPU's Asset Management Committee will review and approve the project in 2007. The confidence in the cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	100	116	49	0	0	0	0	265
<b>Project Total:</b>	0	100	116	49	0	0	0	0	265
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	100	116	49	0	0	0	0	265
<b>Appropriations Total*</b>	0	100	116	49	0	0	0	0	265
<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

## 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> 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 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. SPU's Asset Management Committee will review and approve the project in 2007. The confidence in the cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	80	88	0	0	0	0	168
<b>Project Total:</b>	0	0	80	88	0	0	0	0	168
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	80	88	0	0	0	0	168
<b>Appropriations Total*</b>	0	0	80	88	0	0	0	0	168
<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

## Comprehensive Drainage Plan Implementation

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

**BCL/Program Code:** C332B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2007

**Project ID:** C307018

**End Date:** Ongoing

**Location:** Various

**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 project funds work to be done in the outer years of the current six-year CIP to implement drainage improvements identified in the 2004 Comprehensive Drainage Plan (CDP) Update. Project development work done as part of the Capital Planning – Flood Control and Local Drainage project establishes priorities and schedules for these projects. The specific projects to be implemented in 2007 and beyond are identified in later CIPs after the initial project development work is done. The funding level is identified in advance to provide information about projected spending levels required to meet the goals of the CDP. This project is in a preliminary phase of development and cost estimates will be revised over time, including for years 2011-2012. This project was included in the 2006-2011 Adopted CIP as C3NW032-008.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	6	485	2,289	4,351	0	0	7,132
<b>Project Total:</b>	0	0	6	485	2,289	4,351	0	0	7,132
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	6	485	2,289	4,351	0	0	7,132
<b>Appropriations Total*</b>	0	0	6	485	2,289	4,351	0	0	7,132
<b>O &amp; M Costs (Savings)</b>			0	13	40	100	100	0	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

## Creek Flow Control Implementation

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

**BCL/Program Code:** C334B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2010

**Project ID:** C310001

**End Date:** Ongoing

**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 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. This project was included in the 2006-2011 Adopted CIP as C3NW033-014.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	0	0	0	2,207	2,686	1,973	6,866
<b>Project Total:</b>	0	0	0	0	0	2,207	2,686	1,973	6,866
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	0	0	0	2,207	2,686	1,973	6,866
<b>Appropriations Total*</b>	0	0	0	0	0	2,207	2,686	1,973	6,866
<b>O &amp; M Costs (Savings)</b>			0	0	0	15	15	15	45

*\*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 Sediment Control Program

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

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C353303

**End Date:** 4th Quarter 2011

**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 identifies and implements minor capital projects that address sediment control in urban creeks. The initial project focus is on roadway runoff that is inadequately managed from the roadway edge to the receiving creek, and small, discrete sections of creek located on public land with raw, eroded banks. In the medium term, SPU staff has identified more holistic approaches to controlling excessive fine sediments and a shortage of appropriate larger gravel. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1	25	11	84	20	18	9	0	168
<b>Project Total:</b>	1	25	11	84	20	18	9	0	168
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1	25	11	84	20	18	9	0	168
<b>Appropriations Total*</b>	1	25	11	84	20	18	9	0	168
<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 in 2005, and the confidence level of current cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	39	75	97	78	64	61	76	57	548
<b>Project Total:</b>	39	75	97	78	64	61	76	57	548
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	39	75	97	78	64	61	76	57	548
<b>Appropriations Total*</b>	39	75	97	78	64	61	76	57	548
<b>O &amp; M Costs (Savings)</b>			5	5	5	5	5	0	25
<b>Spending Plan</b>		275	97	78	64	61	76	57	709

\*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 establishes 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. SPU's Asset Management Committee has approved the 2006 budget, and program re-evaluation occurs annually for years 2007-2011. The confidence level of current cost estimates is medium. 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	129	150	185	152	127	122	152	113	1,131
<b>Project Total:</b>	129	150	185	152	127	122	152	113	1,131
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	129	150	185	152	127	122	152	113	1,131
<b>Appropriations Total*</b>	129	150	185	152	127	122	152	113	1,131
<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

## Demand Management

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

**BCL/Program Code:** C410B

**Project Type:** Improved Facility

**Start Date:** 1st Quarter 2007

**Project ID:** C407019

**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 funds a variety of small capital projects designed to reduce the amount of stormwater going into the wastewater system as part of an overall program to manage demand for wastewater capital facilities. This project has not been reviewed by SPU's Asset Management Committee and the confidence level in the current cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	600	597	538	552	566	580	3,433
<b>Project Total:</b>	0	0	600	597	538	552	566	580	3,433
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	600	597	538	552	566	580	3,433
<b>Appropriations Total*</b>	0	0	600	597	538	552	566	580	3,433
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	600	597	538	552	566	580	3,433

*\*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

<b>BCL/Program Name:</b> Landslide Mitigation & Special Programs	<b>BCL/Program Code:</b> C335B
<b>Project Type:</b> New Investment	<b>Start Date:</b> 1st Quarter 2005
<b>Project ID:</b> C353501	<b>End Date:</b> 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. Confidence level in the cost estimate is high.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	40	130	449	194	0	0	0	0	812
<b>Project Total:</b>	40	130	449	194	0	0	0	0	812
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	40	130	449	194	0	0	0	0	812
<b>Appropriations Total*</b>	40	130	449	194	0	0	0	0	812
<b>O &amp; M Costs (Savings)</b>			100	100	100	100	100	100	600

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# 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	26	326	59	346	0	0	0	0	756
<b>Project Total:</b>	26	326	59	346	0	0	0	0	756
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	26	326	59	346	0	0	0	0	756
<b>Appropriations Total*</b>	26	326	59	346	0	0	0	0	756
<b>O &amp; M Costs (Savings)</b>			100	100	100	100	100	0	500

*\*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

<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 2007
<b>Project ID:</b> C3335	<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 will provide funding and technical assistance for Seattle drainage customers who install technologies or stormwater management systems that provide utility system benefits over and beyond regulatory compliance. 2007-2008 will be pilot years for the program, which is currently in a preliminary phase of development, and will focus on outreach to non-City customers. Cost estimates may be revised over time. By 2009, SPU anticipates that this project will replace the Intergovernmental Shares - DRN program (C3355) and be open to projects by City and non-City customers.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	350	750	1,573	1,471	1,791	1,315	7,250
<b>Project Total:</b>	0	0	350	750	1,573	1,471	1,791	1,315	7,250
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	350	750	1,573	1,471	1,791	1,315	7,250
<b>Appropriations Total*</b>	0	0	350	750	1,573	1,471	1,791	1,315	7,250
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# SPU - Drainage & Wastewater

## Drainage & Wastewater Partnership Program - WW

<b>BCL/Program Name:</b> Wastewater Conveyance	<b>BCL/Program Code:</b> C320B
<b>Project Type:</b> New Facility	<b>Start Date:</b> 1st Quarter 2007
<b>Project ID:</b> C3203	<b>End Date:</b> 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 will provide funding and technical assistance for Seattle wastewater customers who install technologies or stormwater management systems that provide utility system benefits over and beyond regulatory compliance. 2007-2008 will be pilot years for the program, which is currently in a preliminary phase of development, and will focus on outreach to non-City customers. Cost estimates may be revised over time. By 2009, SPU anticipates this project will replace the Intergovernmental Shares - DRN program (C3355) and be open to projects by City and non-City customers.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	50	50	197	184	224	164	869
<b>Project Total:</b>	0	0	50	50	197	184	224	164	869
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	50	50	197	184	224	164	869
<b>Appropriations Total*</b>	0	0	50	50	197	184	224	164	869
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# SPU - Drainage & Wastewater

## Drainage Spot Improvements

<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> 2nd Quarter 1998
<b>Project ID:</b> C333201	<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 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 2007-2008 Proposed Budget. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	801	500	271	214	197	184	224	164	2,555
<b>Project Total:</b>	801	500	271	214	197	184	224	164	2,555
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	801	500	271	214	197	184	224	164	2,555
<b>Appropriations Total*</b>	801	500	271	214	197	184	224	164	2,555
<b>O &amp; M Costs (Savings)</b>			3	3	3	3	3	3	18
<b>Spending Plan</b>		250	271	214	197	184	224	164	1,504

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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 in 2005. 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	31	40	7	6	110	88	112	82	477
<b>Project Total:</b>	31	40	7	6	110	88	112	82	477
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	31	40	7	6	110	88	112	82	477
<b>Appropriations Total*</b>	31	40	7	6	110	88	112	82	477
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		68	7	6	110	88	112	82	474

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# SPU - Drainage & Wastewater

## Force Main Improvements

<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 2007
<b>Project ID:</b> C3103	<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 program implements the recommendations of the Force Main/Pump Station Plan by avoiding extremely high costs due to failure of force mains through assessment and repair/replacement of failing infrastructure. SPU's Asset Management Committee will review and approve the program in 2006. The certainty of the cost estimate is a low confidence level.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	591	464	393	368	448	329	2,593
<b>Project Total:</b>	0	0	591	464	393	368	448	329	2,593
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	591	464	393	368	448	329	2,593
<b>Appropriations Total*</b>	0	0	591	464	393	368	448	329	2,593
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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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 is on hold until 2008, and 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. The confidence in the cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	0	279	198	152	875	1,065	2,568
<b>Project Total:</b>	0	0	0	279	198	152	875	1,065	2,568
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	0	279	198	152	875	1,065	2,568
<b>Appropriations Total*</b>	0	0	0	279	198	152	875	1,065	2,568
<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 2009
<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 in 2009-2012 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	0	0	590	552	895	658	2,695
<b>Project Total:</b>	0	0	0	0	590	552	895	658	2,695
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	0	0	590	552	895	658	2,695
<b>Appropriations Total*</b>	0	0	0	0	590	552	895	658	2,695
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# 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 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/Boeing Field.

Cleanup of contaminated sediment in Slip 4 is scheduled to occur in 2007-2008. The City of Seattle (City Light and SPU) is leading the cleanup effort with support from King County. Cleanup and closure of the flume must be completed prior to Slip 4 cleanup activities to prevent potential recontamination of the slip. City Light will remove contaminated sediment from the flume and, given the poor condition of the flume, intends to close the flume after it is cleaned. Because the flume still functions as a storm drain, the drainage system must either be replaced or the existing drainage routed elsewhere.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	209	207	0	0	0	0	416
<b>Project Total:</b>	0	0	209	207	0	0	0	0	416
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	209	207	0	0	0	0	416
<b>Appropriations Total*</b>	0	0	209	207	0	0	0	0	416
<b>O &amp; M Costs (Savings)</b>			0	0	0	15	15	15	45

*\*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

## GIS System Enhancements

**BCL/Program Name:** Landslide Mitigation & Special Programs      **BCL/Program Code:** C335B  
**Project Type:** New Investment      **Start Date:** 1st Quarter 2004  
**Project ID:** C343502      **End Date:** 4th Quarter 2009

**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

The Drainage and Wastewater Geographic Information System (GIS) has undergone significant improvements in recent years to enhance accuracy and completeness. This project provides funding to complete yet-to-be addressed GIS data enhancements to deal with missing data, map/data correction backlog, and missing data attributes.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	220	45	97	80	71	0	0	0	513
<b>Project Total:</b>	220	45	97	80	71	0	0	0	513
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	220	45	97	80	71	0	0	0	513
<b>Appropriations Total*</b>	220	45	97	80	71	0	0	0	513
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		159	97	80	71	0	0	0	407

## GIS System Enhancements- WW

**BCL/Program Name:** Wastewater Conveyance      **BCL/Program Code:** C320B  
**Project Type:** New Investment      **Start Date:** 1st Quarter 2007  
**Project ID:** C307016      **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

The Drainage and Wastewater Geographic Information System (GIS) has undergone significant improvements in recent years to enhance accuracy and completeness. This project provides funding to complete yet-to-be addressed GIS data enhancements to deal with missing data, map/data correction backlog, and missing data attributes.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	103	39	0	0	0	0	142
<b>Project Total:</b>	0	0	103	39	0	0	0	0	142
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	103	39	0	0	0	0	142
<b>Appropriations Total*</b>	0	0	103	39	0	0	0	0	142
<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

## 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 in 2004. In 2005 the AMC gave approval to proceed with the design of the SPU-only portion of the joint project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	135	100	293	1	0	0	0	0	530
<b>Project Total:</b>	135	100	293	1	0	0	0	0	530
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	135	100	293	1	0	0	0	0	530
<b>Appropriations Total*</b>	135	100	293	1	0	0	0	0	530
<b>O &amp; M Costs (Savings)</b>			0	3	3	3	3	3	15
<b>Spending Plan</b>		55	293	1	0	0	0	0	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

## 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 studies the physical features of the Greenwood Peat Bog basin, including water levels, basin morphometry, and peat layers/characteristics. Flow monitors have also been installed in the storm drain system and in Pipers Creek to determine whether the creek is affected by land use impacts, especially dewatering, in the basin. Water level and flow monitoring take place over several years to develop a hydrologic model, which supports consideration of land use restrictions to control ongoing subsidence problems and alternatives to stormwater conveyance where technically feasible. Corrugated metal pipe used for the storm drain trunk system may be nearing the end of its useful life. The project also supports rehabilitation/replacement options for this system. The confidence level of the current cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	215	20	25	13	85	0	0	0	359
<b>Project Total:</b>	215	20	25	13	85	0	0	0	359
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	215	20	25	13	85	0	0	0	359
<b>Appropriations Total*</b>	215	20	25	13	85	0	0	0	359
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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**2007-2012 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 2011

**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 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	80	0	0	786	74	45	0	985
<b>Project Total:</b>	0	80	0	0	786	74	45	0	985
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	80	0	0	786	74	45	0	985
<b>Appropriations Total*</b>	0	80	0	0	786	74	45	0	985
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		250	0	0	786	74	45	0	1,155

\*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

## Heavy Equipment Purchases - DWF

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

**Location:** N/A

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

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** 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 as well as funds the purchase of new equipment adds and the retrofitting of existing equipment to meet SPU operational needs and initiatives. This project was included in the 2006-2011 Adopted CIP as C300399 Heavy Equipment Purchases - DWF and C300499 Heavy Equipment Purchases - WW.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,919	867	1,330	1,141	1,028	476	407	887	8,056
<b>Project Total:</b>	1,919	867	1,330	1,141	1,028	476	407	887	8,056
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1,919	867	1,330	1,141	1,028	476	407	887	8,056
<b>Appropriations Total*</b>	1,919	867	1,330	1,141	1,028	476	407	887	8,056
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		848	1,330	1,141	1,028	476	407	887	6,118

*\*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

## High Point Drainage System

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

**BCL/Program Code:** C334B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2002

**Project ID:** C301303

**End Date:** 4th Quarter 2011

**Location:** SW Juneau St./SW Myrtle St.

**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 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. Funding to maintain the new natural drainage system starting in 2007 will be included in future SPU operating budgets.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,431	1,100	1,376	256	59	55	67	0	5,344
<b>Project Total:</b>	2,431	1,100	1,376	256	59	55	67	0	5,344
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	2,431	1,100	1,376	256	59	55	67	0	5,344
<b>Appropriations Total*</b>	2,431	1,100	1,376	256	59	55	67	0	5,344
<b>O &amp; M Costs (Savings)</b>			36	64	64	65	65	0	294
<b>Spending Plan</b>		465	1,376	256	59	55	67	0	2,278

*\*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

<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> C407022-DWF	<b>End Date:</b> 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-related facilities affected by the Washington State Department of Transportation's (WSDOT) I-5 Pavement Reconstruction Project. WSDOT is planning on reconstructing 16 miles of I-5 pavement from Tukwila/Seattle city limits North to NE 145th. The confidence level of the cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	132	135	135	138	141	145	825
<b>Project Total:</b>	0	0	132	135	135	138	141	145	825
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	132	135	135	138	141	145	825
<b>Appropriations Total*</b>	0	0	132	135	135	138	141	145	825
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	132	135	135	138	141	145	825

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# SPU - Drainage & Wastewater

## Integrated Control Monitoring Program - DWF

<b>BCL/Program Name:</b> Shared Cost Projects	<b>BCL/Program Code:</b> C410B
<b>Project Type:</b> New Investment	<b>Start Date:</b> 1st Quarter 2002
<b>Project ID:</b> C4108-DWF	<b>End Date:</b> 4th Quarter 2012

**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 DWW 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, identifying blockages, assessing DPD permit requests, correlating/calibrating models, and prioritizing planned maintenance.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	976	1,110	1,446	1,360	1,830	2,290	2,319	2,348	13,680
<b>Project Total:</b>	976	1,110	1,446	1,360	1,830	2,290	2,319	2,348	13,680
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	976	1,110	1,446	1,360	1,830	2,290	2,319	2,348	13,680
<b>Appropriations Total*</b>	976	1,110	1,446	1,360	1,830	2,290	2,319	2,348	13,680
<b>O &amp; M Costs (Savings)</b>			0	319	499	594	689	784	2,885
<b>Spending Plan</b>		0	1,446	1,360	1,830	2,290	2,319	2,348	11,594

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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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,984	2,000	1,700	1,800	0	0	0	0	7,484
<b>Project Total:</b>	1,984	2,000	1,700	1,800	0	0	0	0	7,484
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1,984	2,000	1,700	1,800	0	0	0	0	7,484
<b>Appropriations Total*</b>	1,984	2,000	1,700	1,800	0	0	0	0	7,484
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		1,750	1,700	1,800	0	0	0	0	5,250

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# 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 drainage 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	249	250	300	300	0	0	0	0	1,099
<b>Project Total:</b>	249	250	300	300	0	0	0	0	1,099
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	249	250	300	300	0	0	0	0	1,099
<b>Appropriations Total*</b>	249	250	300	300	0	0	0	0	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

## 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

This project constructed three detention ponds in the Jackson Park golf course, including overflow structures between Thornton Creek and the new ponds. The project rerouted 1,600 feet of Thornton Creek channel within the golf course to accommodate the detention ponds and improve habitat for fish and wildlife. The project removed 500 feet of culvert within the golf course and replaced it with open creek channel. 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. Funding to operate and maintain the detention pond and other facilities is included in the SPU operating budget. The confidence level of the current cost estimate is high.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	10,599	110	123	99	85	0	0	0	11,016
<b>Project Total:</b>	10,599	110	123	99	85	0	0	0	11,016
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	10,599	110	123	99	85	0	0	0	11,016
<b>Appropriations Total*</b>	10,599	110	123	99	85	0	0	0	11,016
<b>O &amp; M Costs (Savings)</b>			45	45	45	45	45	45	270
<b>Spending Plan</b>		108	123	99	85	0	0	0	415

*\*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

## 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 2012

**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 managing 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. In the 2006-2011 Adopted CIP, this project was called "South Henderson Street Raincatchers". SPU requested the name be changed via a 2006 Supplemental to change the location of this project. The SPU Asset Management Committee approved a Change PDP for this project in August 2006. The confidence in the budget is medium low as this project is still in preliminary engineering.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	78	628	851	103	50	37	45	33	1,825
<b>Project Total:</b>	78	628	851	103	50	37	45	33	1,825
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	78	628	851	103	50	37	45	33	1,825
<b>Appropriations Total*</b>	78	628	851	103	50	37	45	33	1,825
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		238	851	103	50	37	45	33	1,357

*\*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

## 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 2012

**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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	452	1,440	250	1,001	1,040	837	895	658	6,574
<b>Project Total:</b>	452	1,440	250	1,001	1,040	837	895	658	6,574
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	452	1,440	250	1,001	1,040	837	895	658	6,574
<b>Appropriations Total*</b>	452	1,440	250	1,001	1,040	837	895	658	6,574
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	250	1,001	1,040	837	895	658	4,682

*\*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

## Lower Densmore Drainage Improvement

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

**BCL/Program Code:** C332B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C353205

**End Date:** 4th Quarter 2008

**Location:** Aurora Ave. N

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

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest

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

This project develops a strategic implementation plan for drainage (primary) and water quality (secondary) improvements for the Lower Densmore Basin. This basin has experienced numerous flooding incidents for two-year storm levels or higher, in particular at N 107th and Midvale Ave. N, and the Licton Springs area. Low-impact development stormwater alternatives are being analyzed as one of the various methods to reduce flooding and provide water quality treatment. A hydraulic model is in development to analyze the balance and locations of flows into and out of Green Lake with the intent of modifying overflow structures to provide additional storage capacity. The planning phase of this project was reviewed by SPU's Asset Management Committee in 2003, and the entire project will be reviewed again in 2006. The confidence level of the current cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	152	225	6	5	0	0	0	0	388
<b>Project Total:</b>	152	225	6	5	0	0	0	0	388
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	152	225	6	5	0	0	0	0	388
<b>Appropriations Total*</b>	152	225	6	5	0	0	0	0	388
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		157	6	5	0	0	0	0	168

*\*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 2012

**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, the Madison Valley Long Term Solution (Madison Valley 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) which is currently in construction, is implementing temporary solutions until the new facilities to be built under the long-term solution come online. These temporary solutions include storage of up to 1 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 3 million gallons, thus necessitating further analysis and planning for a long-term solution. The initial project development plan was approved by SPU's Asset Management Committee in December 2005. Preliminary engineering will conclude in the second quarter of 2007.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	1,032	2,158	3,932	1,471	90	66	8,749
<b>Project Total:</b>	0	0	1,032	2,158	3,932	1,471	90	66	8,749
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	1,032	2,158	3,932	1,471	90	66	8,749
<b>Appropriations Total*</b>	0	0	1,032	2,158	3,932	1,471	90	66	8,749
<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

## 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 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	207	231	1,243	29	0	0	0	0	1,710
<b>Project Total:</b>	207	231	1,243	29	0	0	0	0	1,710
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	207	231	1,243	29	0	0	0	0	1,710
<b>Appropriations Total*</b>	207	231	1,243	29	0	0	0	0	1,710
<b>O &amp; M Costs (Savings)</b>			0	0	12	12	12	12	48
<b>Spending Plan</b>		230	1,243	29	0	0	0	0	1,503

*\*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

## Meter Replacement - DWF

<b>BCL/Program Name:</b> Shared Cost Projects	<b>BCL/Program Code:</b> C410B
<b>Project Type:</b> Rehabilitation or Restoration	<b>Start Date:</b> Ongoing
<b>Project ID:</b> C4101-DWF	<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 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,343	597	530	534	517	530	543	557	5,151
<b>Project Total:</b>	1,343	597	530	534	517	530	543	557	5,151
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1,343	597	530	534	517	530	543	557	5,151
<b>Appropriations Total*</b>	1,343	597	530	534	517	530	543	557	5,151
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		643	530	534	517	530	543	557	3,854

*\*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

<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> C3AA402	<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:** In more than one Urban Village

This project makes minor upgrades and replacements to sewer infrastructure such as 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. These upgrades facilitate maintenance activities and do not increase capacity. This project was reviewed by SPU's Asset Management Committee as part of the overall Sewer Rehabilitation Programmatic Plan in May 2005. The confidence level in this cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	243	76	96	82	75	74	94	72	812
<b>Project Total:</b>	243	76	96	82	75	74	94	72	812
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	243	76	96	82	75	74	94	72	812
<b>Appropriations Total*</b>	243	76	96	82	75	74	94	72	812
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		26	96	82	75	74	94	72	519

*\*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 for construction in 2007 along Martin Luther King, Jr. Way by Sound Transit. 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, improves storm water quality treatment using funding from Sound Transit, and reduces overall long-term maintenance costs. This project was initially reviewed by SPU's Asset Management Committee in 2005, and will be reviewed again in 2006. The confidence level in the current cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	613	183	285	284	4	4	4	0	1,377
<b>Project Total:</b>	613	183	285	284	4	4	4	0	1,377
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	613	183	285	284	4	4	4	0	1,377
<b>Appropriations Total*</b>	613	183	285	284	4	4	4	0	1,377
<b>O &amp; M Costs (Savings)</b>			0	2	2	2	2	0	8
<b>Spending Plan</b>		440	285	284	4	4	4	0	1,021

*\*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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	600	300	308	315	323	331	339	348	2,864
<b>Project Total:</b>	600	300	308	315	323	331	339	348	2,864
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	600	300	308	315	323	331	339	348	2,864
<b>Appropriations Total*</b>	600	300	308	315	323	331	339	348	2,864
<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

## 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:** Aurora Ave N/N 110th 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 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 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 in 2003 and will be reviewed again in 2007. The confidence level in the current cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	769	575	403	990	1,636	1,221	0	0	5,594
<b>Project Total:</b>	769	575	403	990	1,636	1,221	0	0	5,594
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	769	575	403	990	1,636	1,221	0	0	5,594
<b>Appropriations Total*</b>	769	575	403	990	1,636	1,221	0	0	5,594
<b>O &amp; M Costs (Savings)</b>			0	0	13	26	40	0	79
<b>Spending Plan</b>		360	403	990	1,636	1,221	0	0	4,610

*\*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

## Natural Drainage System Improvements

<b>BCL/Program Name:</b> Low Impact Development	<b>BCL/Program Code:</b> C334B
<b>Project Type:</b> Improved Facility	<b>Start Date:</b> 1st Quarter 2003
<b>Project ID:</b> C333206	<b>End Date:</b> Ongoing

**Location:** 3rd Ave. NW

**Neighborhood Plan:** Broadview-Bitter Lake-Haller Lake      **Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest      **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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	82	396	169	501	413	386	895	658	3,500
<b>Project Total:</b>	82	396	169	501	413	386	895	658	3,500
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	82	396	169	501	413	386	895	658	3,500
<b>Appropriations Total*</b>	82	396	169	501	413	386	895	658	3,500
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		200	169	501	413	386	895	658	3,222

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# SPU - Drainage & Wastewater

## Nine Minimum Controls Compliance

**BCL/Program Name:** Control Structures

**BCL/Program Code:** C310B

**Project Type:** New Investment

**Start Date:** 1st Quarter 2007

**Project ID:** C307004

**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, Nine Minimum Controls (NMC) Compliance, documents the current efforts and potential gaps needed to achieve Combined Sewer Overflow (CSO) compliance with the National Pollutant Discharge Elimination System (NPDES) Permit. SPU's Asset Management Committee will review and approve the project in 2007. The certainty of the cost estimate is a low confidence level.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	117	94	0	0	0	0	211
<b>Project Total:</b>	0	0	117	94	0	0	0	0	211
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	117	94	0	0	0	0	211
<b>Appropriations Total*</b>	0	0	117	94	0	0	0	0	211
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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**2007-2012 Proposed Capital Improvement Program**

# SPU - Drainage & Wastewater

## No Dig Pipe & Maintenance Rehabilitation

**BCL/Program Name:** Wastewater Conveyance **BCL/Program Code:** C320B  
**Project Type:** Rehabilitation or Restoration **Start Date:** Ongoing  
**Project ID:** C3AA403 **End Date:** Ongoing

**Location:** Citywide

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

This ongoing program rehabilitates sewer pipes prior to complete failure. "No Dig", or trenchless, technology is used for full line replacements, and avoids surface use disruption and costly surface repairs. This program was reviewed by SPU's Asset Management Committee as part of the overall Sewer Rehabilitation Programmatic Plan in May 2005. The confidence level in this cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	10,068	663	2,346	2,160	1,793	1,477	2,248	1,651	22,407
<b>Project Total:</b>	10,068	663	2,346	2,160	1,793	1,477	2,248	1,651	22,407
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	10,068	663	2,346	2,160	1,793	1,477	2,248	1,651	22,407
<b>Appropriations Total*</b>	10,068	663	2,346	2,160	1,793	1,477	2,248	1,651	22,407
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		1,163	2,346	2,160	1,793	1,477	2,248	1,651	12,839

## Operational Facility - Construction - DWF

**BCL/Program Name:** Shared Cost Projects **BCL/Program Code:** C410B  
**Project Type:** Improved Facility **Start Date:** Ongoing  
**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 funds facility construction improvements for 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 AMC for approval.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,518	1,050	1,458	679	894	916	875	896	8,286
<b>Project Total:</b>	1,518	1,050	1,458	679	894	916	875	896	8,286
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1,518	1,050	1,458	679	894	916	875	896	8,286
<b>Appropriations Total*</b>	1,518	1,050	1,458	679	894	916	875	896	8,286
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		1,524	1,458	679	894	916	875	896	7,242

*\*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 - 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 funds non-construction improvements such as 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, but that could be changed over time as projects are determined. Sub-projects within this program will go to SPU's Asset Management Committee for approval.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	373	626	74	75	77	0	0	1,225
<b>Project Total:</b>	0	373	626	74	75	77	0	0	1,225
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	373	626	74	75	77	0	0	1,225
<b>Appropriations Total*</b>	0	373	626	74	75	77	0	0	1,225
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		113	626	74	75	77	0	0	965

## Operations Control Center - DWF

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

**Location:** 2700 Airport Way South/Forest Street/Lender 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. Sub-projects within this program will go to the Asset Management Committee for approval.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	294	1,054	640	123	474	46	0	0	2,631
<b>Project Total:</b>	294	1,054	640	123	474	46	0	0	2,631
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	294	1,054	640	123	474	46	0	0	2,631
<b>Appropriations Total*</b>	294	1,054	640	123	474	46	0	0	2,631
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		1,461	640	123	474	46	0	0	2,744

*\*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

## Other Agency Opportunity - DRN

<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> C3345	<b>End Date:</b> 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 designs and constructs improvements to the drainage system as opportunities arise to partner with projects being constructed by other agencies. In order to reduce disruption of neighborhoods by future street openings, SPU considers replacing or repairing facilities in conjunction with construction on other projects such as Sound Transit Link Light Rail, the Alaskan Way Viaduct, other Washington State Department of Transportation projects, and transportation improvements at South Lake Union. SPU saves the cost of surface restoration and extends the life of its facilities, or upgrades their capacity, as necessary. This project is in a preliminary phase of development and cost estimates are revised over time as specific projects are identified.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1	400	139	112	847	812	1,014	744	4,068
<b>Project Total:</b>	1	400	139	112	847	812	1,014	744	4,068
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1	400	139	112	847	812	1,014	744	4,068
<b>Appropriations Total*</b>	1	400	139	112	847	812	1,014	744	4,068
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	139	112	847	812	1,014	744	3,668

*\*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

## Other Agency Opportunity - WW

**BCL/Program Name:** Wastewater Conveyance

**BCL/Program Code:** C320B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2006

**Project ID:** C3204

**End Date:** Ongoing

**Location:** Citywide

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

**Neighborhood Plan Matrix:** N/A

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

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

This program designs and constructs improvements to the wastewater system as opportunities arise to partner with projects being constructed by other agencies. In order to reduce disruption of neighborhoods by future street openings, SPU considers replacing or repairing facilities in conjunction with construction on other projects such as Sound Transit Link Light Rail, the Alaskan Way Viaduct, other Washington State Department of Transportation projects, and transportation improvements at South Lake Union. SPU saves the cost of surface restoration and extends the life of its facilities or upgrades their capacity, as needed. This project is in a preliminary phase of development and cost estimates are revised over time as specific projects are identified.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	200	23	21	339	325	406	299	1,612
<b>Project Total:</b>	0	200	23	21	339	325	406	299	1,612
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	200	23	21	339	325	406	299	1,612
<b>Appropriations Total*</b>	0	200	23	21	339	325	406	299	1,612
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	23	21	339	325	406	299	1,412

*\*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

## Outfall Rehabilitation Program - DRN

<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> 2nd Quarter 2005
<b>Project ID:</b> C353207	<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 project funds improvements to the City's wastewater outfalls, based on the results of the Outfall Inspection - Drainage project (C302304). The project's initial focus is on developing an analysis of the existing information on the outfalls and related permitting processes and interagency activities. SPU's Asset Management Committee will review and approve the program in 2007. The certainty of the cost estimate is a low confidence level.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	63	200	239	549	488	456	555	408	2,958
<b>Project Total:</b>	63	200	239	549	488	456	555	408	2,958
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	63	200	239	549	488	456	555	408	2,958
<b>Appropriations Total*</b>	63	200	239	549	488	456	555	408	2,958
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		250	239	549	488	456	555	408	2,945

*\*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

## Outfall Rehabilitation Program - WW

**BCL/Program Name:** Wastewater Conveyance  
**Project Type:** Rehabilitation or Restoration  
**Project ID:** C305203

**BCL/Program Code:** C320B  
**Start Date:** 1st Quarter 2006  
**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 funds improvements to the City's wastewater outfalls, based on the results of the Outfall Inspection-Wastewater project (C302202). The project's initial focus is on developing an analysis of the existing information on the outfalls and related permitting processes and interagency activities. SPU's Asset Management Committee will review and approve the program in 2007. The certainty of the cost estimate is a low confidence level.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	10	0	0	118	110	224	164	627
<b>Project Total:</b>	0	10	0	0	118	110	224	164	627
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	10	0	0	118	110	224	164	627
<b>Appropriations Total*</b>	0	10	0	0	118	110	224	164	627
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		20	0	0	118	110	224	164	637

*\*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 2008

**Location:** Thornton Creek Watershed

**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. 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. In 2004, this project was the subject of a budget proviso, which was lifted by Ordinance 121459. The project is partially funded with a \$3.7 million state Public Works Trust Fund loan, which was approved by Ordinance 121464 in 2004. Beginning in 2008, costs to operate and maintain the new system are included in the Department's operating budget. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	3,356	1,287	30	15	0	0	0	0	4,687
<b>Project Total:</b>	3,356	1,287	30	15	0	0	0	0	4,687
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	3,356	1,287	30	15	0	0	0	0	4,687
<b>Appropriations Total*</b>	3,356	1,287	30	15	0	0	0	0	4,687
<b>O &amp; M Costs (Savings)</b>			0	3	3	7	7	7	27
<b>Spending Plan</b>		1,441	30	15	0	0	0	0	1,485

*\*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

## Piper's Creek - Detention

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

**BCL/Program Code:** C333B

**Project Type:** Improved Facility

**Start Date:** 3rd Quarter 1999

**Project ID:** C399326

**End Date:** 4th Quarter 2007

**Location:** 777 NW Carkeek Park Rd.

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

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest

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

The existing pond on NW Carkeek Park Road is loaded with sediment and has little detention capacity, requiring substantial improvements before it can serve as a detention facility. After evaluation of alternatives and performing cost/benefit analysis, the preferred option is to dredge the existing pond now and every 10 years to maintain its function as a sedimentation trap. The project provides for this dredging, as well as for ongoing dam monitoring and ditch cleaning. This project is scheduled to be completed at the end of 2006, but there is potential for schedule delays so it is being included in the 2007-2012 CIP. If the project continues into 2007, funds will be carried forward as necessary.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	308	24	0	0	0	0	0	0	332
<b>Project Total:</b>	308	24	0	0	0	0	0	0	332
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	308	24	0	0	0	0	0	0	332
<b>Appropriations Total*</b>	308	24	0	0	0	0	0	0	332
<b>O &amp; M Costs (Savings)</b>			3	3	3	3	3	0	15
<b>Spending Plan</b>		10	0	0	0	0	0	0	10

*\*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

## Point Sewer Pipe Rehabilitation - Contract

<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 2003
<b>Project ID:</b> C303401	<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:** 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,740	445	1,078	1,156	786	736	895	658	7,494
<b>Project Total:</b>	1,740	445	1,078	1,156	786	736	895	658	7,494
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1,740	445	1,078	1,156	786	736	895	658	7,494
<b>Appropriations Total*</b>	1,740	445	1,078	1,156	786	736	895	658	7,494
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		450	1,078	1,156	786	736	895	658	5,759

*\*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

## Point Sewer Pipe Rehabilitation - Crews

<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 2003
<b>Project ID:</b> C303402	<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 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	8,438	3,200	2,410	2,149	2,957	2,850	3,572	2,702	28,277
<b>Project Total:</b>	8,438	3,200	2,410	2,149	2,957	2,850	3,572	2,702	28,277
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	8,438	3,200	2,410	2,149	2,957	2,850	3,572	2,702	28,277
<b>Appropriations Total*</b>	8,438	3,200	2,410	2,149	2,957	2,850	3,572	2,702	28,277
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		2,200	2,410	2,149	2,957	2,850	3,572	2,702	18,839

*\*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

## Post -Construction Monitoring

<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> C307003	<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 will meet the National Pollutant Discharge Elimination System (NPDES) Permit requirement for development of a Post-Construction Compliance Monitoring Plan. The Plan may detail the measures for effectiveness of the 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 2007. The certainty of the cost estimate is a low confidence level.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	59	47	79	74	90	0	348
<b>Project Total:</b>	0	0	59	47	79	74	90	0	348
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	59	47	79	74	90	0	348
<b>Appropriations Total*</b>	0	0	59	47	79	74	90	0	348
<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

## Pump Station Improvements

<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> C3102	<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 program provides for wastewater pump station improvements, upgrades, repairs and rehabilitation, including 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. SPU's Asset Management Committee will review and approve the project in 2007. The certainty of the cost estimate is a low confidence level.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	452	400	661	521	1,337	1,251	1,522	1,118	7,262
<b>Project Total:</b>	452	400	661	521	1,337	1,251	1,522	1,118	7,262
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	452	400	661	521	1,337	1,251	1,522	1,118	7,262
<b>Appropriations Total*</b>	452	400	661	521	1,337	1,251	1,522	1,118	7,262
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	661	521	1,337	1,251	1,522	1,118	6,410

*\*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

## 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 in 2007. The certainty of the cost estimate is a low confidence level.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	0	0	79	37	0	0	115
<b>Project Total:</b>	0	0	0	0	79	37	0	0	115
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	0	0	79	37	0	0	115
<b>Appropriations Total*</b>	0	0	0	0	79	37	0	0	115
<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.*

**2007-2012 Proposed Capital Improvement Program**

# SPU - Drainage & Wastewater

## Raincatcher Creek Pilot Project

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

**BCL/Program Code:** C335B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2007

**Project ID:** C307015

**End Date:** 4th Quarter 2008

**Location:** Pipers Creek Watershed/NW 143rd St./NW 120th St.

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

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest

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

The Raincatcher Creek Pilot Project targets high-priority watershed basins to fund customer-based strategies, such as cisterns and rain gardens, to reduce stormwater flows to the drainage system and water bodies. This project responds to Council Resolution 30720 by targeting customer incentive programs to high-priority areas such as creek watersheds, Combined Sewer Overflow (CSO) basins, and areas of greatest water quality concern. SPU is currently implementing a customer-based strategy in a CSO basin in SE Seattle. This project will implement and test customer-based approaches in a priority creek watershed. This project will be reviewed by SPU's Asset Management Committee in 2007. The confidence level in the current cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	235	212	0	0	0	0	447
<b>Project Total:</b>	0	0	235	212	0	0	0	0	447
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	235	212	0	0	0	0	447
<b>Appropriations Total*</b>	0	0	235	212	0	0	0	0	447
<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

## 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, 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 supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	305	325	1,183	48	660	1,559	2,418	6,551	13,049
<b>Project Total:</b>	305	325	1,183	48	660	1,559	2,418	6,551	13,049
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	305	325	1,183	48	660	1,559	2,418	6,551	13,049
<b>Appropriations Total*</b>	305	325	1,183	48	660	1,559	2,418	6,551	13,049
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		425	1,183	48	660	1,559	2,418	6,551	12,844

*\*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 co-ordination 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	368	325	577	1,001	251	2,265	3,884	7,900	16,571
<b>Project Total:</b>	368	325	577	1,001	251	2,265	3,884	7,900	16,571
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	368	325	577	1,001	251	2,265	3,884	7,900	16,571
<b>Appropriations Total*</b>	368	325	577	1,001	251	2,265	3,884	7,900	16,571
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		297	577	1,001	251	2,265	3,884	7,900	16,175

*\*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:** 4th Quarter 2008

**Location:** Salmon Bay

**Neighborhood Plan:** Crown Hill/Ballard

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** Northwest

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

This project will protect and restore the last undeveloped wooded shoreline area in Salmon Bay, and will improve the public's access to Ballard shoreline. 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 initiate restoration 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, highlighting the importance of the area for salmon use, the historical alterations of the estuary, and present and historic Native American use of the area. Environmental restoration will continue for three or more years to control invasive species and establish native and other habitat-enhancing vegetation. The confidence level in the current cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	516	10	106	83	0	0	0	0	715
<b>Project Total:</b>	516	10	106	83	0	0	0	0	715
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	516	10	106	83	0	0	0	0	715
<b>Appropriations Total*</b>	516	10	106	83	0	0	0	0	715
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		188	106	83	0	0	0	0	377

*\*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. 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 may be included as key priority goals for achieving collection system compliance.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	330	250	243	206	812	779	973	715	4,308
<b>Project Total:</b>	330	250	243	206	812	779	973	715	4,308
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	330	250	243	206	812	779	973	715	4,308
<b>Appropriations Total*</b>	330	250	243	206	812	779	973	715	4,308
<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

## 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:** 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 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 NewHolly 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 provides 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	300	356	429	488	191	0	0	1,764
<b>Project Total:</b>	0	300	356	429	488	191	0	0	1,764
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	300	356	429	488	191	0	0	1,764
<b>Appropriations Total*</b>	0	300	356	429	488	191	0	0	1,764
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		75	356	429	488	191	0	0	1,539

*\*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 & Wastewater facilities. Phase One, which focused primarily on water fund assets, is now substantially complete, with improvements at 23 SPU-occupied sites that substantially reduced risks at many of the most critical facilities. This project represents Phase Two, which extends this work to further sites and may include installation of key cards, an Integrated Security System, signage, electronic monitoring and security-related infrastructure improvements, as well as upgrades to key, fence, and communication systems. Currently, only 2007 is being budgeted, as SPU's Asset Management Committee will consider a detailed proposal in early 2007. DWF improvements may total \$4 million through 2012.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	615	0	0	0	0	0	615
<b>Project Total:</b>	0	0	615	0	0	0	0	0	615
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	615	0	0	0	0	0	615
<b>Appropriations Total*</b>	0	0	615	0	0	0	0	0	615
<b>O &amp; M Costs (Savings)</b>			200	0	0	0	0	0	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

## Sediment Remediation - DRN

**BCL/Program Name:** Sediments  
**Project Type:** New Investment  
**Project ID:** C3501

**BCL/Program Code:** C350B  
**Start Date:** 4th Quarter 2000  
**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 provides drainage funding for preliminary studies and analysis of cleanup of contaminated sediment sites in which the City is a participant, for actual cleanup of contaminated sites, for preliminary engineering for future clean-up efforts, and for liability allocation negotiations. Funding is used to develop studies and analyses required by regulatory agencies for determining the boundaries and cleanup requirements for specific action sites. The study phase of sediment remediation projects often requires multiple years before specific cleanup actions are defined. As regulatory agency cleanup requirements become clear, additional individual cleanup projects are included in subsequent CIP proposals. This program supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,551	2,816	3,293	2,699	576	176	91	64	12,266
<b>Project Total:</b>	2,551	2,816	3,293	2,699	576	176	91	64	12,266
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	2,551	2,816	3,293	2,699	576	176	91	64	12,266
<b>Appropriations Total*</b>	2,551	2,816	3,293	2,699	576	176	91	64	12,266
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	3,293	2,699	576	176	91	64	6,899

*\*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  
**Project Type:** New Investment  
**Project ID:** C3502

**BCL/Program Code:** C350B  
**Start Date:** 4th Quarter 2000  
**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 provides wastewater funding for preliminary studies and analysis of cleanup of contaminated sediment sites in which the City is a participant, for actual clean-up of contaminated sites, for preliminary engineering for future cleanup efforts, and for liability allocation negotiations. Funding is used to develop studies and analyses required by regulatory agencies for determining the boundaries and cleanup requirements for specific action sites. The study phase of sediment remediation projects often requires multiple years before specific cleanup actions are defined. As regulatory agency cleanup requirements become clear, additional individual cleanup projects are included in subsequent CIP proposals. This program supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	2,877	985	1,374	1,041	223	118	60	43	6,720
<b>Project Total:</b>	2,877	985	1,374	1,041	223	118	60	43	6,720
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	2,877	985	1,374	1,041	223	118	60	43	6,720
<b>Appropriations Total*</b>	2,877	985	1,374	1,041	223	118	60	43	6,720
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	1,374	1,041	223	118	60	43	2,858

*\*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 meet the National Pollutant Discharge Elimination System (NPDES) Permit requirement for development of a Sediment Survey Report. The Study may include a summary of sediment data and findings. SPU's Asset Management Committee will review and approve the project in 2006. The certainty of the cost estimate is a low confidence level.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	107	5	0	0	0	0	112
<b>Project Total:</b>	0	0	107	5	0	0	0	0	112
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	107	5	0	0	0	0	112
<b>Appropriations Total*</b>	0	0	107	5	0	0	0	0	112
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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**2007-2012 Proposed Capital Improvement Program**

# SPU - Drainage & Wastewater

## Sewage System Modeling

**BCL/Program Name:** Wastewater Conveyance

**BCL/Program Code:** C320B

**Project Type:** New Investment

**Start Date:** 3rd Quarter 1998

**Project ID:** C3AA206

**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 develops a system-wide model and methodology for forecasting sewer system performance. This facilitates sewer capacity assessment through a proactive approach to managing sewer capacity. The AMC was briefed about this project and has directed staff to develop a project development plan for approval by year end. The model will allow analysis of Seattle's entire sewer network, including its interaction with the King County System. This will eventually allow SPU to manage flows in the system with pump stations and gates to control combined sewer overflows more effectively and efficiently. It will help identify capacity problems that lead to sewer backup so that restrictions in the system can be eliminated. The confidence in the cost estimate for this project is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	764	225	40	40	85	81	101	74	1,410
<b>Project Total:</b>	764	225	40	40	85	81	101	74	1,410
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	764	225	40	40	85	81	101	74	1,410
<b>Appropriations Total*</b>	764	225	40	40	85	81	101	74	1,410
<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

## Sewer Emergency Rehabilitation

**BCL/Program Name:** Wastewater Conveyance **BCL/Program Code:** C320B  
**Project Type:** Rehabilitation or Restoration **Start Date:** 1st Quarter 1998  
**Project ID:** C3AA404 **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 performs emergency rehabilitation of sewer lines that collapse, cause surface problems, or otherwise endanger public health or welfare. This program was reviewed as part of the overall Sewer Rehabilitation Programmatic Plan in May of 2005. The confidence level is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	3,201	500	677	560	472	478	582	427	6,898
<b>Project Total:</b>	3,201	500	677	560	472	478	582	427	6,898
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	3,201	500	677	560	472	478	582	427	6,898
<b>Appropriations Total*</b>	3,201	500	677	560	472	478	582	427	6,898
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

## Sewer Full Line Replacements

**BCL/Program Name:** Wastewater Conveyance **BCL/Program Code:** C320B  
**Project Type:** Rehabilitation or Restoration **Start Date:** Ongoing  
**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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	794	416	0	320	281	276	353	267	2,707
<b>Project Total:</b>	794	416	0	320	281	276	353	267	2,707
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	794	416	0	320	281	276	353	267	2,707
<b>Appropriations Total*</b>	794	416	0	320	281	276	353	267	2,707
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	0	320	281	276	353	267	1,497

*\*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

## 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 provides for 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. This program does not require SPU Asset Management Committee review as individual spot improvement projects do not exceed \$150,000. The cost estimates will be revised over time as projects are determined.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	766	409	578	469	708	777	364	1,089	5,159
<b>Project Total:</b>	766	409	578	469	708	777	364	1,089	5,159
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	766	409	578	469	708	777	364	1,089	5,159
<b>Appropriations Total*</b>	766	409	578	469	708	777	364	1,089	5,159
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	578	469	708	777	364	1,089	3,984

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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 provides spot improvements and project development support for small-capacity sewer systems throughout Seattle, as well as other small projects related to wastewater. Typical improvements include rerouting of a sewer line or relocation of a maintenance hole. This project does not require SPU Asset Management Committee review as the spot improvements do not exceed \$250,000. The cost estimates will be revised over time as projects are determined.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	234	160	175	145	144	138	173	127	1,296
<b>Project Total:</b>	234	160	175	145	144	138	173	127	1,296
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	234	160	175	145	144	138	173	127	1,296
<b>Appropriations Total*</b>	234	160	175	145	144	138	173	127	1,296
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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**2007-2012 Proposed Capital Improvement Program**

# SPU - Drainage & Wastewater

## Sound Transit - 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 2009

**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.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,303	768	435	130	29	0	0	0	2,665
<b>Project Total:</b>	1,303	768	435	130	29	0	0	0	2,665
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1,303	768	435	130	29	0	0	0	2,665
<b>Appropriations Total*</b>	1,303	768	435	130	29	0	0	0	2,665
<b>O &amp; M Costs (Savings)</b>			0	50	50	50	50	50	250
<b>Spending Plan</b>		870	435	130	29	0	0	0	1,464

*\*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 – University Link - 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 2007
<b>Project ID:</b> C4110-DWF	<b>End Date:</b> 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	95	115	89	0	0	0	298
<b>Project Total:</b>	0	0	95	115	89	0	0	0	298
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	95	115	89	0	0	0	298
<b>Appropriations Total*</b>	0	0	95	115	89	0	0	0	298
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	95	115	89	0	0	0	298

*\*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 this project in 2006. The confidence level in the current cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	6	300	242	348	495	491	0	0	1,882
<b>Project Total:</b>	6	300	242	348	495	491	0	0	1,882
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	6	300	242	348	495	491	0	0	1,882
<b>Appropriations Total*</b>	6	300	242	348	495	491	0	0	1,882
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	60	60	120
<b>Spending Plan</b>		70	242	348	495	491	0	0	1,646

\*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

**BCL/Program Code:** C410B

**Project Type:** Improved Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C4114-DWF

**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/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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	131	1,130	137	133	16	0	0	0	1,547
<b>Project Total:</b>	131	1,130	137	133	16	0	0	0	1,547
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	131	1,130	137	133	16	0	0	0	1,547
<b>Appropriations Total*</b>	131	1,130	137	133	16	0	0	0	1,547
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	137	133	16	0	0	0	286

*\*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 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 2012

**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 evaluates and constructs water quality treatment facilities for the Minor Avenue drainage basin, which includes much of First Hill and Capitol Hill. The basin discharges to southern Lake Union via the Minor Avenue outfall. This project will evaluate the opportunities to construct water quality treatment facilities sequenced with redevelopment opportunities in the South Lake Union area, between I-5 and Pontius Ave. The project will evaluate use of biofiltration swales incorporated into the right-of-way redevelopment as well as traditional treatment media vaults. 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.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	1,653	3,033	79	4	4	3	4,776
<b>Project Total:</b>	0	0	1,653	3,033	79	4	4	3	4,776
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	1,653	3,033	79	4	4	3	4,776
<b>Appropriations Total*</b>	0	0	1,653	3,033	79	4	4	3	4,776
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	8	8
<b>Spending Plan</b>		419	1,653	3,033	79	4	4	3	5,195

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

**2007-2012 Proposed Capital Improvement Program**

# 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 2011

**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 program relocates or replaces drainage- and wastewater-related facilities affected by improvements to the Spokane Street Viaduct. Seattle Department of Transportation is widening the Spokane Street Viaduct and adding new ramps. This work will require SPU to meet additional water quality requirements and code requirements.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	132	135	135	138	141	0	681
<b>Project Total:</b>	0	0	132	135	135	138	141	0	681
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	132	135	135	138	141	0	681
<b>Appropriations Total*</b>	0	0	132	135	135	138	141	0	681
<b>O &amp; M Costs (Savings)</b>			0	0	50	50	50	50	200
<b>Spending Plan</b>		0	132	135	135	138	141	0	681

## 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.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	0	0	132	135	135	138	141	145	825
<b>Project Total:</b>	0	0	132	135	135	138	141	145	825
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	0	0	132	135	135	138	141	145	825
<b>Appropriations Total*</b>	0	0	132	135	135	138	141	145	825
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	132	135	135	138	141	145	825

*\*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

## Stormwater Mitigation Partnership Program

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

**BCL/Program Code:** C333B

**Project Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C353309

**End Date:** 4th Quarter 2010

**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 supports innovative stormwater management improvements (e.g., low-impact development, new stormwater treatment technologies) by partnering with public and/or private entities. Additional funding for these improvements would come from the partnering entity and/or grants. The improvements would be owned and maintained by the partnering entity after SPU's monitoring and other data collection efforts are completed. All efforts must meet the legal nexus for use of drainage funds and provide sufficient benefit in improving the function and operation of SPU's drainage system. This project supports the Mayor's Restore Our Waters Initiative to improve Seattle's aquatic environments.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1	50	50	40	39	37	0	0	218
<b>Project Total:</b>	1	50	50	40	39	37	0	0	218
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1	50	50	40	39	37	0	0	218
<b>Appropriations Total*</b>	1	50	50	40	39	37	0	0	218
<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.*

**2007-2012 Proposed Capital Improvement Program**

# SPU - Drainage & Wastewater

## Strategic Asset Management Plan - DRN

**BCL/Program Name:** Landslide Mitigation & Special Programs      **BCL/Program Code:** C335B  
**Project Type:** New Investment      **Start Date:** 1st Quarter 2004  
**Project ID:** C333507      **End Date:** 4th Quarter 2012

**Location:** N/A

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

This project develops Strategic Asset Management Plans, which set the strategic framework for SPU. These plans are normally prepared looking forward for a five-year period. Plans are developed by analyzing an asset class and examining its life cycle cost, and they provide the basis for development of action plans that are updated annually.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	83	40	134	107	24	22	27	20	456
<b>Project Total:</b>	83	40	134	107	24	22	27	20	456
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	83	40	134	107	24	22	27	20	456
<b>Appropriations Total*</b>	83	40	134	107	24	22	27	20	456
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

## Strategic Asset Management Plan - WW

**BCL/Program Name:** Wastewater Conveyance      **BCL/Program Code:** C320B  
**Project Type:** New Investment      **Start Date:** 1st Quarter 2003  
**Project ID:** C303204      **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 project develops Strategic Asset Management Plans, which set the strategic framework for SPU. These plans are normally prepared looking forward for a five-year period. Plans are developed by analyzing an asset class and examining its life cycle cost, and they provide the basis for development of action plans that are updated annually.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	148	100	34	28	0	0	0	0	310
<b>Project Total:</b>	148	100	34	28	0	0	0	0	310
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	148	100	34	28	0	0	0	0	310
<b>Appropriations Total*</b>	148	100	34	28	0	0	0	0	310
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		100	34	28	0	0	0	0	162

*\*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 2009

**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 medium degree of confidence in the cost estimate. SPU's Asset Management Committee has approved the project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	611	485	1	294	6	0	0	0	1,396
<b>Project Total:</b>	611	485	1	294	6	0	0	0	1,396
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	611	485	1	294	6	0	0	0	1,396
<b>Appropriations Total*</b>	611	485	1	294	6	0	0	0	1,396
<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

## 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 2010

**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 three-by-four-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. 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	724	315	221	11	20	18	0	0	1,309
<b>Project Total:</b>	724	315	221	11	20	18	0	0	1,309
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	724	315	221	11	20	18	0	0	1,309
<b>Appropriations Total*</b>	724	315	221	11	20	18	0	0	1,309
<b>O &amp; M Costs (Savings)</b>			6	6	6	6	6	0	30

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# 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:** 5th Ave. NE

**Neighborhood Plan:** Northgate

**Neighborhood Plan Matrix:** N/A

**Neighborhood District:** North

**Urban Village:** Northgate

This project includes preliminary engineering, design, and construction of a water quality facility on the south lot of Northgate Mall. The facility is located between 3rd and 5th Ave. NE and between NE 100th 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. Ordinance 121548 created the project in 2004 and provided \$400,000 for property acquisition and closing costs. Ordinance 121547 appropriated \$6.8 million for project design and construction, for a total of \$7.2 million. The balance will be carried forward each year until it is spent. This year, \$3.4 in additional budget authority is being requested for this project, as shown in years 2007-2008.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,269	5,980	1,684	1,684	0	0	0	0	10,617
<b>Project Total:</b>	1,269	5,980	1,684	1,684	0	0	0	0	10,617
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1,269	5,980	1,684	1,684	0	0	0	0	10,617
<b>Appropriations Total*</b>	1,269	5,980	1,684	1,684	0	0	0	0	10,617
<b>O &amp; M Costs (Savings)</b>			0	0	0	71	71	0	142
<b>Spending Plan</b>		1,161	4,844	2,380	419	395	149	0	9,348

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# SPU - Drainage & Wastewater

## Utility Relocation due to Alaskan Way Tunnel and Seawall Project - 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 the replacement of the Alaskan Way Viaduct and Seawall Project with a new seawall and transportation facility. The Alaskan Way Viaduct is part of State Route 99, which carries 25% 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 in the February 28, 2001, Nisqually Earthquake. In December 2004, the Mayor and City Council designated a cut-and-cover tunnel as their preferred alternative for replacing the existing Viaduct. 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. The estimated costs shown below are for drainage and wastewater system relocations and related service work from 2007-2012. Note that the project will likely extend to about 2016 with a total cost estimate for drainage and wastewater of over \$117 million. Given the early stage of the project it is anticipated that scope of work and budget estimates will change as the design progresses. SPU's Asset Management Committee has approved the project. See also the Alaskan Way Tunnel and Seawall project in the Seattle Department of Transportation and Utility Relocation Due to Alaskan Way Tunnel and Seawall projects in the CIPs for Seattle City Light and SPU Water.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,255	1,702	3,347	25,876	48,041	26,711	4,950	5,392	117,274
<b>Project Total:</b>	1,255	1,702	3,347	25,876	48,041	26,711	4,950	5,392	117,274
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1,255	1,702	3,347	25,876	48,041	26,711	4,950	5,392	117,274
<b>Appropriations Total*</b>	1,255	1,702	3,347	25,876	48,041	26,711	4,950	5,392	117,274
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		2,241	3,347	25,876	48,041	26,711	4,950	5,392	116,558

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# 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:** 4th Quarter 2012

**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 113-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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	486	405	309	363	184	795	45	33	2,619
<b>Project Total:</b>	486	405	309	363	184	795	45	33	2,619
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	486	405	309	363	184	795	45	33	2,619
<b>Appropriations Total*</b>	486	405	309	363	184	795	45	33	2,619
<b>O &amp; M Costs (Savings)</b>			0	0	0	5	5	5	15
<b>Spending Plan</b>		200	309	363	184	795	45	33	1,928

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# SPU - Drainage & Wastewater

## Wastewater Rehabilitation Evaluation

**BCL/Program Name:** Wastewater Conveyance **BCL/Program Code:** C320B  
**Project Type:** Rehabilitation or Restoration **Start Date:** Ongoing  
**Project ID:** C3AA401 **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 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	1,486	200	258	231	216	221	291	230	3,133
<b>Project Total:</b>	1,486	200	258	231	216	221	291	230	3,133
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	1,486	200	258	231	216	221	291	230	3,133
<b>Appropriations Total*</b>	1,486	200	258	231	216	221	291	230	3,133
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# SPU - Drainage & Wastewater

## Water Reuse - Stormwater

**BCL/Program Name:** Landslide Mitigation & Special Programs      **BCL/Program Code:** C335B  
**Project Type:** New Facility      **Start Date:** 4th Quarter 2001  
**Project ID:** C353308      **End Date:** 4th Quarter 2008

**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 funds SPU's portion of the cost of rain barrels to be sold to the public. The project also helps to educate SPU's customers about options for reducing the amount of stormwater running into the City's drainage system from their properties, such as through downspout disconnection and landscape irrigation alternatives. Other benefits generated by the project include improvements in localized stormwater drainage, wastewater conveyance, and water conservation. Expenditures to date have supported development of large-building project elements such as a cistern for the new Seattle City Hall and the Carkeek Park Environmental Learning Center rainwater system. In the 2005-2010 Adopted CIP, the project was moved to the Protection of Beneficial Uses Budget Control Level, given the project's link with improving water quality.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	50	50	29	24	0	0	0	0	153
<b>Project Total:</b>	50	50	29	24	0	0	0	0	153
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	50	50	29	24	0	0	0	0	153
<b>Appropriations Total*</b>	50	50	29	24	0	0	0	0	153
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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# 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 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 by SPU's Asset Management Committee in 2003. The confidence level in the current cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	392	14	97	37	0	0	0	0	540
<b>Project Total:</b>	392	14	97	37	0	0	0	0	540
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	392	14	97	37	0	0	0	0	540
<b>Appropriations Total*</b>	392	14	97	37	0	0	0	0	540
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0

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**2007-2012 Proposed Capital Improvement Program**

# 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 2011

**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 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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	35	150	71	112	472	147	179	0	1,166
<b>Project Total:</b>	35	150	71	112	472	147	179	0	1,166
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	35	150	71	112	472	147	179	0	1,166
<b>Appropriations Total*</b>	35	150	71	112	472	147	179	0	1,166
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		170	71	112	472	147	179	0	1,151

*\*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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	816	325	1,055	566	3,864	3,698	198	35	10,556
<b>Project Total:</b>	816	325	1,055	566	3,864	3,698	198	35	10,556
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	816	325	1,055	566	3,864	3,698	198	35	10,556
<b>Appropriations Total*</b>	816	325	1,055	566	3,864	3,698	198	35	10,556
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		1,051	1,055	566	3,864	3,698	198	35	10,466

*\*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	2006	2007	2008	2009	2010	2011	2012	Total
<b>Revenue Sources</b>									
Drainage and Wastewater Rates	656	250	301	239	354	368	224	164	2,556
<b>Project Total:</b>	656	250	301	239	354	368	224	164	2,556
<b>Fund Appropriations/Allocations</b>									
SPU Drainage and Wastewater Fund	656	250	301	239	354	368	224	164	2,556
<b>Appropriations Total*</b>	656	250	301	239	354	368	224	164	2,556
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	0
<b>Spending Plan</b>		0	301	239	354	368	224	164	1,650

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