# SPU DRAINAGE AND WASTEWATER

#### **Overview of Facilities and Programs**

Seattle Public Utilities (SPU) is responsible for maintaining the network of sewer and drainage systems throughout the City of Seattle. The system includes approximately:

- 448 miles of sanitary sewers
- 460 miles of storm drains
- 968 miles of combined sewers
- 68 pump stations
- 92 permitted combined sewer overflow outfalls
- 170 storm drain outfalls
- 38 combined sewer overflow control detention tanks/pipes

Seattle Public Utilities' Capital Improvement Program (CIP) is the vehicle for maintaining, upgrading, and expanding this infrastructure, as well as constructing projects that protect, conserve, and enhance our region's environmental resources. The overriding goal of the CIP is to ensure facilities are properly constructed and maintained, and regulatory requirements are met. Projects in the CIP are also guided by various federal regulations, City policies, long-term plan documents, and the SPU Asset Management Committee (AMC) benefit criteria. Many Drainage and Wastewater (DWF) CIP projects are outlined in the Combined Sewer Overflow Reduction Plan and the Comprehensive Drainage Plan.

Historically, the DWF CIP has been funded primarily by revenue bonds. However, DWF financial policies adopted in 2003 gradually increase cash contributions from the Utility to fund the CIP. By 2007, 25% of total CIP costs will be a cash contribution, with the remaining capital needs being debt financed. Overhead costs for the CIP are budgeted in the SPU operating fund and are reimbursed as CIP expenditures are incurred.

## **Highlights**

- Combined Sewer Overflow (CSO) Program: Approximately \$10 million is included in the 2008 Proposed CIP for the combined sewer overflow program. In many parts of Seattle, sewage and stormwater flow together in pipes through a Combined Sewer System. Heavy rains may cause these pipes to fill, causing overflows through outfalls into Lake Union, Lake Washington, or Puget Sound. Projects in the 2008-2013 Proposed CIP respond to federal regulations requiring the City to monitor and reduce CSOs.
- Flood Control, Local Drainage, and Water Quality: The City's Comprehensive Drainage Plan (CDP), originally written in 1988, was updated in 2004 to address flooding and water quality needs in a systematic manner citywide, and to establish a long-term schedule of both capital improvements and operating programs. This work is also intended to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) drainage permit, which took effect in February 2007. The CIP includes projects to implement both the CDP and the Mayor's Restore Our Waters Strategy to protect Seattle's aquatic environment.
- **Sediments**: The City of Seattle is named as a potentially responsible party (PRP) for the Duwamish River Superfund Site because of alleged contamination of sediments in the river from CSO and storm drain discharges. The City continues to work with the Washington State Department of Ecology, King County, and other PRPs on an assessment of contaminants and sources.

#### **Project Selection Process**

SPU has adopted an Asset Management approach for selecting which projects to build. This is a triple bottom line approach in which projects are evaluated on their economic, social, and environmental benefits, as well as the ability to meet customer service levels. The approach provides an elaborate analytical and modeling framework to find the most economical balance between capital investments and operations and maintenance expenditures to minimize life-cycle costs of any facility.

A committee of senior SPU executives, the Asset Management Committee (AMC), reviews each project valued at \$250,000 or more and assures that only projects that meet the benefit criteria move forward. Several projects have been dropped, as the costs were higher than the benefits. Several cost-effective master planning efforts were approved to create up-to-date improvement and upgrade plans for several groups of assets. Other projects have been expanded or expedited because the benefits exceeded the costs.

#### **Program Category Summaries**

The proposed Drainage and Wastewater CIP totals approximately \$78.5 million in 2008 (including Technology projects funded by the Drainage and Wastewater Fund, displayed in a separate section of this CIP), or \$3.8 million higher than the 2008 Endorsed Budget. In the Control Structures BCL, increases are caused by delays to the Windermere CSO Storage and S. Genesee CSO projects, as well as property acquisition costs for Windermere. The CSO Facility Retrofit project is to be accelerated, completing twice as many improvements as originally planned during 2008. In the Wastewater Conveyance BCL, the budget for the Point Sewer Rehab—Contractor program is increased to complete point rehabilitation of critical pipes that cannot be completed by SPU Field Crews in 2008. In the Stormwater & Flood Control BCL, the overall increase in 2008 is a result of three large flood control and water quality projects moving into construction: 4th Ave. S/S Trenton Storm Drain, MLK Way/Norfolk Street Storm Improvement, and Georgetown Flume Drainage Improvements, and increased costs for the Madison Valley Long-Term Solution project. Costs have also increased for the Thornton Creek Water Quality Channel project in the Protection of Beneficial Uses BCL, which is set to begin construction in 2008 after some delays.

The Drainage and Wastewater CIP is composed of nine program categories, which are summarized below.

**Control Structures:** This program contains projects to plan, design, construct, and monitor facilities to control overflows from the combined and partially separated sewer system areas. The adopted CSO Plan amendment discusses the plan for control of those CSO locations where work has not yet been completed. This business area also addresses other hydraulic control features in the system, such as gates, valves, and weirs.

**Sediments**: This program provides 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.

**Landslide Mitigation & Special Programs:** The projects and programs in this program category protect SPU drainage and wastewater infrastructure from landslides, provide drainage improvements where surface water generated from the city right-of-way is contributing to landslides, and manage stormwater policy and grants, interdepartmental coordination and programs, and citizen response activities.

**Low-Impact Development:** The projects and programs in this program category use stormwater facilities with multiple functionality to achieve the primary goals of flood protection, water quality improvement and/or habitat enhancement.

**Protection of Beneficial Uses:** This program makes improvements to the City's drainage system to reduce the harmful effects of stormwater runoff on creeks and receiving water bodies by improving water quality and protecting or enhancing habitat. The program includes projects to improve water quality, protect creeks, meet regulatory requirements, and use best available science to meet community expectations for habitat.

**Shared Cost Projects**: This program includes capital improvement projects that receive funding from multiple SPU funds. In 2008, the program includes funding for the Utility Relocation due to the Alaskan Way Viaduct & Seawall, Operational Facility Improvements, the Operations Control Center Upgrade, Security Improvements, and Sound Transit Light Rail.

**Stormwater & Flood Control:** The projects and programs in this category make improvements to the City's drainage system to alleviate and prevent flooding in Seattle, with a primary focus on the protection of public health, safety and property.

**Technology**: This program makes use of recent technological advances to increase the Department's efficiency and productivity. Drainage and Wastewater-supported technology projects are shown grouped with other technology projects following the Department's three CIP sections. In 2008, SPU continues analyzing and evaluating data and systems to move drainage billing from the King County property tax system to the City's utility billing system.

**Wastewater Conveyance**: This program rehabilitates the City's collection system of sewer pipes. The Department establishes priorities for the program primarily based on the results of closed circuit television inspections and an asset management criticality analysis. The program funds full and partial replacement of sewer line segments, point repairs, and lining of pipes, as well as costs for emergency repairs.

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

When appropriate, the projects in the Drainage and Wastewater Fund CIP include operations and maintenance cost estimates. These estimates will be refined after project completion and will be included as part of SPU's future O&M Proposed Budget submittals.

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
<b>Control Structures</b>						BCI	_/Prograi	n Code:		C310B
Ballard Combined Sewer Overflow	C303101	0	0	309	282	239	589	1,017	407	2,843
Capital Planning - CSO Plan Implementation	C305101	588	385	189	263	269	276	282	289	2,541
Capital Planning Pump Stations	C307011	0	267	72	74	75	77	79	1	645
Combined Sewer Overflow Facility Retrofit	C302102	3,532	709	2,092	2,209	2,263	2,316	2,370	1	15,492
Combined Sewer Overflow Operations & Maintenance Plan	C307005	0	411	298	368	377	386	0	0	1,840
Combined Sewer Overflow Plan Update	C3AA103	2,472	703	491	105	108	55	0	0	3,934
Combined Sewer Overflow Reporting/Public Notice	C307008	0	115	45	0	0	0	0	0	160
Combined Sewer Overflow Structure Configuration Management	C306101	0	116	71	0	0	0	0	0	187
Combined Sewer Overflow Supplemental Characterization	C307006	0	80	445	421	5	0	0	0	951
Fremont-Wallingford Combined Sewer Overflow	C303102	0	0	348	265	222	1,077	1,828	1,024	4,764
Future Combined Sewer Overflow Reduction	C309002	0	0	1	789	808	1,103	3,386	5,778	11,865
Post-Construction Monitoring	C307003	0	59	129	0	108	110	113	116	635
Pump Station and Force Main Improvements	C3102	853	661	1,353	1,798	1,832	1,875	1,919	1,964	12,255
Pump Station Optimization Study	C307012	0	0	0	105	54	0	0	0	159
S Genesee Combined Sewer Overflow	C303103	533	1,183	1,349	1,104	1,024	5,955	9,482	3,582	24,212

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

# **Project Summary**

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
<b>Control Structures</b>						BC	L/Progra	m Code:		C310B
S Henderson Combined Sewer Overflow Storage	C304102	622	577	1,283	833	3,318	4,784	13,559	8,851	33,827
Sediment Survey	C307007	0	107	8	0	0	0	0	0	115
Windermere Combined Sewer Overflow Storage	C302103	1,339	1,055	2,260	5,167	5,416	244	60	0	15,541
<b>Control Structures To</b>	tal	9,939	6,428	10,743	13,783	16,118	18,847	34,095	22,013	131,966

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

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
Landslide Mitigation &	& Special Pro	grams				BCI	_/Prograi	m Code:		C335B
1500 - 2600 Aurora N Landslide	C363401	7	1	1	53	65	198	1,129	0	1,454
47 SW & SW Maplewood Place Landslide	C363402	9	1	1	43	111	116	650	0	931
Aquatic Habitat Matching Grant Project	C353301	54	556	424	436	447	458	468	480	3,323
Capital Planning - Public Asset Protection	C343401	251	463	181	502	431	193	790	251	3,062
Design Standards & Guidelines - DRN	C353501	666	449	350	0	0	0	0	0	1,465
Drainage & Wastewater Partnership Program - DRN	C3335	0	350	359	158	162	198	1,467	1,502	4,196
Drainage Spot Improvements	C333201	1,072	296	219	263	269	276	282	289	2,966
Golden Gardens/View Avenue Landslide	C343403	160	293	1	0	0	0	0	0	454
Greenwood Peat Bog	C333207	254	25	25	114	0	0	0	0	418
Intergovernmental Shares - DRN	C3355	375	1,975	1,873	0	0	0	0	0	4,223
Mobility Improvement	C333514	900	308	309	316	323	331	339	347	3,173
Neighborhood Drainage/Climate Bonus Matching Grant Project	C307020	0	150	156	158	162	165	169	173	1,133
Salmon Bay Phase 2 Acquisition & Restoration	C333307	580	106	1	1	1	0	0	0	689
Small Landslide Projects	C3325	999	578	504	947	1,138	448	1,869	718	7,201
SW Prescott/Admiral Landslide	C302353	636	1	1	316	22	0	0	0	976
Works Progress Administration Drains Study & Repair	C3315	724	301	257	473	539	276	282	359	3,211
Landslide Mitigation of Special Programs Total		6,687	5,853	4,662	3,780	3,670	2,659	7,445	4,119	38,875

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

**SPU - Drainage & Wastewater** 

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
Low Impact Developm	nent					BCI	L/Prograi	m Code:		C334B
3rd Ave. NW & NW 107th Street Natural System	C300329	5,093	94	1	0	0	0	0	0	5,188
Capital Planning – Low Impact Development	C307017	0	321	141	131	135	138	141	144	1,151
Capitol Hill Water Quality Project	C306001	1	1,653	1,963	1,177	833	882	181	173	6,863
Creek Flow Control Implementation	C310001	0	0	0	526	539	3,308	2,427	347	7,147
High Point Drainage System	C301303	2,654	1,376	721	168	108	83	0	0	5,110
Natural Drainage System Improvements	C333206	527	169	122	421	539	551	2,709	3,467	8,505
Pinehurst Natural Drainage System	C333202	4,986	30	85	50	0	0	0	0	5,151
Venema Creek Natural Drainage System	C302317	657	309	151	253	2,780	1,812	124	127	6,213
Watershed Base Creek Flow Control	C353310	109	71	282	210	0	0	0	0	672
Low Impact Developm Total	nent	14,027	4,023	3,466	2,936	4,934	6,774	5,582	4,258	46,000

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

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
<b>Protection of Benefici</b>	al Uses					BCI	L/Progra	m Code:		C333B
Beer Sheva Habitat Improvement	C301319	159	23	45	37	11	11	11	0	297
Best Management Practice Program	C3313	1,033	595	1,429	7,543	2,160	2,133	2,183	1,964	19,040
Bitter Lake/N 137th Stormwater	C301322	14	26	1	26	27	132	452	1,000	1,678
Capital Planning - Protection of Beneficial Uses	C343301	904	285	356	415	48	44	45	46	2,143
Citywide Source Control	C363501	74	103	0	0	0	0	0	0	177
Creeks Habitat Complexity Program	C353302	383	97	79	87	91	116	119	116	1,088
Creeks Vegetation Program	C353304	267	185	161	168	178	185	191	185	1,520
Fecal TMDL Feasibility	C343302	108	100	41	0	0	0	0	0	249
Fish Passage Program	C353305	137	7	1	60	81	165	169	185	805
Greenwood Water Quality Best Management Practice	C353306	23	0	410	0	0	0	0	0	433
Seattle Housing Authority Integrated Drainage Plan	C363301	95	356	337	652	280	0	0	0	1,720
Taylor Creek Culverts Phase 2	C399315	739	221	601	26	11	11	0	0	1,609
Taylor Creek Fish Habitat Improvements	C308003	0	0	1	0	0	0	0	0	1
Thornton Creek Water Quality Channel Project		2,451	6,481	3,257	1,136	185	95	0	0	13,605
Protection of Benefici	al Uses	6,387	8,479	6,719	10,150	3,072	2,892	3,170	3,496	44,365
Total Sediments						BCI	L/ <b>Progra</b> i	m Code:		C350B
Sediment Remediation - DRN	C3501	4,513	3,393	3,254	3,020	1,740	108	8	16	16,052
Sediment Remediation - WW	C3502	3,635	1,416	992	549	51	6	5	1	6,655
Sediments Total		8,148	4,809	4,246	3,569	1,791	114	13	17	22,707

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

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
<b>Shared Cost Projects</b>						BCI	_/Prograi	n Code:		C410B
1% for Art – DWF	C4118 - DWF	595	564	282	399	294	164	205	152	2,655
2006 Storms Capital Program - DWF	C4120- DWF	0	100	100	0	0	0	0	0	200
Bridging the Gap Program-DWF	C4119- DWF	0	0	1,560	1,609	455	470	485	501	5,080
Climate Protection - DWF	C407S01- DWF	0	77	124	115	118	120	123	126	803
Demand Management	C407019	0	600	600	600	1,923	2,040	2,166	0	7,929
Heavy Equipment Purchases - DWF	C4116- DWF	0	1,824	4,534	1,645	1,233	1,555	1,799	1,666	14,256
I-5 Pavement Reconstruction - DWF	C407022- DWF	0	132	139	150	163	167	180	168	1,099
Integrated Control Monitoring Program - DWF	C4108- DWF	2	1,446	3,775	2,980	3,297	3,727	3,934	4,157	23,318
King Street Station Rehabilitation	C408S05	0	0	308	0	0	0	0	0	308
Meter Replacement - DWF	C4101- DWF	2,038	530	577	505	517	529	542	556	5,794
Operational Facility - Construction - DWF	C4106- DWF	2,457	1,823	867	885	907	869	890	913	9,611
Operational Facility - Other - DWF	C4115- DWF	146	626	71	65	67	10	10	10	1,005
Operations Control Center - DWF	C4105- DWF	1,610	640	85	377	45	0	0	0	2,757
Security Improvements - DWF	C4113- DWF	7	768	518	631	647	662	677	0	3,910
Sound Transit – University Link - DWF	C4110- DWF	9	95	237	233	0	0	0	0	574
Sound Transit Central Link - DWF	C4104- DWF	1,911	435	323	0	0	0	0	0	2,669
Sound Transit Integrated Drainage Plan	C405001	86	242	360	484	480	0	0	0	1,652
South Lake Union - DWF	C4114- DWF	0	137	144	8	0	0	0	0	289
South Lander Grade Separation - DWF	C408S03 - DWF	0	0	206	211	217	222	0	0	856
Spokane Street Viaduct - DWF	C407023- DWF	0	132	600	0	0	0	0	0	732

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

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
<b>Shared Cost Projects</b>						ВС	L/Progra	m Code:		C410B
SR 519 Interchange - DWF	C408S04 - DWF	0	0	206	211	217	222	0	0	856
SR-520 Bridge Replacement - DWF	C407021- DWF	0	132	139	150	163	176	191	168	1,119
Utility Relocation due to Alaskan Way Viaduct and Seawall Replacement – DWF	C4102- DWF	1,476	3,347	2,310	2,882	0	0	0	0	10,015
<b>Shared Cost Projects</b>	Total	10,337	13,650	18,065	14,140	10,743	10,933	11,202	8,417	97,487
Stormwater & Flood	Control					BC	L/Progra	m Code:		C332B
14th Ave S Drainage Improvements	C308006	0	0	500	151	0	0	0	0	651
4th Avenue S/S Trenton Storm Drain	C353202	777	793	3,618	4,641	1,258	79	81	0	11,247
Capital Planning - Flood Control & Local Drainage	C343201	1,364	414	289	316	323	331	339	347	3,723
Georgetown Flume Drainage Improvement	C307019	3	209	1,023	0	0	0	0	0	1,235
Jackson Park Detention - Phase 2	C399305	10,664	123	38	53	0	0	0	0	10,878
Localized Flood Control Program	C3312	684	250	1,081	216	1,137	868	4,874	4,738	13,848
Madison Valley Long Term Solution	C307014	1	1,032	3,725	15,776	12,931	110	56	58	33,689
Meadowbrook Outfall Rehabilitation	C353206	446	1,243	22	0	0	0	0	0	1,711
MLK Way/Norfolk Street Storm Improvement	C333205	1,081	285	3,059	68	48	50	0	0	4,591
N 125th & Aurora N Storm Drain	C302313	916	403	567	484	460	0	0	0	2,830
Stormwater & Flood Total	Control	15,936	4,752	13,922	21,705	16,157	1,438	5,350	5,143	84,403

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

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
Wastewater Conveyar	nce					ВС	L/Progra	m Code:		C320B
Design Standards & Guidelines - WW	C305201	130	281	416	0	0	0	0	0	827
Drainage & Wastewater Partnership Program - WW	C3203	0	50	17	1	1	1	1	1	72
Intergovernmental Shares - WW	C3205	251	300	308	0	0	0	0	0	859
Lakewood Raincatcher Pilot Project	C305202	428	851	523	170	60	64	49	58	2,203
Minor Facility Upgrades - Rehabilitation	C3AA402	103	96	90	100	108	116	124	116	853
No Dig Pipe & Maintenance Rehabilitation	C3AA403	6,597	2,346	3,200	2,773	2,164	2,769	2,834	3,582	26,265
Point Sewer Pipe Rehabilitation - Contract	C303401	1,908	1,078	1,218	889	1,078	1,103	1,129	1,078	9,481
Point Sewer Pipe Rehabilitation - Crews	C303402	11,534	2,410	2,830	3,210	3,718	4,399	4,177	3,582	35,860
Sanitary Sewer Overflow Capacity	C302205	569	243	1,071	1,133	1,190	1,199	1,227	1,271	7,903
Sewage System Model	C308005	0	0	1,275	968	560	353	124	0	3,280
Sewer Emergency Rehabilitation	C3AA404	3,882	677	641	631	700	717	734	751	8,733
Sewer Full Line Replacements	C3202	371	145	357	375	404	434	458	462	3,006
Small Sewer Improvements	C303299	280	175	179	452	679	713	730	289	3,497
Taylor Creek Sewer Facility Stabilization	C308004	0	0	1	0	0	0	0	0	1
Wastewater Rehabilitation Evaluation	C3AA401	1,614	258	252	526	323	358	395	578	4,304
Water Reuse - Wastewater	C301203	476	97	44	0	0	0	0	0	617
Wastewater Conveyar Total	nce	28,143	9,007	12,422	11,228	10,985	12,226	11,982	11,768	107,761
<b>Department Total</b>		99,604	57,001	74,245	81,291	67,470	55,883	78,839	59,231	573,564

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

# **Fund Summary**

Fund Name	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Drainage and Wastewater Fund	99,604	57,001	74,245	81,291	67,470	55,883	78,839	59,231	573,564
<b>Department Total</b>	99,604	57,001	74,245	81,291	67,470	55,883	78,839	59,231	573,564

Note: Additional allocations for the Drainage and Wastewater Fund are shown in the SPU - Technology section of this document.

#### 1% for Art – DWF

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type: Improved Facility Start Date: 1st Quarter 2001

Project ID: C4118 - DWF End Date: Ongoing

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

#### 14th Ave S Drainage Improvements

BCL/Program Name: Stormwater & Flood Control BCL/Program Code: C332B

Project Type:Improved FacilityStart Date:1st Quarter 2008Project ID:C308006End Date:4th Quarter 2009

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

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

Neighborhood District: Southwest Urban Village: South Park

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

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

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

#### 1500 - 2600 Aurora N Landslide

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type:New FacilityStart Date:1st Quarter 2006Project ID:C363401End Date:4th Quarter 2012

**Location:** Aurora Ave. N

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Magnolia/Queen AnneUrban Village:Not in an Urban Village

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

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

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

#### 2006 Storms Capital Program - DWF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 2007Project ID:C4120-DWFEnd Date:4th Quarter 2008

**Location:** Multiple

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

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

BCL/Program Name: Low Impact Development BCL/Program Code: C334B

Project Type:Improved FacilityStart Date:4th Quarter 2000Project ID:C300329End Date:1st Quarter 2008

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

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake
Neighborhood District: Northwest
Neighborhood District: Northwest
Neighborhood Plan Matrix: A-9,A-10, A-11
Urban Village: Not in an Urban Village

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

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

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

#### 47 SW & SW Maplewood Place Landslide

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type:New FacilityStart Date:1st Quarter 2006Project ID:C363402End Date:4th Quarter 2012

**Location:** 47th Ave. SW

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SouthwestUrban Village:Not in an Urban Village

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

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

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

#### 4th Avenue S/S Trenton Storm Drain

BCL/Program Name: Stormwater & Flood Control BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353202End Date:4th Quarter 2012

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

Neighborhood Plan: South Park Neighborhood Plan Matrix: N/A

Neighborhood District: Greater Duwamish Urban Village: South Park

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

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

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

#### **Aquatic Habitat Matching Grant Project**

BCL/Program Name: Landslide Mitigation & Special Programs BCL/Program Code: C335B

Project Type: New Facility Start Date: 1st Quarter 2005

Project ID: C353301 End Date: Ongoing

Location: Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

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

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

#### **Ballard Combined Sewer Overflow**

BCL/Program Name: Control Structures

BCL/Program Code: C310B

Project Type:New FacilityStart Date:1st Quarter 2008Project ID:C303101End Date:1st Quarter 2020

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:BallardUrban Village:Not in an Urban Village

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

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

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

#### **Beer Sheva Habitat Improvement**

BCL/Program Name: Protection of Beneficial Uses BCL/Program Code: C333B

Project Type:New FacilityStart Date:4th Quarter 2001Project ID:C301319End Date:4th Quarter 2012

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SoutheastUrban 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 repiped to separate its flow from stormwater and Combined Sewer Overflow discharges, and to improve downstream water quality. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

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

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

#### **Best Management Practice Program**

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:2nd Quarter 2000Project ID:C3313End Date:4th Quarter 2013

Location: Citywide

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

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

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

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

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

#### Bitter Lake/N 137th Stormwater

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:2nd Quarter 2001Project ID:C301322End Date:4th Quarter 2013

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

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake
Neighborhood District: Northwest
Neighborhood District: Northwest
Neighborhood Plan Matrix: N/A
Urban Village: Bitter Lake Village

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

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

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

#### **Bridging the Gap Program-DWF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2008Project ID:C4119-DWFEnd Date:4th Quarter 2016

**Location:** Multiple

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:A-2, A-3, A-6Neighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

#### **Capital Planning - CSO Plan Implementation**

BCL/Program Name: Control Structures

BCL/Program Code: C310B

**Project Type:** New Facility **Start Date:** 1st Quarter 2005

Project ID: C305101 End Date: Ongoing

Location: Citywide

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

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

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

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

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

#### Capital Planning - Flood Control & Local Drainage

BCL/Program Name: Stormwater & Flood Control BCL/Program Code: C332B

Project Type: New Facility Start Date: 1st Quarter 2004

Project ID: C343201 End Date: Ongoing

**Location:** Various

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

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

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

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

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

#### <u>Capital Planning – Low Impact Development</u>

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 PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

#### <u>Capital Planning - Protection of Beneficial Uses</u>

BCL/Program Name: Protection of Beneficial Uses BCL/Program Code: C333B

Project Type: New Facility Start Date: 1st Quarter 2004

Project ID: C343301 End Date: Ongoing

**Location:** Various

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

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

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

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

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

#### **Capital Planning - Public Asset Protection**

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type: New Facility Start Date: 1st Quarter 2004

Project ID: C343401 End Date: Ongoing

**Location:** Citywide

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

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

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

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

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

#### **Capital Planning Pump Stations**

BCL/Program Name: Control Structures BCL/Program Code: C310B

Project Type: New Investment Start Date: 1st Quarter 2007

Project ID: C307011 End Date: Ongoing

**Location:** Various

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

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

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

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

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

BCL/Program Name: Low Impact Development BCL/Program Code: C334B

Project Type:New FacilityStart Date:1st Quarter 2006Project ID:C306001End Date:4th Quarter 2013

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Lake UnionUrban Village:South Lake Union

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

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

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

#### **Citywide Source Control**

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:1st Quarter 2006Project ID:C363501End Date:4th Quarter 2008

**Location:** 

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban 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 occuring on the site and the sensitivity of the receiving water bodies. Thirty-four priority facilities were identified and site inspections were conducted on 15 of those sites. Phase two will inspect approximately 100 additional facilities. This assessment is funded through reimbursements from the Cumulative Reserve Subfund to the Drainage and Wastewater Fund.

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

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

### **Climate Protection - DWF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C407S01-DWFEnd Date:4th Quarter 2013

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban 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	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	0	77	124	115	118	120	123	126	803
Project Total:	0	77	124	115	118	120	123	126	803
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	0	77	124	115	118	120	123	126	803
Appropriations Total*	0	77	124	115	118	120	123	126	803
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		64	124	115	118	120	123	126	790

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

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

BCL/Program Name: Control Structures BCL/Program Code: C310B

Project Type: Rehabilitation or Restoration Start Date: 1st Ouarter 2002

Project ID: C302102 End Date: Ongoing

Location: Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

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

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

### **Combined Sewer Overflow Operations & Maintenance Plan**

BCL/Program Name: Control Structures

BCL/Program Code: C310B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C307005End Date:4th Quarter 2011

Location: Various

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

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

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

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

### **Combined Sewer Overflow Plan Update**

BCL/Program Name: Control Structures BCL/Program Code: C310B

Project Type:Improved FacilityStart Date:1st Quarter 1999Project ID:C3AA103End 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, development of the Environmental Impact Statement, and public participation activities. Work involved in the project includes flow monitoring, hydraulic/hydrologic modeling, statistical analysis of historical rainfall patterns, development of performance standards to incorporate uncertainty and probability of compliance with regulations, capital planning, and development/refinement of the CSO Capital Improvement Plan for implementing CSO projects from 2010 through 2020. The consequence of not completing this project is non-compliance with the CSO NPDES permit, which may result in fines or other consequences (e.g., consent decree, administrative order). SPU's Asset Management Committee reviewed and approved development of the plan. The certainty of the cost estimate has a medium confidence level.

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

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

### **Combined Sewer Overflow Reporting/Public Notice**

BCL/Program Name: Control Structures BCL/Program Code: C310B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C307008End Date:4th Quarter 2008

**Location:** Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### **Combined Sewer Overflow Structure Configuration Management**

BCL/Program Name: Control Structures

BCL/Program Code: C310B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2006Project ID:C306101End Date:4th Quarter 2008

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### **Combined Sewer Overflow Supplemental Characterization**

BCL/Program Name: Control Structures

BCL/Program Code: C310B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C307006End Date:1st Quarter 2010

**Location:** Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### **Creek Flow Control Implementation**

BCL/Program Name: Low Impact Development BCL/Program Code: C334B

Project Type:New FacilityStart Date:1st Quarter 2009Project ID:C310001End Date:1st Quarter 2016

Location: Citywide

Neighborhood Plan:DelridgeNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

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

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

### **Creeks Habitat Complexity Program**

BCL/Program Name: Protection of Beneficial Uses BCL/Program Code: C333B

Project Type: New Facility Start Date: 1st Quarter 2005

Project ID: C353302 End Date: Ongoing

**Location:** Citywide

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

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

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

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

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

### **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 LictonNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

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

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

### **Demand Management**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C407019End Date:4th Quarter 2012

**Location:** Various

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

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

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

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

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

### **Design Standards & Guidelines - DRN**

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type:New InvestmentStart Date:1st Quarter 2005Project ID:C353501End Date:4th Quarter 2008

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### **Design Standards & Guidelines - WW**

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type:New InvestmentStart Date:1st Quarter 2005Project ID:C305201End Date:4th Quarter 2008

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

#### **Drainage & Wastewater Partnership Program - DRN**

BCL/Program Name: Landslide Mitigation & Special Programs BCL/Program Code: C335B

**Project Type:** New Facility **Start Date:** 1st Ouarter 2007

Project ID: C3335 End Date: Ongoing

Location: Citywide

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

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

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

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

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

### <u>Drainage & Wastewater Partnership Program - WW</u>

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

**Project Type:** New Facility **Start Date:** 1st Ouarter 2007

Project ID: C3203 End Date: Ongoing

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

#### **Drainage Spot Improvements**

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type: Rehabilitation or Restoration Start Date: 2nd Quarter 1998

Project ID: C333201 End Date: Ongoing

Location: Citywide

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

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

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

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

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

### **Fecal TMDL Feasibility**

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:4th Quarter 2004Project ID:C343302End Date:4th Quarter 2008

**Location:** Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

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

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

#### Fish Passage Program

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

**Project Type:** New Facility **Start Date:** 1st Quarter 2005

Project ID: C353305 End Date: Ongoing

**Location:** Citywide

Neighborhood Plan: In more than one Plan Neighborhood Plan Matrix: Multiple

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

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

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

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

### Fremont-Wallingford Combined Sewer Overflow

BCL/Program Name: Control Structures

BCL/Program Code: C310B

Project Type:Improved FacilityStart Date:1st Quarter 2008Project ID:C303102End Date:1st Quarter 2020

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### **Future Combined Sewer Overflow Reduction**

BCL/Program Name: Control Structures

BCL/Program Code: C310B

Project Type: New Investment Start Date: 1st Quarter 2008

Project ID: C309002 End Date: Ongoing

Location: Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### **Georgetown Flume Drainage Improvements**

BCL/Program Name: Stormwater & Flood Control BCL/Program Code: C332B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C307019End Date:4th Quarter 2008

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

Neighborhood Plan:GeorgetownNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban 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 Polychorinated Biphenyls (PCBs), phthalates (plasticizers), and other chemicals in the waterway sediment. The flume is owned by Seattle City Light and historically was used to convey cooling water from the Georgetown Steamplant, as well as numerous industrial discharges. It now collects runoff from City rights-of-way and private properties along S. Myrtle and S. Willow Streets, as well as runoff from areas immediately adjacent to the flume. The flume consists of a combination of pipes and wood or concrete-lined flumes that run about 2,500 feet across the north end of the King County Airport.

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

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

#### **Golden Gardens/View Avenue Landslide**

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type:New FacilityStart Date:2nd Quarter 2004Project ID:C343403End Date:4th Quarter 2008

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:NorthwestUrban Village:Not in an Urban Village

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

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

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

#### **Greenwood Peat Bog**

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2003Project ID:C333207End Date:4th Quarter 2009

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

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

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

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

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

### **Greenwood Water Quality Best Management Practice**

BCL/Program Name: Protection of Beneficial Uses BCL/Program Code: C333B

Project Type:New FacilityStart Date:1st Quarter 2006Project ID:C353306End Date:4th Quarter 2008

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:NorthUrban Village:Not in an Urban Village

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

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

### **Heavy Equipment Purchases - DWF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type: New Investment Start Date: 1st Quarter 2007

Project ID: C4116-DWF End Date: Ongoing

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

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

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

### **High Point Drainage System**

BCL/Program Name: Low Impact Development BCL/Program Code: C334B

Project Type:New FacilityStart Date:4th Quarter 2001Project ID:C301303End Date:4th Quarter 2011

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SouthwestUrban Village:Not in an Urban Village

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

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

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

### **I-5 Pavement Reconstruction - DWF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C407022-DWFEnd Date:4th Quarter 2020

**Location:** I-5

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

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

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

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

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

### **Integrated Control Monitoring Program - DWF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:New InvestmentStart Date:1st Quarter 2002Project ID:C4108-DWFEnd Date:4th Quarter 2013

**Location:** Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### **Intergovernmental Shares - DRN**

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C3355End Date:4th Quarter 2008

Location: Citywide

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

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

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

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

### **Intergovernmental Shares - WW**

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C3205End Date:4th Quarter 2008

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### **Jackson Park Detention - Phase 2**

BCL/Program Name: Stormwater & Flood Control BCL/Program Code: C332B

Project Type:New FacilityStart Date:2nd Quarter 1999Project ID:C399305End Date:4th Quarter 2009

Location: Jackson Park Golf Course

Neighborhood Plan:Broadview-Bitter Lake-Haller LakeNeighborhood Plan Matrix:N/ANeighborhood District:NorthUrban Village:Not in an Urban Village

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

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

#### **King Street Station Rehabilitation**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2008Project ID:C408S05End Date:4th Quarter 2008

**Location:** King Street

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

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

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

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

### **Lakewood Raincatcher Pilot Project**

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C305202End Date:4th Quarter 2013

**Location:** Lakewood Avenue South

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SoutheastUrban Village:Columbia City

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

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

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

### **Localized Flood Control Program**

BCL/Program Name: Stormwater & Flood Control BCL/Program Code: C332B

Project Type: New Facility Start Date: Ongoing

Project ID: C3312 End Date: 4th Quarter 2013

**Location:** N/A

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

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

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

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

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

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

BCL/Program Name: Stormwater & Flood Control BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2007Project ID:C307014End Date:4th Quarter 2013

Location: Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:CentralUrban Village:Not in an Urban Village

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

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

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

### **Meadowbrook Outfall Rehabilitation**

BCL/Program Name: Stormwater & Flood Control BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353206End Date:2nd Quarter 2008

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:NorthUrban Village:Not in an Urban Village

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

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

#### Meter Replacement - DWF

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2004

Project ID: C4101-DWF End Date: Ongoing

Location: Citywide

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

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

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

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

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

### Minor Facility Upgrades - Rehabilitation

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type: Rehabilitation or Restoration Start Date: 1st Ouarter 1998

Project ID: C3AA402 End Date: Ongoing

**Location:** Various

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

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

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

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

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

### MLK Way/Norfolk Street Storm Improvement

BCL/Program Name: Stormwater & Flood Control BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2003Project ID:C333205End Date:4th Quarter 2011

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

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

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

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

### **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 PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### N 125th & Aurora N Storm Drain

BCL/Program Name: Stormwater & Flood Control BCL/Program Code: C332B

Project Type:New FacilityStart Date:3rd Quarter 2002Project ID:C302313End Date:4th Quarter 2010

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:NorthwestUrban Village:Bitter Lake Village

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	916	403	567	484	460	0	0	0	2,830
Project Total:	916	403	567	484	460	0	0	0	2,830
Fund Appropriations/Allocations		40.5							• 0•0
Drainage and Wastewater Fund	916	403	567	484	460	0	0	0	2,830
Appropriations Total*	916	403	567	484	460	0	0	0	2,830
O & M Costs (Savings)			0	0	2	2	2	2	8
Spending Plan		120	567	484	460	0	0	0	1,631

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

### **Natural Drainage System Improvements**

BCL/Program Name: Low Impact Development BCL/Program Code: C334B

**Project Type:** New Facility **Start Date:** 1st Quarter 2005

Project ID: C333206 End Date: Ongoing

Location: Citywide

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake Neighborhood Plan Matrix: N/A
Neighborhood District: In more than one District Urban Village: Not in an Urban Village

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

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

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

### Neighborhood Drainage/Climate Bonus Matching Grant Project

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type: New Facility Start Date: 1st Quarter 2007

Project ID: C307020 End Date: Ongoing

**Location:** N/A

Neighborhood Plan:In more than one PlanNeighborhood Plan Matrix:MultipleNeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This matching grant project funds community-based drainage projects that have important drainage benefits and additional value in meeting climate protection goals. It seeks to leverage SPU's drainage efforts with a dollar-for-dollar contribution of volunteer labor and donated materials and services. This project was added to the 2007-2012 Adopted CIP by Council action. 2007 and 2008 will be pilot years for the program, which is currently in a preliminary phase of development.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	0	150	156	158	162	165	169	173	1,133
Project Total:	0	150	156	158	162	165	169	173	1,133
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	0	150	156	158	162	165	169	173	1,133
Appropriations Total*	0	150	156	158	162	165	169	173	1,133
O & M Costs (Savings)			6	6	6	6	6	6	34

#### No Dig Pipe & Maintenance Rehabilitation

BCL/Program Name:Wastewater ConveyanceBCL/Program Code:C320BProject Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C3AA403End 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. Trenchless, or "No Dig", 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. The confidence level in this cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	6,597	2,346	3,200	2,773	2,164	2,769	2,834	3,582	26,265
Project Total:	6,597	2,346	3,200	2,773	2,164	2,769	2,834	3,582	26,265
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	6,597	2,346	3,200	2,773	2,164	2,769	2,834	3,582	26,265
Appropriations Total*	6,597	2,346	3,200	2,773	2,164	2,769	2,834	3,582	26,265
O & M Costs (Savings)			132	132	132	132	132	132	792

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

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

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type: Improved Facility Start Date: 1st Quarter 2004

Project ID: C4106-DWF End Date: Ongoing

**Location:** Multiple

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

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

#### **Operational Facility - Other - DWF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type: Improved Facility Start Date: 1st Quarter 2006

Project ID: C4115-DWF End Date: Ongoing

**Location:** Multiple

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

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

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

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

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

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C4105-DWFEnd Date:4th Quarter 2010

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

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

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

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

### Pinehurst Natural Drainage System

BCL/Program Name: Low Impact Development BCL/Program Code: C334B

Project Type:New FacilityStart Date:4th Quarter 2002Project ID:C333202End Date:4th Quarter 2009

Location:Thornton Creek Watershed/NE 113th St and 23rd Ave. NE/NE 117th St. and 16th Ave. NENeighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:NortheastUrban Village:Not in an Urban Village

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

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

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

### **Point Sewer Pipe Rehabilitation - Contract**

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2003

Project ID: C303401 End Date: Ongoing

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

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

### Point Sewer Pipe Rehabilitation - Crews

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2003

Project ID: C303402 End Date: Ongoing

Location: Citywide

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

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

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

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

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

### **Post-Construction Monitoring**

BCL/Program Name: Control Structures

BCL/Program Code: C310B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C307003End Date:4th Quarter 2013

**Location:** Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

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

BCL/Program Name: Control Structures BCL/Program Code: C310B

**Project Type:** New Facility **Start Date:** 1st Quarter 2008

Project ID: C3102 End Date: Ongoing

**Location:** Various

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

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

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

#### **Pump Station Optimization Study**

BCL/Program Name: Control Structures BCL/Program Code: C310B

Project Type:New InvestmentStart Date:1st Quarter 2009Project ID:C307012End Date:4th Quarter 2010

**Location:** Various

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

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

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

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

### S Genesee Combined Sewer Overflow

BCL/Program Name: Control Structures

BCL/Program Code: C310B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C303103End Date:3rd Quarter 2016

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SoutheastUrban 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, permiting, land acquisition (if necessary) and construction. The project schedule has been revised from the 2001 CSO Plan to account for project development; work performed under the CSO Facility Retrofit project (C302102), which may reduce the size of the necessary facilities in this basin; and potential coordination with King County. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

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

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

### S Henderson Combined Sewer Overflow Storage

BCL/Program Name: Control Structures BCL/Program Code: C310B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C304102End Date:4th Quarter 2017

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SoutheastUrban Village:Not in an Urban Village

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

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

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

### Salmon Bay Phase 2 Acquisition & Restoration

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type:Improved FacilityStart Date:2nd Quarter 2003Project ID:C333307End Date:1st Quarter 2010

**Location:** Salmon Bay

Neighborhood Plan:Crown Hill/BallardNeighborhood Plan Matrix:N/ANeighborhood District:NorthwestUrban Village:Not in an Urban Village

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

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

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

### **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 PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### **Seattle Housing Authority Integrated Drainage Plan**

BCL/Program Name: Protection of Beneficial Uses BCL/Program Code: C333B

Project Type:New InvestmentStart Date:1st Quarter 2006Project ID:C363301End Date:4th Quarter 2010

**Location:** Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### **Security Improvements - DWF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C4113-DWFEnd Date:4th Quarter 2012

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

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

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

### **Sediment Remediation - DRN**

BCL/Program Name: Sediments BCL/Program Code: C350B

Project Type: Rehabilitation or Restoration Start Date: 4th Ouarter 2000

Project ID: C3501 End Date: Ongoing

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This program studies and analyzes the cleanup of contaminated sediment sites in which the City is a participant, performs the actual cleanup of contaminated sites, performs preliminary engineering for future cleanup efforts, and conducts liability allocation negotiations. Funding is used to develop studies and analyses required by regulatory agencies for determining the boundaries and cleanup requirements for specific action sites. The study phase of sediment remediation projects often requires multiple years before specific cleanup actions are defined. As regulatory agency cleanup requirements become clear, additional individual cleanup projects are included in subsequent CIP proposals. This program supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. Seattle Public Utilities (SPU) is planning on deferring the costs of this project under the Financial Accounting Standards Board Statement 71 (FAS 71).

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

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

### **Sediment Remediation - WW**

BCL/Program Name: Sediments BCL/Program Code: C350B

Project Type: Rehabilitation or Restoration Start Date: 4th Ouarter 2000

Project ID: C3502 End Date: Ongoing

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This program studies and analyzes the cleanup of contaminated sediment sites in which the City is a participant, performs the actual cleanup of contaminated sites, performs preliminary engineering for future clean-up efforts, and conducts liability allocation negotiations. Funding is used to develop studies and analyses required by regulatory agencies for determining the boundaries and cleanup requirements for specific action sites. The study phase of sediment remediation projects often requires multiple years before specific cleanup actions are defined. As regulatory agency cleanup requirements become clear, additional individual cleanup projects are included in subsequent CIP proposals. This program supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. Seattle Public Utilities (SPU) is planning on deferring the costs of this project under the Financial Accounting Standards Board Statement 71 (FAS 71).

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

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

### **Sediment Survey**

BCL/Program Name: Control Structures BCL/Program Code: C310B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C307007End Date:4th Quarter 2008

**Location:** Various

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

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

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

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

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

### **Sewage System Model**

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C308005End Date:4th Quarter 2012

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

### **Sewer Emergency Rehabilitation**

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type: Rehabilitation or Restoration Start Date: 1st Ouarter 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. Once reports of surface subsidence or overflows from ratepayers or SPU Field Operations staff are received, a CCTV inspection is completed or attempted. The inspection is followed by a DWF pipeline condition assessment by SPU Engineering staff or SPU Field Operations First Response Crews. Field Operations crews may then perform an emergency repair of a pipeline. If the location is more complicated or in a critical location, SPU will declare the location an emergency and contract the repair with the assistance of SPU's Construction Management division and the Department of Executive Administration (DEA). This effort relieves the burden of a potential service interruption to the customer. This program was reviewed by SPU's Asset Management Committee as part of the overall Sewer Rehabilitation Programmatic Plan. The confidence level in the current cost estimate is medium.

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

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

### **Sewer Full Line Replacements**

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2001

Project ID: C3202 End Date: Ongoing

Location: Citywide

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

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

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

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

#### **Small Landslide Projects**

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type: Improved Facility Start Date: 1st Quarter 2004

Project ID: C3325 End Date: Ongoing

Location: Citywide

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

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

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

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

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

### **Small Sewer Improvements**

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type: Improved Facility Start Date: 1st Quarter 2003

Project ID: C303299 End Date: Ongoing

**Location:** Citywide

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

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

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

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

### Sound Transit - University Link - DWF

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2007Project ID:C4110-DWFEnd Date:4th Quarter 2009

Location: North Seattle

Neighborhood Plan: In more than one Plan Neighborhood Plan Matrix: Multiple

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

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

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

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

### Sound Transit Central Link - DWF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2003Project ID:C4104-DWFEnd Date:4th Quarter 2008

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

Neighborhood Plan: In more than one Plan Neighborhood Plan Matrix: Multiple

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

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

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

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

### **Sound Transit Integrated Drainage Plan**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C405001End Date:4th Quarter 2010

**Location:** South East Neighborhood District

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

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

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

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

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

### **South Lake Union - DWF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C4114-DWFEnd Date:4th Quarter 2009

**Location:** South Lake Union

Neighborhood Plan:South Lake UnionNeighborhood Plan Matrix:N/ANeighborhood District:Lake UnionUrban Village:South Lake Union

This project relocates or replaces drainage and wastewater related facilities affected by City-sponsored projects in the South Lake Union Area. Project work also includes flow modeling and development of green roofs. This effort identifies SPU drainage and wastewater system direct impacts, opportunities for system improvements, and cost responsibility. This project also funds planning-level coordination with other City departments on projects within the South Lake Union area. The confidence level of the cost estimate is medium.

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

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

### **South Lander Grade Separation - DWF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2008Project ID:C408S03 - DWFEnd Date:4th Quarter 2011

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

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

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

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

### **Spokane Street Viaduct - DWF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2007Project ID:C407023-DWFEnd Date:4th Quarter 2008

**Location:** Spokane Street Viaduct

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:West Seattle Junction

This project relocates or replaces drainage and wastewater assets affected by SDOT work on the Spokane St. Viaduct. In mid-2008, SDOT will begin construction of the new 4th Ave S off ramp from the the S Spokane St Viaduct. SPU must relocate approximately 600 linear feet of 30" watermain between the BNSF railroad tracks and 4th Ave S to make way for the new ramp, and the project may also require relocation of drianage and wastewater assets. SPU is expected to complete the relocation project in time to allow the SDOT project to be built on schedule. SPU will design, advertise and construct the relocations in a separate contract from the SDOT project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	0	132	600	0	0	0	0	0	732
Project Total:	0	132	600	0	0	0	0	0	732
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	0	132	600	0	0	0	0	0	732
Appropriations Total*	0	132	600	0	0	0	0	0	732
O & M Costs (Savings)			0	50	50	50	50	50	250

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

### SR 519 Interchange - DWF

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2008Project ID:C408S04 - DWFEnd Date:4th Quarter 2011

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

Neighborhood Plan:DuwamishNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

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

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

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

### SR-520 Bridge Replacement - DWF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2007Project ID:C407021-DWFEnd Date:4th Quarter 2020

**Location:** SR 520

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:University Campus

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

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

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

### **SW Prescott/Admiral Landslide**

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type:New FacilityStart Date:3rd Quarter 2002Project ID:C302353End Date:4th Quarter 2010

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

Neighborhood Plan:AdmiralNeighborhood Plan Matrix:N/ANeighborhood District:SouthwestUrban Village:Not in an Urban Village

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

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

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

### **Taylor Creek Culverts Phase 2**

BCL/Program Name: Protection of Beneficial Uses BCL/Program Code: C333B

Project Type:New FacilityStart Date:4th Quarter 1999Project ID:C399315End Date:4th Quarter 2011

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

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

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

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

### **Taylor Creek Fish Habitat Improvements**

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:2nd Quarter 2008Project ID:C308003End Date:4th Quarter 2008

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

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

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

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

### **Taylor Creek Sewer Facility Stabilization**

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type:New FacilityStart Date:2nd Quarter 2008Project ID:C308004End Date:4th Quarter 2008

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

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

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

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

### **Thornton Creek Water Quality Channel Project**

BCL/Program Name: Protection of Beneficial Uses BCL/Program Code: C333B

Project Type:New FacilityStart Date:4th Quarter 2004Project ID:C343306End Date:4th Quarter 2011

Location: 330 NE 100th Street

Neighborhood Plan: Northgate Neighborhood Plan Matrix: N/A

Neighborhood District: North Urban Village: Northgate

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

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

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

### <u>Utility Relocation due to Alaskan Way Viaduct and Seawall Replacement – DWF</u>

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C4102-DWFEnd Date:4th Quarter 2017

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

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

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

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

### Venema Creek Natural Drainage System

BCL/Program Name: Low Impact Development BCL/Program Code: C334B

Project Type:New FacilityStart Date:1st Quarter 2003Project ID:C302317End Date:2nd Quarter 2014

**Location:** Venema Creek Drainage Basin

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:NorthwestUrban Village:Not in an Urban Village

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

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

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

#### **Wastewater Rehabilitation Evaluation**

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type: Rehabilitation or Restoration Start Date: 1st Ouarter 1998

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

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

#### Water Reuse - Wastewater

BCL/Program Name: Wastewater Conveyance BCL/Program Code: C320B

Project Type:New FacilityStart Date:4th Quarter 2001Project ID:C301203End Date:4th Quarter 2008

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

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

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

#### **Watershed Base Creek Flow Control**

BCL/Program Name: Low Impact Development BCL/Program Code: C334B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353310End Date:4th Quarter 2009

**Location:** Citywide/Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

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

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

#### <u>Windermere Combined Sewer Overflow Storage</u>

BCL/Program Name: Control Structures

BCL/Program Code: C310B

Project Type:New FacilityStart Date:2nd Quarter 2002Project ID:C302103End Date:4th Quarter 2012

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:NortheastUrban Village:Not in an Urban Village

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

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

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

#### Works Progress Administration Drains Study & Repair

BCL/Program Name: Landslide Mitigation & Special Programs

BCL/Program Code: C335B

Project Type: Rehabilitation or Restoration Start Date: 3rd Quarter 2000

Project ID: C3315 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 evaluates, prioritizes and makes necessary repairs on subsurface landslide control drains and tunnels installed as a result of extensive landslide damage during the winter of 1933-1934. The Works Progress Administration sponsored the construction of landslide mitigation projects at 29 sites around the city between 1935-1941. This program was one of the recommended activities from the Landslide Policy Paper adopted by the City Council in 1998. This program is in a preliminary phase of development and cost estimates will be revised over time as comprehensive site-specific evaluations are completed. SPU's Asset Management Committee has approved the programmatic approach.

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

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

# SPU -SOLID WASTE

# Seattle Public Utilities - Solid Waste

# **Overview of Facilities and Programs**

Seattle Public Utilities (SPU) is responsible for the collection and disposal of solid waste generated within the City of Seattle. The City-owned infrastructure used to accomplish this task consists of two recycling and disposal stations, two household hazardous waste facilities, and a fleet of trucks and heavy equipment. In addition, the Solid Waste Capital Improvement Plan (CIP) supports post-closure projects on two landfills previously used by the City.

The City's solid waste collection system consists of the South Recycling and Disposal Station (SRDS), located in the South Park area of the city, and the North Recycling and Disposal Station, located just north of the Lake Washington Ship Canal near Stone Way. The South Household Hazardous Waste facility is located on the same site as the SRDS, while the North Household Hazardous Waste facility is located at North 125th Street, adjacent to the City-owned Haller Lake shops.

Private contractors collect household refuse and recyclables and deliver the waste to the recycling and disposal stations for its ultimate disposal. Private contractors also collect the City's commercial waste and deliver some of that waste to the City's recycling and disposal stations. Self-haulers, private individuals, and small contractors can also deliver their own refuse to the stations. Once deposited at a station, the trash is processed through a large compaction machine and placed in a sealed shipping container. This container is hauled by solid waste fleet trucks to the Union Pacific Railhead where it is placed on a train. Six times a week, the trains carry the loaded containers to a privately-owned regional landfill in Eastern Oregon, where final disposal is accomplished. The trains return with empty containers to be refilled. Self-haulers may also bring their recyclables to the recycling and disposal stations. Materials are separated by the customer and placed in large bins. Once the bins are full, Solid Waste Field Operations personnel haul these bins to private recyclers for processing. Large goods (refrigerators, stoves, etc.) may also be brought to the stations for recycling. Customers can also bring unused pesticides, paints, and solvents to one of the two household hazardous waste sites. The City contracts with a private company to pick up and dispose of these materials. Seattle Public Utilities maintains a list of materials that are still useable and makes these items available to anyone who wants them.

The Solid Waste CIP is funded through solid waste rates and revenue bonds. Overhead costs for the CIP (such as rent and utilities) are currently budgeted in SPU's operating budget and then repaid as CIP expenditures are incurred.

# **Highlights**

Facilities Master Plan Implementation: The Solid Waste Facilities Master Plan guides the construction of facilities that provide the citizens of Seattle with sufficient recycling and solid waste services for the next 30 years. In 2008, this project is broken down into two separate projects: the North Transfer Station Rebuild and the South Transfer Station Rebuild. Investments in these facilities will modernize solid waste operations, enhance worker safety, and allow for greater recycling opportunities as Seattle pursues aggressive new waste reduction strategies to minimize waste the City collects and disposes. Costs include Environmental Policy Act (SEPA) evaluations, permitting, property acquisition, design, construction, and purchase of facility equipment.

Midway Landfill Post-Closure Improvements: This project conducts post-closure capital improvements at the Midway Landfill, a 50-acre former gravel quarry located in Kent, Washington and operated by SPU from 1966 to 1983. The Washington State Department of Transportation (WSDOT) is undertaking a billion dollar project to widen Interstate 5 by two lanes on the west side. This state project impacts landfill post-closure infrastructure that is currently in place on the WSDOT right-of-way, and also requires SPU to remove refuse buried in the right-of-way. Project costs may change depending on negotiations underway between SPU and WSDOT. SPU and WSDOT are working together on this project, which enters the construction phase in 2010, if WSDOT obtains

# Seattle Public Utilities - Solid Waste

funding for its highway project. The funding decision is included in the state Regional Transportation Investment District (RTID) ballot measure in November 2007.

# **Project Selection Process**

SPU has adopted an Asset Management approach for selecting which projects to build. This is a triple bottom line approach in which projects are evaluated on their economic, social, and environmental costs and benefits, as well as the ability to meet customer service levels. The approach provides an elaborate analytical and modeling framework to find the most economic balance between capital investments and operation and maintenance expenditures so as to minimize life-cycle costs of any facility.

The Asset Management Committee, a committee of senior SPU executives, reviews each project valued at \$250,000 or more and assures that only projects that meet the benefit criteria move forward. Several projects have been dropped, as their costs were higher than their benefits. Several cost-effective master planning efforts have been approved to create up-to-date improvement and upgrade plans for various groups of assets. Other projects have been expanded or expedited because the benefits exceed the costs.

# **Program Category Summaries**

The Solid Waste Proposed CIP totals approximately \$11.4 million in 2008 (including Technology projects funded by the Solid Waste Fund, displayed in a separate section of this CIP), or \$35.3 million lower than the 2008 Endorsed Budget. In the New Facilities BCL, the 2008 budget for the South Park Development project is lower by \$8.1 million but the total project costs remain relatively unchanged. Also, the joint Executive-Council decision to avoid building the intermodal third station reduces the 2008 budget by \$28 million. In the Rehabilitation and Heavy Equipment BCL, the budget is about \$1 million lower than the Endorsed due to a shift of heavy equipment purchases to the Shared Cost Projects BCL, and an efficiency reduction for the Midway Flare Improvements project.

The Solid Waste CIP is composed of four program categories, which are summarized below.

**New Facilities:** This program plans, designs, and constructs new facilities to enhance solid waste operations. In 2008, SPU continues implementation of its Solid Waste Facilities Master Plan, which features a two-station configuration.

**Rehabilitation and Heavy Equipment:** This program designs and constructs projects to repair and/or upgrade solid waste facilities.

**Shared Cost Projects:** This program includes capital improvement projects that receive funding from multiple SPU funds. In 2008 the program includes funding for Operational Facility improvements, the Operations Control Center Upgrade, Security Improvements, and Heavy Equipment Purchases.

**Technology:** This program makes use of recent technology advances to increase efficiency and productivity. Solid Waste-supported technology projects are shown grouped with other technology projects in the SPU Technology CIP section.

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

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

# **Project Summary**

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
New Facilities						ВС	L/Progra		C230B	
Miscellaneous Station Improvements	C203005	979	123	116	0	0	0	0	0	1,218
New Facilities Development	C205308	40	26	25	29	31	33	35	29	248
Solid Waste Facility Master Plan North Transfer Station Rebuild	C207005	10	941	1,055	3,541	16,797	15,096	4,963	4,503	46,906
Solid Waste Facility Master Plan South Transfer Station Rebuild	C207006	4	12,530	5,100	23,778	28,404	8,218	17,954	4,306	100,294
South Park Development	C206402	0	617	376	2,524	539	2,977	564	0	7,597
South Recycling Disposal Station Household Hazardous Waste Relocation	C207002	0	246	286	827	847	0	0	0	2,206
<b>New Facilities Total</b>		1,033	14,483	6,958	30,699	46,618	26,324	23,516	8,838	158,469

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

# **Project Summary**

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
Rehabilitation and He	avy Equipme	ent				BC	L/Progra	m Code:		C240B
Disaster Debris Management Plan	C206401	0	102	49	0	0	0	0	0	151
Historic Landfill Improvements	C206601	143	51	39	0	0	0	0	0	233
Kent Highlands Agency Negotiations	C205406	190	51	58	54	55	57	59	58	582
Kent Highlands Flare Improvement	C205404	11	99	103	107	0	0	0	0	320
Kent Highlands N Pond Diversion	C205405	0	25	54	0	0	0	0	0	79
Kent Highlands Storm Drain Replacement	C208001	0	0	256	515	11	0	0	0	782
Kent Records Retention	C207001	0	30	74	0	0	0	0	0	104
Midway Agency Negotiations	C205407	48	15	31	26	55	28	29	29	261
Midway Flare Improvements	C207003	0	20	33	0	0	0	0	0	53
Midway Landfill Improvements	C203004	865	225	166	252	2,838	2,978	0	0	7,324
Rehab & Heavy Equipment Development	C205411	0	52	0	58	61	65	67	63	366
Yard Waste Carts	C205412	2,056	0	0	1,149	0	0	0	0	3,205
Rehabilitation and He	avy	3,313	670	863	2,161	3,020	3,128	155	150	13,460
Equipment Total Shared Cost Projects						BC	L/Progra	m Code:		C410B
1% for Art – SWF	C4118 - SWF	60	359	64	277	455	236	232	91	1,774
Heavy Equipment Purchases - SWF	C4116- SWF	3,398	1,137	1,625	1,262	1,337	1,416	1,588	1,745	13,508
Operational Facility - Construction - SWF	C4106- SWF	1,099	687	221	284	291	272	278	286	3,418
Operational Facility - Other - SWF	C4115- SWF	12	82	29	25	26	10	10	10	204
Operations Control Center - SWF	C4105- SWF	458	210	26	118	15	0	0	0	827
Security Improvements - SWF	C4113- SWF	2	223	173	210	216	221	226	0	1,271
Shared Cost Projects	Fotal	5,029	2,698	2,138	2,176	2,340	2,155	2,334	2,132	21,002
<b>Department Total</b>		9,375	17,851	9,959	35,036	51,978	31,607	26,005	11,120	192,931

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

# **Fund Summary**

Fund Name	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Solid Waste Fund	9,375	17,851	9,959	35,036	51,978	31,607	26,005	11,120	192,931
<b>Department Total</b>	9,375	17,851	9,959	35,036	51,978	31,607	26,005	11,120	192,931

Note: Additional allocations for the Solid Waste Fund are shown in the SPU - Technology section of this document.

#### 1% for Art – SWF

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type: Improved Facility Start Date: 1st Quarter 2003

Project ID: C4118 - SWF End Date: Ongoing

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	60	359	64	277	455	236	232	91	1,774
Project Total:	60	359	64	277	455	236	232	91	1,774
Fund Appropriations/Allocations									
Solid Waste Fund	60	359	64	277	455	236	232	91	1,774
Appropriations Total*	60	359	64	277	455	236	232	91	1,774
O & M Costs (Savings)			12	12	12	12	12	12	72

#### **Disaster Debris Management Plan**

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type:Improved FacilityStart Date:4th Quarter 2006Project ID:C206401End 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 a citywide disaster debris management plan. Federal grant funds have been requested. The scope of the plan will depend on grant funding levels and grant requirements.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	0	102	49	0	0	0	0	0	151
Project Total:	0	102	49	0	0	0	0	0	151
Fund Appropriations/Allocations									
Solid Waste Fund	0	102	49	0	0	0	0	0	151
Appropriations Total*	0	102	49	0	0	0	0	0	151
O & M Costs (Savings)			0	1	1	1	1	1	4
Spending Plan		220	49	0	0	0	0	0	269

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

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

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:New InvestmentStart Date:OngoingProject ID:C4116-SWFEnd Date:Ongoing

**Location:** N/A

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

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

This program replaces existing heavy equipment (such as loaders and bulldozers) used at Solid Waste Utility facilities, purchases new equipment, and retrofits existing equipment to meet SPU operational needs and initiatives. This project was included in the 2007-2012 Adopted CIP as C201002 Heavy Equipment Purchases – SWF.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	3,398	1,137	1,625	1,262	1,337	1,416	1,588	1,745	13,508
Project Total:	3,398	1,137	1,625	1,262	1,337	1,416	1,588	1,745	13,508
Fund Appropriations/Allocations Solid Waste Fund	3,398	1,137	1,625	1,262	1,337	1,416	1,588	1,745	13,508
Appropriations Total*	3,398	1,137	1,625	1,262	1,337	1,416	1,588	1,745	13,508
O & M Costs (Savings)			45	45	45	45	45	45	269
Spending Plan		539	1,625	1,262	1,337	1,416	1,588	1,745	9,512

#### **Historic Landfill Improvements**

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type:Improved FacilityStart Date:1st Quarter 2006Project ID:C206601End 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 project researches and evaluates measures to reduce environmental impacts at old historic landfills in the city. A test landfill gas extraction system and monitoring network was installed at Genessee Park in November 2006. The evaluation of this system will be completed in November 2007. The results of the evaluation will be used to determine if additional work is needed. The confidence in the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	143	51	39	0	0	0	0	0	233
Project Total:	143	51	39	0	0	0	0	0	233
Fund Appropriations/Allocations									
Solid Waste Fund	143	51	39	0	0	0	0	0	233
Appropriations Total*	143	51	39	0	0	0	0	0	233
O & M Costs (Savings)			13	13	13	13	13	13	78
Spending Plan		105	39	0	0	0	0	0	144

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

#### **Kent Highlands Agency Negotiations**

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type: Improved Facility Start Date: 1st Quarter 2005

Project ID: C205406 End Date: Ongoing

**Location:** 23076 Military Rd. S

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 conducts the required environmental and feasibility studies to evaluate the effectiveness of the Kent Highlands Landfill closure. These efforts and regulatory agency negotiations are required under an existing Consent Order with the Washington State Department of Ecology. The outcome of these efforts may lead to validation that the current environmental controls are sufficient, or require additional remedial actions. If these efforts are successful, the result is avoided unnecessary capital expenditures or new operations and maintenance expenses. The confidence in the cost estimate is medium. SPU's Asset Management Committee has approved the project concept, although additional briefings may occur.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	190	51	58	54	55	57	59	58	582
Project Total:	190	51	58	54	55	57	59	58	582
Fund Appropriations/Allocations									
Solid Waste Fund	190	51	58	54	55	57	59	58	582
Appropriations Total*	190	51	58	54	55	57	59	58	582
O & M Costs (Savings)			25	25	25	25	25	25	150
Spending Plan		60	58	54	55	57	59	58	401

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

# **Kent Highlands Flare Improvement**

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type:Improved FacilityStart Date:1st Quarter 2006Project ID:C205404End Date:4th Quarter 2009

**Location:** 23076 Military Rd. S

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project designs and constructs modifications needed to continue operating the gas flare facility at the Kent Highlands Landfill. As gas flows decrease naturally over time, modifications are necessary to continue operating the flare facility. The original equipment was sized for the gas flows in 1993 and SPU is approaching the limits of system components for decreased flows. Anticipated work elements over time include blower replacement, connection to natural gas for supplemental fuel, and flare replacement. The confidence in the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	11	99	103	107	0	0	0	0	320
Project Total:	11	99	103	107	0	0	0	0	320
Fund Appropriations/Allocations									
Solid Waste Fund	11	99	103	107	0	0	0	0	320
Appropriations Total*	11	99	103	107	0	0	0	0	320
O & M Costs (Savings)			0	0	2	2	2	2	6
Spending Plan		80	103	107	0	0	0	0	290

#### **Kent Highlands N Pond Diversion**

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C205405End Date:4th Quarter 2008

Location: 23076 Military Rd. S

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 diverts water from the Kent Highlands North Pond to surface waters via the Green River, avoiding costly discharge to the King County Metro sewer. Subsequent investigations indicate this discharge is not as significant as earlier assumed. SPU will continue to monitor Kent Highlands North Pond while the diversion is on hold.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	0	25	54	0	0	0	0	0	79
Project Total:	0	25	54	0	0	0	0	0	79
Fund Appropriations/Allocations Solid Waste Fund	0	25	54	0	0	0	0	0	79
Appropriations Total*	0	25	54	0	0	0	0	0	79
O & M Costs (Savings)			0	(25)	(25)	(25)	(25)	(25)	-125

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

#### **Kent Highlands Storm Drain Replacement**

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2008Project ID:C208001End Date:1st Quarter 2010

**Location:** 23076 Military Rd S

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project rehabilitates a critical storm drainage line at the Kent Highlands Landfill. SPU owns, operates and maintains a 42" storm drainage line on the south side of the Kent Highlands landfill. The line was installed in the 1970s to divert water away from the landfill operations. The more than 2000-foot line is constructed of corregated metal pipe and is failing. One section is crushed and the rest is severely corroded. This line transmits surface water from I-5, Military Road and a small portion of the landfill. The line is located on City property and on WSDOT right-of-way adjacent to SR516. If this line fails, it will damage the adjacent highway. This project funds the evaluation of the existing line and subsequent rehabilitation.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	0	0	256	515	11	0	0	0	782
Project Total:	0	0	256	515	11	0	0	0	782
Fund Appropriations/Allocations									
Solid Waste Fund	0	0	256	515	11	0	0	0	782
Appropriations Total*	0	0	256	515	11	0	0	0	782
O & M Costs (Savings)			0	0	0	4	4	4	12

#### **Kent Records Retention**

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C207001End Date:4th Quarter 2008

Location: 23076 Military Rd. S

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project plans, designs, and constructs a location to maintain the required Superfund Administrative Record for the clean-ups at Midway and Kent Highlands. Currently the records are not centralized in a secure location. Part of the planning may identify the best storage strategy for this enormous volume of files. The confidence in the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	0	30	74	0	0	0	0	0	104
Project Total:	0	30	74	0	0	0	0	0	104
Fund Appropriations/Allocations									
Solid Waste Fund	0	30	74	0	0	0	0	0	104
Appropriations Total*	0	30	74	0	0	0	0	0	104
O & M Costs (Savings)			0	1	1	1	1	1	3
Spending Plan		25	74	0	0	0	0	0	99

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

#### **Midway Agency Negotiations**

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type: Improved Facility Start Date: 1st Quarter 2005

Project ID: C205407 End Date: Ongoing

Location: 24808 Pacific Hwy. S

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 conducts the required environmental and feasibility studies to evaluate the effectiveness of the closure of the Midway Landfill. These efforts and regulatory agency negotiations are required under an existing Consent Order with the Washington State Department of Ecology. The outcome of these efforts may lead to validation that the current environmental controls are sufficient or identify the need for additional remedial actions. If these efforts are successful, this project has the potential to reduce new capital expenditures or new operations and maintenance expenses. The confidence in the cost estimate is medium. SPU's Asset Management Committee has approved the project concept, although additional briefings may occur.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	48	15	31	26	55	28	29	29	261
Project Total:	48	15	31	26	55	28	29	29	261
Fund Appropriations/Allocations									
Solid Waste Fund	48	15	31	26	55	28	29	29	261
Appropriations Total*	48	15	31	26	55	28	29	29	261
O & M Costs (Savings)			1	1	1	1	1	1	8

#### **Midway Flare Improvements**

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C207003End Date:4th Quarter 2008

Location: 24808 Pacific Hwy S

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project designs and constructs modifications necessary to continue operation of the gas flare facility at the Midway Landfill. As gas flows decrease naturally over time, modifications are necessary to continue operating the flare facility. The original equipment was sized for the gas flows in 1989 and retrofitted in 2003. SPU anticipates that by 2008, the system may again approach its limits for decreased flows. By 2008, SPU may add natural gas to the system in order to maintain combustion. Alternatives to flaring may be researched during this project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	0	20	33	0	0	0	0	0	53
Project Total:	0	20	33	0	0	0	0	0	53
Fund Appropriations/Allocations									
Solid Waste Fund	0	20	33	0	0	0	0	0	53
Appropriations Total*	0	20	33	0	0	0	0	0	53
O & M Costs (Savings)			0	0	0	0	0	0	1
Spending Plan		25	33	0	0	0	0	0	58

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

#### **Midway Landfill Improvements**

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C203004End Date:4th Quarter 2011

**Location:** 24808 Pacific Hwy. S

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project conducts post-closure capital improvements at the Midway Landfill, a 50-acre former gravel quarry located in Kent, Washington and operated by SPU from 1966 to 1983. The Washington State Department of Transportation (WSDOT) is undertaking a billion-dollar project to widen Interstate 5 by two lanes on the west side. This state project impacts landfill post-closure infrastructure that is currently in place on the WSDOT right-of-way, and also requires SPU to remove refuse buried in the right-of-way. SPU and WSDOT are working together on this project, which will be awarded as a Design Build contract in 2008, if WSDOT obtains funding for its highway project. SPU has completed preliminary engineering for waste removal and stormwater system relocation as needed to accommodate the additional lanes on I-5. Design will resume once WSDOT has obtained funding for the project, as determined by public vote in November 2007.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	865	225	166	252	2,838	2,978	0	0	7,324
Project Total:	865	225	166	252	2,838	2,978	0	0	7,324
Fund Appropriations/Allocations									
Solid Waste Fund	865	225	166	252	2,838	2,978	0	0	7,324
Appropriations Total*	865	225	166	252	2,838	2,978	0	0	7,324
O & M Costs (Savings)			0	0	0	0	37	37	73
Spending Plan		460	166	252	2,838	2,978	0	0	6,694

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

#### **Miscellaneous Station Improvements**

BCL/Program Name: New Facilities BCL/Program Code: C230B

Project Type:Improved FacilityStart Date:4th Quarter 2003Project ID:C203005End Date:4th Quarter 2008

Location: 1350 N 34th St. & Second Ave. S

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project allows short-term actions to ensure that the City's existing Recycling & Disposal Stations continue to function reliably, pending implementation of the Solid Waste Facilities Master Plan. The work includes emergency electrical service relocation to maintain safe and reliable power, fuel system control reconfiguration, development of a misting system at the South Recycling & Disposal Station, transfer station electrical improvements, transfer station drainage improvements, installation of acoustical insulation, water line and hydrant replacement, South Household Hazardous Waste entry relocation, and other facility improvements necessary to keep the stations operational and safe. The project also includes installation of electric trucking gates, an important security element as SPU does more trucking in off-peak hour periods.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	979	123	116	0	0	0	0	0	1,218
Project Total:	979	123	116	0	0	0	0	0	1,218
Fund Appropriations/Allocations									
Solid Waste Fund	979	123	116	0	0	0	0	0	1,218
Appropriations Total*	979	123	116	0	0	0	0	0	1,218
O & M Costs (Savings)			0	5	5	5	5	5	25
Spending Plan		295	116	0	0	0	0	0	411

#### **New Facilities Development**

BCL/Program Name: New Facilities BCL/Program Code: C230B

Project Type: Improved Facility Start Date: 1st Quarter 2005

Project ID: C205308 End Date: Ongoing

**Location:** Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project develops Solid Waste New Facility improvements through the preparation of Project Development Plans. Project proposals, including supporting cost-benefit analyses, are reviewed and approved by SPU's Capital Planning Committee. Staff then develop a Project Development Plan for approval by SPU's Asset Management Committee. Documentation is prepared and budget implications are identified. The confidence in the cost estimate is medium. SPU's Asset Management Committee may review new individual project proposals as they occur.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	40	26	25	29	31	33	35	29	248
Project Total:	40	26	25	29	31	33	35	29	248
Fund Appropriations/Allocations									
Solid Waste Fund	40	26	25	29	31	33	35	29	248
Appropriations Total*	40	26	25	29	31	33	35	29	248
O & M Costs (Savings)			1	1	1	1	1	1	7
Spending Plan		0	25	29	31	33	35	29	182

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

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type: Improved Facility Start Date: 1st Quarter 2004

Project ID: C4106-SWF End Date: Ongoing

**Location:** Multiple

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

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	1,099	687	221	284	291	272	278	286	3,418
Project Total:	1,099	687	221	284	291	272	278	286	3,418
Fund Appropriations/Allocations									
Solid Waste Fund	1,099	687	221	284	291	272	278	286	3,418
Appropriations Total*	1,099	687	221	284	291	272	278	286	3,418
O & M Costs (Savings)			17	17	17	17	17	17	103
Spending Plan		333	221	284	291	272	278	286	1,965

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

#### **Operational Facility - Other - SWF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

**Project Type:** Improved Facility Start Date: 1st Ouarter 2006

Project ID: C4115-SWF End Date: Ongoing

**Location:** Multiple

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	12	82	29	25	26	10	10	10	204
Project Total:	12	82	29	25	26	10	10	10	204
Fund Appropriations/Allocations									
Solid Waste Fund	12	82	29	25	26	10	10	10	204
Appropriations Total*	12	82	29	25	26	10	10	10	204
O & M Costs (Savings)			1	1	1	1	1	1	5
Spending Plan		185	29	25	26	10	10	10	295

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

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C4105-SWFEnd Date:4th Quarter 2010

Location: 2700 Airport Way S/Forest/Lander Street

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

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	458	210	26	118	15	0	0	0	827
Project Total:	458	210	26	118	15	0	0	0	827
Fund Appropriations/Allocations									
Solid Waste Fund	458	210	26	118	15	0	0	0	827
Appropriations Total*	458	210	26	118	15	0	0	0	827
O & M Costs (Savings)			0	0	0	4	4	4	12
Spending Plan		200	26	118	15	0	0	0	359

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

## Rehab & Heavy Equipment Development

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type: Improved Facility Start Date: 1st Quarter 2006

Project ID: C205411 End Date: Ongoing

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project develops rehabilitation and heavy equipment improvements identified through Project Development Plans. Project proposals, including cost-benefit analyses, are reviewed and approved by SPU's Capital Planning Committee. Staff then develops a Project Development Plan for approval by SPU's Asset Management Committee. The confidence in the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	0	52	0	58	61	65	67	63	366
Project Total:	0	52	0	58	61	65	67	63	366
Fund Appropriations/Allocations									
Solid Waste Fund	0	52	0	58	61	65	67	63	366
Appropriations Total*	0	52	0	58	61	65	67	63	366
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		10	0	58	61	65	67	63	324

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

#### **Security Improvements - SWF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C4113-SWFEnd Date:4th Quarter 2012

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	2	223	173	210	216	221	226	0	1,271
Project Total:	2	223	173	210	216	221	226	0	1,271
Fund Appropriations/Allocations									
Solid Waste Fund	2	223	173	210	216	221	226	0	1,271
Appropriations Total*	2	223	173	210	216	221	226	0	1,271
O & M Costs (Savings)			32	32	32	32	32	32	192
Spending Plan		400	173	210	216	221	226	0	1,446

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

#### Solid Waste Facility Master Plan -- North Transfer Station Rebuild

BCL/Program Name: New Facilities BCL/Program Code: C230B

Project Type:New FacilityStart Date:1st Quarter 2006Project ID:C207005End Date:4th Quarter 2013

**Location:** North Seattle

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

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

This project implements the North Transfer Station rebuild included in the Solid Waste CIP Facilities Master Plan (formerly C201006). The existing North Recycling and Disposal Station will be replaced with a new transfer station that will modernize solid waste operations, enhance worker safety, and allow for greater recycling opportunities. The new transfer station will be constructed on the existing parcel and a new adjacent parcel purchased in 2007. The transfer station design will be adjusted slightly to accommodate the two-station solution agreed to by Mayor and Council in 2007. The confidence level in the cost estimate is medium as the project is in the pre-engineering phase.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	10	941	1,055	3,541	16,797	15,096	4,963	4,503	46,906
Project Total:	10	941	1,055	3,541	16,797	15,096	4,963	4,503	46,906
Fund Appropriations/Allocations									
Solid Waste Fund	10	941	1,055	3,541	16,797	15,096	4,963	4,503	46,906
Appropriations Total*	10	941	1,055	3,541	16,797	15,096	4,963	4,503	46,906
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		1,088	1,055	3,541	16,797	15,096	4,963	4,503	47,043

## Solid Waste Facility Master Plan -- South Transfer Station Rebuild

BCL/Program Name: New Facilities BCL/Program Code: C230B

Project Type:New FacilityStart Date:1st Quarter 2006Project ID:C207006End Date:4th Quarter 2013

**Location:** South Seattle

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

This project implements the South Transfer Station rebuild included in the Solid Waste CIP Facilities Master Plan (formerly C201006). The existing South Recycling and Disposal Station will be replaced with a new station that will modernize solid waste operations, enhance worker safety, and allow for greater recycling opportunities. The new transfer station will be constructed on the existing parcel and an adjacent parcel that will be purchased in late 2007. The transfer station design will be adjusted slightly to accommodate the two-station solution agreed to by Mayor and Council's in 2007. The confidence level in the cost estimate is medium as the project is in the pre-engineering phase.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	4	12,530	5,100	23,778	28,404	8,218	17,954	4,306	100,294
Project Total:	4	12,530	5,100	23,778	28,404	8,218	17,954	4,306	100,294
Fund Appropriations/Allocations									
Solid Waste Fund	4	12,530	5,100	23,778	28,404	8,218	17,954	4,306	100,294
Appropriations Total*	4	12,530	5,100	23,778	28,404	8,218	17,954	4,306	100,294
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		11,524	5,100	23,778	28,404	8,218	17,954	4,306	99,284

## **South Park Development**

BCL/Program Name: New Facilities BCL/Program Code: C230B

Project Type:Improved FacilityStart Date:2nd Quarter 2006Project ID:C206402End Date:4th Quarter 2012

**Location:** 8100 2nd Ave. S

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

Neighborhood District: Greater Duwamish Urban Village: South Park

This project studies, plans, designs and constructs remediation of the historic South Park Landfill site to minimize environmental impacts. SPU owns a portion of the site on which the landfill once operated, and as a historic landfill operator will participate in the remediation of the entire site. The Department of Ecology is the lead regulatory agency for oversight of this project. The confidence in the cost estimate is low. SPU plans to defer the costs of this project under the Financial Accounting Standards Board Statement 71 (FAS 71).

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	0	617	376	2,524	539	2,977	564	0	7,597
Project Total:	0	617	376	2,524	539	2,977	564	0	7,597
Fund Appropriations/Allocations									
Solid Waste Fund	0	617	376	2,524	539	2,977	564	0	7,597
Appropriations Total*	0	617	376	2,524	539	2,977	564	0	7,597
O & M Costs (Savings)			0	0	300	300	300	300	1,200
Spending Plan		430	376	2,524	539	2,977	564	0	7,410

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

#### South Recycling Disposal Station Household Hazardous Waste Relocation

BCL/Program Name: New Facilities BCL/Program Code: C230B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C207002End Date:4th Quarter 2010

**Location:** 8105 5th Ave. S

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

This project relocates the South Household Hazardous Waste (SHHW) facility, currently located at the South Recycling Disposal Station (SRDS). The Solid Waste Facility Master Plan calls for the SRDS to be demolished and rebuilt. As a result, the SHHW, which is co-located with SRDS, may need to be relocated. Other site redevelopment efforts may be significantly constrained if the existing facility remains in its current location. In addition, SHHW may require some facility improvements. Retrofitting the existing facility may cost more than complete replacement because engineering costs for facility retrofits are significantly higher. The timing of this investment is dependent on implementation of the Master Plan and redevelopment of the south transfer station property.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	0	246	286	827	847	0	0	0	2,206
Project Total:	0	246	286	827	847	0	0	0	2,206
Fund Appropriations/Allocations									
Solid Waste Fund	0	246	286	827	847	0	0	0	2,206
Appropriations Total*	0	246	286	827	847	0	0	0	2,206
O & M Costs (Savings)			0	0	0	11	11	11	33
Spending Plan		0	286	827	847	0	0	0	1,960

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

## **Yard Waste Carts**

BCL/Program Name: Rehabilitation and Heavy Equipment BCL/Program Code: C240B

Project Type:New InvestmentStart Date:1st Quarter 2005Project ID:C205412End Date:4th Quarter 2009

**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 purchases the remaining value of yard waste carts and commercial containers in the event that SPU engages new contractors for solid waste collection. Requests for proposals are under development for solid waste collection contracts which expire March 31, 2009. SPU will decide how to address container acquisition as it prepares to execute new collection contracts.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Solid Waste Rates	2,056	0	0	1,149	0	0	0	0	3,205
Project Total:	2,056	0	0	1,149	0	0	0	0	3,205
Fund Appropriations/Allocations									
Solid Waste Fund	2,056	0	0	1,149	0	0	0	0	3,205
Appropriations Total*	2,056	0	0	1,149	0	0	0	0	3,205
O & M Costs (Savings)			0	0	16	16	16	16	64

# SPU TECHNOLOGY PROJECTS

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
Technology						BC	L/Progra	m Code:		C510B
Administrative - Technology	C5301	3,862	822	889	892	948	220	0	0	7,633
Business Intelligence - Technology	C5302	2,359	2,373	1,542	1,504	916	827	677	0	10,198
Customer Relationship Management - Technology	C5303	7,026	2,213	2,086	1,525	3,018	3,419	225	0	19,512
Enterprise Project Management - Technology	C5304	1,465	1,897	1,026	1,682	1,724	263	0	0	8,057
Fund Placeholders - Technology	C5305	0	0	0	0	0	2,258	8,298	10,630	21,186
Information Management - Technology	C5306	8,971	1,959	1,722	1,586	1,201	1,158	226	0	16,823
Monitor & Control Management - Technology	C5307	813	348	3	3	129	124	0	0	1,420
Technology Infrastructure - Technology	C5308	5,339	1,094	1,958	3,250	1,401	1,654	734	0	15,430
Work Management - Technology	C5309	2,027	461	949	816	577	221	225	0	5,276
Technology Total		31,862	11,167	10,175	11,258	9,914	10,144	10,385	10,630	105,535
<b>Department Total</b>		31,862	11,167	10,175	11,258	9,914	10,144	10,385	10,630	105,535

# **Fund Summary**

Fund Name	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Drainage and Wastewater Fund	10,204	3,843	4,298	3,956	3,395	3,474	3,555	3,639	36,364
Solid Waste Fund	5,602	1,569	1,444	1,706	1,857	1,900	1,946	1,992	18,016
Water Fund	16,056	5,755	4,433	5,596	4,662	4,770	4,884	4,999	51,155
<b>Department Total</b>	31,862	11,167	10,175	11,258	9,914	10,144	10,385	10,630	105,535

Note: Additional allocations for the Drainage and Wastewater Fund are shown in the SPU - Technology section of this document.

#### **Administrative - Technology**

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type: New Investment Start Date: 4th Quarter 2006

Project ID: C5301 End Date: Ongoing

**Location:** N/A

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

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

This program makes technology improvements to support the management of SPU. Major projects include IT Service Management and a suite of Finance System Enhancements.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	1,180	230	254	257	310	77	0	0	2,308
Solid Waste Rates	712	113	156	156	160	44	0	0	1,341
Water Rates	1,970	479	479	479	478	99	0	0	3,984
Project Total:	3,862	822	889	892	948	220	0	0	7,633
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	1,180	230	254	257	310	77	0	0	2,308
Solid Waste Fund	712	113	156	156	160	44	0	0	1,341
Water Fund	1,970	479	479	479	478	99	0	0	3,984
Appropriations Total*	3,862	822	889	892	948	220	0	0	7,633
O & M Costs (Savings)			38	38	38	38	38	38	229
Spending Plan		436	889	892	948	220	0	0	3,385

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

#### **Business Intelligence - Technology**

BCL/Program Name: Technology BCL/Program Code: C510B

**Project Type:** New Investment **Start Date:** 3rd Quarter 2005

Project ID: C5302 End Date: Ongoing

**Location:** N/A

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

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

This program develops tools that pull together data from SPU's major operational systems to inform management decisions. Major projects include upgrades to the Science Information Management System, a Customer Contact data warehouse, Fleet Management Data and an End-User Computing Program. Due to quickly changing technology cycles and uncertainty about the out years, the budget for year 2013 is in the Fund Placeholders program (C5305).

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	651	745	544	434	383	329	282	0	3,368
Solid Waste Rates	546	439	182	45	15	60	113	0	1,400
Water Rates	1,162	1,189	816	1,025	518	438	282	0	5,430
Project Total:	2,359	2,373	1,542	1,504	916	827	677	0	10,198
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	651	745	544	434	383	329	282	0	3,368
Solid Waste Fund	546	439	182	45	15	60	113	0	1,400
Water Fund	1,162	1,189	816	1,025	518	438	282	0	5,430
Appropriations Total*	2,359	2,373	1,542	1,504	916	827	677	0	10,198
O & M Costs (Savings)			51	51	51	51	51	51	306
Spending Plan		1,782	1,542	1,504	916	827	677	0	7,248

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

#### <u>Customer Relationship Management - Technology</u>

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type: New Investment Start Date: 1st Quarter 2002

Project ID: C5303 End Date: Ongoing

**Location:** N/A

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

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

This program develops and implements systems to manage billing, customer contact, and customer information at Seattle Public Utilities (SPU). Major projects include Automated Meter Reading and the Drainage Billing System.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	2,645	1,363	1,601	919	1,084	1,145	91	0	8,848
Solid Waste Rates	1,940	271	205	191	925	1,092	37	0	4,661
Water Rates	2,441	579	280	415	1,009	1,182	97	0	6,003
Project Total:	7,026	2,213	2,086	1,525	3,018	3,419	225	0	19,512
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	2,645	1,363	1,601	919	1,084	1,145	91	0	8,848
Solid Waste Fund	1,940	271	205	191	925	1,092	37	0	4,661
Water Fund	2,441	579	280	415	1,009	1,182	97	0	6,003
Appropriations Total*	7,026	2,213	2,086	1,525	3,018	3,419	225	0	19,512
O & M Costs (Savings)			98	98	98	98	98	98	585
Spending Plan		1,832	2,086	1,525	3,018	3,419	225	0	12,105

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

#### **Enterprise Project Management - Technology**

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type:New InvestmentStart Date:3rd Quarter 2004Project ID:C5304End Date:4th Quarter 2011

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program develops and implements a Project Tracking System to provide Seattle Public Utilities (SPU) with a comprehensive system to effectively manage its portfolio of capital projects in a single, coherent repository. The system will include information such as the list of projects planned and underway, component tasks for each project, budget and schedule estimates, and actual cost and schedule for completed work.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	564	607	328	538	552	84	0	0	2,673
Solid Waste Rates	146	190	103	168	172	26	0	0	805
Water Rates	755	1,100	595	976	1,000	153	0	0	4,579
Project Total:	1,465	1,897	1,026	1,682	1,724	263	0	0	8,057
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	564	607	328	538	552	84	0	0	2,673
Solid Waste Fund	146	190	103	168	172	26	0	0	805
Water Fund	755	1,100	595	976	1,000	153	0	0	4,579
Appropriations Total*	1,465	1,897	1,026	1,682	1,724	263	0	0	8,057
O & M Costs (Savings)			0	0	0	0	40	40	81
Spending Plan		750	1,026	1,682	1,724	263	0	0	5,445

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

#### **Fund Placeholders - Technology**

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type: New Investment Start Date: 1st Quarter 2011

Project ID: C5305 End Date: Ongoing

**Location:** N/A

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

This program sets aside funds for future technology investments in years 2011-2013 currently not yet identified with the recognition that technologies and technology demands continue to evolve and have a shorter life cycle than do public works investments. Funds will be spent only after the development and approval of specific projects through the 2011-2013 Budget processes.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	0	0	0	902	2,700	3,639	7,241
Solid Waste Rates	0	0	0	0	0	196	1,672	1,992	3,860
Water Rates	0	0	0	0	0	1,160	3,926	4,999	10,085
Project Total:	0	0	0	0	0	2,258	8,298	10,630	21,186
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	0	0	0	0	0	902	2,700	3,639	7,241
Solid Waste Fund	0	0	0	0	0	196	1,672	1,992	3,860
Water Fund	0	0	0	0	0	1,160	3,926	4,999	10,085
Appropriations Total*	0	0	0	0	0	2,258	8,298	10,630	21,186
O & M Costs (Savings)			0	0	0	0	0	0	0

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

#### <u>Information Management - Technology</u>

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type: New Investment Start Date: 2nd Quarter 2004

Project ID: C5306 End Date: Ongoing

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program improves Seattle Public Utilities' (SPU) technological infrastructure for storage and retrieval of business information, including spatial information and documents. Major projects include Document Management and Utility GIS Data Development. Due to quickly changing technology cycles and uncertainty about the out years, the Budget for year 2013 is in the Fund Placeholders - Program C5305.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	3,048	422	618	467	368	325	149	0	5,397
Solid Waste Rates	758	311	241	269	197	205	0	0	1,981
Water Rates	5,165	1,226	863	850	636	628	77	0	9,445
Project Total:	8,971	1,959	1,722	1,586	1,201	1,158	226	0	16,823
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	3,048	422	618	467	368	325	149	0	5,397
Solid Waste Fund	758	311	241	269	197	205	0	0	1,981
Water Fund	5,165	1,226	863	850	636	628	77	0	9,445
Appropriations Total*	8,971	1,959	1,722	1,586	1,201	1,158	226	0	16,823
O & M Costs (Savings)			84	84	84	84	84	84	505
Spending Plan		2,018	1,722	1,586	1,201	1,158	226	0	7,911

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

#### **Monitor & Control Management - Technology**

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type: New Investment Start Date: 3rd Quarter 2002

Project ID: C5307 End Date: Ongoing

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program develops systems to directly interface with utility infrastructure, either to control it or to provide real-time information about its state. Two small out-year subprojects are planned in this category: a Laboratory Information Management System upgrade and a monitoring system for historic landfills. Due to quickly changing technology cycles and uncertainty about the out years, the Budget for years 2012 and 2013 are in the Fund Placeholders - Program C5305.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	14	33	1	1	0	0	0	0	49
Solid Waste Rates	4	10	1	1	129	0	0	0	145
Water Rates	795	305	1	1	0	124	0	0	1,226
Project Total:	813	348	3	3	129	124	0	0	1,420
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	14	33	1	1	0	0	0	0	49
Solid Waste Fund	4	10	1	1	129	0	0	0	145
Water Fund	795	305	1	1	0	124	0	0	1,226
Appropriations Total*	813	348	3	3	129	124	0	0	1,420
O & M Costs (Savings)			7	7	7	7	7	7	43

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

#### <u>Technology Infrastructure - Technology</u>

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type: New Investment Start Date: 2nd Quarter 2005

Project ID: C5308 End Date: Ongoing

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program develops and implements technology improvements that support Seattle Public Utilities' (SPU) business systems. Major projects include IT Business Continuity, Data Storage Improvements, a Server Environment Upgrade and SPU's share of the Citywide Technology Infrastructure Optimization project. Due to uncertainty surrounding short technology product cycles, the budget for year 2013 is in the Fund Placeholders - Program C5305.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	1,023	308	622	1,041	487	541	261	0	4,283
Solid Waste Rates	1,172	168	432	779	190	242	88	0	3,071
Water Rates	3,144	618	904	1,430	724	871	385	0	8,076
Project Total:	5,339	1,094	1,958	3,250	1,401	1,654	734	0	15,430
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	1,023	308	622	1,041	487	541	261	0	4,283
Solid Waste Fund	1,172	168	432	779	190	242	88	0	3,071
Water Fund	3,144	618	904	1,430	724	871	385	0	8,076
Appropriations Total*	5,339	1,094	1,958	3,250	1,401	1,654	734	0	15,430
O & M Costs (Savings)			77	77	77	77	77	77	463
Spending Plan		985	1,958	3,250	1,401	1,654	734	0	9,982

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

#### **Work Management - Technology**

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type: New Investment Start Date: 1st Quarter 2003

Project ID: C5309 End Date: Ongoing

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program develops and implements new technologies to improve the efficiency and effectiveness of Seattle Public Utilities' (SPU) front-line workers. Major projects include Dispatching, Vehicle Location Technology and a Maximo Upgrade Program. Due to the uncertainty surrounding short technology product cycles, the budget for year 2013 is in the Fund Placeholders - Program C5305.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Drainage and Wastewater Rates	1,079	135	330	299	211	71	72	0	2,197
Solid Waste Rates	324	67	124	97	69	35	36	0	752
Water Rates	624	259	495	420	297	115	117	0	2,327
Project Total:	2,027	461	949	816	577	221	225	0	5,276
Fund Appropriations/Allocations									
Drainage and Wastewater Fund	1,079	135	330	299	211	71	72	0	2,197
Solid Waste Fund	324	67	124	97	69	35	36	0	752
Water Fund	624	259	495	420	297	115	117	0	2,327
Appropriations Total*	2,027	461	949	816	577	221	225	0	5,276
O & M Costs (Savings)			26	26	26	26	26	26	158
Spending Plan		1,236	949	816	577	221	225	0	4,024

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

# SPU - WATER

#### Seattle Public Utilities - Water

#### **Overview of Facilities and Programs**

Seattle Public Utilities (SPU) operates the City-owned water system serving a population of approximately 1.45 million people in a 450-square-mile area. The system extends from Edmonds to Des Moines and from Puget Sound to Lake Joy near Duvall. SPU retails water in Seattle and adjacent areas, and sells wholesale to 20 suburban water utilities and one interlocal association for distribution of water to their customers. SPU's Capital Improvement Program (CIP) is the vehicle for upgrading and expanding water infrastructure as well as constructing projects that protect, conserve, and enhance the region's environmental resources. The overriding goal of the CIP is to assure that the water system is properly upgraded and expanded to reliably deliver high-quality, safe drinking water to customers, protect the environment, and comply with regulations.

The Utility's financial policies (adopted in 2005) call for cash contributions to the CIP averaging 20% of total CIP costs over any given rate period. The remaining portion of the CIP is bond funded. Overhead costs for the CIP are budgeted in the SPU operating fund and are reimbursed as CIP expenditures are incurred.

### **Highlights**

- Open Distribution System Reservoirs: To comply with water quality regulations and to enhance water system security, the City plans to cover all of its drinking-water reservoirs over the next several years. Two reservoirs, Bitter Lake and Lake Forest Park, have already been covered with floating covers. The Lincoln Reservoir/Cal Anderson Park project is complete. Design work for the replacement of Beacon, Myrtle, West Seattle, and Maple Leaf reservoirs commenced in 2005, and construction began on the Beacon and Myrtle Reservoir projects in 2006 with projected project completion at the end of 2008. Construction of a new buried reservoir to replace the West Seattle Reservoir will begin in 2008 with completion of the project by the end of 2010. The construction of Maple Leaf Reservoir's replacement is scheduled to begin in 2009 and end in 2011. SPU currently plans to decommission the Roosevelt Reservoir, and further evaluate the possibility of decommissioning the Volunteer Reservoir; however, specific actions at these two reservoirs are expected to occur after 2011.
- Cedar River Watershed Habitat Conservation Plan (HCP): In 2000, after seven years of intensive study and negotiation with state, federal, and tribal authorities, the City entered into a 50-year habitat conservation plan on the Cedar River Watershed. This agreement commits the City to certain projects and management practices to mitigate the environmental impact of drinking water diversions. Major HCP components include investments in fisheries enhancement projects such as the Landsburg Fish Passage Improvements, which was completed in 2004. The remaining large fisheries enhancement project within the Cedar HCP Program is the Cedar Sockeye Hatchery, which has been delayed at least a year as it undergoes an appeal of its Environmental Impact Statement. Other HCP projects within the municipal watershed include culvert improvements and other stream restoration work, removal of logging roads, and restoration of forest and lands. Research and monitoring are also being conducted in association with many of these projects. Approximately \$31 million is included in the 2008-2013 Adopted CIP for these projects.

## **Project Selection Process**

SPU has adopted an Asset Management approach for selecting projects to build. This is a triple bottom line approach in which projects are evaluated on their economic, social, and environmental benefits, as well as the ability to meet customer service levels. The approach provides an elaborate analytical and modeling framework to find the most economical balance between capital investments and operation and maintenance expenditures so as to minimize the life cycle costs of any capital asset.

The Asset Management Committee (AMC), a committee of senior SPU executives, reviews each project valued at \$250,000 or more and assures that only projects that meet the benefit criteria move forward. As a result of this analysis, several projects have been dropped due to the costs far exceeding the benefits. Several cost-effective

#### Seattle Public Utilities – Water

master planning efforts were approved to create up-to-date improvement and/or upgrade plans for several groups of assets. Other projects have been expanded or expedited because the benefits exceed the costs.

#### **Program Category Summaries**

The Proposed Water CIP totals approximately \$83.9 million in 2008 (including Technology projects funded by the Water Fund, displayed in a separate section of this CIP), or \$7.6 million higher than the 2008 Endorsed Budget. In the Distribution BCL, the higher demand for taps results in an increase of \$4.3 million for that program. The Watermain Rehabilitation program increases slightly in order to fund specific projects that will in turn reduce maintenance costs. Likewise, the Transmission Pipeline Rehabilitation program, in the Transmission BCL, sees an increase to initiate new projects that will save maintenance costs. The 2008 budget for the Water Quality and Treatment BCL increases by \$2.76 million due to the following: inflationary costs for the West Seattle Reservoir Covering project, acceleration of the Maple Leaf Reservoir Covering project, and an adjustment to the cash flow for the Beacon Reservoir Covering project, without affecting overall costs. In the Water Resources BCL, a few projects result in increases: acceleration of the Morse Lake Pumping Plant project, increased site condition costs for the Cedar Moraine Improvements project, and a delay with the Landsburg Flood Passage Improvements project. In the Watershed Stewardship BCL, the budget increases by \$1.52 million largely due to implementation of the Muckleshoot Indian Tribe Agreement and expanding the scope for the Endangered Species Act Chinook Research and Monitoring Project.

The Water CIP is comprised of eight program categories, which are summarized below.

**Distribution:** Projects and programs in this program category relate to repairs and upgrades to the City's water lines, pump stations, and other facilities that are part of the distribution system (serving only retail customers).

**Habitat Conservation Program:** This program category includes projects and programs directly related to implementation of the Cedar River Watershed Habitat Conservation Plan. Projects are grouped into eight areas of focus: road improvements and decommissioning, stream and riparian restoration, upland forest restoration, Landsburg fish passage improvements, Cedar sockeye hatchery, Ballard Locks improvements, downstream fish habitat, and Cedar permanent dead storage evaluations.

**Shared Cost Projects:** This program includes capital improvement projects that receive funding from multiple SPU funds. In 2008, the program includes funding for utility relocation due to the Alaskan Way Tunnel & Seawall Project, Operational Facility Improvements, the Operations Control Center Upgrade, Security Improvements, and Sound Transit Light Rail.

**Technology:** This program category makes use of recent technology advances to increase efficiency and productivity. Water-supported technology projects are shown grouped with technology projects supported by SPU's other fund sources.

**Transmission:** The purpose of this program category is to repair and upgrade the City's large transmission pipelines that bring untreated water to the treatment facilities, and convey water from the treatment facilities to Seattle and its suburban wholesale customers' distribution systems.

Water Quality & Treatment: The purpose of this program category is to design, construct, and repair water treatment facilities, and remaining open water reservoirs. This program also manages the delivery of drinking water quality and treatment services to meet customer and environmental service levels and to comply with state and federal drinking water regulations.

#### Seattle Public Utilities – Water

**Water Resources:** The purpose of this program category is to plan for and produce untreated water to meet anticipated demands at our supply reliability standard, and promote residential and commercial water conservation.

**Watershed Stewardship**: Projects and programs in this program category provide environmental protection, sustain the environment, and enhance environmental quality, both locally and regionally. Several of the projects are implemented in response to the listing of the Chinook salmon as a threatened species under the Endangered Species Act.

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

When appropriate, the projects in the Water Fund CIP include operations and maintenance cost estimates. These estimates will be refined after project completion and will be included as part of SPU's future O&M Proposed Budget submittals.

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BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
Distribution						BCI	L/Prograi	n Code:		C110B
Asset Management	C1126	1,518	259	51	208	212	216	220	231	2,915
Aurora Ave. N (110th - 145th)	C103033	3	8	1	0	0	0	0	0	12
Cathodic Protection Program	C1116	1,476	843	451	552	580	609	639	809	5,959
Cedar River Pipeline 2 Replace Portion	C104013	77	316	1	0	0	0	0	0	394
Chamber Upgrades - Distribution	C103002	524	121	154	105	108	110	113	116	1,351
Distribution System In- Line Gate Valves	C199012	571	60	61	121	124	127	130	133	1,327
Fireflow & Pressure Improvements	C1128	71	561	327	1,052	1,078	1,103	1,129	1,156	6,477
Hidden Lake CSO Betterments	C104066	71	446	1	0	0	0	0	0	518
Hidden Lake CSO Impact Work	C104067	145	293	46	0	0	0	0	0	484
Multiple Utility Relocation	C1133	327	612	573	625	870	913	958	1,156	6,034
Painting Program - Myrtle Tank	C104031	87	56	5	1,399	388	0	0	0	1,935
Painting Program - Richmond Highland	C104032	98	5	5	1,956	593	0	0	0	2,657
Painting Program - Steel Structures	C1NW13 0	262	52	0	473	539	551	564	578	3,019
Pump Station - Install Station Motors	C199052	415	60	72	63	65	66	68	69	878
Pump Station - Queen Anne	C1AA005	734	5,102	171	0	0	0	0	0	6,007
Seismic Upgrade - Pipeline Backbone	C101038	407	51	765	1,657	580	0	0	0	3,460
Seismic Upgrade - Tanks	C1120	1,349	3,510	690	300	300	551	300	0	7,000
Water Infrastructure - Hydrant Replacement/Relocatio n	C1110	1,536	163	425	436	447	458	468	480	4,413
Water Infrastructure - New Hydrants	C1112	0	105	102	131	135	138	141	144	896
Water Infrastructure - New Taps	C1113	3,209	5,474	8,500	6,836	7,004	7,168	7,337	7,511	53,039

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

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
Distribution						BC	L/Progra	m Code:		C110B
Water Infrastructure - Service Renewal	C1109	58	6,099	5,478	6,310	6,466	6,616	6,773	6,933	44,733
Water Infrastructure - Watermain Extensions	C1111	253	1,167	592	1,052	1,078	1,103	1,129	1,156	7,530
Watermain Rehabilitation	C1129	3,840	1,118	1,141	4,207	4,310	4,411	4,515	5,200	28,742
WSDOT Sound Walls	C104019	27	149	41	0	0	0	0	0	217
<b>Distribution Total</b>		17,058	26,630	19,653	27,483	24,877	24,140	24,484	25,672	189,997
<b>Habitat Conservation</b>	Program					BC	L/Progra	m Code:		C160B
Ballard Locks Improvements	C1606	961	76	79	54	431	0	0	0	1,601
Cedar Sockeye Hatchery	C1605	2,799	5,407	2,245	7,572	647	0	0	0	18,670
Downstream Fish Habitat	C1607	465	2,517	2,729	2,451	43	17	0	0	8,222
Instream Flow Management Studies	C1608	554	571	718	500	337	0	0	0	2,680
Landsburg Fish Passage Monitoring	C1604	351	268	261	3	0	0	0	0	883
Stream & Riparian Restoration	C1602	3,374	955	738	759	606	657	592	433	8,114
Upland Reserve Forest Restoration	C1603	3,753	831	658	701	722	742	695	661	8,763
Watershed Road Improvement/Decommissioning	C1601 i	5,445	940	846	780	804	700	727	745	10,987
Habitat Conservation Program Total		17,702	11,565	8,274	12,820	3,590	2,116	2,014	1,839	59,920

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

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
<b>Shared Cost Projects</b>						BCI	_/Prograi	n Code:		C410B
1% for Art – WF	C4118 - WF	741	592	218	388	415	182	51	118	2,705
2006 Storms Capital Program - WF	C4120- WF	0	100	100	0	0	0	0	0	200
Bridging the Gap Program-WF	C4119- WF	0	0	1,277	1,317	372	384	397	410	4,157
Climate Protection - WF	C407S01- WF	0	154	186	172	177	181	185	189	1,244
Heavy Equipment Purchases - WF	C4116- WF	251	4,643	2,873	1,511	4,683	4,933	1,019	2,435	22,348
I-5 Pavement Reconstruction - WF	C407022- WF	0	132	139	150	163	167	180	168	1,099
Integrated Control Monitoring Program - WF	C4108- WF	12	3,899	2,072	919	650	55	28	87	7,722
Meter Replacement - WF	C4101- WF	2,208	574	625	547	560	573	587	602	6,276
Operational Facility - Construction - WF	C4106- WF	2,909	2,650	1,102	1,834	1,877	1,495	1,530	1,569	14,966
Operational Facility - Other - WF	C4115- WF	156	676	182	567	818	110	113	116	2,738
Operations Control Center - WF	C4105- WF	3,022	1,383	183	820	102	0	0	0	5,510
Regional Facility - WF	C4107- WF	60	1,420	776	2,604	2,687	551	564	578	9,240
Security Improvements - WF	C4113- WF	46	2,379	1,036	1,262	1,293	1,323	1,355	0	8,694
Sound Transit – Airport Link - WF	C4111- WF	3	63	28	0	0	0	0	0	94
Sound Transit – University Link - WF	C4110- WF	5	49	122	120	0	0	0	0	296
Sound Transit - Water Betterment	C405430	1,195	410	431	833	1,025	992	1,016	0	5,902
Sound Transit Central Link - WF	C4104- WF	3,752	612	369	0	0	0	0	0	4,733
South Lake Union - W	F C4114- WF	0	150	139	16	0	0	0	0	305
South Lander Grade Separation - WF	C408S03 - WF	0	0	102	104	107	109	0	0	422
Spokane Street Viaduct - WF	C407023- WF	0	132	1,527	0	0	0	0	0	1,659

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

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BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
<b>Shared Cost Projects</b>						BC	L/Progra	m Code:		C410B
SR 519 Interchange - WF	C408S04 - WF	0	0	102	104	107	109	0	0	422
SR-520 Bridge Replacement - WF	C407021- WF	0	132	139	150	163	176	191	168	1,119
Utility Relocation due to Alaskan Way Viaduct and Seawall Replacement - WF	C4102- WF	337	2,117	257	320	0	0	0	0	3,031
Shared Cost Projects	Total	14,697	22,267	13,985	13,738	15,199	11,340	7,216	6,440	104,882
Transmission						BC	L/Progra	m Code:		C120B
I-405 Widening Cedar River Pipelines Impacts		35	39	142	0	0	0	0	0	216
Maple Leaf Gatehouse Pipe Refurbishing	C195001	94	254	350	0	0	0	0	0	698
Marine View/Des Moines Creek	C197021	248	5	5	0	0	0	0	0	258
Purveyor Meters Replace - SPU	C1206	2	147	137	105	108	110	113	1	723
Renton Franchise/Line Valve Cedar River	C102023	2,235	45	1	0	0	0	0	0	2,281
Replace Air Valve Chambers	C199060	458	64	64	67	69	71	72	74	939
Seismic Upgrade - Cedar River Pipelines @ Ginger Creek	C197032	1,710	5	1	0	0	0	0	0	1,716
Tolt Pipeline 2 II & III East of Tieline	C100084	28,239	11	11	11	11	0	0	0	28,283
Tolt Pipeline 2 II & III West of Tieline	C100083	26,418	1	5	0	0	0	0	0	26,424
Tolt Pipeline I - Phase 3 - B	C199003	5,249	6	0	2	2	2	0	0	5,261
Tolt Pipeline II - Phase 4	C194029	28,735	8	1	0	0	0	0	0	28,744
Transmission Pipelines Rehabilitation	C1207	44	689	1,145	1,051	1,077	1,103	1,129	1,157	7,395
Water Design Standards & Guideline Program	C102028	399	275	115	0	0	0	0	0	789
Water System Dewatering	C1205	320	34	14	158	162	165	169	174	1,196
<b>Transmission Total</b>		94,186	1,583	1,991	1,394	1,429	1,451	1,483	1,406	104,923

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

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
Water Quality & Trea	atment					BC	L/Prograi	m Code:		C140B
Cedar Treatment Facility	C196015	93,568	454	1	1	1	1	1	0	94,027
Reservoir Covering - Beacon	C101060	11,692	18,490	9,326	1,500	0	0	0	0	41,008
Reservoir Covering - Maple Leaf	C101078	1,309	14	718	14,198	28,018	14,335	804	0	59,396
Reservoir Covering - Myrtle	C101076	4,115	6,720	600	0	0	0	0	0	11,435
Reservoir Covering - Volunteer	C101059	94	0	10	5	54	110	847	8,089	9,209
Reservoir Covering - West Seattle	C101075	1,293	730	8,149	18,445	8,938	175	0	0	37,730
Treatment Facility/Water Quality Improvements	C107018	0	106	154	158	162	165	169	173	1,087
Water Quality Equipment	C107020	0	166	102	5	0	0	0	0	273
Water Quality & Trea	atment	112,071	26,680	19,060	34,312	37,173	14,786	1,821	8,262	254,165
Water Resources						BC	L/Prograi	m Code:		C150B
Dam Safety Program	C1506	3,302	0	3,322	206	804	2,427	368	578	11,007
Morse Lake Pump Plan	nt C103032	805	1,847	1,588	10,517	12,392	2,328	4,515	578	34,570
Regional Water Conservation Program	C1504	5,235	3,731	3,774	4,207	4,858	682	729	765	23,981
Seattle Direct Service Additional Conservation	C1505	1,751	1,918	1,802	1,991	2,088	37	0	0	9,587
Water Resources Project Development	C105100	397	102	113	113	108	121	128	0	1,082
Water Supply Flexibility Program	C1507	0	0	438	841	862	0	0	0	2,141
Water System Plan - 2013	C113001	0	0	0	49	99	465	770	23	1,406
Water Resources Tota	al	11,490	7,598	11,037	17,924	21,211	6,060	6,510	1,944	83,774

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

						J				
BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
Watershed Stewardsh	ip					BCI	./Progran	n Code:		C130B
BPA - Aquatic & Riparian Restoration	C1303	868	305	36	0	0	0	0	0	1,209
BPA - Road Decommissioning/Improvements	C1304	74	137	157	5	0	0	0	0	373
BPA - Security Measures	C1305	720	35	72	11	11	11	0	0	860
BPA - Upland Forest Restoration	C1306	555	395	176	79	27	28	0	0	1,260
Cedar Bridges	C1307	49	1,176	209	105	178	192	0	0	1,909
Cedar Falls – Railroad Hazardous Material Remediation	C100078	171	62	53	0	0	0	0	0	286
Cedar River - Boundary Land Acquisition	C198008	2,357	128	11	322	117	123	129	135	3,322
Cedar River Non-HCP Road Improvements	C191001	5,324	830	702	715	733	860	880	902	10,946
Cedar River Watershed Cultural Resource Information Management System	C107005	0	207	103	0	0	0	0	0	310
Cedar River Watershed Fish & Wildlife Information Management System	C107001	0	42	141	0	0	0	0	0	183
Cedar River Watershed Inventory Management System	C107006	0	199	201	0	0	0	0	0	400
Cedar River Watershed Limited Use Area Management Plan	C107002	0	104	44	0	0	0	0	0	148
Endangered Species Act Chinook Research & Monitoring	C101048	1,112	259	323	0	0	0	0	0	1,694
Endangered Species Act Snohomish River Basin	C101003	277	45	49	53	65	55	0	0	544
Endangered Species Act Tolt Levee Modifications	C105095	540	1,247	945	599	27	28	0	0	3,386
Environmental Steward Project Development	C105084	112	97	86	105	108	110	113	116	847

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

SPU - Water

BCL/Program Name & Project	Project ID	Life To	2007	2008	2009	2010	2011	2012	2013	Total
Watershed Stewardsh	iip					ВС	L/Progra	m Code:		C130B
Kerriston Road Mitigation	C107017	0	75	104	221	232	243	255	268	1,398
Lake Youngs Management Plan	C107003	0	156	54	42	70	62	0	0	384
Muckleshoot Agreement Implementation Plan	C1309	17,302	1,324	885	105	0	0	0	0	19,616
Restoration Thinning Slash Treatment	C107019	0	223	174	90	93	0	0	0	580
Rock Creek Fishway	C101008	440	1,640	180	14	14	0	0	0	2,288
South Fork Tolt Large Woody Debris Replacement	C104057	88	3	3	63	65	26	0	0	248
Tolt Bridges	C1308	230	6	85	263	0	0	0	0	584
Tolt River Watershed Road Improvements	C196007	1,643	177	192	126	129	132	135	0	2,534
Tolt Watershed Management Plan	C105083	341	219	161	0	0	0	0	0	721
Watershed Emergency/Opportunit	C107004 y	0	207	214	158	216	221	226	231	1,473
Watershed Vegetation Management Plan	C107015	0	103	130	127	130	0	0	0	490
Watershed Stewardsh	ip Total	32,203	9,401	5,490	3,203	2,215	2,091	1,738	1,652	57,993
Department Total		299,407	105,724	79,490	110,874	105,694	61,984	45,266	47,215	855,654

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

# **Fund Summary**

Fund Name	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Water Fund	299,407	105,724	79,490	110,874	105,694	61,984	45,266	47,215	855,654
<b>Department Total</b>	299,407	105,724	79,490	110,874	105,694	61,984	45,266	47,215	855,654

Note: Additional allocations for the Water Fund are shown in the SPU - Technology section of this document.

#### <u>1% for Art – WF</u>

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type: Improved Facility Start Date: 1st Quarter 2001

Project ID: C4118 - WF End Date: Ongoing

**Location:** N/A

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

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

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	741	592	218	388	415	182	51	118	2,705
Project Total:	741	592	218	388	415	182	51	118	2,705
Fund Appropriations/Allocations Water Fund	741	592	218	388	415	182	51	118	2,705
Appropriations Total*	741	592	218	388	415	182	51	118	2,705
O & M Costs (Savings)			12	12	12	12	12	12	71

#### 2006 Storms Capital Program - WF

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 2007Project ID:C4120-WFEnd Date:4th Quarter 2008

**Location:** Multiple

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

This program repairs water infrastructure damaged by the 2006 winter storms, which were declared a federal emergency. The majority of this work will take place in the watersheds, as the storms had the most lasting impact in those areas. This work will be reimbursed by the Federal Emergency Management Agency (FEMA).

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	100	100	0	0	0	0	0	200
Project Total:	0	100	100	0	0	0	0	0	200
Fund Appropriations/Allocations Water Fund	0	100	100	0	0	0	0	0	200
Appropriations Total*	0	100	100	0	0	0	0	0	200
O & M Costs (Savings)			1	1	1	1	1	1	6

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

#### **Asset Management**

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

Project Type: Rehabilitation or Restoration Start Date: 4th Quarter 2002

Project ID: C1126 End Date: Ongoing

**Location:** Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This program allows Seattle Public Utilities to manage the City's water system assets as optimally as possible by using sound asset management principles and practices. Project elements include the following: developing, monitoring, and reporting on measurable customer and environmental service levels; preparing Strategic Asset Management Plans; developing and implementing asset decision models; developing information technology applications; collecting data and assessing the condition of SPU's assets; and evaluating SPU's current operating and maintenance practices and processes. Funding is allocated from the Asset Management Program to these various programs once they are clearly defined.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	1,518	259	51	208	212	216	220	231	2,915
Project Total:	1,518	259	51	208	212	216	220	231	2,915
Fund Appropriations/Allocations									
Water Fund	1,518	259	51	208	212	216	220	231	2,915
Appropriations Total*	1,518	259	51	208	212	216	220	231	2,915
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		160	51	208	212	216	220	231	1,298

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

#### Aurora Ave. N (110th - 145th)

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

Project Type:Improved FacilityStart Date:4th Quarter 2003Project ID:C103033End Date:1st Quarter 2008

**Location:** N 110th St./Aurora Ave. N

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:NorthUrban Village:Not in an Urban Village

The Seattle Department of Transportation is developing a scope of work for rehabilitating or improving Aurora Ave. N. This project conducts preliminary engineering to determine the water system impacts of that transportation project. If the transportation project progresses further, additional funds will be requested at that time. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	3	8	1	0	0	0	0	0	12
Project Total:	3	8	1	0	0	0	0	0	12
Fund Appropriations/Allocations									
Water Fund	3	8	1	0	0	0	0	0	12
Appropriations Total*	3	8	1	0	0	0	0	0	12
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		0	0	0	0	0	0	0	0

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

#### **Ballard Locks Improvements**

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type:Improved FacilityStart Date:1st Quarter 2000Project ID:C1606End Date:4th Quarter 2010

**Location:** NW 54th St.

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

Neighborhood District: Ballard Urban Village: Ballard

This project is a sub-element of the Cedar River Habitat Conservation Plan (HCP) and associated Cedar River Instream Flow Agreement. Improvements include the planning, design, and construction of freshwater conservation and smolt passage facilities at the Ballard Locks to improve fish passage and survival. The project is part of a comprehensive instream flow management program for the Cedar River that protects the City's continued ability to divert adequate amounts of high quality water for regional use. This program also protects instream resources and the U.S. Army Corps of Engineers' ability to provide adequate flows for operating the Locks. SPU's Asset Management Committee has approved the HCP at the program level. The confidence level for this cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	961	76	79	54	431	0	0	0	1,601
Project Total:	961	76	79	54	431	0	0	0	1,601
Fund Appropriations/Allocations									
Water Fund	961	76	79	54	431	0	0	0	1,601
Appropriations Total*	961	76	79	54	431	0	0	0	1,601
O & M Costs (Savings)			0	0	0	8	8	8	24

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

#### **BPA - Aquatic & Riparian Restoration**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:2nd Quarter 2004Project ID:C1303End Date:4th Quarter 2008

**Location:** Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program plans and implements aquatic and riparian restoration projects within the Cedar River Municipal Watershed. These projects enhance and accelerate the City's existing efforts to restore riparian, aquatic, and wetland habitat in the watershed, and compensate for the impacts of the Bonneville Power Administration's power line project on that habitat. SPU's Asset Management Committee has approved this program. The confidence level in the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	868	305	36	0	0	0	0	0	1,209
Project Total:	868	305	36	0	0	0	0	0	1,209
Fund Appropriations/Allocations									
Water Fund	868	305	36	0	0	0	0	0	1,209
Appropriations Total*	868	305	36	0	0	0	0	0	1,209
O & M Costs (Savings)			0	6	6	6	6	6	30
Spending Plan		261	36	0	0	0	0	0	297

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

#### **BPA - Road Decommissioning/Improvements**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:2nd Quarter 2004Project ID:C1304End Date:4th Quarter 2009

Location: Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program plans and implements road decommissioning and road improvement projects within the Cedar River Municipal Watershed. These projects enhance and accelerate the City's existing programs to improve or abandon watershed roads, and compensate for the effects of the additional road length added to the watershed as a result of the Bonneville Power Administration's power line project. SPU's Asset Management Committee has approved this program. The confidence level in the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	74	137	157	5	0	0	0	0	373
Project Total:	74	137	157	5	0	0	0	0	373
Fund Appropriations/Allocations									
Water Fund	74	137	157	5	0	0	0	0	373
Appropriations Total*	74	137	157	5	0	0	0	0	373
O & M Costs (Savings)			0	0	2	2	2	2	7
Spending Plan		102	157	5	0	0	0	0	264

#### **BPA - Security Measures**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C1305End Date:4th Quarter 2011

Location: Cedar River Watershed

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

This program plans, purchases, and installs watershed security improvements within the Cedar River Municipal Watershed to protect watershed resources and restrict watershed access. These projects compensate for the impacts of the Bonneville Power Administration's power line project on security within the watershed. SPU's Asset Management Committee has reviewed and approved this set of projects. The confidence level in cost estimates is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	720	35	72	11	11	11	0	0	860
Project Total:	720	35	72	11	11	11	0	0	860
Fund Appropriations/Allocations									
Water Fund	720	35	72	11	11	11	0	0	860
Appropriations Total*	720	35	72	11	11	11	0	0	860
O & M Costs (Savings)			0	0	0	0	4	4	9
Spending Plan		46	72	11	11	11	0	0	151

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

#### **BPA - Upland Forest Restoration**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:2nd Quarter 2004Project ID:C1306End Date:4th Quarter 2011

Location: Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program plans and implements forest restoration projects within the Cedar River Municipal Watershed. This program will enhance and accelerate the City's existing Upland Forest Restoration Program and help compensate for the impacts of the Bonneville Power Administration's power line project on older, second-growth forest and other upland habitats in the watershed. SPU's Asset Management Committee has reviewed and approved this program. The confidence level in cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	555	395	176	79	27	28	0	0	1,260
Project Total:	555	395	176	79	27	28	0	0	1,260
Fund Appropriations/Allocations									
Water Fund	555	395	176	79	27	28	0	0	1,260
Appropriations Total*	555	395	176	79	27	28	0	0	1,260
O & M Costs (Savings)			0	0	0	0	6	6	13
Spending Plan		482	176	79	27	28	0	0	792

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

#### **Bridging the Gap Program-WF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2008Project ID:C4119-WFEnd Date:4th Quarter 2016

**Location:** Multiple

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	0	1,277	1,317	372	384	397	410	4,157
Project Total:	0	0	1,277	1,317	372	384	397	410	4,157
Fund Appropriations/Allocations									
Water Fund	0	0	1,277	1,317	372	384	397	410	4,157
Appropriations Total*	0	0	1,277	1,317	372	384	397	410	4,157
O & M Costs (Savings)			0	0	0	0	0	0	0

#### **Cathodic Protection Program**

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

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2004

Project ID: C1116 End Date: Ongoing

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This program implements SPU's Cathodic Protection Master Plan by installing pipe exterior corrosion protection systems along the major water transmission pipelines. Cathodic protection systems are a relatively low-cost method of extending the life of buried pipelines. They can be used to protect ductile iron, steel, and concrete cylinder pipe. Unprotected, these types of pipelines corrode through an electrochemical process; cathodic protection strives to slow down or even stop this electrochemical process by providing electrical current to the pipe. Each project installs new or replacement rectifiers and anodes along a section of pipeline between one and four miles in length.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	1,476	843	451	552	580	609	639	809	5,959
Project Total:	1,476	843	451	552	580	609	639	809	5,959
Fund Appropriations/Allocations									
Water Fund	1,476	843	451	552	580	609	639	809	5,959
Appropriations Total*	1,476	843	451	552	580	609	639	809	5,959
O & M Costs (Savings)			3	3	3	3	3	3	18
Spending Plan		452	451	552	580	609	639	809	4,092

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

#### **Cedar Bridges**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C1307End Date:4th Quarter 2011

Location: Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project replaces bridges in the Cedar River Watershed on watershed roads where existing bridges are no longer able to carry required loading, resulting in safety and environmental risks. In 2008, high priority bridge replacements will be planned and executed in compliance with state laws, safety and environmental regulations, and tribal access agreements. The Cedar River Watershed Transportation Strategic Asset Management Plan has identified critical bridge replacements as a priority. SPU's Asset Management Committee has approved the program. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	49	1,176	209	105	178	192	0	0	1,909
Project Total:	49	1,176	209	105	178	192	0	0	1,909
Fund Appropriations/Allocations									
Water Fund	49	1,176	209	105	178	192	0	0	1,909
Appropriations Total*	49	1,176	209	105	178	192	0	0	1,909
O & M Costs (Savings)			16	16	16	16	16	16	96
Spending Plan		567	209	105	178	192	0	0	1,251

#### Cedar Falls - Railroad Hazardous Material Remediation

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2006Project ID:C100078End Date:4th Quarter 2008

Location: Cedar River Watershed

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

This project addresses contamination left by historical railroad operations in the Cedar River Municipal Watershed. It has three components: 1) assess the nature and risks posed by the contamination; 2) determine the scope and cost of an appropriate cleanup; and 3) support negotiations with Burlington Northern Santa Fe (BNSF) that lead to remedial action. The first two of these components have been completed. A small portion of the contaminated material is located on lands where BNSF and its predecessor operated under an easement granted by the City, while the majority of the contaminated material is located on land that BNSF owns. The project funds staff time to negotiate an agreement to share a portion of the cleanup costs, and is consistent with SPU's long-term effort to consolidate ownership of watershed lands, after proper cleanup by the responsible parties of any contamination. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	171	62	53	0	0	0	0	0	286
Project Total:	171	62	53	0	0	0	0	0	286
Fund Appropriations/Allocations									
Water Fund	171	62	53	0	0	0	0	0	286
Appropriations Total*	171	62	53	0	0	0	0	0	286
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		8	53	0	0	0	0	0	61

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

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

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type: New Investment Start Date: 1st Ouarter 1998

Project ID: C198008 End Date: Ongoing

**Location:** Cedar River Watershed

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

Although the City owns virtually all lands draining to the municipal water supply intake on the Cedar River, some exceptions remain along the boundary. The past decade has seen significant changes in ownership and land use of properties immediately adjoining the City's property. This project enables SPU to evaluate risks to watershed protection and security posed by these changes, and to respond as opportunities arise by acquiring property. All property acquisitions require specific legislative authority. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	2,357	128	11	322	117	123	129	135	3,322
Project Total:	2,357	128	11	322	117	123	129	135	3,322
Fund Appropriations/Allocations									
Water Fund	2,357	128	11	322	117	123	129	135	3,322
Appropriations Total*	2,357	128	11	322	117	123	129	135	3,322
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		398	11	322	117	123	129	135	1,235

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

#### **Cedar River Non-HCP Road Improvements**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type: Improved Facility Start Date: 1st Quarter 1991

Project ID: C191001 End Date: Ongoing

**Location:** Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

The Cedar River Watershed contains more than 615 miles of forest roads. This project funds major improvements (beyond routine maintenance) on roads designated as having long-term purpose for watershed management including forest fire suppression, fish and wildlife management, forest management, security, and public education. Roads not deemed to be of long-term necessity are "deconstructed" by removing potentially unstable sidecast and fill material; constructing frequent waterbars; and re-establishing stream crossings. This work is designed to provide long-term stability, approximate the drainage flows that existed prior to management activities, and to be complementary to road improvement and decommissioning projects included in the Cedar River Habitat Conservation Plan (HCP). SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	5,324	830	702	715	733	860	880	902	10,946
Project Total:	5,324	830	702	715	733	860	880	902	10,946
Fund Appropriations/Allocations									
Water Fund	5,324	830	702	715	733	860	880	902	10,946
Appropriations Total*	5,324	830	702	715	733	860	880	902	10,946
O & M Costs (Savings)			50	50	50	50	50	50	301
Spending Plan		829	702	715	733	860	880	0	4,719

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

#### **Cedar River Pipeline 2 Replace Portion**

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

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2004Project ID:C104013End Date:1st Quarter 2008

**Location:** Carpel #2 Between Volunteer Park And Maple Leaf Gatehouse

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This project investigates the condition and the current maximum working pressure of a 42-inch lockbar steel feeder main that is suspected to be corroded in some locations. The Cedar River Pipeline No. 2 extends from Volunteer Park to the Maple Leaf neighborhood and crosses the Ship Canal in a tunnel. It is currently expected that improvements will be limited to pressure testing the pipeline and installing an impressed current cathodic protection system. SPU's Asset Management Committee reviewed and approved the preliminary engineering phase of the project. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	77	316	1	0	0	0	0	0	394
Project Total:	77	316	1	0	0	0	0	0	394
Fund Appropriations/Allocations									
Water Fund	77	316	1	0	0	0	0	0	394
Appropriations Total*	77	316	1	0	0	0	0	0	394
O & M Costs (Savings)			0	2	2	2	2	2	10
Spending Plan		120	0	0	0	0	0	0	120

#### **Cedar River Watershed Cultural Resource Information Management System**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107005End Date:4th Quarter 2008

Location: Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project develops a comprehensive information management system for archaeological artifacts from the Cedar River and S. Fork Tolt River Municipal Watersheds. It will create a searchable database while simultaneously accessioning and preserving the collection, which currently is not being archivally preserved. The database will also make the information easily accessible to researchers and the public. SPU manages a collection of thousands of artifacts, documents and photos documenting over 9,400 years of human activity in watersheds. These collections are located in the Gale Archives at the Cedar River Watershed Education Center. Information about these artifacts and documents is neither cohesive, nor accessible to researchers, staff or Native American tribes currently. Capturing the archaeological information about these collections is critical to the proper management and preservation of these irreplaceable items.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	207	103	0	0	0	0	0	310
Project Total:	0	207	103	0	0	0	0	0	310
Fund Appropriations/Allocations									
Water Fund	0	207	103	0	0	0	0	0	310
Appropriations Total*	0	207	103	0	0	0	0	0	310
O & M Costs (Savings)			5	5	5	5	5	5	30
Spending Plan		91	103	0	0	0	0	0	194

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

## Cedar River Watershed Fish & Wildlife Information Management System

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107001End Date:4th Quarter 2008

Location: Cedar River Watershed

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

This project develops and implements a data management system for fish and wildlife assets and resources in the Cedar River Municipal Watershed (CRW), which covers over 90,000 acres. Development and use of the information management system (IMS) will be compatible with and linked to, as appropriate, other SPU information management systems and their architecture. The outcome will be a significant decrease in staff labor over decades, better management of the City land, enhanced regulatory compliance, and knowledge and documentation of Cedar River fish and wildlife assets. The confidence level of the cost estimate is medium. This project title was Cedar River Watershed & Wildlife Information Management System in the 2007-2013 Adopted CIP.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	42	141	0	0	0	0	0	183
Project Total:	0	42	141	0	0	0	0	0	183
Fund Appropriations/Allocations									
Water Fund	0	42	141	0	0	0	0	0	183
Appropriations Total*	0	42	141	0	0	0	0	0	183
O & M Costs (Savings)			0	5	5	5	5	5	25
Spending Plan		20	141	0	0	0	0	0	161

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

#### **Cedar River Watershed Inventory Management System**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107006End Date:1st Quarter 2008

Location: Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project implements an inventory management system (including bar codes and bar code readers) to help identify inventory requirements, set targets, and report actual and projected inventory status. Proper inventory control will improve efficiency, reduce waste on capital and operations and maintenance expenditures, and optimize inventory levels. The inventory system will link to SPU's Work Management System (Maximo) and provide SPU staff with information useful in determining true project and activity costs. It will also assist in setting and meeting service level targets. The confidence level of the cost estimate is medium. This project title was Cedar River Watershed Management System in the 2007-2013 Adopted CIP.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	199	201	0	0	0	0	0	400
Project Total:	0	199	201	0	0	0	0	0	400
Fund Appropriations/Allocations									
Water Fund	0	199	201	0	0	0	0	0	400
Appropriations Total*	0	199	201	0	0	0	0	0	400
O & M Costs (Savings)			0	5	5	5	5	5	25
Spending Plan		47	201	0	0	0	0	0	248

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

#### Cedar River Watershed Limited Use Area Management Plan

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107002End Date:4th Quarter 2008

Location: Cedar River Watershed

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

This project analyzes Limited Uses Areas (LUAs) within the Cedar River Municipal Watershed. The analysis will include a review of current management plans, operational activities, and public usage patterns, identification of problems and issues, and development of recommendations for changes in Seattle Public Utilities' (SPU) policies and operational activities. SPU owns several hundred acres of land near or adjacent to the Cedar River Municipal Watershed that lies outside of the hydrographic boundary of the drinking water supply. SPU provides and maintains recreational facilities (trails, sanitation, parking, boat ramps, etc.) and maintenance operations on these lands, such as the Rattlesnake Lake Recreation Area, Landsburg Park, and Taylor Mountain Forest. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	104	44	0	0	0	0	0	148
Project Total:	0	104	44	0	0	0	0	0	148
Fund Appropriations/Allocations									
Water Fund	0	104	44	0	0	0	0	0	148
Appropriations Total*	0	104	44	0	0	0	0	0	148
O & M Costs (Savings)			0	1	1	1	1	1	4
Spending Plan		65	44	0	0	0	0	0	109

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

#### **Cedar Sockeye Hatchery**

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type:New FacilityStart Date:1st Quarter 2000Project ID:C1605End Date:4th Quarter 2010

Location: Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project, a component of the Cedar River Habitat Conservation Plan (HCP) and Landsburg Mitigation Agreement, mitigates impacts on sockeye salmon caused by the migration barrier formed by the Landsburg Diversion Dam. The hatchery's purpose is to produce fry in lieu of the production that could occur if sockeye were allowed to spawn above Landsburg Dam. The project consists of spring-fed water supply improvements, a broodstock holding facility, an incubation and short-term holding facility capable of producing 34 million fry, housing for two employees, and a broodstock collection facility. SPU's Asset Management Committee approved the HCP at the program level. The confidence level for this cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	2,799	5,407	2,245	7,572	647	0	0	0	18,670
Project Total:	2,799	5,407	2,245	7,572	647	0	0	0	18,670
Fund Appropriations/Allocations									
Water Fund	2,799	5,407	2,245	7,572	647	0	0	0	18,670
Appropriations Total*	2,799	5,407	2,245	7,572	647	0	0	0	18,670
O & M Costs (Savings)			334	458	458	458	458	458	2,624
Spending Plan		2,165	2,245	7,572	647	0	0	0	12,629

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

#### **Cedar Treatment Facility**

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:New FacilityStart Date:1st Quarter 1996Project ID:C196015End Date:4th Quarter 2012

Location: N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project develops and implements water treatment improvements to the Cedar River water supply to improve water quality, ensure compliance with drinking water regulations, and mitigate the periodic taste and odor problems that occur on the Cedar source. Under this project, new ozone disinfecting facilities (compatible with filtration) were planned, designed, and constructed near the Lake Youngs Reservoir. SPU utilized a design-build-operate contracting method for this project, similar to that used for the recently-commissioned Tolt Treatment Facility. The project is now complete and fully operating.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	93,568	454	1	1	1	1	1	0	94,027
Project Total:	93,568	454	1	1	1	1	1	0	94,027
<b>Fund Appropriations/Allocations</b>									
Water Fund	93,568	454	1	1	1	1	1	0	94,027
Appropriations Total*	93,568	454	1	1	1	1	1	0	94,027
O & M Costs (Savings)			7	7	7	7	8	8	44
Spending Plan		460	0	0	0	0	0	0	460

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

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

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2003

Project ID: C103002 End Date: Ongoing

Location: Citywide

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

This program allows SPU to meet current Occupational Safety and Health Administration (OSHA) and Washington State Health Administration (WSHA) standards for confined space entry by replacing undersized underground chamber access openings (rings and covers) throughout the City's water system. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	524	121	154	105	108	110	113	116	1,351
Project Total:	524	121	154	105	108	110	113	116	1,351
Fund Appropriations/Allocations									
Water Fund	524	121	154	105	108	110	113	116	1,351
Appropriations Total*	524	121	154	105	108	110	113	116	1,351
O & M Costs (Savings)			7	7	7	7	7	7	41
Spending Plan		100	154	105	108	110	113	116	806

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

# **Climate Protection - WF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C407S01-WFEnd Date:4th Quarter 2013

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project researches the impact of climate change on the water 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 (OSE) leads the Citywide effort.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	154	186	172	177	181	185	189	1,244
Project Total:	0	154	186	172	177	181	185	189	1,244
Fund Appropriations/Allocations									
Water Fund	0	154	186	172	177	181	185	189	1,244
Appropriations Total*	0	154	186	172	177	181	185	189	1,244
O & M Costs (Savings)			0	0	0	0	0	0	0

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

#### **Dam Safety Program**

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type: Rehabilitation or Restoration Start Date: 1st Ouarter 2008

Project ID: C1506 End Date: Ongoing

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This ongoing program funds projects that ensure the continuing safe functioning, operation and monitoring of SPU's water supply dams and associated facilities per regulatory, utility and public requirements. These dams are located outside Seattle with the exception of the in-town reservoir dams. Some system improvements occur on an as-needed basis, usually by regulatory mandate, and therefore specific upgrades cannot be identified fully at this time. Typical improvements include upgrades to the dams' failure warning systems, spillways, outlet works, piping and other civil, mechanical and structural systems whose proper functioning is required for the safe operation of the dams.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	3,302	0	3,322	206	804	2,427	368	578	11,007
Project Total:	3,302	0	3,322	206	804	2,427	368	578	11,007
Fund Appropriations/Allocations									
Water Fund	3,302	0	3,322	206	804	2,427	368	578	11,007
Appropriations Total*	3,302	0	3,322	206	804	2,427	368	578	11,007
O & M Costs (Savings)			500	500	500	500	500	500	3,000

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

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

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 1999

Project ID: C199012 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 replaces aging in-line gate valves throughout the water distribution system, many of which are more than 50 years old, and for which spare parts are difficult to obtain. The confidence level of the cost estimate is medium as it is dependent on the condition of the gate valves and the availability of parts. The project has been approved by SPU's Asset Management Committee.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	571	60	61	121	124	127	130	133	1,327
Project Total:	571	60	61	121	124	127	130	133	1,327
Fund Appropriations/Allocations									
Water Fund	571	60	61	121	124	127	130	133	1,327
Appropriations Total*	571	60	61	121	124	127	130	133	1,327
O & M Costs (Savings)			7	7	7	7	7	7	40
Spending Plan		115	61	121	124	127	130	133	811

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

#### **Downstream Fish Habitat**

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2001Project ID:C1607End Date:4th Quarter 2011

Location: Cedar River Watershed

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

The project implements downstream habitat protection and restoration measures in the lower 22 miles of the main stem Cedar River for the benefit of anadromous salmonid species, especially Chinook salmon, and to enhance natural ecological processes that shape and maintain riparian and aquatic habitat. Activities include habitat land acquisition in collaboration with Cascade Land Conservancy, restoration work at Walsh Lake, and restoration work in the lower Cedar River. This project is part of the Cedar River Habitat Conservation Plan (HCP), which was approved by SPU's Asset Management Committee at the program level. The confidence level of the current cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	465	2,517	2,729	2,451	43	17	0	0	8,222
Project Total:	465	2,517	2,729	2,451	43	17	0	0	8,222
Fund Appropriations/Allocations									
Water Fund	465	2,517	2,729	2,451	43	17	0	0	8,222
Appropriations Total*	465	2,517	2,729	2,451	43	17	0	0	8,222
O & M Costs (Savings)			50	50	50	50	50	50	300
Spending Plan		2,515	2,729	2,451	43	17	0	0	7,755

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

#### **Endangered Species Act Chinook Research & Monitoring**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2001Project ID:C101048End Date:4th Quarter 2008

**Location:** Lake Washington/Ship Canal/Lake Union

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 researches and monitors Seattle's salmon population, with emphasis on their habitat use in Lake Washington, the Ship Canal/Lake Union, and Ballard Locks. This program is part of the City's response to the listing of Chinook salmon as a threatened species under the federal Endangered Species Act (ESA). The results of these research and monitoring activities may minimize adverse impacts to endangered species from capital facilities and facility operations, as well as design salmon habitat restoration projects within the City of Seattle. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	1,112	259	323	0	0	0	0	0	1,694
Project Total:	1,112	259	323	0	0	0	0	0	1,694
Fund Appropriations/Allocations									
Water Fund	1,112	259	323	0	0	0	0	0	1,694
Appropriations Total*	1,112	259	323	0	0	0	0	0	1,694
O & M Costs (Savings)			0	8	8	8	8	8	42
Spending Plan		337	323	0	0	0	0	0	660

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

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2000Project ID:C101003End Date:4th Quarter 2011

Location: Snohomish River Basin

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 acquires and develops critical habitat for salmon in the Tolt River Watershed. The program is coordinated with similar efforts undertaken by Seattle City Light, and projects may occur in cooperation with King County, affected tribes, or other local, state, and federal agencies. The confidence level of the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	277	45	49	53	65	55	0	0	544
Project Total:	277	45	49	53	65	55	0	0	544
Fund Appropriations/Allocations									
Water Fund	277	45	49	53	65	55	0	0	544
Appropriations Total*	277	45	49	53	65	55	0	0	544
O & M Costs (Savings)			0	0	0	0	3	3	5
Spending Plan		11	49	53	65	55	0	0	233

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

## **Endangered Species Act Tolt Levee Modifications**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C105095End Date:4th Quarter 2011

**Location:** City Of Carnation

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project removes approximately 1,000 feet of riverbank levee along the lower right bank of the Tolt River adjacent to the Tolt MacDonald Park. It is a collaborative project between Seattle Public Utilities, Seattle City Light, and the King County Department of Natural Resources and Parks. The project constructs a new setback levee at the edge of the floodplain to provide reconnection to off-channel salmon habitat and to allow for the creation of new spawning and rearing habitat for Chinook salmon. The SPU Asset Management Committee has approved this project. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	540	1,247	945	599	27	28	0	0	3,386
Project Total:	540	1,247	945	599	27	28	0	0	3,386
Fund Appropriations/Allocations									
Water Fund	540	1,247	945	599	27	28	0	0	3,386
Appropriations Total*	540	1,247	945	599	27	28	0	0	3,386
O & M Costs (Savings)			0	0	0	0	17	17	34
Spending Plan		250	945	599	27	28	0	0	1,849

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

#### **Environmental Steward Project Development**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type: Improved Facility Start Date: 1st Quarter 2005

Project ID: C105084 End Date: Ongoing

Location: Cedar & Tolt River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project plans environmental stewardship activities prior to the formation of specific capital projects. This work includes development of Strategic Asset Management Plans and Project Development Plans for the Watershed and Environmental Program Area, policy analysis and program development to deal with issues related to the management of the Tolt and Cedar River Municipal Watersheds, and other work that assists in the identification of potential capital projects and development of concept-level scopes and estimates for new capital projects.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	112	97	86	105	108	110	113	116	847
Project Total:	112	97	86	105	108	110	113	116	847
Fund Appropriations/Allocations									
Water Fund	112	97	86	105	108	110	113	116	847
Appropriations Total*	112	97	86	105	108	110	113	116	847
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		75	86	105	108	110	113	116	713

#### **Fireflow & Pressure Improvements**

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

Project Type: Improved Facility Start Date: 1st Quarter 2003

Project ID: C1128 End Date: Ongoing

**Location:** Citywide

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

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

This project improves the water distribution system by adding new water lines; replacing, relining, or slip-lining existing lines; adjusting pressure zone boundaries; and installing pressure reducing and pressure boosting installations to meet evolving customer service levels for continuity of service, pressure, water quality, and fire protection. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									_
Water Rates	71	561	327	1,052	1,078	1,103	1,129	1,156	6,477
Project Total:	71	561	327	1,052	1,078	1,103	1,129	1,156	6,477
Fund Appropriations/Allocations Water Fund	71	561	327	1,052	1,078	1,103	1,129	1,156	6,477
Appropriations Total*	71	561	327	1,052	1,078	1,103	1,129	1,156	6,477
O & M Costs (Savings)			5	5	5	5	5	5	30
Spending Plan		260	327	1,052	1,078	1,103	1,129	1,156	6,105

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

#### **Heavy Equipment Purchases - WF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type: New Investment Start Date: 1st Ouarter 1999

Project ID: C4116-WF End Date: Ongoing

**Location:** N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This program replaces existing heavy equipment (such as loaders and bulldozers) used at Water Utility facilities and purchases new equipment. The project also retrofits existing equipment to meet SPU operational needs and initiatives.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	251	4,643	2,873	1,511	4,683	4,933	1,019	2,435	22,348
Project Total:	251	4,643	2,873	1,511	4,683	4,933	1,019	2,435	22,348
Fund Appropriations/Allocations									
Water Fund	251	4,643	2,873	1,511	4,683	4,933	1,019	2,435	22,348
Appropriations Total*	251	4,643	2,873	1,511	4,683	4,933	1,019	2,435	22,348
O & M Costs (Savings)			112	112	112	112	112	112	670
Spending Plan		1,940	2,873	1,511	4,683	4,933	1,019	2,435	19,394

#### **Hidden Lake CSO Betterments**

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

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 2004Project ID:C104066End Date:1st Quarter 2008

Location: N/A

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:NortheastUrban Village:Not in an Urban Village

This project improves fire flows and hydrants in conjunction with a King County combined sewer rehabilitation project, which is impacting SPU Water services in Shoreline. The County project creates an opportunity for SPU to perform its work while the width of the street is exposed, reducing future disruption by additional street openings. The four-inch water line under Springdale Ct. NW does not provide minimum fireflow requirements to the area and replacing approximately 1,100 linear feet of pipe will bring to the area at least 20 percent more than the minimum requirement. In addition, all hydrants in the area will be replaced with six-inch standard hydrants. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	71	446	1	0	0	0	0	0	518
Project Total:	71	446	1	0	0	0	0	0	518
Fund Appropriations/Allocations									
Water Fund	71	446	1	0	0	0	0	0	518
Appropriations Total*	71	446	1	0	0	0	0	0	518
O & M Costs (Savings)			0	3	3	3	3	3	13
Spending Plan		529	0	0	0	0	0	0	529

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

#### **Hidden Lake CSO Impact Work**

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

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 2004Project ID:C104067End Date:4th Quarter 2008

**Location:** City of Shoreline

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:NortheastUrban Village:Not in an Urban Village

This project is an inter-agency project with King County to address impacts to the City's water system in Shoreline by a King County sewer rehabilitation and improvement project. The County project includes the installation of a large underground storage pipe in the Boeing Creek Park, replacing the Hidden Lake pump station and approximately 11,000 feet of sewer pipe between the Hidden Lake pump station and the Richmond Beach pump station. The SPU work involves cutting, capping, and reconnecting pipes to allow implementation of the County project through SPU's water service area. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	145	293	46	0	0	0	0	0	484
Project Total:	145	293	46	0	0	0	0	0	484
Fund Appropriations/Allocations									
Water Fund	145	293	46	0	0	0	0	0	484
Appropriations Total*	145	293	46	0	0	0	0	0	484
O & M Costs (Savings)			0	2	2	2	2	2	12
Spending Plan		605	46	0	0	0	0	0	651

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

#### I-405 Widening Cedar River Pipelines Impacts

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2005Project ID:C105096End 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 is in response to the Washington State Department of Transportation's (WSDOT) planned widening of I-405 in the vicinity of South Center mall, and SR-167 near S 212 Street. At both locations SPU owns the pipeline right-of-way. At South Center, it is expected that SPU will sell airspace rights to WSDOT. Construction is expected to be performed by, and at the expense of, WSDOT replacing 900 feet of Cedar River Pipeline (CRPL) 4. The confidence level of the current cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	35	39	142	0	0	0	0	0	216
Project Total:	35	39	142	0	0	0	0	0	216
Fund Appropriations/Allocations									
Water Fund	35	39	142	0	0	0	0	0	216
Appropriations Total*	35	39	142	0	0	0	0	0	216
O & M Costs (Savings)			0	1	1	1	1	1	5
Spending Plan		80	142	0	0	0	0	0	222

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

#### **I-5 Pavement Reconstruction - WF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C407022-WFEnd Date:4th Quarter 2020

**Location:** I-5

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

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

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

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

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

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

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type:Improved FacilityStart Date:4th Quarter 2003Project ID:C1608End Date:4th Quarter 2010

Location: Citywide

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

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

This program is part of the Cedar River Habitat Conservation Plan (HCP), which has received approval by SPU's Asset Management Committee. This program studies the relationships between stream flow and habitat conditions, with an emphasis on Chinook; supports effective allocation of water above guaranteed levels; and addresses technical issues that emerged in the later stages of developing the HCP. The project includes studies to evaluate the feasibility of using dead storage in Chester Morse Lake to augment future water supply and flows, taking into account engineering, environmental, and economic issues. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	554	571	718	500	337	0	0	0	2,680
Project Total:	554	571	718	500	337	0	0	0	2,680
Fund Appropriations/Allocations									
Water Fund	554	571	718	500	337	0	0	0	2,680
Appropriations Total*	554	571	718	500	337	0	0	0	2,680
O & M Costs (Savings)			0	0	0	13	13	13	40
Spending Plan		402	718	500	337	0	0	0	1,957

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

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

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:New InvestmentStart Date:1st Quarter 2002Project ID:C4108-WFEnd Date:4th Quarter 2013

**Location:** Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program expands upon the Supervisory Control and Data Acquisition (SCADA) system installed as part of CIP project C195008. This program is broken down into three concurrent projects. Project one will enable System Operators to gather more system information and control water infrastructure. The equipment includes 120 new SCADA devices, such as flow or pressure from remote sensors and from supply dams, to remotely control-led pumps and valves. Project two is Operations Optimization, a set of organizational process and technology applications to improve water system operations and SCADA data usefulness. Applications include a web-based Water System Operating Plan, a Water Quality Analyzer, and a Data Quality Monitor. Project three 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 planning.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	12	3,899	2,072	919	650	55	28	87	7,722
Project Total:	12	3,899	2,072	919	650	55	28	87	7,722
Fund Appropriations/Allocations									
Water Fund	12	3,899	2,072	919	650	55	28	87	7,722
Appropriations Total*	12	3,899	2,072	919	650	55	28	87	7,722
O & M Costs (Savings)			31	123	372	372	372	372	1,642
Spending Plan		3,811	2,072	919	650	55	28	87	7,622

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

#### **Kerriston Road Mitigation**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107017End Date:4th Quarter 2013

Location: Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project analyzes the water supply risks presented by public access on the Kerriston Road. It includes feasibility studies and cost estimates for all of the risk management options that are developed, as well as funds for acquisition of property, based on the assumption that acquisition will be the preferred option. Kerriston Road is a King County right-of way that bisects the lower Cedar River watershed within the municipal watershed boundary. The presence of this road poses a number of security and operational challenges in watershed management. The Washington Department of Health, which administers the Safe Drinking Water Act, has pointed out these risks to Seattle Public Utilities and requested an approach to address them. King County has shown an interest in cooperating in the acquisition of privately-owned land at the end of Kerriston Road, thereby allowing the County to close the road. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	75	104	221	232	243	255	268	1,398
Project Total:	0	75	104	221	232	243	255	268	1,398
Fund Appropriations/Allocations									
Water Fund	0	75	104	221	232	243	255	268	1,398
Appropriations Total*	0	75	104	221	232	243	255	268	1,398
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		4	104	221	232	243	255	268	1,327

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

#### **Lake Youngs Management Plan**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107003End Date:4th Quarter 2011

Location: Lake Youngs Reserve

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project aims to survey and control invasive plant species and restore habitat of the infested areas in the Lake Youngs Reserve. Surveys will be completed for all common noxious weed species, including English Holly, English Ivy, Scotch Broom, and Eurasian Blackberries. The primary invasive species that impacts forest habitat is English Holly. This project will investigate several control methods for the holly and will restore the forest habitat by planting a variety of native understory species once the holly is removed. The primary invasive species that threatens the wetland habitat is Eurasian Blackberry. This project will remove the invasive blackberry from the wetlands and plant where needed with native wetland plants. Short and long-term goals for other habitat restoration will also be developed during this project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	156	54	42	70	62	0	0	384
Project Total:	0	156	54	42	70	62	0	0	384
Fund Appropriations/Allocations									
Water Fund	0	156	54	42	70	62	0	0	384
Appropriations Total*	0	156	54	42	70	62	0	0	384
O & M Costs (Savings)			0	0	0	0	10	10	20
Spending Plan		10	54	42	70	62	0	0	238

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

#### **Landsburg Fish Passage Monitoring**

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type:Improved FacilityStart Date:2nd Quarter 1999Project ID:C1604End Date:4th Quarter 2009

**Location:** Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program mitigates the effects of the fish migration blockage on the Cedar River created by the Landsburg Dam, and is a key element of the Cedar River Habitat Conservation Plan (HCP). The program includes the planning, design, and construction of four major fish passage facilities; interim studies; and the implementation of monitoring and other mitigation measures to help restore Chinook, Coho, and Steelhead populations. Landsburg is the site of the City of Seattle's municipal water diversion and treatment facilities on the Cedar River. The SPU Asset Management Committee has approved the design and construction phases of the project and the confidence level for this cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	351	268	261	3	0	0	0	0	883
Project Total:	351	268	261	3	0	0	0	0	883
Fund Appropriations/Allocations									
Water Fund	351	268	261	3	0	0	0	0	883
Appropriations Total*	351	268	261	3	0	0	0	0	883
O & M Costs (Savings)			169	169	169	169	169	169	1,014
Spending Plan		212	261	3	0	0	0	0	476

#### Maple Leaf Gatehouse Pipe Refurbishing

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:2nd Quarter 1995Project ID:C195001End Date:2nd Quarter 2008

**Location:** NE 83rd St./12th Ave. NE

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

This project refurbishes valves and piping to allow more water from the Tolt source to be delivered to areas south of the Lake Washington Ship Canal that are normally served by the Cedar source. The project also addresses seismic issues with the gatehouse structure. The confidence level in the current cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	94	254	350	0	0	0	0	0	698
Project Total:	94	254	350	0	0	0	0	0	698
Fund Appropriations/Allocations									
Water Fund	94	254	350	0	0	0	0	0	698
Appropriations Total*	94	254	350	0	0	0	0	0	698
O & M Costs (Savings)			5	5	5	5	5	5	30
Spending Plan		240	350	0	0	0	0	0	590

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

#### Marine View/Des Moines Creek

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 1997Project ID:C197021End Date:4th Quarter 2008

**Location:** Marine View Dr.

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project responds to a project by the City of Des Moines that replaces an existing embankment and box culvert over the Des Moines Creek with a bridge. As a result of the City of Des Moines' project, SPU's Des Moines Way pipeline over the embankment is decommissioned. The work is essentially complete, and the section of the pipeline south of the new bridge is no longer in service. Remaining closeout activities include finding a new owner for the decommissioned pipe, or filling it with sand or weak concrete. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	248	5	5	0	0	0	0	0	258
Project Total:	248	5	5	0	0	0	0	0	258
Fund Appropriations/Allocations									
Water Fund	248	5	5	0	0	0	0	0	258
Appropriations Total*	248	5	5	0	0	0	0	0	258
O & M Costs (Savings)			0	1	1	1	1	1	6
Spending Plan		2	5	0	0	0	0	0	7

#### Meter Replacement - WF

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2004

Project ID: C4101-WF End Date: Ongoing

Location: Citywide

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

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

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	2,208	574	625	547	560	573	587	602	6,276
Project Total:	2,208	574	625	547	560	573	587	602	6,276
Fund Appropriations/Allocations									
Water Fund	2,208	574	625	547	560	573	587	602	6,276
Appropriations Total*	2,208	574	625	547	560	573	587	602	6,276
O & M Costs (Savings)			5	5	5	5	5	5	30

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

#### **Morse Lake Pump Plant**

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C103032End Date:2nd Quarter 2013

**Location:** Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project implements a cost-effective system for reliably delivering water from Cedar Dead Storage during drought conditions for water supply and instream flows. This project may either make modifications to the existing Morse Lake Pumping Plants or construct a more reliable and cost-effective alternative system. SPU Asset Management Committee has approved the project. The confidence level of the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	805	1,847	1,588	10,517	12,392	2,328	4,515	578	34,570
Project Total:	805	1,847	1,588	10,517	12,392	2,328	4,515	578	34,570
Fund Appropriations/Allocations									
Water Fund	805	1,847	1,588	10,517	12,392	2,328	4,515	578	34,570
Appropriations Total*	805	1,847	1,588	10,517	12,392	2,328	4,515	578	34,570
O & M Costs (Savings)			95	32	49	32	32	32	272
Spending Plan		738	1,588	10,517	12,392	2,328	4,515	578	32,656

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

#### **Muckleshoot Agreement Implementation Plan**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C1309End Date:4th Quarter 2009

Location: Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

The Muckleshoot Settlement Agreement, per Ordinance 122131, settles Muckleshoot Indian Tribe (MIT) claims over Seattle's withdrawal of water from the Cedar River and a longstanding tribal claim over declining fish runs in the Cedar River/Lake Washington Basin. The agreement provides certainty for the region's water quality and quantity and a cooperative relationship between the City and the tribe. This program implements the agreement's provisions, including trail improvements, development of the Cooperative Plan, upgrading the computerized access notification system, safety plan development, and improvements (including safety equipment and technology, communication equipment improvements, gates), surplus land transfers, and acquisition of the Yakima Pass parcel (required prior to conveyance to MIT). This program also includes the remaining payout of the settlement agreement; as well as projects C106015 and C107016 previously listed as separate projects in the 2007-2012 CIP.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	17,302	1,324	885	105	0	0	0	0	19,616
Project Total:	17,302	1,324	885	105	0	0	0	0	19,616
Fund Appropriations/Allocations									
Water Fund	17,302	1,324	885	105	0	0	0	0	19,616
Appropriations Total*	17,302	1,324	885	105	0	0	0	0	19,616
O & M Costs (Savings)			105	105	105	105	105	105	630
Spending Plan		1,650	885	105	0	0	0	0	2,640

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

#### **Multiple Utility Relocation**

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

Project Type: Rehabilitation or Restoration Start Date: 1st Ouarter 2007

Project ID: C1133 End Date: Ongoing

**Location:** Citywide

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

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

This program enables Seattle Public Utilities (SPU) to respond to large projects that are conducted by other agencies that impact Seattle's water system. Impacts include utility conflicts that require relocations and construction impacts, and the project includes coordination to minimize impacts to SPU's customers and supply. Often these agencies reimburse SPU for some or all of the costs incurred. The id number for this program was C1205 in the 2007-2012 Adopted CIP.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	327	612	573	625	870	913	958	1,156	6,034
Project Total:	327	612	573	625	870	913	958	1,156	6,034
Fund Appropriations/Allocations Water Fund	327	612	573	625	870	913	958	1,156	6,034
Appropriations Total*	327	612	573	625	870	913	958	1,156	6,034
O & M Costs (Savings)			30	30	30	30	30	30	181
Spending Plan		710	573	625	870	913	958	1,156	5,805

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

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type: Improved Facility Start Date: 1st Quarter 2004

Project ID: C4106-WF End Date: Ongoing

Location: Multiple

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

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	2,909	2,650	1,102	1,834	1,877	1,495	1,530	1,569	14,966
Project Total:	2,909	2,650	1,102	1,834	1,877	1,495	1,530	1,569	14,966
Fund Appropriations/Allocations									
Water Fund	2,909	2,650	1,102	1,834	1,877	1,495	1,530	1,569	14,966
<b>Appropriations Total*</b>	2,909	2,650	1,102	1,834	1,877	1,495	1,530	1,569	14,966
O & M Costs (Savings)			75	75	75	75	75	75	449
Spending Plan		1,260	1,102	1,834	1,877	1,495	1,530	1,569	10,667

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

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

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type: Improved Facility Start Date: 4th Quarter 2006

Project ID: C4115-WF End Date: Ongoing

**Location:** Multiple

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	156	676	182	567	818	110	113	116	2,738
Project Total:	156	676	182	567	818	110	113	116	2,738
Fund Appropriations/Allocations									
Water Fund	156	676	182	567	818	110	113	116	2,738
Appropriations Total*	156	676	182	567	818	110	113	116	2,738
O & M Costs (Savings)			14	14	14	14	14	14	82
Spending Plan		1,110	182	567	818	110	113	116	3,016

#### **Operations Control Center - WF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C4105-WFEnd Date:4th Quarter 2010

Location: 2700 Airport Way South/Forest/Lander Street

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	3,022	1,383	183	820	102	0	0	0	5,510
Project Total:	3,022	1,383	183	820	102	0	0	0	5,510
Fund Appropriations/Allocations									
Water Fund	3,022	1,383	183	820	102	0	0	0	5,510
Appropriations Total*	3,022	1,383	183	820	102	0	0	0	5,510
O & M Costs (Savings)			0	0	0	28	28	28	83
Spending Plan		1,312	183	820	102	0	0	0	2,417

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

#### **Painting Program - Myrtle Tank**

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

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2004Project ID:C104031End Date:2nd Quarter 2010

**Location:** SW Myrtle St.

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SouthwestUrban Village:Morgan Junction

This project cleans and overcoats the tank exterior of the Myrtle tanks. The Tank Painting program involves interior and exterior surface preparation and painting, minor structural repairs, and safety modifications on a regular maintenance cycle at the city's various tank sites. The interior lining on one of the tanks is also removed and replaced. Minor safety and operational modifications are made. The confidence level of the cost estimate is high, but the project is currently on hold due to staff reallocation to higher-priority projects. SPU's Asset Management Committee has approved the project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	87	56	5	1,399	388	0	0	0	1,935
Project Total:	87	56	5	1,399	388	0	0	0	1,935
Fund Appropriations/Allocations									
Water Fund	87	56	5	1,399	388	0	0	0	1,935
Appropriations Total*	87	56	5	1,399	388	0	0	0	1,935
O & M Costs (Savings)			0	0	0	10	10	10	29
Spending Plan		8	5	1,399	388	0	0	0	1,800

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

### Painting Program - Richmond Highland

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

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2004Project ID:C104032End Date:2nd Quarter 2010

**Location:** N 195th St./Fremont Ave. N

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 cleans and overcoats the tank exterior of the Richmond Highland tanks. The interior lining is completely removed and replaced. Minor safety and operational modifications are made. The Tank Painting program involves interior and exterior surface preparation and painting, minor structural repairs, and safety modifications on a regular maintenance cycle at the City's various tank sites. The confidence level of the cost estimate is high, but the project is currently on hold due to staff reallocation to higher priority projects. SPU's Asset Management Committee has approved the project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	98	5	5	1,956	593	0	0	0	2,657
Project Total:	98	5	5	1,956	593	0	0	0	2,657
Fund Appropriations/Allocations									
Water Fund	98	5	5	1,956	593	0	0	0	2,657
Appropriations Total*	98	5	5	1,956	593	0	0	0	2,657
O & M Costs (Savings)			0	0	0	13	13	13	40
Spending Plan		8	5	1,956	593	0	0	0	2,562

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

### **Painting Program - Steel Structures**

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

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2000Project ID:C1NW130End Date:4th Quarter 2013

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

The Steel Structures Painting program involves rehabilitation of the coating, lining, and paint systems on exposed steel pipelines, elevated tanks, standpipes, and other steel structures in the water system. The work involves minor structural repairs and safety modifications, surface preparation, and the application of a new coating system. This program is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	262	52	0	473	539	551	564	578	3,019
Project Total:	262	52	0	473	539	551	564	578	3,019
Fund Appropriations/Allocations									
Water Fund	262	52	0	473	539	551	564	578	3,019
Appropriations Total*	262	52	0	473	539	551	564	578	3,019
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		50	0	473	539	551	564	578	2,755

#### **Pump Station - Install Station Motors**

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

Project Type: Rehabilitation or Restoration Start Date: 4th Quarter 1999

Project ID: C199052 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 aging pump station motors throughout the water distribution system with new, more efficient motors. Some of the existing motors were installed 30 or more years ago and are now obsolete, with limited replacement parts available. The confidence for this project cost estimate is medium. SPU's Asset Management Committee has approved this project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	415	60	72	63	65	66	68	69	878
Project Total:	415	60	72	63	65	66	68	69	878
Fund Appropriations/Allocations									
Water Fund	415	60	72	63	65	66	68	69	878
Appropriations Total*	415	60	72	63	65	66	68	69	878
O & M Costs (Savings)			4	4	4	4	4	4	26

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

### **Pump Station - Queen Anne**

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

Project Type:Improved FacilityStart Date:1st Quarter 1996Project ID:C1AA005End Date:4th Quarter 2008

**Location:** 110 Lee St.

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Magnolia/Queen AnneUrban Village:Not in an Urban Village

This project constructs a new booster pump station and pressure zone on the top of Queen Anne Hill to improve pressure at existing low-pressure water services in the higher elevation areas. The project includes more than 14,000 feet of watermain improvements necessary to establish the new pressure zone. The booster pump station will be an underground facility located at the site of the Queen Anne standpipes. The project also has a side benefit of improving fire flow capacity within the new pressure zone created. Project is in construction and the pressure improvements will be realized in mid-2008. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	734	5,102	171	0	0	0	0	0	6,007
Project Total:	734	5,102	171	0	0	0	0	0	6,007
Fund Appropriations/Allocations									
Water Fund	734	5,102	171	0	0	0	0	0	6,007
Appropriations Total*	734	5,102	171	0	0	0	0	0	6,007
O & M Costs (Savings)			16	16	16	16	16	16	96
Spending Plan		7,602	171	0	0	0	0	0	7,773

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

### Purveyor Meters Replace - SPU

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2000

Project ID: C1206 End Date: Ongoing

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This program replaces SPU wholesale customer meters that are not performing within industry standards of accuracy. The project also funds customer-requested wholesale meter changes and upgrades. Most SPU costs are directly reimbursed by the wholesale customers. The confidence in the cost estimate is medium. This program does not require the SPU Asset Management Committee review as it is an ongoing program. This id number for this program was C1107 in the 2007-2012 Adopted CIP.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	2	147	137	105	108	110	113	1	723
Project Total:	2	147	137	105	108	110	113	1	723
Fund Appropriations/Allocations									
Water Fund	2	147	137	105	108	110	113	1	723
Appropriations Total*	2	147	137	105	108	110	113	1	723
O & M Costs (Savings)			4	4	4	4	4	4	22
Spending Plan		62	137	105	108	110	113	1	636

#### **Regional Facility - WF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type: Improved Facility Start Date: 1st Quarter 2007

Project ID: C4107-WF 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 improves regional facilities that support SPU management, operations and maintenance business functions, work force, material, and equipment. The cost estimates will be revised over time as projects are determined. Subprojects within this program will go to the Asset Management Committee for approval.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	60	1,420	776	2,604	2,687	551	564	578	9,240
Project Total:	60	1,420	776	2,604	2,687	551	564	578	9,240
Fund Appropriations/Allocations Water Fund	60	1 420	776	2.604	2 697	551	561	578	0.240
water rund	60	1,420	776	2,604	2,687	551	564	378	9,240
Appropriations Total*	60	1,420	776	2,604	2,687	551	564	578	9,240
O & M Costs (Savings)			46	46	46	46	46	46	277
Spending Plan		1,247	776	2,604	2,687	551	564	578	9,007

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

### **Regional Water Conservation Program**

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 1999Project ID:C1504End Date:4th Quarter 2013

Location: Citywide

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

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

This program provides rebates to water customers to "buy back" water that is being inefficiently used at a cost that is lower than the cost of developing new supply sources. The rebates are provided to direct and wholesale retail customers for a variety of water-using products and equipment. Examples include upgrades in industrial process water, replacing water-cooled equipment with air-cooled versions, more efficient toilets and urinals, high-efficiency clothes washers, and new irrigation controllers and sensors. This project is required by Seattle's Water System Plan, wholesale contracts, and by City Council adopted legislation, including Resolutions 30091 and 30259, and Ordinance 120532. The goal is to cumulatively save 11 million gallons per day of average annual savings by 2011.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	5,235	3,731	3,774	4,207	4,858	682	729	765	23,981
Project Total:	5,235	3,731	3,774	4,207	4,858	682	729	765	23,981
Fund Appropriations/Allocations									
Water Fund	5,235	3,731	3,774	4,207	4,858	682	729	765	23,981
Appropriations Total*	5,235	3,731	3,774	4,207	4,858	682	729	765	23,981
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		3,300	3,774	4,207	4,858	682	729	765	18,315

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

### Renton Franchise/Line Valve Cedar River

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2002Project ID:C102023End Date:1st Quarter 2008

Location: Cedar River Pipeline

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

In 1998, the Cities of Seattle and Renton signed an agreement that addresses Renton's request that SPU add line valves east of downtown Renton to reduce flooding in the event of a pipeline failure. This project responds to that agreement. Project components include improvement or relocation of pipeline dewatering points, replacement of Cedar River Pipeline 1 & 2 valves, automation of the I-405 ball valves, modifications to Augusta Gatehouse, and other miscellaneous work. The certainty of the project cost estimate is high, and it has been approved by SPU's Asset Management Committee.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	2,235	45	1	0	0	0	0	0	2,281
Project Total:	2,235	45	1	0	0	0	0	0	2,281
Fund Appropriations/Allocations									
Water Fund	2,235	45	1	0	0	0	0	0	2,281
Appropriations Total*	2,235	45	1	0	0	0	0	0	2,281
O & M Costs (Savings)			35	35	35	35	35	35	210
Spending Plan		145	0	0	0	0	0	0	145

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

### **Replace Air Valve Chambers**

BCL/Program Name: Transmission BCL/Program Code: C120B

**Project Type:** Rehabilitation or Restoration **Start Date:** 3rd Quarter 1999

Project ID: C199060 End Date: Ongoing

Location: Citywide

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

This program replaces existing valve chamber tops and access chimneys with larger diameter tops and chimneys, and makes minor air valve improvements as needed. The project provides SPU staff with safer access to valves, and complies with industry safety standards. The confidence level in the cost estimate is high. SPU's Asset Management Committee has approved the project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	458	64	64	67	69	71	72	74	939
Project Total:	458	64	64	67	69	71	72	74	939
Fund Appropriations/Allocations									
Water Fund	458	64	64	67	69	71	72	74	939
Appropriations Total*	458	64	64	67	69	71	72	74	939
O & M Costs (Savings)			5	5	5	5	5	5	28

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

### Reservoir Covering - Beacon

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101060End Date:4th Quarter 2009

Location: S Spokane St./Beacon Ave. S

Neighborhood Plan: North Beacon Hill Neighborhood Plan Matrix: N/A
Neighborhood District: Greater Duwamish Urban Village: Beacon Hill

This project replaces the existing 49 million gallon open South Beacon Reservoir with a new 50 million gallon underground reinforced concrete reservoir, and rehabilitates the pipes and valves connecting the reservoir to the water system. Additionally, the project retires the existing 61 million gallon North Beacon Reservoir and fills the void with soil. This project helps to protect Seattle's water supply from vandalism and contamination. Following this project, the Seattle Department of Parks and Recreation (Parks) will expand Jefferson Park over the reservoir site as a 2000 Parks Levy Project. The confidence level of the cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	11,692	18,490	9,326	1,500	0	0	0	0	41,008
Project Total:	11,692	18,490	9,326	1,500	0	0	0	0	41,008
Fund Appropriations/Allocations									
Water Fund	11,692	18,490	9,326	1,500	0	0	0	0	41,008
Appropriations Total*	11,692	18,490	9,326	1,500	0	0	0	0	41,008
O & M Costs (Savings)			0	(10)	(10)	(10)	(10)	(10)	-50
Spending Plan		17,130	9,326	1,539	0	0	0	0	27,995

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

### Reservoir Covering - Maple Leaf

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101078End Date:4th Quarter 2012

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

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:NortheastUrban Village:Not in an Urban Village

This project replaces the existing 60 million gallon Maple Leaf Reservoir with a new 60 million gallon, 2-cell underground reinforced concrete reservoir, and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination and improves water quality. Funds spent to date have been for design. The confidence level of the cost estimate is medium as construction is not scheduled to occur for several years in the future. Project construction completion is now planned for the year 2011, 2 years ahead of the previous schedule. Project commissioning and closeout activities will extend through 2012.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	1,309	14	718	14,198	28,018	14,335	804	0	59,396
Project Total:	1,309	14	718	14,198	28,018	14,335	804	0	59,396
Fund Appropriations/Allocations									
Water Fund	1,309	14	718	14,198	28,018	14,335	804	0	59,396
Appropriations Total*	1,309	14	718	14,198	28,018	14,335	804	0	59,396
O & M Costs (Savings)			0	0	0	0	10	10	20
Spending Plan		350	718	14,198	28,018	14,335	804	0	58,423

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

### **Reservoir Covering - Myrtle**

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101076End Date:4th Quarter 2008

**Location:** 35th Ave. SW

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SouthwestUrban Village:Morgan Junction

This project replaces the existing 10 million gallon open Myrtle Reservoir with a new 5 million gallon underground reinforced concrete reservoir, rehabilitates the pipes and valves connecting the reservoir to the water system, and converts the existing gas chlorine disinfection system at the reservoir to sodium hypochlorite (a liquid form of chlorine disinfection). The project helps to protect Seattle's water supply from vandalism and contamination and improves water quality. Due to the August 2006 Concrete Strike and adverse weather in the winter of 2006/2007 construction completion is planned for 1st Quarter 2008. Project closeout activities will extend through 2008. The confidence level of the cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	4,115	6,720	600	0	0	0	0	0	11,435
Project Total:	4,115	6,720	600	0	0	0	0	0	11,435
Fund Appropriations/Allocations									
Water Fund	4,115	6,720	600	0	0	0	0	0	11,435
Appropriations Total*	4,115	6,720	600	0	0	0	0	0	11,435
O & M Costs (Savings)			2	5	5	5	5	5	27
Spending Plan		6,612	600	0	0	0	0	0	7,212

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

### **Reservoir Covering - Volunteer**

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101059End Date:2nd Quarter 2016

**Location:** 12th Ave. E/E Prospect St.

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:East DistrictUrban Village:Capitol Hill

Per Ordinance 121447, this project may replace the existing Volunteer Reservoir with a new underground reservoir, and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination. SPU is evaluating the possibility of decommissioning this reservoir instead of burying it. Funding provided in 2011 is intended for design work to underground the reservoir, if a decision is made to keep the reservoir in service. The confidence level of the cost estimate is low.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	94	0	10	5	54	110	847	8,089	9,209
Project Total:	94	0	10	5	54	110	847	8,089	9,209
<b>Fund Appropriations/Allocations</b>									
Water Fund	94	0	10	5	54	110	847	8,089	9,209
Appropriations Total*	94	0	10	5	54	110	847	8,089	9,209
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		15	10	5	54	110	847	8,089	9,130

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

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101075End Date:4th Quarter 2011

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

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

This project replaces the existing 68 million gallon West Seattle Reservoir with a new 30 million gallon underground reinforced concrete reservoir, and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination. The confidence level of the cost estimate is medium. Project construction completion is planned for the year 2010.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	1,293	730	8,149	18,445	8,938	175	0	0	37,730
Project Total:	1,293	730	8,149	18,445	8,938	175	0	0	37,730
Fund Appropriations/Allocations									
Water Fund	1,293	730	8,149	18,445	8,938	175	0	0	37,730
Appropriations Total*	1,293	730	8,149	18,445	8,938	175	0	0	37,730
O & M Costs (Savings)			0	0	0	10	10	10	30
Spending Plan		680	8,149	18,445	8,938	175	0	0	36,387

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

### **Restoration Thinning Slash Treatment**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2007Project ID:C107019End Date:4th Quarter 2010

Location: Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project treats woody debris (slash) that results from thinning small trees under the HCP Upland Forest Restoration Thinning program. This project will improve wildlife habitat and huckleberry production as part of the Muckleshoot Settlement Agreement. The Restoration Thinning program requires cutting young trees to reduce tree density and improve long-term habitat value. These cut trees are typically left on the ground to decay, and the thinning has resulted in persistent slash in several watershed locations. This slash presents an obstacle to wildlife movement, impedes understory plant growth, and increases wildfire risk. This project treats the slash using a variety of methods (cut and pile, mulch, and/or remove) in key areas to improve wildlife movement, understory plant growth, and reduce fire hazard. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	223	174	90	93	0	0	0	580
Project Total:	0	223	174	90	93	0	0	0	580
Fund Appropriations/Allocations									
Water Fund	0	223	174	90	93	0	0	0	580
Appropriations Total*	0	223	174	90	93	0	0	0	580
O & M Costs (Savings)			0	0	0	3	3	3	9
Spending Plan		180	174	90	93	0	0	0	537

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

### **Rock Creek Fishway**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2002Project ID:C101008End Date:4th Quarter 2010

**Location:** Lake Youngs

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

In 2000, SPU received notification from the Washington Department of Fish and Wildlife that the culvert crossing under the Lake Youngs Aqueduct on Rock Creek, approximately 3.5 miles north of Landsburg, does not comply with existing fish passage requirements. This project is planned to meet requirements: an independent consultant assessment of the nature and magnitude of fish passage impairment at the current structure; conceptual development of a range of improvement options for the facility; and design, permitting, and construction of the selected improvement option. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	440	1,640	180	14	14	0	0	0	2,288
Project Total:	440	1,640	180	14	14	0	0	0	2,288
Fund Appropriations/Allocations									
Water Fund	440	1,640	180	14	14	0	0	0	2,288
Appropriations Total*	440	1,640	180	14	14	0	0	0	2,288
O & M Costs (Savings)			0	0	0	3	3	3	8
Spending Plan		1,750	180	14	14	0	0	0	1,958

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

### **Seattle Direct Service Additional Conservation**

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C1505End 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 program assists low-income households with installing water-efficient fixtures, such as toilets, showerheads, clothes washers, and faucets. The program implements Ordinance 120532, adopted in 2001, and supplements funding provided under SPU's Regional Water Conservation Program (C1504). Council directed SPU to provide additional funding for measures to reduce personal and commercial water consumption in SPU's direct service area. The project is designed in three phases. Phase One targets low-income housing providers; Phase Two targets subsidized and non-subsidized low-income households; and Phase Three targets clothes washers and irrigation system upgrades for all low-income households. Accelerated commercial and industrial facility and equipment upgrades are done in all three phases and may include reclaimed water projects if cost effective. The confidence level of the cost estimate is low, since it is dependent on customer response.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	1,751	1,918	1,802	1,991	2,088	37	0	0	9,587
Project Total:	1,751	1,918	1,802	1,991	2,088	37	0	0	9,587
Fund Appropriations/Allocations									
Water Fund	1,751	1,918	1,802	1,991	2,088	37	0	0	9,587
Appropriations Total*	1,751	1,918	1,802	1,991	2,088	37	0	0	9,587
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		1,795	1,802	1,991	2,088	37	0	0	7,713

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

### **Security Improvements - WF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C4113-WFEnd Date:4th Quarter 2012

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This project improves security and protection of SPU's water facilities. Phase one is now substantially complete, with improvements at 23 SPU-occupied sites that significantly 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.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	46	2,379	1,036	1,262	1,293	1,323	1,355	0	8,694
Project Total:	46	2,379	1,036	1,262	1,293	1,323	1,355	0	8,694
Fund Appropriations/Allocations									
Water Fund	46	2,379	1,036	1,262	1,293	1,323	1,355	0	8,694
Appropriations Total*	46	2,379	1,036	1,262	1,293	1,323	1,355	0	8,694
O & M Costs (Savings)			194	194	194	194	194	194	1,164
Spending Plan		1,957	1,036	1,262	1,293	1,323	1,355	0	8,226

#### Seismic Upgrade - Cedar River Pipelines @ Ginger Creek

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:1st Quarter 1999Project ID:C197032End Date:1st Quarter 2008

**Location:** Lake Youngs Wy. SE & Kirkland Wy. SE (Renton)

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

This project upgrades support systems for Cedar River Pipelines 1, 2, and 3 where they cross a boggy area at Ginger Creek so they can better withstand and remain operational after a medium-to-large earthquake. The confidence in the cost estimates is high, and SPU's Asset Management Committee has approved the project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	1,710	5	1	0	0	0	0	0	1,716
Project Total:	1,710	5	1	0	0	0	0	0	1,716
Fund Appropriations/Allocations									
Water Fund	1,710	5	1	0	0	0	0	0	1,716
<b>Appropriations Total*</b>	1,710	5	1	0	0	0	0	0	1,716
O & M Costs (Savings)			0	9	9	9	9	9	43
Spending Plan		100	0	0	0	0	0	0	100

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

### Seismic Upgrade - Pipeline Backbone

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

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101038End 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 makes seismic improvements to the water distribution system to better ensure water availability following an earthquake. The program includes seismic vulnerability and hydraulic modeling of the system to determine pipeline vulnerabilities, earthquake failure effects on the system, and cost-effective mitigation approaches. For budgeting purposes, it is anticipated that approximately 20 isolation valves will be installed at various locations to prevent vulnerable pipelines from draining the system. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	407	51	765	1,657	580	0	0	0	3,460
Project Total:	407	51	765	1,657	580	0	0	0	3,460
Fund Appropriations/Allocations									
Water Fund	407	51	765	1,657	580	0	0	0	3,460
Appropriations Total*	407	51	765	1,657	580	0	0	0	3,460
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan		75	765	1,657	580	0	0	0	3,077

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

### Seismic Upgrade - Tanks

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

Project Type:Improved FacilityStart Date:4th Quarter 1994Project ID:C1120End Date:4th Quarter 2011

Location: Citywide

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This project makes seismic upgrades or replaces above-ground water tanks to improve their performance under seismic conditions and eliminate the risk of major failures. Typical upgrades include improving anchorage and foundations for standpipes, and adding seismic isolators and strengthening braces for elevated tanks supported on steel pillars. This project has been approved by SPU's Asset Management Committee. This project is in a preliminary phase of development for the years beyond 2008, and cost estimates will be revised over time.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	1,349	3,510	690	300	300	551	300	0	7,000
Project Total:	1,349	3,510	690	300	300	551	300	0	7,000
Fund Appropriations/Allocations									
Water Fund	1,349	3,510	690	300	300	551	300	0	7,000
Appropriations Total*	1,349	3,510	690	300	300	551	300	0	7,000
O & M Costs (Savings)			0	0	0	0	31	31	61
Spending Plan		4,792	690	11	0	551	0	0	6,044

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

### Sound Transit - Airport Link - WF

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2007Project ID:C4111-WFEnd Date:4th Quarter 2008

Location: South 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, replaces, and protects water-related facilities affected by the extension of the Sound Transit Central Link light rail system to SeaTac Airport. This extension is located in Tukwila but will impact one or more water transmission lines. Sound Transit's project will first construct an electric light rail system on an over 14-mile alignment from the Convention Place Station to S. 154th Street near Seattle/Tacoma International Airport. The second segment will progress from the Convention Place Station to Northgate.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	3	63	28	0	0	0	0	0	94
Project Total:	3	63	28	0	0	0	0	0	94
Fund Appropriations/Allocations Water Fund	3	63	28	0	0	0	0	0	94
Appropriations Total*	3	63	28	0	0	0	0	0	94
O & M Costs (Savings)			0	50	50	50	50	50	250

#### Sound Transit - University Link - WF

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2007Project ID:C4110-WFEnd Date:4th Quarter 2009

**Location:** North Seattle

Neighborhood Plan: In more than one Plan Neighborhood Plan Matrix: Multiple

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

This program relocates or replaces water-related facilities affected by the extension of the Sound Transit Central Link light rail system to the University District. Sound Transit's project will first construct an electric light rail system on an over 14-mile alignment from the Convention Place Station to S. 154th Street near Seattle/Tacoma International Airport. The second segment will progress from the Convention Place Station to Northgate.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	5	49	122	120	0	0	0	0	296
Project Total:	5	49	122	120	0	0	0	0	296
Fund Appropriations/Allocations									
Water Fund	5	49	122	120	0	0	0	0	296
Appropriations Total*	5	49	122	120	0	0	0	0	296
O & M Costs (Savings)			0	0	50	50	50	50	200

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

### **Sound Transit - Water Betterment**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C405430End Date:4th Quarter 2012

**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 project improves water mains and appurtenances (hydrants, valves, coatings, cathodic protection, etc.) related to Sound Transit's light rail projects. These improvements are "opportunity" projects that become available and cost effective as Sound Transit constructs light rail and rebuilds the street right-of-way. Sound Transit's project will first construct an electric light rail system on an over 14-mile alignment from the Convention Place Station to S. 154th Street near Seattle/Tacoma International Airport. The second segment will progress from the Convention Place Station to Northgate.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	1,195	410	431	833	1,025	992	1,016	0	5,902
Project Total:	1,195	410	431	833	1,025	992	1,016	0	5,902
Fund Appropriations/Allocations									
Water Fund	1,195	410	431	833	1,025	992	1,016	0	5,902
Appropriations Total*	1,195	410	431	833	1,025	992	1,016	0	5,902
O & M Costs (Savings)			0	60	60	60	60	60	300

### **Sound Transit Central Link - WF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2003Project ID:C4104-WFEnd Date:4th Quarter 2008

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

Neighborhood Plan: In more than one Plan Neighborhood Plan Matrix: Multiple

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

This program relocates or replaces water-related facilities affected by Sound Transit's Central Link Project. Sound Transit is constructing 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 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.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	3,752	612	369	0	0	0	0	0	4,733
Project Total:	3,752	612	369	0	0	0	0	0	4,733
Fund Appropriations/Allocations									
Water Fund	3,752	612	369	0	0	0	0	0	4,733
Appropriations Total*	3,752	612	369	0	0	0	0	0	4,733
O & M Costs (Savings)			0	0	0	50	50	50	150

### South Fork Tolt Large Woody Debris Replacement

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104057End Date:4th Quarter 2011

**Location:** South Fork Tolt River

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 improves fish habitat on the South Fork Tolt River. The 1989 Tolt Settlement Agreement for the federal relicensing of the South Fork Tolt Dam obligated SPU to conduct this work, under the management of the interagency Tolt Fish Advisory Committee (TFAC). In 2004, TFAC approved a project to place large woody debris in the South Fork Tolt River, which was completed in October 2005. This project improved habitat conditions for salmon and steelhead in the river and utilized approximately \$88,000 of SPU's total \$210,000 funding obligation (in 2004 dollars). Remaining funds will be spent when TFAC identifies and implements additional project(s). The confidence level of the cost estimate is high, but the timing is uncertain.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	88	3	3	63	65	26	0	0	248
Project Total:	88	3	3	63	65	26	0	0	248
Fund Appropriations/Allocations									
Water Fund	88	3	3	63	65	26	0	0	248
Appropriations Total*	88	3	3	63	65	26	0	0	248
O & M Costs (Savings)			0	0	0	0	1	1	2
Spending Plan		0	3	63	65	26	0	0	157

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

### South Lake Union - WF

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C4114-WFEnd Date:4th Quarter 2009

**Location:** South Lake Union

Neighborhood Plan:South Lake UnionNeighborhood Plan Matrix:N/ANeighborhood District:Lake UnionUrban Village:South Lake Union

This project relocates or replaces watermains, hydrants, water services, and transmission lines affected by Citysponsored projects in the South Lake Union Area. This effort identifies SPU water system direct impacts, opportunities for system improvements, and cost responsibility. This project also funds planning-level coordination with other City departments on projects within the South Lake Union area. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	150	139	16	0	0	0	0	305
Project Total:	0	150	139	16	0	0	0	0	305
<b>Fund Appropriations/Allocations</b> Water Fund	0	150	139	16	0	0	0	0	305
Appropriations Total*	0	150	139	16	0	0	0	0	305
O & M Costs (Savings)			0	0	2	2	2	2	6

### **South Lander Grade Separation - WF**

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2008Project ID:C408S03 - WFEnd Date:4th Quarter 2011

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

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

This project protects and/or replaces water assets affected by SDOT work to create a grade-separated crossing of the railroad tracks on S. Lander, south of downtown. The project is part of Bridging the Gap and needs to be completed prior to demolition of the Alaskan Way Viaduct. SDOT plans to begin construction in mid 2009. The project will impact a 16" watermain between Occidental Ave S and 3rd Ave S. Costs, scheduling and contracting modes are in preliminary planning stages. SPU will consider options including replacement, abandonment or protection in place.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	0	102	104	107	109	0	0	422
Project Total:	0	0	102	104	107	109	0	0	422
Fund Appropriations/Allocations									
Water Fund	0	0	102	104	107	109	0	0	422
Appropriations Total*	0	0	102	104	107	109	0	0	422
O & M Costs (Savings)			0	0	0	0	2	2	4

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

### **Spokane Street Viaduct - WF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2007Project ID:C407023-WFEnd Date:4th Quarter 2008

Location: Spokane Street Viaduct

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:West Seattle Junction

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	132	1,527	0	0	0	0	0	1,659
Project Total:	0	132	1,527	0	0	0	0	0	1,659
Fund Appropriations/Allocations									
Water Fund	0	132	1,527	0	0	0	0	0	1,659
Appropriations Total*	0	132	1,527	0	0	0	0	0	1,659
O & M Costs (Savings)			0	50	50	50	50	50	250

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

### SR 519 Interchange - WF

BCL/Program Name: Shared Cost Projects BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2008Project ID:C408S04 - WFEnd Date:4th Quarter 2011

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

Neighborhood Plan:DuwamishNeighborhood Plan Matrix:N/ANeighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	0	102	104	107	109	0	0	422
Project Total:	0	0	102	104	107	109	0	0	422
Fund Appropriations/Allocations									
Water Fund	0	0	102	104	107	109	0	0	422
Appropriations Total*	0	0	102	104	107	109	0	0	422
O & M Costs (Savings)			0	0	0	0	2	2	4

### SR-520 Bridge Replacement - WF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2007Project ID:C407021-WFEnd Date:4th Quarter 2020

**Location:** SR 520

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:University Campus

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

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

### **Stream & Riparian Restoration**

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type: Rehabilitation or Restoration Start Date: 2nd Quarter 2000

Project ID: C1602 End Date: Ongoing

Location: Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program restores fish and wildlife habitats in the Cedar River Watershed that have been degraded by past activities, such as logging and road construction. It is part of the Cedar River Habitat Conservation Plan (HCP) and includes streambank stabilization, streamside revegetation, large woody debris placement, conifer under-planting, riparian thinning, stream-crossing projects to improve flow, stream-crossing improvements to reestablish fish passage, and bull trout habitat studies. SPU's Asset Management Committee has approved the HCP at the program level. The confidence level for this project cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	3,374	955	738	759	606	657	592	433	8,114
Project Total:	3,374	955	738	759	606	657	592	433	8,114
Fund Appropriations/Allocations									
Water Fund	3,374	955	738	759	606	657	592	433	8,114
Appropriations Total*	3,374	955	738	759	606	657	592	433	8,114
O & M Costs (Savings)			41	41	41	41	41	41	243
Spending Plan		504	738	759	606	657	592	433	4,289

#### **Tolt Bridges**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2004Project ID:C1308End Date:4th Quarter 2009

**Location:** Tolt River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project replaces two remaining stream crossings with bridges in the Tolt River Watershed. A cost/benefit analysis determined that access is needed on these roads, and the existing crossings are undersized for stream conditions, posing a risk of road failure with associated safety and environmental risks. The confidence level of the current cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	230	6	85	263	0	0	0	0	584
Project Total:	230	6	85	263	0	0	0	0	584
Fund Appropriations/Allocations									
Water Fund	230	6	85	263	0	0	0	0	584
Appropriations Total*	230	6	85	263	0	0	0	0	584
O & M Costs (Savings)			3	3	3	3	3	3	18
Spending Plan		0	0	0	0	0	0	0	0

#### Tolt Pipeline 2 II & III East of Tieline

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:3rd Quarter 1987Project ID:C100084End 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

The project constructed portions of Tolt Pipeline No. 2 between the Trilogy Development and Duvall. It is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence level in the cost estimate is high. SPU's Asset Management Committee has approved the project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	28,239	11	11	11	11	0	0	0	28,283
Project Total:	28,239	11	11	11	11	0	0	0	28,283
<b>Fund Appropriations/Allocations</b>									
Water Fund	28,239	11	11	11	11	0	0	0	28,283
Appropriations Total*	28,239	11	11	11	11	0	0	0	28,283
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan		22	11	11	11	0	0	0	55

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

### Tolt Pipeline 2 II & III West of Tieline

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:3rd Quarter 1987Project ID:C100083End Date:4th Quarter 2008

**Location:** Various

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

The project constructed portions of Tolt Pipeline No. 2 between Redmond's Education Hill neighborhood and the Trilogy Development. It is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence level in the cost estimate is high. SPU's Asset Management Committee has approved the project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	26,418	1	5	0	0	0	0	0	26,424
Project Total:	26,418	1	5	0	0	0	0	0	26,424
Fund Appropriations/Allocations									
Water Fund	26,418	1	5	0	0	0	0	0	26,424
Appropriations Total*	26,418	1	5	0	0	0	0	0	26,424
O & M Costs (Savings)			20	20	20	20	20	20	120
Spending Plan		5	5	0	0	0	0	0	10

#### Tolt Pipeline I - Phase 3 - B

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 1999Project ID:C199003End Date:4th Quarter 2011

**Location:** Tolt Pipeline

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 replaced one mile of the original Tolt Pipeline No. 1 spanning the Snoqualmie Valley where it was weakened by corrosion. It is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence level in the cost estimate is high. SPU's Asset Management Committee has approved the project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	5,249	6	0	2	2	2	0	0	5,261
Project Total:	5,249	6	0	2	2	2	0	0	5,261
<b>Fund Appropriations/Allocations</b>									
Water Fund	5,249	6	0	2	2	2	0	0	5,261
<b>Appropriations Total*</b>	5,249	6	0	2	2	2	0	0	5,261
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan		5	0	2	2	2	0	0	11

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

### Tolt Pipeline II - Phase 4

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:1st Quarter 1995Project ID:C194029End Date:1st Quarter 2008

**Location:** Tolt Pipeline Right of Way

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

The project constructed portions of Tolt Pipeline No. 2 between Woodinville and Lake Forest Park. It is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence level in the cost estimate is high. SPU's Asset Management Committee has approved the project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	28,735	8	1	0	0	0	0	0	28,744
Project Total:	28,735	8	1	0	0	0	0	0	28,744
Fund Appropriations/Allocations									
Water Fund	28,735	8	1	0	0	0	0	0	28,744
Appropriations Total*	28,735	8	1	0	0	0	0	0	28,744
O & M Costs (Savings)			24	24	25	27	29	29	158
Spending Plan		8	0	0	0	0	0	0	8

#### **Tolt River Watershed Road Improvements**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 1996Project ID:C196007End Date:4th Quarter 2012

Location: Tolt Watershed

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

This project improves the forest roads in the South Fork Tolt River Watershed to comply with Washington State Department of Natural Resources Forest Practices Act standards, and to minimize erosion and sediment loading into creeks and the South Fork Tolt reservoir. Improvements include regrading, replacing inadequate culverts and cross drains, installing a stable rock base, and capping with finer rock. The confidence level of the cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	1,643	177	192	126	129	132	135	0	2,534
Project Total:	1,643	177	192	126	129	132	135	0	2,534
Fund Appropriations/Allocations									
Water Fund	1,643	177	192	126	129	132	135	0	2,534
Appropriations Total*	1,643	177	192	126	129	132	135	0	2,534
O & M Costs (Savings)			0	0	0	0	0	13	13
Spending Plan		88	192	126	129	132	135	0	802

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

### **Tolt Watershed Management Plan**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C105083End Date:4th Quarter 2008

**Location:** Tolt River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project develops a Tolt Watershed Management Plan to bring operations in the Tolt municipal watershed area into alignment with the operation of other major watershed facilities, and to provide guidance for a wide array of management activities into the future. Major elements addressed in the plan include forestland management, facility security and protection, road maintenance and operations, and fish and wildlife management. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	341	219	161	0	0	0	0	0	721
Project Total:	341	219	161	0	0	0	0	0	721
Fund Appropriations/Allocations									
Water Fund	341	219	161	0	0	0	0	0	721
Appropriations Total*	341	219	161	0	0	0	0	0	721
O & M Costs (Savings)			0	4	4	4	4	4	18
Spending Plan		377	161	0	0	0	0	0	538

#### **Transmission Pipelines Rehabilitation**

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2005

Project ID: C1207 End Date: Ongoing

**Location:** Citywide

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

This program rehabilitates and upgrades water transmission pipes as deficiencies are identified. The confidence level of the current cost estimate is low. SPU's Asset Management Committee review is not required as it is an ongoing program. The id number for this program was C1127 in the 2007-2012 Adopted CIP.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	44	689	1,145	1,051	1,077	1,103	1,129	1,157	7,395
Project Total:	44	689	1,145	1,051	1,077	1,103	1,129	1,157	7,395
Fund Appropriations/Allocations									
Water Fund	44	689	1,145	1,051	1,077	1,103	1,129	1,157	7,395
Appropriations Total*	44	689	1,145	1,051	1,077	1,103	1,129	1,157	7,395
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan		200	1,145	1,051	1,077	1,103	1,129	0	5,705

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

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

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2007

Project ID: C107018 End Date: Ongoing

Location: Various

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

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

This project plans, designs, and constructs minor water quality and treatment facility rehabilitation and improvement projects on an ongoing basis. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	106	154	158	162	165	169	173	1,087
Project Total:	0	106	154	158	162	165	169	173	1,087
Fund Appropriations/Allocations									
Water Fund	0	106	154	158	162	165	169	173	1,087
Appropriations Total*	0	106	154	158	162	165	169	173	1,087
O & M Costs (Savings)			5	5	5	5	5	5	33
Spending Plan		65	154	158	162	165	169	173	1,046

### **Upland Reserve Forest Restoration**

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type: Rehabilitation or Restoration Start Date: 2nd Quarter 2000

Project ID: C1603 End Date: Ongoing

Location: Cedar River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program, part of the Cedar River Habitat Conservation Plan (HCP), conducts restoration planting and restoration and ecological thinning within previously-harvested upland forests. Planting occurs in selected areas of forest to promote the development of more natural and diverse ecological communities of vegetation. Restoration thinning reduces the density of trees to encourage tree growth. Ecological thinning accelerates the development of characteristics of mature forests. Work also includes marbled murrelet surveys and forest inventory and modeling. The inventory is used to plan restoration work, and the modeling is used to project effects of restoration treatments in development of the forest over time. SPU's Asset Management Committee has approved the HCP at the program level. The confidence level for this cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	3,753	831	658	701	722	742	695	661	8,763
Project Total:	3,753	831	658	701	722	742	695	661	8,763
Fund Appropriations/Allocations									
Water Fund	3,753	831	658	701	722	742	695	661	8,763
Appropriations Total*	3,753	831	658	701	722	742	695	661	8,763
O & M Costs (Savings)			44	44	44	44	44	44	263
Spending Plan		820	658	701	722	742	695	661	4,999

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

### <u>Utility Relocation due to Alaskan Way Viaduct and Seawall Replacement - WF</u>

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C4102-WFEnd Date:4th Quarter 2017

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

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

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	337	2,117	257	320	0	0	0	0	3,031
Project Total:	337	2,117	257	320	0	0	0	0	3,031
<b>Fund Appropriations/Allocations</b>									
Water Fund	337	2,117	257	320	0	0	0	0	3,031
Appropriations Total*	337	2,117	257	320	0	0	0	0	3,031
O & M Costs (Savings)			0	0	0	0	0	0	0

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

### Water Design Standards & Guideline Program

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2002Project ID:C102028End 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 creates detailed design standards for various types of water facilities in order to streamline future design efforts, reduce costs, and increase the quality of future facilities. The confidence level in the cost estimate is high. SPU's Asset Management Committee has approved the project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	399	275	115	0	0	0	0	0	789
Project Total:	399	275	115	0	0	0	0	0	789
Fund Appropriations/Allocations	200	275	115	0	0	0	0	0	700
Water Fund	399	275	115	0	0	0	0	0	789
Appropriations Total*	399	275	115	0	0	0	0	0	789
O & M Costs (Savings)			0	4	4	4	4	4	20
Spending Plan		420	115	0	0	0	0	0	535

#### Water Infrastructure - Hydrant Replacement/Relocation

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

Project Type: Rehabilitation or Restoration Start Date: 4th Quarter 1998

Project ID: C1110 End Date: Ongoing

Location: Citywide

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

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

This program replaces older and damaged hydrants to ensure a reliable and adequate supply of water for fire protection. The Seattle Fire Department provides SPU with information on hydrants that are found to be malfunctioning. Other repairs or replacements occur when hydrants are damaged by vehicles. On average, SPU repairs or replaces between seven and 25 hydrants per year. Cost estimates are revised over time, reflecting uncertainty about how many hydrants will be found to be malfunctioning in a given year. The SPU Asset Management Committee has approved the project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	1,536	163	425	436	447	458	468	480	4,413
Project Total:	1,536	163	425	436	447	458	468	480	4,413
Fund Appropriations/Allocations									
Water Fund	1,536	163	425	436	447	458	468	480	4,413
Appropriations Total*	1,536	163	425	436	447	458	468	480	4,413
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan		415	425	436	447	458	468	480	3,129

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

### Water Infrastructure - New Hydrants

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

Project Type: New Facility Start Date: 2nd Quarter 1999

Project ID: C1112 End Date: Ongoing

**Location:** Citywide

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

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

This program provides new fire hydrants citywide. The number of new hydrants installed each year varies with demand. The confidence level of the cost estimate is medium, as the Seattle Fire Department determines the number of hydrants that should be added. The project has been approved by the SPU Asset Management Committee.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	105	102	131	135	138	141	144	896
Project Total:	0	105	102	131	135	138	141	144	896
Fund Appropriations/Allocations									
Water Fund	0	105	102	131	135	138	141	144	896
Appropriations Total*	0	105	102	131	135	138	141	144	896
O & M Costs (Savings)			1	1	1	1	1	1	6
Spending Plan		125	102	131	135	138	141	144	916

#### Water Infrastructure - New Taps

BCL/Program Name:DistributionBCL/Program Code:C110BProject Type:New FacilityStart Date:4Q/1998Project ID:C1113End 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 new connections to existing watermains with no interruption of service to adjacent existing customers (watermain taps), and the installation of metered water service lines from the new tap to the new customers' property lines. SPU's approach is to respond to customers' requests for new water services and to coordinate this work with other water utility work needed at the site of the subject development. If this work were not accomplished, new structures could not be completed or occupied. The confidence level of the current cost estimate is medium as the number of taps depends on customer requests. SPU's Asset Management Committee has approved this project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	3,209	5,474	8,500	6,836	7,004	7,168	7,337	7,511	53,039
Project Total:	3,209	5,474	8,500	6,836	7,004	7,168	7,337	7,511	53,039
Fund Appropriations/Allocations									
Water Fund	3,209	5,474	8,500	6,836	7,004	7,168	7,337	7,511	53,039
Appropriations Total*	3,209	5,474	8,500	6,836	7,004	7,168	7,337	7,511	53,039
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan		7,000	8,500	6,836	7,004	7,168	7,337	7,511	51,356

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

### Water Infrastructure - Service Renewal

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

Project Type: Rehabilitation or Restoration Start Date: 4th Ouarter 1998

Project ID: C1109 End Date: Ongoing

Location: Citywide

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

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

This project replaces water service lines that are prone to failure due to their age or pipe material characteristics, and disconnects and retires water service lines that are no longer needed by customers due to changes in property use. SPU's approach is to preemptively replace water services in those settings where water service leakage would require an unusually costly reactive replacement. This project also provides reactive replacement of services that develop leaks and are likely to develop additional leaks. If water service line replacement work were not to occur, leakage on aging or obsolete water service pipes could not be prevented or eliminated. Each leak incident would need to be addressed separately with individual repair visits, repeated pavement openings, and multiple instances of citizen inconvenience. If unneeded water service lines were not disconnected from the active distribution system, then their aging and their lack of visibility would result in leakage and instances of unintended damage during future utility excavation work. The confidence level of the current cost estimate is high. SPU's Asset Management Committee has approved this project.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	58	6,099	5,478	6,310	6,466	6,616	6,773	6,933	44,733
Project Total:	58	6,099	5,478	6,310	6,466	6,616	6,773	6,933	44,733
Fund Appropriations/Allocations Water Fund	58	6,099	5,478	6,310	6,466	6,616	6,773	6,933	44,733
Appropriations Total*	58	6,099	5,478	6,310	6,466	6,616	6,773	6,933	44,733
O & M Costs (Savings)			10	10	10	10	10	10	60

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

### Water Infrastructure - Watermain Extensions

BCL/Program Name:DistributionBCL/Program Code:C110BProject Type:New FacilityStart Date:OngoingProject ID:C1111End 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 assists private developers to install new standard watermains and fire hydrants that serve properties being developed or re-developed. Once constructed and commissioned, new watermains are turned over to SPU to own, operate, and maintain. Costs incurred by SPU under this program are almost fully reimbursed by the parties triggering the need for the new watermains. The confidence level of the current cost estimate is medium. The program has been approved by SPU's Asset Management Committee.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	253	1,167	592	1,052	1,078	1,103	1,129	1,156	7,530
Project Total:	253	1,167	592	1,052	1,078	1,103	1,129	1,156	7,530
Fund Appropriations/Allocations									
Water Fund	253	1,167	592	1,052	1,078	1,103	1,129	1,156	7,530
Appropriations Total*	253	1,167	592	1,052	1,078	1,103	1,129	1,156	7,530
O & M Costs (Savings)			5	5	5	5	5	5	30
Spending Plan		1,000	592	1,052	1,078	1,103	1,129	1,156	7,110

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

### **Water Quality Equipment**

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C107020End 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 purchases and installs on-line water quality monitoring equipment to increase Seattle's capacity to detect and rapidly respond to drinking water contamination events. SPU is actively investigating methods to improve the drinking water quality security and surveillance system. This project would allow for continued improvements. Collaborative research between SPU and United States Environmental Protection Agency (USEPA) will yield specific recommendations for online monitoring equipment (quantity and suggested locations) in 2007. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	166	102	5	0	0	0	0	273
Project Total:	0	166	102	5	0	0	0	0	273
Fund Appropriations/Allocations									
Water Fund	0	166	102	5	0	0	0	0	273
Appropriations Total*	0	166	102	5	0	0	0	0	273
O & M Costs (Savings)			32	32	33	34	35	35	201
Spending Plan		120	102	5	0	0	0	0	227

#### **Water Resources Project Development**

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type: Improved Facility Start Date: 1st Quarter 2005

Project ID: C105100 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 develops potential new projects in SPU's Water Resources Business Area through the preparation of technical evaluation, cost benefit analysis, and the initial Project Development Plan (PDP1). The scope and costs are refined as the project progresses to the preliminary engineering phase.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	397	102	113	113	108	121	128	0	1,082
Project Total:	397	102	113	113	108	121	128	0	1,082
Fund Appropriations/Allocations									
Water Fund	397	102	113	113	108	121	128	0	1,082
Appropriations Total*	397	102	113	113	108	121	128	0	1,082
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		480	113	113	108	121	128	0	1,063

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

### Water Supply Flexibility Program

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:New InvestmentStart Date:1st Quarter 2008Project ID:C1507End Date:4th Quarter 2010

Location: Multiple

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This program provides water supply flexibility by addressing critical water resource management issues, and is grouped into five categories: drought and flood mitigation; improved environmental performance; legal, regulatory and policy issues; emergency response; and future supply uncertainties. This program includes projects C104016, C197009, and C1AA012 which were previously listed separately in the 2007-2012 Adopted CIP.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	0	438	841	862	0	0	0	2,141
Project Total:	0	0	438	841	862	0	0	0	2,141
Fund Appropriations/Allocations									
Water Fund	0	0	438	841	862	0	0	0	2,141
Appropriations Total*	0	0	438	841	862	0	0	0	2,141
O & M Costs (Savings)			5	5	10	10	10	10	50

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

### **Water System Dewatering**

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2007

Project ID: C1205 End Date: Ongoing

**Location:** Regional

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This program improves the configuration of approximately 200 blowoffs as the need arises. Blowoffs are valves and piping located at low points in water pipelines used to drain or flush the line for emergency or maintenance operations. The program's goals include: eliminating or minimizing flooding damage to downstream private property due to blowoff operations; addressing the discharge of water into sensitive streams; requiring monitoring and treatment for impacts due to chlorine, pH, and turbidity; eliminating possible cross-connections; and addressing improvements to water courses to reduce erosion or other damage caused by blowoff operations. The programmatic approach and criteria have been approved by SPU's Asset Management Committee. The confidence level of the cost estimate is medium. The id number for this program was C1105 in the 2007-2012 Adopted CIP.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	320	34	14	158	162	165	169	174	1,196
Project Total:	320	34	14	158	162	165	169	174	1,196
Fund Appropriations/Allocations									
Water Fund	320	34	14	158	162	165	169	174	1,196
Appropriations Total*	320	34	14	158	162	165	169	174	1,196
O & M Costs (Savings)			5	5	5	5	5	5	31
Spending Plan		91	14	158	162	165	169	0	759

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

### Water System Plan - 2013

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:New InvestmentStart Date:3rd Quarter 2009Project ID:C113001End Date:3rd Quarter 2013

Location: N/A

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

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

This project conducts an environmental review and updates the 2013 Comprehensive Water System Plan. State regulations require water utilities to submit a new comprehensive water system plan every six years as a condition of state utility operating permit renewal. 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.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	0	0	49	99	465	770	23	1,406
Project Total:	0	0	0	49	99	465	770	23	1,406
Fund Appropriations/Allocations									
Water Fund	0	0	0	49	99	465	770	23	1,406
Appropriations Total*	0	0	0	49	99	465	770	23	1,406
O & M Costs (Savings)			0	0	0	0	0	0	0

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

### **Watermain Rehabilitation**

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

Project Type: Rehabilitation or Restoration Start Date: 1st Ouarter 2004

Project ID: C1129 End Date: Ongoing

Location: Regional

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

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

This program replaces and rehabilitates watermain pipelines. The program utilizes asset management principles to provide sustainability of the watermain distribution system infrastructure at the lowest life-cycle costs. Pipes are replaced when the cost of continued repairs exceeds the replacement cost. Alternative methods of rehabilitation, such as clean and cement mortar lining, are utilized when appropriate to provide a more cost-effective option while reducing the impacts to the surrounding community. Other customer levels of service, such as pressure and fire flow, may drive watermain improvements, either by regulation or where cost effective. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	3,840	1,118	1,141	4,207	4,310	4,411	4,515	5,200	28,742
Project Total:	3,840	1,118	1,141	4,207	4,310	4,411	4,515	5,200	28,742
Fund Appropriations/Allocations Water Fund	3,840	1,118	1,141	4,207	4,310	4,411	4,515	5,200	28,742
Appropriations Total*	3,840	1,118	1,141	4,207	4,310	4,411	4,515	5,200	28,742
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan		1,178	1,141	4,207	4,310	4,411	4,515	5,200	24,962

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

### Watershed Emergency/Opportunity

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C107004End Date:4th Quarter 2013

Location: Cedar & Tolt River Watershed

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project provides limited funding for small, unanticipated capital projects to address emergency requirements and take advantage of opportunities in the Cedar River and Tolt River municipal watersheds. History has shown that such situations arise throughout the year with little advance warning. Examples of emergencies include landslides, windstorms, or other severe weather conditions that cause damage to the watershed. Such events would need immediate assessments regarding whether capital expenditures could be required, and possibly immediate, small-scale restoration actions. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	207	214	158	216	221	226	231	1,473
Project Total:	0	207	214	158	216	221	226	231	1,473
Fund Appropriations/Allocations									
Water Fund	0	207	214	158	216	221	226	231	1,473
Appropriations Total*	0	207	214	158	216	221	226	231	1,473
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		200	214	158	216	221	226	231	1,466

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

### Watershed Road Improvement/Decommissioning

BCL/Program Name: Habitat Conservation Program BCL/Program Code: C160B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2001

Project ID: C1601 End Date: Ongoing

Location: Cedar River Watershed

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

This program improves some roads and decommissions others in conjunction with the Cedar River Habitat Conservation Plan (HCP). The goal is to protect stream and riparian habitats and forest ecosystems. These projects are based on analyses and designs for the control of water flowing on, under, or adjacent to forest roads, and the removal of unstable soils within the road prism. Control of water and unstable soils minimizes sediment delivery to streams from roads, and improves drainage patterns. The SPU Asset Management Committee has approved the HCP at the program level. The confidence level for this cost estimate is high.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	5,445	940	846	780	804	700	727	745	10,987
Project Total:	5,445	940	846	780	804	700	727	745	10,987
Fund Appropriations/Allocations									
Water Fund	5,445	940	846	780	804	700	727	745	10,987
Appropriations Total*	5,445	940	846	780	804	700	727	745	10,987
O & M Costs (Savings)			51	51	51	51	51	51	307
Spending Plan		900	846	780	804	700	727	0	4,757

### **Watershed Vegetation Management Plan**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107015End Date:4th Quarter 2010

Location: Cedar & Tolt River Watershed; Lake Youngs Reserve

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban Village:Not in an Urban Village

This project develops and begins implementation of a plan for the control or eradication of non-native, invasive plants throughout the Cedar and Tolt Municipal Watersheds and the Lake Youngs Reserve. It will also include restoration of native habitats in locations where the invasives occur. This project requires extensive surveys for over 55 non-native plant species that landowners are legally required to control. It also requires testing numerous control and eradication methods for each species, to ensure that only the most cost-effective methods are used over the longer term. This testing will result in a large amount of control work and habitat restoration that will take place during the development of the management plan. The plan will include recommendations for management of invasive plants along powerline rights-of-way within the municipal watersheds.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	0	103	130	127	130	0	0	0	490
Project Total:	0	103	130	127	130	0	0	0	490
Fund Appropriations/Allocations									
Water Fund	0	103	130	127	130	0	0	0	490
Appropriations Total*	0	103	130	127	130	0	0	0	490
O & M Costs (Savings)			0	0	0	85	85	85	255
Spending Plan		195	130	127	130	0	0	0	582

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

### **WSDOT Sound Walls**

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

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104019End Date:4th Quarter 2008

**Location:** I-5/E Roanoke

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:East DistrictUrban Village:Not in an Urban Village

This project responds to impacts on a 20-inch watermain resulting from Washington State Department of Transportation's (WSDOT) planned installation of sound walls along the I-5 corridor. SPU's approach is to work with WSDOT designers to keep the sound wall construction from degrading the service life of this important watermain, and to ensure that the wall foundation will not impede future maintenance and repair of the watermain. If this work were not accomplished, the design and construction of the new sound wall could promote leakage or catastrophic failure of the 20-inch watermain and make associated repairs impossible without partial removal of the new wall. The confidence level of the cost estimate is medium.

	LTD	2007	2008	2009	2010	2011	2012	2013	Total
Revenue Sources									
Water Rates	27	149	41	0	0	0	0	0	217
Project Total:	27	149	41	0	0	0	0	0	217
Fund Appropriations/Allocations									
Water Fund	27	149	41	0	0	0	0	0	217
Appropriations Total*	27	149	41	0	0	0	0	0	217
O & M Costs (Savings)			0	1	1	1	1	1	5
Spending Plan		26	41	0	0	0	0	0	67

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