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:

- 530 miles of sanitary sewers
- 500 miles of storm drains
- 1.000 miles of combined sewers
- 768 pump stations
- 93 permitted combined sewer overflow outfalls
- 277 storm drain outfalls
- 34 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 the CIP to 25% of total CIP costs, by 2007. 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 \$30 million is included in the 2006-2011 Adopted 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 2006-2011 Adopted CIP respond to federal regulations requiring that the City monitor and reduce CSOs. The South Lake Union (SLU) Combined Sewer Overflow King County project coordinated and jointly funded by the City and King County, was completed in 2005 and is in the close-out phase. Other large construction projects identified in the 2001 CSO Reduction Plan are being delayed to realize savings through optimization of the existing facilities prior to construction of large storage projects.
- 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 pending renewal of Seattle's Federal Stormwater Permit. The CIP includes projects to implement both the CDP and the Mayor's Restore Our Waters Strategy to protect Seattle's aquatic environment. The CIP also includes funding from the Cumulative Reserve Subfund for an assessment of City-owned facilities stormwater for code compliance.
- Habitat and 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 and their 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 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 their costs were higher than their 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 their benefits exceeded their costs.

Program Category Summaries

The Drainage and Wastewater CIP totals almost \$42 million in 2006 (including Technology projects funded by the Drainage and Wastewater Fund, displayed in a separate section of this CIP). It is composed of 10 program categories, summarized below. A detailed listing of all projects in the Drainage and Wastewater CIP follows this overview.

Combined Sewer Overflow (CSO): This program contains projects to plan, design, construct, and monitor facilities to control overflows from the combined and partially separated sewer system areas. Of the 105 CSO points, control technologies have been applied to 99. Monitoring of the effectiveness of these controls has resulted in SPU initiating additional work at a number of locations, as noted in the adopted CSO Plan amendment. The adopted CSO Plan amendment also discusses the plan for control of those CSO locations where work has not yet been completed.

Flood Control and Local Drainage: This program makes improvements to the City's drainage system to address flooding and provide neighborhood drainage systems. The program continues SPU's expanded role in addressing flooding and installing natural drainage system projects to reduce runoff and improve water quality in areas without full street improvements. The program provides funds for major drainage projects including the High Point drainage system, the Pinehurst natural drainage system, and the MLK Way/Norfolk St. Storm Improvement project. The program also funds projects identified in the City's neighborhood plans, such as flood control projects in the Thornton Creek and Densmore drainage basins.

General Wastewater: This program funds studies to assess the need for system improvements, projects to improve system capacity and reliability, facility upgrades, equipment purchases, and joint projects with other agencies to improve the wastewater system. For 2006, the Pump Station Improvements program will begin to design and construct projects identified in the Pump Station Rehabilitation Study.

Habitat and Sediments: This program funds sediment remediation studies and analyses as well as cleanup of contaminated sediment sites in which the City is a participant. In 2006, the South Park Soil Project is included in this program. The project funds long-term mitigation of PCB contamination discovered in South Park across the street from the Terminal 117 Superfund Early Action cleanup site. Starting in 2005, as per Ordinance 121796, this program includes the Sediment Remediation – Drainage project.

Other Drainage: This program makes improvements to the City's drainage system through partnerships with other agencies. The program also includes funding for other capital costs, such as heavy equipment, and for projects that improve the efficiency of the overall drainage program. In 2006, the program provides funds for drainage designers for the Seattle Department of Transportation to design the drainage portion of street improvements.

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.

Public Asset Protection: This program makes improvements to the City's drainage system to reduce the risk to City infrastructure (such as roads and utilities) from landslides and to control stormwater runoff on steep hillsides so that stormwater does not contribute to landslides. The program includes funds for projects such as the SW Prescott/Admiral Way and the Burke Gilman/NE 144th landslide mitigation projects.

Sewer Rehabilitation: 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.

Shared Cost Projects: This program includes capital improvement projects that receive funding from multiple SPU funds. In 2006, the program includes funding for the Alaskan Way Viaduct & Seawall, Facility Improvements, the SPU Operations Control Center Upgrade, and Sound Transit Light Rail projects.

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 2006, SPU continues analyzing and evaluating data and systems to move drainage billing from the King County property tax system to the City's drainage billing system.

Anticipated Operating Expenses Associated with Capital Facilities Projects

For most projects in the Drainage and Wastewater CIP, there are no new 2006 operations and maintenance costs, or these costs have not been calculated (N/C). In these cases, the cost impacts of the projects are either insignificant or offset by cost savings realized by other projects.

City Council Changes to the Proposed CIP

In the 2006 budget process, Council adopted a proviso specifying that that no more than \$400,000 appropriated for 2006 in the Drainage and Wastewater Fund's Technology Budget Control Level can be spent to pay for assessing requirements to move the drainage billing system from the King County property tax billing system to the SPU combined utility billing system until authorized by future ordinance.

The Council amended the CIP to add \$300,000 per year to the Aquatic Habitat Matching Grant Project (C353301) for 2007 through 2011.

At the Executive's request, the Council amended the description of the Sound Transit Light Rail – DWF (C4104-DWF) project to reference SPU's plan to participate in preliminary engineering and design by Sound Transit on the North Link system, which is expected to begin in late 2006.

SPU - Drainage & Wastewater

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Combined Sewer Ove	erflow					BCI	L/Prograi	n Code:		C310B
Ballard Combined Sewer Overflow	C303101	0	0	0	0	270	220	552	566	1,608
Capital Planning - CSC Plan Implementation	C305101	0	500	150	566	633	1,002	888	1,183	4,922
CSO Facility Retrofit	C302102	2,083	550	554	513	525	538	1,000	1,025	6,788
CSO Plan Update	C3AA103	1,316	200	550	349	326	420	320	3,300	6,781
CSO Structure Configuration Management	C306101	0	0	100	100	50	0	0	0	250
CSO Wastewater Monitoring	C305102	0	1,085	407	325	419	407	382	355	3,380
Fremont-Wallingford CSO	C303102	0	0	0	513	525	0	0	0	1,038
S Genesee Combined Sewer Overflow	C303103	70	369	325	423	434	1,093	1,104	272	4,090
S Henderson CSO Storage	C304102	31	263	325	377	556	641	2,208	208	4,609
SLU Combined Sewer Overflow - KC	C3AA104	17,031	1,810	400	0	0	0	0	0	19,241
SLU Combined Sewer Overflow Phase 2	C3AA106	5,627	260	10	0	0	0	0	0	5,897
Windermere CSO Storage	C302103	448	249	325	395	521	434	552	272	3,196
Combined Sewer Overflow Total		26,606	5,286	3,146	3,561	4,259	4,755	7,006	7,181	61,800

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Flood Control and Lo	cal Drainage	e				BC	L/Progra	m Code:		C332B
20th Ave. NE Local Drainage	C301317	205	5	5	5	0	0	0	0	220
2500 Fairview Drainage Improvements	C353201	0	105	110	0	0	0	0	0	215
30th Ave. NE/NE 107 St. Drainage Improvements	C343203	114	370	130	0	1	1	0	0	616
3rd Ave. NW & NW 107 St. Natural System	C300329	4,669	77	69	56	0	0	0	0	4,871
4th Ave. S/S Trenton Storm Drain	C353202	0	185	750	1,604	1,713	169	2	2	4,425
Aurora Bridge Drainage	eC363201	0	0	50	0	0	0	0	0	50
Ballard/Fremont Drainage Improvements	C353203	0	60	90	328	32	0	0	0	510
Capital Planning - Flood Control & Local Drainage	C343201	236	370	320	308	394	323	414	426	2,791
Comprehensive Drainage Plan Implementation	C3NW03 2-008	0	0	0	2,463	4,349	10,573	12,950	11,058	41,393
Delridge Way SW/SW Myrtle - DRN	C353204	0	45	60	205	21	0	0	0	331
Drainage Spot Improvements	C333201	507	500	500	513	525	538	552	566	4,201
Eastlake Ave./Galer- Drainage Improvement	C3NW03 2-010	0	0	0	0	0	162	110	0	272
Georgetown Drainage Basin Study	C302311	135	0	50	205	158	27	0	0	575
Greenwood Peat Bog	C333207	167	65	20	21	21	108	22	0	424
High Point Drainage System	C301303	810	1,300	1,100	513	53	54	0	0	3,830
Jackson Park Detention - Phase 2	C399305	10,495	88	110	85	87	89	0	0	10,954
Lake City/NE 92nd Storm Drain	C302312	26	0	0	201	0	0	0	0	227
Lower Densmore Drainage Improvement	C353205	0	225	225	0	0	0	0	0	450
Meadowbrook Outfall Rehabilitation	C353206	0	200	231	1,333	53	0	0	0	1,817
MLK Way/Norfolk St. Storm Improvement	C333205	171	440	183	113	2	2	2	0	913

^{*}Amounts in thousands of dollars

SPU - Drainage & Wastewater

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Flood Control and Lo	cal Drainag	e				BC	L/Progra	m Code:		C332B
N 105th St./Aurora Ave. N - Drainage Improvement	C363203	0	0	150	103	0	0	0	0	253
N 125th & Aurora N Storm Drain	C302313	593	800	575	1,538	1,576	1,615	1,656	1,000	9,353
N 85th St/Greenwood Ave Drainage Improvement	C363204	0	0	150	103	0	0	0	0	253
Natural Drainage System Improvements	C333206	0	320	326	217	1,773	1,092	1,130	1,000	5,858
Northlake Way Drainage	C343202	17	200	300	0	0	0	0	0	517
Northpark Ave. N Drainage Improvement	C3NW03 2-011	0	0	0	51	735	377	28	0	1,191
Outfall Rehab Program - DRN	C353207	0	150	200	154	158	162	166	170	1,160
Pinehurst Natural Drainage System	C333202	1,168	1,698	1,287	91	12	0	0	0	4,256
Piper's Creek - Detention	C399326	296	140	24	41	42	43	44	45	675
Venema Creek Natural Drainage System	C302317	118	250	405	2,300	1,500	0	0	0	4,573
West Seattle Bridge Drainage	C363202	0	0	400	0	0	0	0	0	400
Flood Control and Lo Drainage Total	cal	19,727	7,593	7,820	12,551	13,205	15,335	17,076	14,267	107,574

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BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
General Wastewater						BCI	L/Progran	n Code:		C320B
Design Commission Fees - WW	C301706	0	5	1	5	5	5	6	6	33
Design Standards & Guidelines - WW	C305201	0	51	326	0	0	0	0	0	377
Facility Security Upgrades - WW	C304202	0	16	387	0	0	0	0	0	403
Force Main/Pump Stations Plan	C302204	317	288	142	513	525	538	552	566	3,441
Heavy Equipment Purchases - WW	C300499	1,368	2,410	195	440	684	345	784	804	7,030
Intergovernmental Shares - WW	C305250	0	250	250	256	263	269	276	283	1,847
Madison Valley Infrastructure Improvements	C306201	0	0	1,200	0	0	0	0	0	1,200
Other Agency Opportunity - WW	C305220	0	139	200	410	420	431	442	453	2,495
Outfall Rehab Program - WW	C305203	0	137	10	297	158	162	166	170	1,100
Pump Station Improvements	C305230	0	936	400	1,853	2,095	2,154	2,208	2,263	11,909
S Henderson Street Raincatchers	C305202	0	789	628	0	0	0	0	0	1,417
S Lake Washington Sewer Maintenance Assessment	C303201	0	300	10	0	0	0	0	0	310
Sanitary Sewer Overflow Capacity	C302205	231	350	250	1,025	1,051	1,077	1,104	1,132	6,220
Sewage System Modeling	C3AA206	726	163	225	103	105	108	110	113	1,653
SLU Feasibility Phase 2 - WW	C305221	0	210	660	0	0	0	0	0	870
Small Sewer Improvements	C303299	106	170	160	174	179	183	188	193	1,353
Strategic Asset Management Plan - WW	C303204	73	100	100	0	0	0	0	0	273
Wastewater Plan	C304201	0	530	100	0	0	0	0	0	630
Water Reuse - Wastewater	C301203	208	20	14	0	0	0	0	0	242

^{*}Amounts in thousands of dollars

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
General Wastewater						BCI	L/Prograi	n Code:		C320B
General Wastewater Total		3,029	6,864	5,258	5,076	5,485	5,272	5,836	5,983	42,803
Habitat and Sediment	ss					BCI	L/Prograi	n Code:		C350B
Dallas Ave. S Emergency Soil Removal	C304502	312	0	120	60	0	0	0	0	492
Sediment Remediation - DRN	C305503	0	1,196	2,115	611	287	221	162	166	4,758
Sediment Remediation - WW	C300412	1,786	1,392	985	1,085	320	242	201	206	6,217
South Park Soil Project	C305502	0	768	581	3,949	39	0	0	0	5,337
Habitat and Sediment	ES .	2,098	3,356	3,801	5,705	646	463	363	372	16,804
Total Other Drainage						BCI	L/Prograi	n Code:		C335B
City Facilities Drainage Assessment	C363501	0	0	100	0	0	0	0	0	100
Design Commission Fees - DRN	C301704	0	15	26	8	11	11	11	11	93
Design Standards & Guidelines - DRN	C353501	0	263	130	0	0	0	0	0	393
Facility Security Upgrades - DRN	C3NW03 5-004	0	16	0	0	0	0	0	0	16
GIS System Enhancements	C343502	124	45	45	0	0	0	0	0	214
Heavy Equipment Purchases - DRN	C300399	1,919	477	320	825	1,073	485	706	725	6,530
Intergovernmental Shares - DRN	C353550	0	2,000	2,000	2,050	2,101	2,154	2,208	2,263	14,776
Mobility Improvement	C333514	300	300	300	308	315	323	331	339	2,516
Other Agency Opportunity - DRN	C353520	0	55	400	1,025	1,414	1,077	1,104	1,132	6,207
SLU Feasibility Phase 2 - DRN	C353521	0	185	60	0	0	0	0	0	245
Strategic Asset Management Plan - DRN	C333507	52	40	40	0	0	0	0	0	132
Other Drainage Total		2,395	3,396	3,421	4,216	4,914	4,050	4,360	4,470	31,222

^{*}Amounts in thousands of dollars

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Protection of Beneficia	al Uses					BCI	_/Progran	n Code:		C333B
10718 35th NE Sediment Pond	C302305	522	250	222	615	5	5	0	0	1,619
Aquatic Habitat Matching Grant Project	C353301	0	300	300	300	300	300	300	300	2,100
Beer Sheva Habitat Improvement	C301319	142	65	50	36	68	13	13	13	400
Best Management Practice Program Implementation	C300316	207	75	365	1,025	1,366	1,238	1,214	0	5,490
Bitter Lake Dredging	C3NW03 3-002	0	0	0	410	0	0	0	0	410
Bitter Lake/N 137th Stormwater	C301322	11	200	0	1,743	210	54	55	0	2,273
Capital Planning - Protection of Beneficial Uses	C343301	245	116	70	154	158	162	166	170	1,241
Channel Widening Project	C3NW03 3-013	0	0	0	0	100	100	100	0	300
Creek Flow Control Implementation	C3NW03 3-014	0	0	0	0	1,000	4,000	3,000	5,223	13,223
Creek Sediment Control Program	C353303	0	23	25	103	105	135	138	0	529
Creeks Habitat Complexity Program	C353302	0	75	75	77	79	81	83	85	555
Creeks Hydrology Program	C3NW03 3-005	0	0	0	63	38	194	237	0	532
Creeks Vegetation Program	C353304	0	150	150	154	158	162	166	170	1,110
Fecal Total Maximum Daily Load Feasibility	C343302	1	113	0	256	53	0	0	0	423
Fish Passage Program	C353305	0	27	40	128	425	140	121	124	1,005
Greenwood Water Quality Best Management Practice	C353306	0	40	80	349	0	0	0	0	469
Longfellow Creek- Yancy St Phase 3	C302332	161	64	0	10	0	0	0	0	235
Monitoring System Upgrades	C343303	137	459	103	0	0	0	0	0	699
Salmon Bay Phase 2 Acquisition & Restoration	C333307	419	95	10	0	0	0	0	0	524

^{*}Amounts in thousands of dollars

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Protection of Beneficia	al Uses					BCI	_/Progran	n Code:		C333B
Seattle Housing Authority Integrated Drainage Plan	C363301	0	0	300	500	800	150	50	0	1,800
South Park Water Quality Study	C343304	21	25	10	0	0	0	0	0	56
Stormwater Mitigation Partnership Program	C353309	0	50	50	50	50	50	50	0	300
Taylor Creek Culverts Phase 2	C399315	638	80	315	15	5	5	0	0	1,058
Thornton Creek Water Quality Channel Project		403	6,846	0	0	0	0	0	0	7,249
Water Reuse - Stormwater	C353308	0	50	50	0	0	0	0	0	100
Watershed Base Creek Flow Control	C353310	0	50	150	425	200	200	200	0	1,225
Protection of Beneficia Uses Total	ıl	2,907	9,153	2,365	6,413	5,120	6,989	5,893	6,085	44,925
Public Asset Protection	n					BCI	L/Progran	n Code:		C334B
1500 - 2600 Aurora N Landslide	C363401	0	0	31	62	221	1,077	6	0	1,397
47 SW & SW Maplewood Pl. Landslide	C363402	0	0	50	103	105	576	0	0	834
Burke Gilman/NE 144th Landslide	C301355	350	577	662	715	570	208	0	0	3,082
Capital Planning - Public Asset Protection	C343401	61	175	100	179	184	377	552	566	2,194
Golden Gardens/View Ave. Landslide	C343403	66	50	100	513	677	0	0	0	1,406
Rainier Ave. S/S Carver - Landslide	C353401	0	74	86	57	672	11	0	0	900
Small Landslide Projects	C343402	565	385	409	718	630	646	1,656	1,700	6,709
SW Prescott/Admiral Landslide	C302353	541	765	485	623	541	0	0	0	2,955
Works Progress Administration Drains Study & Repair	C300338	511	250	250	256	263	485	552	566	3,133
Public Asset Protection Total	n	2,094	2,276	2,173	3,226	3,863	3,380	2,766	2,832	22,610

^{*}Amounts in thousands of dollars

SPU - Drainage & Wastewater

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Sewer Rehabilitation						BCI	L/Progra	m Code:		C340B
Minor Facility Upgrades - Rehabilitation	C3AA402	211	80	76	81	110	98	100	103	859
No Dig Pipe & Maintenance Rehabilitation	C3AA403	9,882	785	663	1,531	2,288	2,280	2,008	2,511	21,948
Point Sewer Pipe Rehabilitation - Contract	C303401	965	810	445	1,421	3,071	1,616	1,651	1,533	11,512
Point Sewer Pipe Rehabilitation - Crews	C303402	5,404	3,325	3,200	4,271	4,596	4,947	5,325	4,408	35,476
Sewer Emergency Repairs	C3AA404	2,733	294	500	406	548	490	589	604	6,164
Sewer Full Line Replacements	C300488	35,570	900	416	309	252	254	251	314	38,266
Wastewater Rehabilitation Evaluation	C3AA401	1,261	88	200	96	102	108	114	117	2,086
Sewer Rehabilitation Total		56,026	6,282	5,500	8,115	10,967	9,793	10,038	9,590	116,311

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Shared Cost Projects						ВС	L/Progra	m Code:		C410B
Alaskan Way Viaduct & Seawall	C404201- DWF	263	1,335	1,535	0	0	0	0	0	3,133
Facility Improvements - DWF	C404602- DWF	799	1,055	1,050	0	0	0	0	0	2,904
Fleet Management Study	C405601- DWF	0	54	0	0	0	0	0	0	54
Main Warehouse Improvements - DWF	C406601- DWF	0	0	128	0	0	0	0	0	128
Meter Replacement - DWF	C4101- DWF	3,817	672	597	543	557	571	643	643	8,043
Operational Facilities Plan	C406622- DWF	0	0	260	0	0	0	0	0	260
Operations Control Center Upgrade - DWF	C404501- DWF	164	770	286	108	0	0	0	0	1,328
Seattle Monorail Project - DWF	C404301- DWF	122	400	0	0	0	0	0	0	522
Shared Opportunity Projects - DWF	C405603- DWF	0	100	0	103	105	108	110	110	636
Sound Transit Integrated Drainage Plan	C405001	0	300	300	1,538	162	0	0	0	2,300
Sound Transit Light Rail - DWF	C4104- DWF	490	1,076	498	308	84	3	0	0	2,459
Spoils Yard & Decant Facility - DWF	C404603- DWF	0	10	113	0	0	0	0	0	123
Shared Cost Projects Total		5,655	5,772	4,767	2,600	908	682	753	753	21,890
Department Total		120,537	49,978	38,251	51,463	49,367	50,719	54,091	51,533	465,939

Fund Summary

Fund Name	LTD	2005	2006	2007	2008	2009	2010	2011	Total
SPU Drainage and Wastewater Fund	122,042	52,168	38,251	51,463	49,367	50,719	54,091	51,533	469,634
Department Total	122,042	52,168	38,251	51,463	49,367	50,719	54,091	51,533	469,634

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

10718 35th NE Sediment Pond

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:Improved FacilityStart Date:3rd Quarter 2002Project ID:C302305End Date:4th Quarter 2009

Location: 10718 35th Ave. NE

Neighborhood Plan:North District/Lake CityNeighborhood Plan Matrix: 2B-4Neighborhood District:NorthUrban Village:Not in an Urban Village

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	522	250	222	615	5	5	0	0	1,619
Project Total:	522	250	222	615	5	5	0	0	1,619
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	522	250	222	615	5	5	0	0	1,619
Appropriations Total*	522	250	222	615	5	5	0	0	1,619
O & M Costs (Savings)			0	0	0	0	0	0	0

1500 - 2600 Aurora N Landslide

BCL/Program Name: Public Asset Protection BCL/Program Code: C334B

Project Type:New FacilityStart Date:3rd Quarter 2006Project ID:C363401End Date:1st Quarter 2010

Location: Aurora Ave. N

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	31	62	221	1,077	6	0	1,397
Project Total:	0	0	31	62	221	1,077	6	0	1,397
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	31	62	221	1,077	6	0	1,397
Appropriations Total*	0	0	31	62	221	1,077	6	0	1,397
O & M Costs (Savings)			0	0	0	0	0	0	0

20th Ave. NE Local Drainage

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:Improved FacilityStart Date:3rd Quarter 2001Project ID:C301317End Date:4th Quarter 2007

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

Neighborhood Plan:North District/Lake CityNeighborhood Plan Matrix:MultipleNeighborhood District:NorthUrban Village:Not in an Urban Village

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	205	5	5	5	0	0	0	0	220
Project Total:	205	5	5	5	0	0	0	0	220
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	205	5	5	5	0	0	0	0	220
Appropriations Total*	205	5	5	5	0	0	0	0	220
O & M Costs (Savings)			0	0	3	3	3	3	12

2500 Fairview Drainage Improvements

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353201End Date:4th Quarter 2006

Location: 2500 Fairview Ave. N

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

This project addresses a lack of adequate runoff collection and conveyance at 2500 Fairview Ave. N., an approximately one-acre physical depression. Ponding develops when the existing single catch-basin grate is obstructed or a storm taxes the capacity of the six-inch outfall. The flooding extends across the west roadway shoulder, the southbound shoulder and partially into the northbound lane of Fairview Ave. N. for approximately 300 feet, obstructing traffic and parking. The project removes the existing paved shoulder to collect, detain and convey runoff from the one-acre basin, and replaces the existing brick catch basin with a new, larger structure. Funding to maintain the improvements made by this project will be included in SPU's operating budget. The confidence level for the cost estimate is medium.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	105	110	0	0	0	0	0	215
Project Total:	0	105	110	0	0	0	0	0	215
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	105	110	0	0	0	0	0	215
Appropriations Total*	0	105	110	0	0	0	0	0	215
O & M Costs (Savings)			0	1	1	1	1	1	5

30th Ave. NE/NE 107 St. Drainage Improvements

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C343203End Date:4th Quarter 2009

Location: 10703 30th Ave. NE

Neighborhood Plan: Northgate Neighborhood Plan Matrix: Multiple

Neighborhood District: North Urban Village: Lake City

This project investigates alternatives that upgrade the flow capacity to achieve a 25-year level of service and reduce maintenance costs. The south fork of Thornton Creek (Maple Leaf) and Kramer ditch intersect on the west side of 30th Ave. NE at NE 107th St. and flow beneath 30th Ave. NE through independent channels to converge on the east side of the bridge. A delta forms where the two streams combine as the result of sediment deposition from Thornton Creek. This results in flooding of houses upstream of the culverts. Areas of investigation include ditch widening, installation of larger culverts at selected driveways, and adding berms to protect low lying properties and the possible addition of an overflow line. Funding shown for 2008 through 2009 is for the establishment of landscaping.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	114	370	130	0	1	1	0	0	616
Project Total:	114	370	130	0	1	1	0	0	616
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	114	370	130	0	1	1	0	0	616
Appropriations Total*	114	370	130	0	1	1	0	0	616
O & M Costs (Savings)			0	0	0	0	0	0	0

3rd Ave. NW & NW 107 St. Natural System

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:Improved FacilityStart Date:4th Quarter 2000Project ID:C300329End Date:4th Quarter 2007

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

Neighborhood Plan:Broadview-Bitter Lake-Haller LakeNeighborhood Plan Matrix: A-11Neighborhood District:NorthwestUrban Village: Not in an Urban Village

This project addresses stormwater management using a "natural system" approach that promotes sustainable drainage design. The project minimizes the use of standard engineered stormwater infrastructure, using the unimproved right-of-way as a starting point for design. The project includes construction of an engineered system of stepped pools to detain runoff, filter pollutants and allow maximum opportunity for infiltration; construction of a sidewalk on the south side of 3rd Ave. NW and NW 107th to provide safe pedestrian access to a nearby elementary school; creation of natural drainage system features within the right-of-way; and the use of vegetation as a stormwater management element and for aesthetic appeal. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	4,669	77	69	56	0	0	0	0	4,871
Project Total:	4,669	77	69	56	0	0	0	0	4,871
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	4,669	77	69	56	0	0	0	0	4,871
Appropriations Total*	4,669	77	69	56	0	0	0	0	4,871
O & M Costs (Savings)			0	0	4	4	4	4	16

47 SW & SW Maplewood Pl. Landslide

BCL/Program Name: Public Asset Protection BCL/Program Code: C334B

Project Type:New FacilityStart Date:3rd Quarter 2006Project ID:C363402End Date:4th Quarter 2009

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. SPU Asset Management Committee review is required prior to the start of the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	50	103	105	576	0	0	834
Project Total:	0	0	50	103	105	576	0	0	834
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	50	103	105	576	0	0	834
Appropriations Total*	0	0	50	103	105	576	0	0	834
O & M Costs (Savings)			0	0	0	0	6	6	12

4th Ave. S/S Trenton Storm Drain

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353202End Date:4th Quarter 2011

Location: S Trenton/2nd Ave./5th Ave.

Neighborhood Plan: South Park Neighborhood Plan Matrix: Multiple

Neighborhood District: Greater Duwamish Urban Village: South Park

This project installs approximately 1,760 linear feet of 12-inch storm drain along South Trenton St., 3rd Ave. S and 4th Ave. S, and approximately 2,380 linear feet of 12-inch storm drain 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 S Henderson Street. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	185	750	1,604	1,713	169	2	2	4,425
Project Total:	0	185	750	1,604	1,713	169	2	2	4,425
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	185	750	1,604	1,713	169	2	2	4,425
Appropriations Total*	0	185	750	1,604	1,713	169	2	2	4,425
O & M Costs (Savings)			5	5	5	10	10	10	45

Alaskan Way Viaduct & Seawall

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:4th Quarter 2001Project ID:C404201-DWFEnd Date:4th Quarter 2011

Location: Alaskan Way Viaduct

Neighborhood Plan: Commercial Core Neighborhood Plan Matrix: LT 13

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

This project funds planning, preliminary engineering, and design costs associated with drainage and wastewater utility impacts arising from replacing the Alaskan Way Viaduct and seawall with a new transportation facility. The Alaskan Way Viaduct is part of State Route 99, which carries 25% of the north-south traffic through downtown Seattle and is a major truck route serving the City's industrial areas. The seawall supports the soils under Alaskan Way and the Viaduct. Both facilities were damaged in the February 28, 2001 Nisqually Earthquake. The Federal Highway Administration (FHWA), the Washington State Department of Transportation (WSDOT) and the City of Seattle are partners on the project. WDSOT, in conjunction with the Seattle Department of Transportation (SDOT), is conducting a plan and study for demolition and replacement of the existing facility. At this early stage, a number of options are being evaluated. The costs and timing of those improvements, as well as the sources of funding, have not been determined and will be refined as the project scope is further developed. See also projects in the SDOT (project TC36605) and Seattle City Light (project 8307) CIPs. The SPU Asset Management Committee approved the project in 2005.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	263	1,335	1,535	0	0	0	0	0	3,133
Project Total:	263	1,335	1,535	0	0	0	0	0	3,133
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	263	1,335	1,535	0	0	0	0	0	3,133
Appropriations Total*	263	1,335	1,535	0	0	0	0	0	3,133
O & M Costs (Savings)			0	0	0	0	0	0	0

Aquatic Habitat Matching Grant Project

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

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

Project ID: C353301 End Date: Ongoing

Location: Various

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 habitat improvement projects that leverage SPU's drainage-related habitat efforts with a dollar-for-dollar contribution of volunteer labor and donated materials and services. This project was added to the 2005-2010 Adopted CIP by Council action. Resolution 30719 describes grant application procedures and eligible projects, which may include removal of fish passage blockages; removal of non-native invasive plant species from aquatic habitats; restoration of native plant species, riparian vegetation and natural aquatic habitat features and complexity; removal of bank armoring; and re-establishment of creek connectivity. A seven-member Aquatic Habitat Matching Grant Review Board was established in 2005, and developed the grant guidelines for implementation.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	300	300	300	300	300	300	300	2,100
Project Total:	0	300	300	300	300	300	300	300	2,100
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	300	300	300	300	300	300	300	2,100
Appropriations Total*	0	300	300	300	300	300	300	300	2,100
O & M Costs (Savings)			0	0	0	0	0	0	0

Aurora Bridge Drainage

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:Improved FacilityStart Date:1st Quarter 2006Project ID:C363201End Date:4th Quarter 2006

Location: Aurora Bridge

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

The Aurora Bridge requires frequent maintenance by SPU crews to ensure the drains are clean and functional. Poor drainage on the bridge can lead to traffic delays. This project replaces the existing drainage system with improved drains. The intended changes likely result in reduced drainage operation and maintenance costs but the reduction has not been determined. This project is in a preliminary phase of development and the cost estimates will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	50	0	0	0	0	0	50
Project Total:	0	0	50	0	0	0	0	0	50
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	50	0	0	0	0	0	50
Appropriations Total*	0	0	50	0	0	0	0	0	50
O & M Costs (Savings)			0	0	0	0	0	0	0

Ballard Combined Sewer Overflow

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C303101End Date:1st Quarter 2021

Location: Various

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. SPU Asset Management Committee review is required before the project begins. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	0	0	270	220	552	566	1,608
Project Total:	0	0	0	0	270	220	552	566	1,608
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	0	0	270	220	552	566	1,608
Appropriations Total*	0	0	0	0	270	220	552	566	1,608
O & M Costs (Savings)			0	0	0	0	0	0	0

Ballard/Fremont Drainage Improvements

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353203End Date:2nd Quarter 2008

Location: Various

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

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

This project constructs drainage improvements to reduce or eliminate flooding in the Ballard and Fremont areas in response to complaints from the public. A report has been completed including the scoping of drainage issues in the area and required spot improvements. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	60	90	328	32	0	0	0	510
Project Total:	0	60	90	328	32	0	0	0	510
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	60	90	328	32	0	0	0	510
Appropriations Total*	0	60	90	328	32	0	0	0	510
O & M Costs (Savings)			0	0	0	0	0	0	0

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 2011

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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	142	65	50	36	68	13	13	13	400
Project Total:	142	65	50	36	68	13	13	13	400
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	142	65	50	36	68	13	13	13	400
Appropriations Total*	142	65	50	36	68	13	13	13	400
O & M Costs (Savings)			0	0	0	0	0	0	0

Best Management Practice Program Implementation

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:2nd Quarter 2000Project ID:C300316End 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 project 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	207	75	365	1,025	1,366	1,238	1,214	0	5,490
Project Total:	207	75	365	1,025	1,366	1,238	1,214	0	5,490
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	207	75	365	1,025	1,366	1,238	1,214	0	5,490
Appropriations Total*	207	75	365	1,025	1,366	1,238	1,214	0	5,490
O & M Costs (Savings)			0	0	0	0	0	0	0

Bitter Lake Dredging

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2007Project ID:C3NW033-002End Date:4th Quarter 2007

Location: N 137th St.

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake Neighborhood Plan Matrix: Multiple Neighborhood District: Northwest Urban Village: Not in an Urban Village

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	0	410	0	0	0	0	410
Project Total:	0	0	0	410	0	0	0	0	410
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	0	410	0	0	0	0	410
Appropriations Total*	0	0	0	410	0	0	0	0	410
O & M Costs (Savings)			0	0	0	0	0	0	0

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:3rd Quarter 2010

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

Neighborhood Plan:Broadview-Bitter Lake-Haller LakeNeighborhood Plan Matrix:MultipleNeighborhood District:NorthwestUrban Village:Bitter Lake Village

This project funds the design and construction of a stormwater treatment project to improve the quality of stormwater discharging to Bitter Lake and to reduce the frequency of required dredging offshore of the Greenwood Ave. N storm drain outfall in the lake. A preliminary engineering report, completed by a Seattle University civil engineering senior design team in 2000, evaluated options for treating runoff from the Greenwood Ave. N storm drain. Treatment options included wet vaults and media filters with swirl concentrators for pretreatment. Additional work includes evaluation of natural drainage system designs, updating the preliminary engineering analysis to determine the most cost-effective option, and constructing the selected project(s). The project is delayed due to staffing capacity and is projected to continue in 2007. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	11	200	0	1,743	210	54	55	0	2,273
Project Total:	11	200	0	1,743	210	54	55	0	2,273
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	11	200	0	1,743	210	54	55	0	2,273
Appropriations Total*	11	200	0	1,743	210	54	55	0	2,273
O & M Costs (Savings)			0	2	2	2	2	2	10

Burke Gilman/NE 144th Landslide

BCL/Program Name: Public Asset Protection BCL/Program Code: C334B

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C301355End Date:4th Quarter 2009

Location: NE 145th St./38th Ave. NE

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

This project investigates and develops a long-range plan to address flooding and slope instability problems in the area of Burke Gilman/NE 144th in northeast Seattle. The project includes researching historical information, drilling soil samples, and identifying and implementing solutions to problem areas. This project is in a preliminary phase of development as SPU evaluates all projects identified in the planning study conducted in 2002 and cost estimates will be revised over time. Ten projects addressing flooding and slope instability have been completed to date.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	350	577	662	715	570	208	0	0	3,082
Project Total:	350	577	662	715	570	208	0	0	3,082
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	350	577	662	715	570	208	0	0	3,082
Appropriations Total*	350	577	662	715	570	208	0	0	3,082
O & M Costs (Savings)			0	0	0	0	0	0	0

Capital Planning - CSO Plan Implementation

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

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

Project ID: C305101 End Date: Ongoing

Location: Citywide

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

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	500	150	566	633	1,002	888	1,183	4,922
Project Total:	0	500	150	566	633	1,002	888	1,183	4,922
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	500	150	566	633	1,002	888	1,183	4,922
Appropriations Total*	0	500	150	566	633	1,002	888	1,183	4,922
O & M Costs (Savings)			0	0	0	0	0	0	0

Capital Planning - Flood Control & Local Drainage

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

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

Project ID: C343201 End Date: Ongoing

Location: Various

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

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	236	370	320	308	394	323	414	426	2,791
Project Total:	236	370	320	308	394	323	414	426	2,791
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	236	370	320	308	394	323	414	426	2,791
Appropriations Total*	236	370	320	308	394	323	414	426	2,791
O & M Costs (Savings)			0	0	0	0	0	0	0

Capital Planning - Protection of Beneficial Uses

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

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

Project ID: C343301 End Date: Ongoing

Location: Various

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

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

This project supports development of Protection of Beneficial Uses program projects. Work includes evaluation of potential projects (primarily those identified in the Comprehensive Drainage Plan) for water quality and habitat drainage-related projects. 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.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	245	116	70	154	158	162	166	170	1,241
Project Total:	245	116	70	154	158	162	166	170	1,241
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	245	116	70	154	158	162	166	170	1,241
Appropriations Total*	245	116	70	154	158	162	166	170	1,241
O & M Costs (Savings)			0	0	0	0	0	0	0

Capital Planning - Public Asset Protection

BCL/Program Name: Public Asset Protection BCL/Program Code: C334B

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

Project ID: C343401 End Date: Ongoing

Location: Citywide

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

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

This project supports development of Public Asset Protection program projects. Work includes evaluation of potential projects (primarily those identified in the Comprehensive Drainage Plan) including investigation of reported drainage problems. The evaluation includes field verification and technical analysis to obtain information on benefits and 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.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	61	175	100	179	184	377	552	566	2,194
Project Total:	61	175	100	179	184	377	552	566	2,194
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	61	175	100	179	184	377	552	566	2,194
Appropriations Total*	61	175	100	179	184	377	552	566	2,194
O & M Costs (Savings)			0	0	0	0	0	0	0

Channel Widening Project

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:1st Quarter 2008Project ID:C3NW033-013End Date:4th Quarter 2010

Location: Citywide

Neighborhood Plan:DelridgeNeighborhood Plan Matrix:P-18Neighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	0	0	100	100	100	0	300
Project Total:	0	0	0	0	100	100	100	0	300
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	0	0	100	100	100	0	300
Appropriations Total*	0	0	0	0	100	100	100	0	300
O & M Costs (Savings)			0	0	0	5	5	5	15

City Facilities Drainage Assessment

BCL/Program Name: Other Drainage BCL/Program Code: C335B

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

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

The SPU Surface Water Quality Team conducts periodic inspections of businesses and City facilities that are engaged in high-risk pollution generating activities, such as vehicle fueling or washing, above ground fuel or hazardous materials storage. SPU has identified a number of City facilities that require facility retrofits or changes to operational procedures. This project allows the City to conduct a comprehensive review of City facilities to identify potential retrofits or changes to operational procedures. This assessment is funded through reimbursements from the Cumulative Reserve Fund to the Drainage and Wastewater Fund.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	100	0	0	0	0	0	100
Project Total:	0	0	100	0	0	0	0	0	100
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	100	0	0	0	0	0	100
Appropriations Total*	0	0	100	0	0	0	0	0	100
O & M Costs (Savings)			N/C	N/C	N/C	N/C	N/C	N/C	0

Comprehensive Drainage Plan Implementation

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

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

Project ID: C3NW032-008 End Date: Ongoing

Location: Various

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

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	0	2,463	4,349	10,573	12,950	11,058	41,393
Project Total:	0	0	0	2,463	4,349	10,573	12,950	11,058	41,393
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	0	2,463	4,349	10,573	12,950	11,058	41,393
Appropriations Total*	0	0	0	2,463	4,349	10,573	12,950	11,058	41,393
O & M Costs (Savings)			0	0	13	40	100	100	253

Creek Flow Control Implementation

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

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

Project ID: C3NW033-014 End Date: Ongoing

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	0	0	1,000	4,000	3,000	5,223	13,223
Project Total:	0	0	0	0	1,000	4,000	3,000	5,223	13,223
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	0	0	1,000	4,000	3,000	5,223	13,223
Appropriations Total*	0	0	0	0	1,000	4,000	3,000	5,223	13,223
O & M Costs (Savings)			0	0	0	15	15	15	45

Creek Sediment Control Program

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

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353303End 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 identifies and implements minor capital projects that address sediment control in urban creeks. The initial program focus is on roadway runoff that is inadequately managed from the roadway edge to the receiving creek, and small, discrete sections of creek located on public land with raw, eroded banks. In the medium term, SPU staff have identified more holistic approaches to controlling excessive fine sediments and a shortage of appropriate larger gravel. This project is in a preliminary phase of development and cost estimates will be revised over time. SPU Asset Management Committee review is required prior to the start of the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	23	25	103	105	135	138	0	529
Project Total:	0	23	25	103	105	135	138	0	529
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	23	25	103	105	135	138	0	529
Appropriations Total*	0	23	25	103	105	135	138	0	529
O & M Costs (Savings)			0	0	0	0	0	0	0

Creeks Habitat Complexity Program

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

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

Project ID: C353302 End Date: Ongoing

Location: Citywide

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

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

This program addresses altered stream and shoreline habitat. The program increases in-stream habitat complexity and establishes conditions that result in increased pools, riffles, and fish refuge habitat, by adding large woody debris or boulders to creeks and creek mouths. Different sites are designed and constructed each year, with an initial focus on land owned by the Seattle Department of Parks and Recreation (Parks). Individual projects are identified and prioritized based on expected habitat benefits and ease of implementation. The project results in costs to Parks to operate and maintain the habitat improvements, but these costs have not yet been determined. The SPU Asset Management Committee approved this project in 2005, and the confidence level of current cost estimate is medium.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	75	75	77	79	81	83	85	555
Project Total:	0	75	75	77	79	81	83	85	555
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	75	75	77	79	81	83	85	555
Appropriations Total*	0	75	75	77	79	81	83	85	555
O & M Costs (Savings)			5	5	5	5	5	5	30

Creeks Hydrology Program

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:1st Quarter 2007Project ID:C3NW033-005End Date:4th Quarter 2010

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 program addresses altered creek hydrology. The short-term focus is on obtaining easements along undeveloped sections of creek to protect the existing flood plains, developing a strategy for modifying altered hydrology, and implementing some pilot projects. The long-term focus is implementing the strategy. This project is in a preliminary phase of development and cost estimates will be revised over time. SPU Asset Management Committee review is conducted prior to the start of the program. Beginning in 2007, funding will be included in SPU's operating budget for maintenance of improvements made under this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	0	63	38	194	237	0	532
Project Total:	0	0	0	63	38	194	237	0	532
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	0	63	38	194	237	0	532
Appropriations Total*	0	0	0	63	38	194	237	0	532
O & M Costs (Savings)			0	3	3	3	3	3	15

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:MultipleNeighborhood District:In more than one DistrictUrban Village:Not in an Urban Village

This project establishes the first six years of a 20-year effort to protect and restore more than 300 acres of publicly owned forest located along riparian corridors. This project removes invasive plants from selected sites each year, adds native trees and shrubs, and provides maintenance for the first three years. SPU is working in partnership with the Seattle Department of Parks and Recreation and the City's Office of Sustainability and Environment. Restoring the riparian forest helps ensure creeks have cooler water with more oxygen and creek banks remain stable, and reduces the amount of runoff reaching creeks during storm events. SPU's Asset Management Committee has approved the 2006 budget and program re-evaluation occurs annually for years 2007-2011. The confidence level of current cost estimates is medium. This project supports both the Mayor's Green Seattle Initiative to reforest riparian areas along urban creeks, and the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	150	150	154	158	162	166	170	1,110
Project Total:	0	150	150	154	158	162	166	170	1,110
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	150	150	154	158	162	166	170	1,110
Appropriations Total*	0	150	150	154	158	162	166	170	1,110
O & M Costs (Savings)			0	0	0	0	0	0	0

CSO Facility Retrofit

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

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

To optimize system operation and storage, this project retrofits, upgrades, and modifies existing Combined Sewer Overflow (CSO) reduction facilities in priority CSO basins. 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. The project is in the design and construction phase and the certainty of the cost estimate is a medium confidence level.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	2,083	550	554	513	525	538	1,000	1,025	6,788
Project Total:	2,083	550	554	513	525	538	1,000	1,025	6,788
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	2,083	550	554	513	525	538	1,000	1,025	6,788
Appropriations Total*	2,083	550	554	513	525	538	1,000	1,025	6,788
O & M Costs (Savings)			0	0	0	0	0	0	0

CSO Plan Update

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

Project Type: Improved Facility Start Date: 1st Ouarter 1999

Project ID: C3AA103 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

Combined Sewer Overflow (CSO) reduction plans are required by the Department of Ecology. This project funds preparation of the next plan update, Environmental Impact Statement, and public participation activities. The project also prepares feasibility studies to identify potential opportunities for coordination with King County. This project is in a preliminary phase of development and cost estimates will be revised over time. The SPU Asset Management Committee approved the plan in 2005.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	1,316	200	550	349	326	420	320	3,300	6,781
Project Total:	1,316	200	550	349	326	420	320	3,300	6,781
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	1,316	200	550	349	326	420	320	3,300	6,781
Appropriations Total*	1,316	200	550	349	326	420	320	3,300	6,781
O & M Costs (Savings)			0	0	0	0	0	0	0

CSO Structure Configuration Management

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

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

The 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.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	100	100	50	0	0	0	250
Project Total:	0	0	100	100	50	0	0	0	250
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	100	100	50	0	0	0	250
Appropriations Total*	0	0	100	100	50	0	0	0	250
O & M Costs (Savings)			0	0	0	0	0	0	0

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

CSO Wastewater Monitoring

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

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

Project ID: C305102 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 collects data regarding wastewater flows in the combined sewer system to support facility planning and engineering through model calibration and refinement, pre-flow monitoring of CIP project locations, and post-flow monitoring of CIP projects. Funds are used for acquisition of monitoring equipment, identification of monitoring site locations, and data collection and management for use in modeling, planning, design, and NPDES permit compliance. 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.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	1,085	407	325	419	407	382	355	3,380
Project Total:	0	1,085	407	325	419	407	382	355	3,380
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	1,085	407	325	419	407	382	355	3,380
Appropriations Total*	0	1,085	407	325	419	407	382	355	3,380
O & M Costs (Savings)			0	0	0	0	0	0	0

Dallas Ave. S Emergency Soil Removal

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

Project Type:New FacilityStart Date:4th Quarter 2004Project ID:C304502End Date:4th Quarter 2007

Location: 17th Ave. S/S Donovan/Dallas 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 is an interim project to mitigate PCB-contaminated soil in street right-of-ways and in two residential yards and a private lot in a residential-industrial neighborhood along 17th Avenue South, South Donovan Street and Dallas Avenue South in South Park (see South Park Soil project C305502). To protect public health in the immediate term, SPU removed some contaminated soil and placed a temporary asphalt cap on other contaminated areas. Crews also installed a temporary storm water collection and treatment system in the area to control runoff from the newly paved roadways. This interim action was designed in consultation with the State Department of Ecology and Seattle-King County Public Health to limit human exposure to the PCBs until a more permanent solution could be implemented. Most of these interim activities were completed in December 2004. Two residential yards and another private storage lot were excavated in June 2005, along with a small part of the road shoulder along 16th Avenue South. For information on other soil remediation projects, see South Park Soil Project (C305502).

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	312	0	120	60	0	0	0	0	492
Project Total:	312	0	120	60	0	0	0	0	492
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	312	0	120	60	0	0	0	0	492
Appropriations Total*	312	0	120	60	0	0	0	0	492
O & M Costs (Savings)			0	0	0	0	0	0	0

Delridge Way SW/SW Myrtle - DRN

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353204End Date:4th Quarter 2008

Location: Delridge Wy. SW/SW Myrtle St.

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

Frequent ponding occurs along the east side of Delridge Way SW, centered near a bus stop just north of SW Myrtle. Traffic on Delridge is adversely impacted, along with bus service (the curb and sidewalk are submerged). This project upgrades the drainage infrastructure at this location, providing adequate conveyance to eliminate the flooding, with some basic water quality features to reduce pollutant loads reaching Longfellow Creek. The confidence level of the cost estimate is medium.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	45	60	205	21	0	0	0	331
Project Total:	0	45	60	205	21	0	0	0	331
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	45	60	205	21	0	0	0	331
Appropriations Total*	0	45	60	205	21	0	0	0	331
O & M Costs (Savings)			0	0	0	1	1	1	3

Design Commission Fees - DRN

BCL/Program Name: Other Drainage BCL/Program Code: C335B

Project Type: Improved Facility Start Date: Ongoing

Project ID: C301704 End Date: Ongoing

Location: Citywide

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

This project funds the City Design Commission's review of the environmental and design aspects of drainage capital improvement projects funded by the Drainage and Wastewater Fund. Projects reviewed by the Design Commission include those which have a visual impact on the public realm, including buildings, fencing, gates, and landscaping. The allocations shown below are estimates and are expected to be revised over time. This project serves as a central location for fee estimates and once specific projects are reviewed and costs are incurred, the fees are allocated to the appropriate projects.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	15	26	8	11	11	11	11	93
Project Total:	0	15	26	8	11	11	11	11	93
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	15	26	8	11	11	11	11	93
Appropriations Total*	0	15	26	8	11	11	11	11	93
O & M Costs (Savings)			0	0	0	0	0	0	0

Design Commission Fees - WW

BCL/Program Name:General WastewaterBCL/Program Code:C320BProject Type:Improved FacilityStart Date:OngoingProject ID:C301706End Date:Ongoing

Location: Citywide

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

This project funds the City Design Commission's review of the environmental and design aspects of wastewater capital improvement projects funded by the Drainage and Wastewater Fund. Projects reviewed by the Design Commission include those which have a visual impact on the public realm including buildings, fencing, gates, and landscaping. The allocations shown below are estimates and are expected to be revised over time. This project serves as a central location for fee estimates and when specific projects are reviewed and costs are incurred, fees are allocated to the appropriate projects.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	5	1	5	5	5	6	6	33
Project Total:	0	5	1	5	5	5	6	6	33
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	5	1	5	5	5	6	6	33
Appropriations Total*	0	5	1	5	5	5	6	6	33
O & M Costs (Savings)			0	0	0	0	0	0	0

Design Standards & Guidelines - DRN

BCL/Program Name: Other Drainage BCL/Program Code: C335B

Project Type:New InvestmentStart Date:1st Quarter 2005Project ID:C353501End Date:4th Quarter 2006

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. Confidence level in the cost estimate is high.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	263	130	0	0	0	0	0	393
Project Total:	0	263	130	0	0	0	0	0	393
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	263	130	0	0	0	0	0	393
Appropriations Total*	0	263	130	0	0	0	0	0	393
O & M Costs (Savings)			0	100	100	100	100	100	500

Design Standards & Guidelines - WW

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

Project Type:New InvestmentStart Date:1st Quarter 2005Project ID:C305201End Date:4th Quarter 2006

Location: N/A

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	51	326	0	0	0	0	0	377
Project Total:	0	51	326	0	0	0	0	0	377
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	51	326	0	0	0	0	0	377
Appropriations Total*	0	51	326	0	0	0	0	0	377
O & M Costs (Savings)			0	100	100	100	100	100	500

Drainage Spot Improvements

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

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 and creeks throughout Seattle. Projects increase the capacity of the drainage systems and prevent flooding. Typical improvements include installation of inlets and catch-basins, construction of ditches and grassed swales, and installation of culverts. Funding to maintain the improvements made under this program is included in SPU's 2006 Adopted Budget. The confidence level of the cost estimate is medium.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	507	500	500	513	525	538	552	566	4,201
Project Total:	507	500	500	513	525	538	552	566	4,201
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	507	500	500	513	525	538	552	566	4,201
Appropriations Total*	507	500	500	513	525	538	552	566	4,201
O & M Costs (Savings)			3	3	3	3	3	3	18

Eastlake Ave./Galer-Drainage Improvement

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2009Project ID:C3NW032-010End Date:4th Quarter 2010

Location: Eastlake Ave. E

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

This project investigates and improves a drainage problem identified at this location as a result of the Comprehensive Drainage Plan. SPU Operations staff are collecting additional information to determine the appropriate solution. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	0	0	0	162	110	0	272
Project Total:	0	0	0	0	0	162	110	0	272
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	0	0	0	162	110	0	272
Appropriations Total*	0	0	0	0	0	162	110	0	272
O & M Costs (Savings)			0	0	0	0	0	0	0

Facility Improvements - DWF

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

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404602-DWFEnd Date:4th Quarter 2006

Location: 700 5th Ave.

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan Matrix: N/A
Neighborhood District: Downtown Urban Village: Commercial Core

This project funds logistical support services for SPU, including tenant improvements, office buildouts, and furniture. The funding shown below is the Drainage and Wastewater Fund's share of the project's cost. The 2006 total cost for this project across all SPU funds is approximately \$2.8 million.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	799	1,055	1,050	0	0	0	0	0	2,904
Project Total:	799	1,055	1,050	0	0	0	0	0	2,904
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	799	1,055	1,050	0	0	0	0	0	2,904
Appropriations Total*	799	1,055	1,050	0	0	0	0	0	2,904
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Facility Security Upgrades - DRN

BCL/Program Name: Other Drainage BCL/Program Code: C335B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C3NW035-004End Date:4th Quarter 2006

Location: Haller Lake & Charles St. Facilities

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 funds basic physical security upgrades to the Drainage and Wastewater facilities at Haller Lake and Charles Street including installation of card key access systems, high security locks, reinforced doors and windows, and "No Trespassing" signs on perimeter fencing.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	16	0	0	0	0	0	0	16
Project Total:	0	16	0	0	0	0	0	0	16
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	16	0	0	0	0	0	0	16
Appropriations Total*	0	16	0	0	0	0	0	0	16
O & M Costs (Savings)			0	0	0	0	0	0	0

Facility Security Upgrades - WW

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

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C304202End Date:4th Quarter 2006

Location: Haller Lake & Charles St. Facilities

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

This project funds basic physical security upgrades to the Drainage and Wastewater facilities including installation of card key access systems, high security locks, reinforced doors and windows, and "No Trespassing" signs on perimeter fencing.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	16	387	0	0	0	0	0	403
Project Total:	0	16	387	0	0	0	0	0	403
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	16	387	0	0	0	0	0	403
Appropriations Total*	0	16	387	0	0	0	0	0	403
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Fecal Total Maximum Daily Load Feasibility

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C343302End 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 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 Load water quality regulations. This focus 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	1	113	0	256	53	0	0	0	423
Project Total:	1	113	0	256	53	0	0	0	423
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	1	113	0	256	53	0	0	0	423
Appropriations Total*	1	113	0	256	53	0	0	0	423
O & M Costs (Savings)			0	0	0	0	0	0	0

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. The project's short-term focus is on removing minor barriers located in downstream Pipers Creek and Taylor Creek near 68th Ave. SE. Currently, returning adult salmon can access approximately five miles of stream. If all the barriers were removed, salmon could potentially use up to 22 miles of stream. SPU's Asset Management Committee approved this project in 2005. This project is in a preliminary phase of development and cost estimates will be revised over time. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	27	40	128	425	140	121	124	1,005
Project Total:	0	27	40	128	425	140	121	124	1,005
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	27	40	128	425	140	121	124	1,005
Appropriations Total*	0	27	40	128	425	140	121	124	1,005
O & M Costs (Savings)			0	0	0	0	0	0	0

Fleet Management Study

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

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C405601-DWFEnd Date:4th Quarter 2005

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 applies asset management principles to the management of SPU's fleet of heavy equipment. A consultant study is complete and the recommendations related to fleet utilization, including which kinds of equipment SPU should be using and how the Department's work practices might be changed either to use existing equipment better or to use different equipment, have been presented to the SPU Asset Management Committee. The project supports other work being done by SPU to assess its current system of fleet management, develop performance measures and tracking systems, and modify Department processes and practices related to fleet management. It is expected that the implementation of the recommendations identified through this study lead to lower life cycle costs for fleet management.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	54	0	0	0	0	0	0	54
Project Total:	0	54	0	0	0	0	0	0	54
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	54	0	0	0	0	0	0	54
Appropriations Total*	0	54	0	0	0	0	0	0	54
O & M Costs (Savings)			0	0	0	0	0	0	0

Force Main/Pump Stations Plan

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

Project Type: Improved Facility Start Date: 3rd Quarter 2002

Project ID: C302204 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 implements a long-term strategy for prioritizing improvements to the City's wastewater force mains and pump stations based on criteria such as average life expectancy, system capacity projections, and physical inventory data. The program includes replacing defective critical components. The program allows SPU to make better capital replacement and repair decisions regarding pump stations and force mains, helping to optimize operations and maintenance efforts and costs associated with these assets over a longer-term planning horizon.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	317	288	142	513	525	538	552	566	3,441
Project Total:	317	288	142	513	525	538	552	566	3,441
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	317	288	142	513	525	538	552	566	3,441
Appropriations Total*	317	288	142	513	525	538	552	566	3,441
O & M Costs (Savings)			0	0	0	0	0	0	0

Fremont-Wallingford CSO

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C303102End Date:1st Quarter 2020

Location: Fremont/Wallingford areas

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

This project constructs Combined Sewer Overflow (CSO) reduction facilities in the Fremont/Wallingford area, at Basins 147 and 174. Major work includes flow monitoring, system modeling, facility planning, preliminary engineering, design, permits, land acquisition (if necessary) and construction. Work performed in the initial planning phase collects additional data and re-evaluates alternatives prior to allocating and spending additional funds. The project is on hold until 2007, and the project budget and schedule have been revised from the 2001 CSO Plan to account for project development, CSO Retrofit Implementation (which may reduce the size of the necessary facilities in this basin), and potential coordination with King County. Proposed allocations for 2007 and 2008 are 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 Asset Management Committee review is required before the start of the project. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	0	513	525	0	0	0	1,038
Project Total:	0	0	0	513	525	0	0	0	1,038
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	0	513	525	0	0	0	1,038
Appropriations Total*	0	0	0	513	525	0	0	0	1,038
O & M Costs (Savings)			0	0	0	0	0	0	0

Georgetown Drainage Basin Study

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:Improved FacilityStart Date:2nd Quarter 2002Project ID:C302311End Date:4th Quarter 2009

Location: Georgetown

Neighborhood Plan:GeorgetownNeighborhood Plan Matrix:GC-4 B.2Neighborhood District:Greater DuwamishUrban Village:Not in an Urban Village

This project funds a planning-level analysis of drainage demands in the Georgetown neighborhood. Information previously developed by City and County Combined Sewer Overflow (CSO) studies and past drainage studies is used in the analysis. The project is coordinated with implementation of the Norfolk Basin Plan, the City's new CSO Plan (prepared under CSO Plan Update, C3AA103), and other initiatives in the project area.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	135	0	50	205	158	27	0	0	575
Project Total:	135	0	50	205	158	27	0	0	575
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	135	0	50	205	158	27	0	0	575
Appropriations Total*	135	0	50	205	158	27	0	0	575
O & M Costs (Savings)			0	0	0	0	0	0	0

GIS System Enhancements

BCL/Program Name: Other Drainage BCL/Program Code: C335B

Project Type:New InvestmentStart Date:1st Quarter 2004Project ID:C343502End Date:4th Quarter 2006

Location: Citywide

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	124	45	45	0	0	0	0	0	214
Project Total:	124	45	45	0	0	0	0	0	214
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	124	45	45	0	0	0	0	0	214
Appropriations Total*	124	45	45	0	0	0	0	0	214
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Golden Gardens/View Ave. Landslide

BCL/Program Name: Public Asset Protection BCL/Program Code: C334B

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 and initial design of a landslide 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 downslope 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 planning phase and cost estimates will be revised over time. The SPU Asset Management Committee approved this project in 2004.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	66	50	100	513	677	0	0	0	1,406
Project Total:	66	50	100	513	677	0	0	0	1,406
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	66	50	100	513	677	0	0	0	1,406
Appropriations Total*	66	50	100	513	677	0	0	0	1,406
O & M Costs (Savings)			0	0	0	0	0	0	0

Greenwood Peat Bog

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2003Project ID:C333207End Date:4th Quarter 2010

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

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	167	65	20	21	21	108	22	0	424
Project Total:	167	65	20	21	21	108	22	0	424
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	167	65	20	21	21	108	22	0	424
Appropriations Total*	167	65	20	21	21	108	22	0	424
O & M Costs (Savings)			0	0	0	0	0	0	0

Greenwood Water Quality Best Management Practice

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353306End Date:4th Quarter 2007

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 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. The confidence level of the current cost estimate is low as the project is in the planning phase.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	40	80	349	0	0	0	0	469
Project Total:	0	40	80	349	0	0	0	0	469
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	40	80	349	0	0	0	0	469
Appropriations Total*	0	40	80	349	0	0	0	0	469
O & M Costs (Savings)			0	0	0	0	0	0	0

Heavy Equipment Purchases - DRN

BCL/Program Name:Other DrainageBCL/Program Code:C335BProject Type:New InvestmentStart Date:OngoingProject ID:C300399End 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. These pieces of equipment have reached the end of their useful lives. The project also funds retrofitting of existing equipment to meet environmental standards.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	1,919	477	320	825	1,073	485	706	725	6,530
Project Total:	1,919	477	320	825	1,073	485	706	725	6,530
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	1,919	477	320	825	1,073	485	706	725	6,530
Appropriations Total*	1,919	477	320	825	1,073	485	706	725	6,530
O & M Costs (Savings)			0	0	0	0	0	0	0

Heavy Equipment Purchases - WW

BCL/Program Name:General WastewaterBCL/Program Code:C320BProject Type:New InvestmentStart Date:OngoingProject ID:C300499End 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 replaces existing heavy equipment (such as vactors, loaders, and bulldozers) used by SPU field crews. These pieces of equipment have reached the end of their useful lives. The project also funds retrofitting of existing equipment to meet environmental standards.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	1,368	2,410	195	440	684	345	784	804	7,030
Project Total:	1,368	2,410	195	440	684	345	784	804	7,030
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	1,368	2,410	195	440	684	345	784	804	7,030
Appropriations Total*	1,368	2,410	195	440	684	345	784	804	7,030
O & M Costs (Savings)			0	0	0	0	0	0	0

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

High Point Drainage System

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2002Project ID:C301303End Date:4th Quarter 2009

Location: SW Juneau St./SW Myrtle St.

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 10% of Longfellow Creek Watershed to meet the pre-developed pasture runoff conditions for the two-year design storm, as well as provide a distributed, block-scale water quality treatment system. The drainage system also includes construction of porous pavement sidewalks and up to three blocks of porous pavement streets. The project enables SPU to achieve flood control and water quality objectives in the project area at a lower cost than through either development of a large regional drainage and water quality facility, or through retrofit of currently developed streets to include natural drainage systems.

Funding to maintain the new natural drainage system starting in 2007 will be included in future SPU operating budgets. The High Point Natural Drainage System was approved by City Council in May 2003 as part of SHA's subdivision and street vacation application. The project is partially funded by a \$2.7 million construction loan and a \$157,170 grant for education, water quality monitoring and other activities, both from the Washington State Department of Ecology, and a \$192,900 grant from the United States Environmental Protection Agency. These loans and grants were authorized in 2004 by Ordinance 121553. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	810	1,300	1,100	513	53	54	0	0	3,830
Project Total:	810	1,300	1,100	513	53	54	0	0	3,830
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	810	1,300	1,100	513	53	54	0	0	3,830
Appropriations Total*	810	1,300	1,100	513	53	54	0	0	3,830
O & M Costs (Savings)			0	36	64	64	65	65	294

^{*}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: Other Drainage BCL/Program Code: C335B

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

Project ID: C353550 End Date: Ongoing

Location: Citywide

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

This project provides funding of to enable SPU to partner with other City departments that are implementing projects with a drainage nexus and creating a benefit for the drainage system. Requests for funding from this project are developed in partnership with other departments and SPU, and involve joint planning of CIP projects. The SPU Asset Management Committee reviews and approves all drainage funding commitments. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	2,000	2,000	2,050	2,101	2,154	2,208	2,263	14,776
Project Total:	0	2,000	2,000	2,050	2,101	2,154	2,208	2,263	14,776
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	2,000	2,000	2,050	2,101	2,154	2,208	2,263	14,776
Appropriations Total*	0	2,000	2,000	2,050	2,101	2,154	2,208	2,263	14,776
O & M Costs (Savings)			0	0	0	0	0	0	0

Intergovernmental Shares - WW

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

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

Project ID: C305250 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 provides funding to enable SPU to partner with other City departments that are implementing projects with a wastewater nexus and creating a benefit for the wastewater system. Requests for funding from this project are developed in partnership with other departments and SPU, and involve joint planning of CIP projects. The SPU Asset Management Committee reviews and approves all wastewater funding commitments. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	250	250	256	263	269	276	283	1,847
Project Total:	0	250	250	256	263	269	276	283	1,847
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	250	250	256	263	269	276	283	1,847
Appropriations Total*	0	250	250	256	263	269	276	283	1,847
O & M Costs (Savings)			0	0	0	0	0	0	0

Jackson Park Detention - Phase 2

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

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

Location: Multiple locations

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

Neighborhood District: In more than one Neighborhood

Urban Village: In more than one Urban Village

District

This project constructs three detention ponds in the Jackson Park golf course, including overflow structures for transferring flow between Thornton Creek and the ponds. The project reroutes 1,600 feet of Thornton Creek channel within the golf course to accommodate the detention ponds and improve habitat for fish and wildlife. The project removes 500 feet of culvert within the golf course and replaces it with open creek channel. This project was substantially completed in 2003 and physical completion notice was issued in April 2004. Remaining work includes post-construction monitoring, reporting to external agencies, and riparian plant establishment to meet federal permitting requirements. Funding to operate and maintain the detention pond and other facilities is included in the SPU operating budget.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	10,495	88	110	85	87	89	0	0	10,954
Project Total:	10,495	88	110	85	87	89	0	0	10,954
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	10,495	88	110	85	87	89	0	0	10,954
Appropriations Total*	10,495	88	110	85	87	89	0	0	10,954
O & M Costs (Savings)			45	45	45	45	45	45	270

Lake City/NE 92nd Storm Drain

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 2002Project ID:C302312End Date:4th Quarter 2007

Location: Lake City Wy. NE/NE 92nd St./NE 95th St.

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

This project rehabilitates approximately 700 feet of cracked culvert line along the east side of Lake City Way NE

between NE 92nd and NE 95th Streets. The project is scheduled for construction in 2007.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	26	0	0	201	0	0	0	0	227
Project Total:	26	0	0	201	0	0	0	0	227
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	26	0	0	201	0	0	0	0	227
Appropriations Total*	26	0	0	201	0	0	0	0	227
O & M Costs (Savings)			0	0	0	0	0	0	0

Longfellow Creek-Yancy St. - Phase 3

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

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C302332End Date:4th Quarter 2007

Location: SW Yancy St./30th Ave. SW

Neighborhood Plan:DelridgeNeighborhood Plan Matrix:I-A-11Neighborhood District:DelridgeUrban Village:Not in an Urban Village

This project continues habitat improvements at the Yancy Street site along Longfellow Creek. Work includes additional bank stabilization, landscaping, wetland enhancements, and other repairs as necessary. The construction phase of the project is substantially complete and is now in the close-out phase.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	161	64	0	10	0	0	0	0	235
Project Total:	161	64	0	10	0	0	0	0	235
Fund Appropriations/Allocations									
SPU Drainage and Wastewater Fund	161	64	0	10	0	0	0	0	235
Appropriations Total*	161	64	0	10	0	0	0	0	235
O & M Costs (Savings)			10	10	10	10	10	10	60

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

Lower Densmore Drainage Improvement

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353205End Date:4th Quarter 2006

Location: Aurora Ave. N

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake Neighborhood Plan Matrix: B2

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

This project develops the preliminary engineering analysis, including modeling, to identify alternatives to constructing a storm drain system in the Lower Densmore subbasin. The project also identifies the additional system requirements for stormwater flow resulting from improvements in the Bitter Lake, Haller Lake and Stone Avenue subbasins. Lower Densmore is a large subbasin on the receiving end of the flow draining through the upper Densmore basin, which includes the Bitter Lake, Haller Lake and Stone Ave. subbasins. This subbasin has experienced numerous flooding incidents for two-year storm levels or higher, in particular at N 107th and Midvale Ave. N, and the Licton Springs area. This preliminary engineering phase defines a scope and budget for the project, and the cost for design and construction will be determined after preliminary engineering is completed. This project is in a preliminary phase of development and cost estimates will be revised over time. SPU Asset Management Committee review is conducted prior to project implementation.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	225	225	0	0	0	0	0	450
Project Total:	0	225	225	0	0	0	0	0	450
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	225	225	0	0	0	0	0	450
Appropriations Total*	0	225	225	0	0	0	0	0	450
O & M Costs (Savings)			0	0	0	0	0	0	0

Madison Valley Infrastructure Improvements

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

Project Type: New Facility **Start Date:** 1st Quarter 2006

Project ID: C306201 End Date: TBD

Location: Madison Valley

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 corrects infrastructure deficiencies that have resulted in sewage backups and flooding problems in the vicinity of East John Street and 30th Avenue East, to minimize the likelihood that sewage backups and stormwater flooding occur in private residences. This project may include stormwater and combined sewage new facilities and also make operational or infrastructure improvements. The project may include flow monitoring, modeling, property acquisition, preliminary engineering, design, permitting, public works contracting, demolition activities, community involvement, Asset Management deliverables, and construction of infrastructure improvements. Future phases of the project continue beyond 2006. The cost estimate is preliminary and will be refined over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	1,200	0	0	0	0	0	1,200
Project Total:	0	0	1,200	0	0	0	0	0	1,200
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	1,200	0	0	0	0	0	1,200
Appropriations Total*	0	0	1,200	0	0	0	0	0	1,200
O & M Costs (Savings)			0	0	0	0	0	0	0

Main Warehouse Improvements - DWF

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

Project Type:Improved FacilityStart Date:1st Quarter 2006Project ID:C406601-DWFEnd Date:4th Quarter 2006

Location: 2700 Airport/Way/S

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

This project evaluates, plans, designs and constructs building systems, such as a sprinkler system for fire suppression, and maintenance improvements such as lighting, heating, ventilation and air conditioning, and roof replacement for the main warehouse facility at the Operations Control Center. The funding shown for this project reflects an estimated cost to perform required code improvements and evaluate the overall building needs. The SPU Asset Management Committee approved this project in 2005.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	128	0	0	0	0	0	128
Project Total:	0	0	128	0	0	0	0	0	128
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	128	0	0	0	0	0	128
Appropriations Total*	0	0	128	0	0	0	0	0	128
O & M Costs (Savings)			0	0	0	0	0	0	0

Meadowbrook Outfall Rehabilitation

BCL/Program Name: Flood Control and Local Drainage 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. Preliminary engineering investigates alternatives to repair or replace the three outfall pipes, and assesses conditions of related structures, including the seawall next to the outfall pipes, an upstream 90-inch pipe connecting to the outfall pipes, and an upstream 72-inch pipe connecting to the 90-inch pipe. Preliminary engineering also investigates causes of sinkholes near the outfall pipes, and performs a flow analysis and evaluation to check the feasibility of adding another 72-inch overflow pipe at Meadowbrook Pond. The planning phase cost estimate has a medium level of confidence. The SPU Asset Management Committee reviewed is required before the start of the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	200	231	1,333	53	0	0	0	1,817
Project Total:	0	200	231	1,333	53	0	0	0	1,817
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	200	231	1,333	53	0	0	0	1,817
Appropriations Total*	0	200	231	1,333	53	0	0	0	1,817
O & M Costs (Savings)			0	0	0	12	12	12	36

Ongoing

End Date:

Meter Replacement - DWF

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Rehabilitation or RestorationStart Date:Ongoing

Project ID: C4101-DWF

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. In the 2005-2010 Adopted CIP, the project ID for this project was C404102-DWF.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	3,817	672	597	543	557	571	643	643	8,043
Project Total:	3,817	672	597	543	557	571	643	643	8,043
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	3,817	672	597	543	557	571	643	643	8,043
Appropriations Total*	3,817	672	597	543	557	571	643	643	8,043
O & M Costs (Savings)			0	0	0	0	0	0	0

Minor Facility Upgrades - Rehabilitation

BCL/Program Name: Sewer Rehabilitation BCL/Program Code: C340B

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

Project ID: C3AA402 End Date: Ongoing

Location: Various

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

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

This project makes minor upgrades and replacements to sewer infrastructure such as setting castings to grade on repaving projects and installing maintenance holes on existing sewer mainlines. These upgrades facilitate maintenance activities and do not increase capacity.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	211	80	76	81	110	98	100	103	859
Project Total:	211	80	76	81	110	98	100	103	859
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	211	80	76	81	110	98	100	103	859
Appropriations Total*	211	80	76	81	110	98	100	103	859
O & M Costs (Savings)			0	0	0	0	0	0	0

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

MLK Way/Norfolk St. Storm Improvement

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2003Project ID:C333205End Date:4th Quarter 2010

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 for construction in 2007 along Martin Luther King, Jr. Way by Sound Transit. The project removes petroleum-contaminated sediments from the existing system, provides improved maintenance access for future cleaning, increases the carrying capacity of the system to meet a 25-year performance level, improves storm water quality treatment using funding from Sound Transit, and reduces overall long-term maintenance costs.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	171	440	183	113	2	2	2	0	913
Project Total:	171	440	183	113	2	2	2	0	913
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	171	440	183	113	2	2	2	0	913
Appropriations Total*	171	440	183	113	2	2	2	0	913
O & M Costs (Savings)			0	0	2	2	2	2	8

Mobility Improvement

BCL/Program Name: Other Drainage 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 program funds drainage designers to work on Seattle Department of Transportation 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	300	300	300	308	315	323	331	339	2,516
Project Total:	300	300	300	308	315	323	331	339	2,516
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	300	300	300	308	315	323	331	339	2,516
Appropriations Total*	300	300	300	308	315	323	331	339	2,516
O & M Costs (Savings)			0	0	0	0	0	0	0

Monitoring System Upgrades

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C343303End Date:4th Quarter 2006

Location: Various

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

This project updates SPU's flow and rainfall monitoring system to improve access to the data and to ensure consistent data quality for the existing network of rainfall, Combined Sewer Overflow (CSO) and stream/storm drain monitoring stations located throughout the city. Flow monitoring data is routinely collected and used to design capital improvement projects, comply with water quality permit requirements, and evaluate program and project performance. Better data can also be used to identify maintenance problems, help reduce costs, and improve the effectiveness of future projects. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	137	459	103	0	0	0	0	0	699
Project Total:	137	459	103	0	0	0	0	0	699
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	137	459	103	0	0	0	0	0	699
Appropriations Total*	137	459	103	0	0	0	0	0	699
O & M Costs (Savings)			0	0	0	0	0	0	0

N 105th St./Aurora Ave. N - Drainage Improvement

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:2nd Quarter 2006Project ID:C363203End Date:4th Quarter 2007

Location: N 105th St./Aurora Ave. N/Northgate Ave.

Neighborhood Plan:Aurora LictonNeighborhood Plan Matrix:D-3Neighborhood District:NorthUrban Village:Not in an Urban Village

This project investigates stormwater runoff along North 105th Street and Aurora Ave. N. The project examines the causes of flooding in the travel lane, and identifies possible drainage improvements to this area including the alternative of constructing new inlets and catch-basins. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	150	103	0	0	0	0	253
Project Total:	0	0	150	103	0	0	0	0	253
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	150	103	0	0	0	0	253
Appropriations Total*	0	0	150	103	0	0	0	0	253
O & M Costs (Savings)			0	0	0	0	0	0	0

N 125th & Aurora N Storm Drain

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:3rd Quarter 2002Project ID:C302313End Date:4th Quarter 2011

Location: N 125th St./Aurora Ave. N

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake
Neighborhood District: Northwest
Neighborhood District: Bitter Lake Village
Urban Village: Bitter Lake Village

This project funds a preliminary study for the construction of approximately 2,550 linear feet of new pipe combined with catch-basins and connecting pipes along N 125th St. and Aurora Ave. N, as well as the upgrade of approximately 2,400 linear feet of existing pipe along Aurora Ave. N, to reduce street and property flooding. The project is consistent with SPU's Densmore Drainage Basin Study, and has been accelerated to coordinate with the Seattle Department of Transportation (SDOT) Aurora Transit, Pedestrian and Safety Improvements project TC36625, which plans to install new curbs, gutters, and sidewalks on the west side of Aurora Ave. N from N 110th to N 145th St. The shoulder is also upgraded and converted to a new bus lane.

While construction of SDOT's project is targeted to begin second quarter of 2006, delay may occur due to uncertainty around the funding of SDOT's Aurora Avenue project. SPU plans to proceed with this project on an expedited basis to take advantage of cost sharing opportunities with SDOT. The project is also coordinated with downstream improvements that SPU is making to move stormwater out of the Densmore Basin to Lake Union, and with the Water Quality Study planned for the Densmore Basin, which evaluates alternatives for improving water quality in the basin. This project is in a preliminary phase of development and cost estimates will be revised over time. SPU's Asset Management Committee has approved preliminary engineering for the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	593	800	575	1,538	1,576	1,615	1,656	1,000	9,353
Project Total:	593	800	575	1,538	1,576	1,615	1,656	1,000	9,353
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	593	800	575	1,538	1,576	1,615	1,656	1,000	9,353
Appropriations Total*	593	800	575	1,538	1,576	1,615	1,656	1,000	9,353
O & M Costs (Savings)			0	0	0	0	0	0	0

N 85th St/Greenwood Ave. - Drainage Improvement

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:2nd Quarter 2006Project ID:C363204End Date:4th Quarter 2007

Location: Greenwood Ave. N/3rd Ave. N

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

Neighborhood District: Northwest Urban Village: Greenwood

This project investigates a drainage problem identified at this location through the development of the Comprehensive Drainage Plan. Although street flooding in the travel lane exists, little information is currently available about the causes or extent of the problem, or potential solutions. The confidence level of the preliminary cost estimate is low.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	150	103	0	0	0	0	253
Project Total:	0	0	150	103	0	0	0	0	253
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	150	103	0	0	0	0	253
Appropriations Total*	0	0	150	103	0	0	0	0	253
O & M Costs (Savings)			0	0	0	0	0	0	0

Natural Drainage System Improvements

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

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

Project ID: C333206 End Date: Ongoing

Location: Various/3rd Ave. NW

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake
Neighborhood District: Northwest
Neighborhood District: Northwest
Neighborhood Plan Matrix: Multiple
Urban Village: Not in an Urban Village

This project assesses unimproved right-of-way within the city and identifies areas suitable for enhancing existing ditch 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 unimproved 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 update, 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, as well as to prescribe how drainage is to be improved by other public and private developers. Work on this project was delayed while efforts were spent on natural drainage systems at 3rd Ave. NW and NW 107th St., Venema Creek, and Pinehurst natural drainage systems. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. In 2005, Ordinance 121993 appropriated \$70,000 in a grant from the John F. Kennedy School of Government for this project. This supplemental appropriation is reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	320	326	217	1,773	1,092	1,130	1,000	5,858
Project Total:	0	320	326	217	1,773	1,092	1,130	1,000	5,858
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	320	326	217	1,773	1,092	1,130	1,000	5,858
Appropriations Total*	0	320	326	217	1,773	1,092	1,130	1,000	5,858
O & M Costs (Savings)			0	0	0	0	0	0	0

No Dig Pipe & Maintenance Rehabilitation

BCL/Program Name:Sewer RehabilitationBCL/Program Code:C340BProject 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. "No Dig" technology avoids surface use disruption and costly surface repairs.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	9,882	785	663	1,531	2,288	2,280	2,008	2,511	21,948
Project Total:	9,882	785	663	1,531	2,288	2,280	2,008	2,511	21,948
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	9,882	785	663	1,531	2,288	2,280	2,008	2,511	21,948
Appropriations Total*	9,882	785	663	1,531	2,288	2,280	2,008	2,511	21,948
O & M Costs (Savings)			0	0	0	0	0	0	0

Northlake Way Drainage

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C343202End Date:4th Quarter 2006

Location: N Northlake Wy/Stone Wy. N

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

This project studies drainage problems along N Northlake Way, located along the north shore of Lake Union. The project proposes solutions to noted storm water conveyance problems, as well as alternatives for water quality treatment before draining into Lake Union. The timing of the project is such that it can be coordinated with planned paving improvements along N Northlake Way as planned by the Seattle Department of Transportation.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	17	200	300	0	0	0	0	0	517
Project Total:	17	200	300	0	0	0	0	0	517
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	17	200	300	0	0	0	0	0	517
Appropriations Total*	17	200	300	0	0	0	0	0	517
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Northpark Ave. N Drainage Improvement

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:2nd Quarter 2007Project ID:C3NW032-011End Date:4th Quarter 2010

Location: Northpark Ave N & Linden Ave N

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

This project investigates and makes improvements to address the drainage problem identified at this location (Northpark Ave. N, formerly called Linden Swale) during development of the Comprehensive Drainage Plan. Little information is currently available about the extent or causes of the problem, or potential solutions. The confidence level for the cost estimate is low.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	0	51	735	377	28	0	1,191
Project Total:	0	0	0	51	735	377	28	0	1,191
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	0	51	735	377	28	0	1,191
Appropriations Total*	0	0	0	51	735	377	28	0	1,191
O & M Costs (Savings)			0	0	0	0	0	0	0

Operational Facilities Plan

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2006Project ID:C406622-DWFEnd Date:4th Quarter 2006

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 an inventory of existing facilities and their condition and identifies Department functions, and adjacency, facility and space requirements. The information is used to develop a plan for the use of existing facilities, required upgrades, identification of gaps and recommended options for addressing those gaps. The 2006 total cost for this project across all the SPU funds is \$759,000.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	260	0	0	0	0	0	260
Project Total:	0	0	260	0	0	0	0	0	260
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	260	0	0	0	0	0	260
Appropriations Total*	0	0	260	0	0	0	0	0	260
O & M Costs (Savings)			0	0	0	0	0	0	0

Operations Control Center Upgrade - DWF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404501-DWFEnd Date:4th Quarter 2007

Location: 2700 Airport Wy. S

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

This project remodels and upgrades SPU's Operations Control Center building. The project includes reconfiguring internal space to improve security and incorporate the new Supervisory Control And Data Acquisition system. The upgraded center accommodates SPU's new Strategic Operations Division, as well as Field Operations administration and electrical, mechanical, maintenance and emergency response crews.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	164	770	286	108	0	0	0	0	1,328
Project Total:	164	770	286	108	0	0	0	0	1,328
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	164	770	286	108	0	0	0	0	1,328
Appropriations Total*	164	770	286	108	0	0	0	0	1,328
O & M Costs (Savings)			0	0	0	0	0	0	0

Other Agency Opportunity - DRN

BCL/Program Name: Other Drainage BCL/Program Code: C335B

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

Project ID: C353520 End Date: Ongoing

Location: Citywide

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

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

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

In 2005, Ordinance 121883 transferred \$768,000 from this project to SPU's Sediment Remediation-Drainage project (C3NW033-011), to fund emergency clean-up work in the South Park area. Also in 2005, Ordinance 121993 transferred \$300,000 from this project to SPU's Drainage and Wastewater Administration Budget Control Level, to reflect that fewer general and administrative costs had been charged to the CIP than SPU had originally planned for 2005. These supplemental appropriation changes are reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	55	400	1,025	1,414	1,077	1,104	1,132	6,207
Project Total:	0	55	400	1,025	1,414	1,077	1,104	1,132	6,207
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	55	400	1,025	1,414	1,077	1,104	1,132	6,207
Appropriations Total*	0	55	400	1,025	1,414	1,077	1,104	1,132	6,207
O & M Costs (Savings)			0	0	0	0	0	0	0

Other Agency Opportunity - WW

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

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

Project ID: C305220 End Date: Ongoing

Location: Citywide

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

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	139	200	410	420	431	442	453	2,495
Project Total:	0	139	200	410	420	431	442	453	2,495
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	139	200	410	420	431	442	453	2,495
Appropriations Total*	0	139	200	410	420	431	442	453	2,495
O & M Costs (Savings)			0	0	0	0	0	0	0

Outfall Rehab Program - DRN

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type: Rehabilitation or Restoration Start Date: 2nd Quarter 2005

Project ID: C353207 End Date: Ongoing

Location: Citywide

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

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

This project funds improvements to the City's stormwater outfalls, based on the results of the Outfall Inspection - Drainage project (C302304). The project's initial focus is on developing an analysis of the existing information on the outfalls and related permitting processes and interagency activities.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	150	200	154	158	162	166	170	1,160
Project Total:	0	150	200	154	158	162	166	170	1,160
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	150	200	154	158	162	166	170	1,160
Appropriations Total*	0	150	200	154	158	162	166	170	1,160
O & M Costs (Savings)			0	0	0	0	0	0	0

Outfall Rehab Program - WW

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

Project Type: Rehabilitation or Restoration Start Date: 2nd Quarter 2005

Project ID: C305203 End Date: Ongoing

Location: Citywide

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

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

This project funds improvements to the City's wastewater outfalls, based on the results of the Outfall Inspection-Wastewater project (C302202). The project's initial focus is on developing an analysis of the existing information on the outfalls and related permitting processes and interagency activities.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	137	10	297	158	162	166	170	1,100
Project Total:	0	137	10	297	158	162	166	170	1,100
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	137	10	297	158	162	166	170	1,100
Appropriations Total*	0	137	10	297	158	162	166	170	1,100
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Pinehurst Natural Drainage System

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:4th Quarter 2002Project ID:C333202End Date:4th Quarter 2008

Location: Thornton Creek Watershed

Neighborhood 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. 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. These sidewalks may include alternative design elements such as porous pavements. 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 against existing spot drainage problems. In 2004, this project was the subject of a budget proviso, which was lifted by Ordinance 121459. The project is partially funded with a \$3.7 million state Public Works Trust Fund loan, which was approved by Ordinance 121464 in 2004. Beginning in 2008, costs to operate and maintain the new system are included in the Department's operating budget. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	1,168	1,698	1,287	91	12	0	0	0	4,256
Project Total:	1,168	1,698	1,287	91	12	0	0	0	4,256
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	1,168	1,698	1,287	91	12	0	0	0	4,256
Appropriations Total*	1,168	1,698	1,287	91	12	0	0	0	4,256
O & M Costs (Savings)			0	0	1	2	1	1	5

Piper's Creek - Detention

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type: Improved Facility Start Date: 3rd Quarter 1999

Project ID: C399326 End Date: Ongoing

Location: 777 NW Carkeek Park Rd.

Neighborhood Plan:Broadview-Bitter Lake-Haller LakeNeighborhood Plan Matrix:MultipleNeighborhood District:NorthwestUrban Village:Not in an Urban Village

The existing pond on NW Carkeek Park Road is loaded with sediment and has little detention capacity, requiring substantial improvements before it can serve as a detention facility. After evaluation of alternatives and performing cost/benefit analysis, the preferred option is to dredge the existing pond now and every 10 years to maintain its function as a sedimentation trap. The project provides for this dredging, as well as for ongoing dam monitoring and ditch cleaning.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	296	140	24	41	42	43	44	45	675
Project Total:	296	140	24	41	42	43	44	45	675
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	296	140	24	41	42	43	44	45	675
Appropriations Total*	296	140	24	41	42	43	44	45	675
O & M Costs (Savings)			3	3	3	3	3	3	18

Point Sewer Pipe Rehabilitation - Contract

BCL/Program Name: Sewer Rehabilitation BCL/Program Code: C340B

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 repairs and 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	965	810	445	1,421	3,071	1,616	1,651	1,533	11,512
Project Total:	965	810	445	1,421	3,071	1,616	1,651	1,533	11,512
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	965	810	445	1,421	3,071	1,616	1,651	1,533	11,512
Appropriations Total*	965	810	445	1,421	3,071	1,616	1,651	1,533	11,512
O & M Costs (Savings)			0	0	0	0	0	0	0

Point Sewer Pipe Rehabilitation - Crews

BCL/Program Name: Sewer Rehabilitation BCL/Program Code: C340B

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 repairs and 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.

In 2005, Ordinance 121993 transferred \$300,000 from this project to SPU's Drainage and Wastewater Administration Budget Control Level, to reflect that fewer general and administrative costs had been charged to the CIP than SPU had originally planned for 2005. Ordinance 121993 also transferred \$200,000 from this project to the SLU Combined Sewer Overflow - KC project (C3AA104), to provide additional budget authority in that project pending resolution of funding negotiations between the City and King County. These supplemental appropriation changes are reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	5,404	3,325	3,200	4,271	4,596	4,947	5,325	4,408	35,476
Project Total:	5,404	3,325	3,200	4,271	4,596	4,947	5,325	4,408	35,476
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	5,404	3,325	3,200	4,271	4,596	4,947	5,325	4,408	35,476
Appropriations Total*	5,404	3,325	3,200	4,271	4,596	4,947	5,325	4,408	35,476
O & M Costs (Savings)			0	0	0	0	0	0	0

Pump Station Improvements

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

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

Project ID: C305230 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 program provides for wastewater pump station improvements, upgrades, repairs and rehabilitation, including design and installation of emergency generators, and material and labor costs for equipment replacement (pumps and valves), as well as equipment for the remote monitoring system. This project implements the Pump Station Asset Management Plan.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	936	400	1,853	2,095	2,154	2,208	2,263	11,909
Project Total:	0	936	400	1,853	2,095	2,154	2,208	2,263	11,909
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	936	400	1,853	2,095	2,154	2,208	2,263	11,909
Appropriations Total*	0	936	400	1,853	2,095	2,154	2,208	2,263	11,909
O & M Costs (Savings)			0	0	0	0	0	0	0

Rainier Ave. S/S Carver - Landslide

BCL/Program Name: Public Asset Protection BCL/Program Code: C334B

Project Type:New FacilityStart Date:3rd Quarter 2005Project ID:C353401End Date:1st Quarter 2009

Location:

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

This project makes improvements to protect three combined sewer lines that traverse a steep slope down to Rainier Avenue S. Preliminary analysis determined these three lines were at risk of damage due to landslides. The project entails constructing retaining walls along Rainier Avenue S to protect the combined sewer lines from the effects of landslides. The project also makes improvements to the collection of stormwater from the streets that feed stormwater to these combined sewers, to reduce the risk of landslides. This project is in a preliminary phase of development and cost estimates will be revised over time. SPU Asset Management Committee review is required before the project implementation phase.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	74	86	57	672	11	0	0	900
Project Total:	0	74	86	57	672	11	0	0	900
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	74	86	57	672	11	0	0	900
Appropriations Total*	0	74	86	57	672	11	0	0	900
O & M Costs (Savings)			0	0	0	0	6	6	12

S Genesee Combined Sewer Overflow

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

Project Type:New FacilityStart Date:1st Quarter 2003Project ID:C303103End Date:3rd Quarter 2016

Location: S Genesee St.

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, 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 an early phase of development and cost estimates will be revised over time. This project has been approved by SPU's Asset Management Committee. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	70	369	325	423	434	1,093	1,104	272	4,090
Project Total:	70	369	325	423	434	1,093	1,104	272	4,090
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	70	369	325	423	434	1,093	1,104	272	4,090
Appropriations Total*	70	369	325	423	434	1,093	1,104	272	4,090
O & M Costs (Savings)			0	0	0	0	0	0	0

S Henderson CSO Storage

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

Project Type:New FacilityStart Date:3rd Quarter 2004Project ID:C304102End Date:4th Quarter 2017

Location: S Henderson St./Rainier Ave. S

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 co-ordination with King County. This project is in a preliminary phase of development and cost estimates will be revised over time. This project has been approved by SPU's Asset Management Committee. In addition, this project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	31	263	325	377	556	641	2,208	208	4,609
Project Total:	31	263	325	377	556	641	2,208	208	4,609
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	31	263	325	377	556	641	2,208	208	4,609
Appropriations Total*	31	263	325	377	556	641	2,208	208	4,609
O & M Costs (Savings)			0	0	0	0	0	0	0

S Henderson Street Raincatchers

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

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C305202End Date:4th Quarter 2006

Location: S Henderson St.

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SoutheastUrban Village:Rainier Beach

This project studies decentralized alternatives to managing the collection and conveyance of 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 S Henderson Street 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 federal Environmental Protection Agency.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	789	628	0	0	0	0	0	1,417
Project Total:	0	789	628	0	0	0	0	0	1,417
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	789	628	0	0	0	0	0	1,417
Appropriations Total*	0	789	628	0	0	0	0	0	1,417
O & M Costs (Savings)			0	0	0	0	0	0	0

S Lake Washington Sewer Maintenance Assessment

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

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2003Project ID:C303201End Date:4th Quarter 2006

Location: Various

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

This project provides an assessment of the condition and capacity of the combined sewer main in the Henderson basin. Work may include cleaning, closed circuit television investigation, monitoring and modeling for alternatives in the basin addressing CSO compliance and sewer main capacity issues. Some repair and retrofit may be necessary while long term capital improvements are planned. Confidence level in this current cost estimate is medium.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	300	10	0	0	0	0	0	310
Project Total:	0	300	10	0	0	0	0	0	310
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	300	10	0	0	0	0	0	310
Appropriations Total*	0	300	10	0	0	0	0	0	310
O & M Costs (Savings)			0	0	0	0	0	0	0

Salmon Bay Phase 2 Acquisition & Restoration

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:Improved FacilityStart Date:2nd Quarter 2003Project ID:C333307End Date:4th Quarter 2006

Location: Salmon Bay

Neighborhood Plan:Crown Hill/BallardNeighborhood Plan Matrix:II OS10Neighborhood District:NorthwestUrban Village:Not in an Urban Village

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. It is a critical transition zone for migrating salmon, which must acclimatize to salt water immediately after passing through the locks. This project initiates restoration to improve shoreline habitat at the site. The project also improves public access by building pedestrian paths and installing a public "viewing area" with interpretive signage. Environmental restoration continues through 2006 to control invasive species and establish native and other habitat enhancing vegetation.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	419	95	10	0	0	0	0	0	524
Project Total:	419	95	10	0	0	0	0	0	524
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	419	95	10	0	0	0	0	0	524
Appropriations Total*	419	95	10	0	0	0	0	0	524
O & M Costs (Savings)			0	0	0	0	0	0	0

Sanitary Sewer Overflow Capacity

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

Project Type: New Investment Start Date: 2nd Quarter 2002

Project ID: C302205 End Date: Ongoing

Location: N/A

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

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

This project develops a guidance document and self-audit tool for SPU to apply to its wastewater collection system programs and practices, as part of complying with a proposed federal ruling on Sanitary Sewer Overflows (SSOs). The project creates an inventory of the components of the wastewater collection system, and helps ensure that SPU's reporting and record keeping practices reflect federal Capacity, Management, Operations and Maintenance program standards. The project identifies gaps in regulatory compliance, and generates recommendations for improving preventive maintenance of the wastewater system and complying with proposed SSO regulations.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	231	350	250	1,025	1,051	1,077	1,104	1,132	6,220
Project Total:	231	350	250	1,025	1,051	1,077	1,104	1,132	6,220
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	231	350	250	1,025	1,051	1,077	1,104	1,132	6,220
Appropriations Total*	231	350	250	1,025	1,051	1,077	1,104	1,132	6,220
O & M Costs (Savings)			0	0	0	0	0	0	0

Seattle Housing Authority Integrated Drainage Plan

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:1st Quarter 2006Project ID:C363301End Date:2nd Quarter 2010

Location: Lake Washington Drainage Basin

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	300	500	800	150	50	0	1,800
Project Total:	0	0	300	500	800	150	50	0	1,800
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	300	500	800	150	50	0	1,800
Appropriations Total*	0	0	300	500	800	150	50	0	1,800
O & M Costs (Savings)			0	0	0	0	2	2	4

Seattle Monorail Project - DWF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C404301-DWFEnd Date:1st Quarter 2006

Location: SW Morgan St./NW 85th St.

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

The Seattle Monorail Project (SMP) is planning an initial 14-mile monorail route between Ballard and West Seattle that travels through downtown Seattle. Seattle voters approved the Monorail conceptual plan in November 2002. This project funds planning, design, and coordination with agencies involved in SPU utility relocations associated with implementation of a new monorail. The project does not include funding for construction. An agreement is in place between the SMP and the City in which the former will reimburse the City for all costs incurred by City departments because of the Monorail project. This project is funded by SPU's Drainage & Wastewater and Water Funds. In 2005, the SMP's Board of Directors turned down the financing plan proposed for the SMP, and the project's status was uncertain at the time of the 2006 Proposed Budget. In November 2005, Proposition 1, which concerned constructing a monorail by modifying the Seattle Popular Monorail Plan, was not approved by voters. As a result, the Monorail Green Line will not be built and the Seattle Popular Monorail Authority will be dissolved. See also the Seattle Monorail Project in the Seattle City Light CIP (8306).

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	122	400	0	0	0	0	0	0	522
Project Total:	122	400	0	0	0	0	0	0	522
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	122	400	0	0	0	0	0	0	522
Appropriations Total*	122	400	0	0	0	0	0	0	522
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Sediment Remediation - DRN

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

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

Project ID: C305503 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 provides drainage funding for preliminary studies and analysis of cleanup of contaminated sediment sites in which the City is a participant, for actual cleanup of contaminated sites, and for preliminary engineering for future cleanup efforts. 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 project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. In 2005, Ordinance 121883 transferred \$768,000 from SPU's Other Agency Opportunity project (C3NW035-006) to this project to pay for emergency clean-up work in the South Park area. This supplemental appropriation change is reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	1,196	2,115	611	287	221	162	166	4,758
Project Total:	0	1,196	2,115	611	287	221	162	166	4,758
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	1,196	2,115	611	287	221	162	166	4,758
Appropriations Total*	0	1,196	2,115	611	287	221	162	166	4,758
O & M Costs (Savings)			0	0	0	0	0	0	0

Sediment Remediation - WW

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

Project Type: New Investment Start Date: 4th Quarter 2000

Project ID: C300412 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 provides wastewater funding for preliminary studies and analysis of cleanup of contaminated sediment sites in which the City is a participant, for actual clean-up of contaminated sites, and for preliminary engineering for future cleanup efforts. 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 project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	1,786	1,392	985	1,085	320	242	201	206	6,217
Project Total:	1,786	1,392	985	1,085	320	242	201	206	6,217
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	1,786	1,392	985	1,085	320	242	201	206	6,217
Appropriations Total*	1,786	1,392	985	1,085	320	242	201	206	6,217
O & M Costs (Savings)			0	0	0	0	0	0	0

Sewage System Modeling

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

Project Type: New Investment Start Date: 3rd Quarter 1998

Project ID: C3AA206 End Date: Ongoing

Location: Citywide

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

This project facilitates sewer capacity assessment by development of computer models and other methodologies for sewer system evaluation, including data collection.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	726	163	225	103	105	108	110	113	1,653
Project Total:	726	163	225	103	105	108	110	113	1,653
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	726	163	225	103	105	108	110	113	1,653
Appropriations Total*	726	163	225	103	105	108	110	113	1,653
O & M Costs (Savings)			0	0	0	0	0	0	0

Sewer Emergency Repairs

BCL/Program Name: Sewer Rehabilitation BCL/Program Code: C340B

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

Project ID: C3AA404 End Date: Ongoing

Location: Citywide

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

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

This program makes emergency repairs to sewer lines that collapse, cause surface problems, or otherwise endanger public health or welfare.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	2,733	294	500	406	548	490	589	604	6,164
Project Total:	2,733	294	500	406	548	490	589	604	6,164
Fund Appropriations/Allocations									
SPU Drainage and Wastewater Fund	2,733	294	500	406	548	490	589	604	6,164
Appropriations Total*	2,733	294	500	406	548	490	589	604	6,164
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Sewer Full Line Replacements

BCL/Program Name: Sewer Rehabilitation BCL/Program Code: C340B

Project Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C300488End 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 and repairs sewer lines citywide. Closed circuit television inspections identify defects in sewer mainlines. Each mainline defect is catalogued in the Department's database and assigned a priority number, which designates the urgency of repair under this program. SPU uses a criticality analysis as part of an asset management approach to evaluating life cycle costs, and revises priorities among project selection and rehabilitation methodology.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	35,570	900	416	309	252	254	251	314	38,266
Project Total:	35,570	900	416	309	252	254	251	314	38,266
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	35,570	900	416	309	252	254	251	314	38,266
Appropriations Total*	35,570	900	416	309	252	254	251	314	38,266
O & M Costs (Savings)			0	0	0	0	0	0	0

Shared Opportunity Projects - DWF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type: Rehabilitation or Restoration Start Date: 1st Ouarter 2005

Project ID: C405603-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 project provides funding for a preliminary assessment of emerging demands that may develop during the year, such as shared fund water, drainage and wastewater, and solid waste projects, emergency repairs, or actions to comply with enforcement orders by regulatory agencies. Funding is used to develop scopes, budgets, and schedules for new projects to be included in subsequent CIP proposals. For projects that cannot wait until the next funding cycle, SPU uses these funds to prepare background documentation to seek City Council approval for project design and construction in the year it wants the project to begin. New projects that are developed with these funds are reviewed and approved by SPU's capital planning committees. The committees review expenditures on a monthly basis and establish priorities among projects. In the 2005-2010 Adopted CIP, the project ID for this project was C4NW106-005-DWF.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	100	0	103	105	108	110	110	636
Project Total:	0	100	0	103	105	108	110	110	636
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	100	0	103	105	108	110	110	636
Appropriations Total*	0	100	0	103	105	108	110	110	636
O & M Costs (Savings)			0	0	0	0	0	0	0

SLU Combined Sewer Overflow - KC

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

Project Type:New FacilityStart Date:4th Quarter 1996Project ID:C3AA104End Date:4th Quarter 2006

Location: Denny Wy.

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

This is a joint City of Seattle/King County project to provide combined sewer overflow control near Denny Way and Lake Union. King County manages the project. Seattle's share of the project costs is 17% of the full project budget, and is reflected below. Construction was completed in 2005 and the project is in the close-out phase. In 2005, Ordinance 121993 transferred \$200,000 from the Point Sewer Pipe Rehabilitation - Crews project (C303402) to this project, to provide additional budget authority pending resolution of negotiations between the City and King County about the City's share of a grant for the project. This supplemental appropriation is reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	17,031	1,810	400	0	0	0	0	0	19,241
Project Total:	17,031	1,810	400	0	0	0	0	0	19,241
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	17,031	1,810	400	0	0	0	0	0	19,241
Appropriations Total*	17,031	1,810	400	0	0	0	0	0	19,241
O & M Costs (Savings)			0	0	0	0	0	0	0

SLU Combined Sewer Overflow Phase 2

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

Project Type:New FacilityStart Date:1st Quarter 1995Project ID:C3AA106End Date:4th Quarter 2006

Location: Valley St.

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

This project connects the City's new Combined Sewer Overflow project (Phase I), a larger transport system along the east side of Lake Union, to King County's projects, which are storage, conveyance, and primary treatment projects (Phases III and IV). The project is in the construction phase with high confidence in the cost estimate, and does not require review by SPU's Asset Management Committee.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	5,627	260	10	0	0	0	0	0	5,897
Project Total:	5,627	260	10	0	0	0	0	0	5,897
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	5,627	260	10	0	0	0	0	0	5,897
Appropriations Total*	5,627	260	10	0	0	0	0	0	5,897
O & M Costs (Savings)			0	0	0	0	0	0	0

SLU Feasibility Phase 2 - DRN

BCL/Program Name: Other Drainage BCL/Program Code: C335B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2005Project ID:C353521End Date:4th Quarter 2006

Location: South Lake Union Area

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

This project addresses drainage-related requirements arising from other City-sponsored projects in South Lake Union. The work includes flow modeling, development of green roof specifications, and pipeline relocations. The cost estimate confidence level is medium and does require SPU Asset Management Committee review. The funding expended for this project is dependent upon the schedule of other South Lake Union projects.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	185	60	0	0	0	0	0	245
Project Total:	0	185	60	0	0	0	0	0	245
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	185	60	0	0	0	0	0	245
Appropriations Total*	0	185	60	0	0	0	0	0	245
O & M Costs (Savings)			0	0	0	0	0	0	0

SLU Feasibility Phase 2 - WW

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

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2005Project ID:C305221End Date:4th Quarter 2006

Location: South Lake Union Area

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

This project addresses wastewater-related requirements arising from other City-sponsored projects in South Lake Union. The work includes flow modeling, development of green roof specifications, and pipeline relocations. The cost estimate confidence levelis medium and does require SPU Asset Management Committee review. The funding expended for this project is dependent upon the schedule of other South Lake Union projects.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	210	660	0	0	0	0	0	870
Project Total:	0	210	660	0	0	0	0	0	870
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	210	660	0	0	0	0	0	870
Appropriations Total*	0	210	660	0	0	0	0	0	870
O & M Costs (Savings)			0	0	0	0	0	0	0

Small Landslide Projects

BCL/Program Name: Public Asset Protection BCL/Program Code: C334B

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

Project ID: C343402 End Date: Ongoing

Location: Citywide

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

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

This project provides for spot improvements in landslide-prone areas throughout Seattle. Typical improvements include installing berms, swales, catch-basins, storm drains, subsurface drains and small slope stability improvement projects. Individual spot improvement projects do not exceed \$150,000. This project does not require SPU Asset Management Committee review as the spot improvements do not exceed \$250,000. The cost estimates will be revised over time as projects are determined.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	565	385	409	718	630	646	1,656	1,700	6,709
Project Total:	565	385	409	718	630	646	1,656	1,700	6,709
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	565	385	409	718	630	646	1,656	1,700	6,709
Appropriations Total*	565	385	409	718	630	646	1,656	1,700	6,709
O & M Costs (Savings)			0	0	0	0	0	0	0

Small Sewer Improvements

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

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

Project ID: C303299 End Date: Ongoing

Location: Citywide

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

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	106	170	160	174	179	183	188	193	1,353
Project Total:	106	170	160	174	179	183	188	193	1,353
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	106	170	160	174	179	183	188	193	1,353
Appropriations Total*	106	170	160	174	179	183	188	193	1,353
O & M Costs (Savings)			0	0	0	0	0	0	0

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 2008

Location: Various

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

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

This project funds SPU's work to implement drainage improvements under an agreement with Sound Transit. Sound Transit has agreed in principle to enter into an Integrated Drainage Plan (IDP) agreement with the City of Seattle to provide funds to the City in lieu of constructing storm water treatment facilities for the Link Light Rail project constructed in the city south of the Downtown Seattle Transit Tunnel. The value established for Sound Transit's payment to the City under terms of the IDP is \$2.3 million, including the at-grade segments of light rail within the city south of the Transit Tunnel. Under the terms of the agreement, SPU develops a project to address drainage and water quality within the Martin Luther King/Norfolk drainage basin area. The confidence level of current cost estimate is low as specific work is continuing to be defined. An agreement authorizing all City services related to Sound Transit light rail construction (Sound Transit Construction Services Agreement) was adopted via Ordinance 121312 in July 2003. Sound Transit intends to issue task orders authorizing multiple years of City service for each contract segment. See also Sound Transit projects in the City Light (8204) and Seattle Department of Transportation (TC36631) CIPs. In the 2005-2010 Adopted CIP, the project ID for this project was C3NW035-008. In 2005, Ordinance 121883 moved this project from SPU's Other Drainage Budget Control Level to the Shared Cost Projects BCL. The Project ID was changed from C405451 in the 2006-2011 Proposed CIP.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	300	300	1,538	162	0	0	0	2,300
Project Total:	0	300	300	1,538	162	0	0	0	2,300
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	300	300	1,538	162	0	0	0	2,300
Appropriations Total*	0	300	300	1,538	162	0	0	0	2,300
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		0	300	1,538	162	0	0	0	2,000

Sound Transit Light Rail - 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 2009

Location: Martin Luther King Jr. Wy. S/S Walden St.

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

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

This program will fund projects for SPU's costs related to Sound Transit's Light Rail system. SPU is currently working on the planning, design and construction of the Central Link Light Rail System. Sound Transit proposes to construct and operate this electrical light rail transit system, which includes more than 14 miles of alignment. The first phase of Sound Transit's project constructs a light rail segment from the Convention Place Station to South 154th Street near Seattle/Tacoma Airport. SPU is also planning to participate in Sound Transit's preliminary engineering and design on the North Link system, which is expected to begin late 2006. The City of Seattle, including SPU, has an ongoing agreement for reimbursement from Sound Transit. See also Sound Transit projects in the City Light (8204) and Seattle Department of Transportation (TC36631) CIPs. In the 2005-2010 Adopted CIP, the project ID was C404401-DWF for this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	490	1,076	498	308	84	3	0	0	2,459
Project Total:	490	1,076	498	308	84	3	0	0	2,459
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	490	1,076	498	308	84	3	0	0	2,459
Appropriations Total*	490	1,076	498	308	84	3	0	0	2,459
O & M Costs (Savings)			0	0	0	0	0	0	0

South Park Soil Project

BCL/Program Name: Habitat and Sediments

BCL/Program Code: C350B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C305502End Date:2nd Quarter 2008

Location: Dallas Ave South/16th Ave South/South Donovan St

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

Neighborhood District: Southwest Urban Village: South Park

This project provides long-term mitigation of PCB contaminated soil in street right-of-ways in a residential-industrial neighborhood along 17th Avenue South, South Donovan Street and Dallas Avenue South in South Park. To protect public health and the environment, state Department of Ecology and federal EPA require SPU to meet either a residential (less than one part per million) or industrial cleanup standard (less than 10 parts per million with capping and institutional controls). The project likely involves a combination of excavation, soil disposal and replacement, capping, and installation of drainage infrastructure. An emergency cleanup is already substantially complete but regulators are requiring long term mitigation. This site is across the street from the Superfund Early Action Site Terminal 117. For information on other soil remediation projects, see the Dallas Ave. S Emergency Soil Removal project (C304502).

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	768	581	3,949	39	0	0	0	5,337
Project Total:	0	768	581	3,949	39	0	0	0	5,337
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	768	581	3,949	39	0	0	0	5,337
Appropriations Total*	0	768	581	3,949	39	0	0	0	5,337
O & M Costs (Savings)			0	0	0	0	0	0	0

South Park Water Quality Study

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C343304End Date:4th Quarter 2006

Location: South Park Drainage Basin

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

A drainage improvement study was completed for the South Park drainage basin in 2002. In light of that study, this project evaluates water quality conditions and develops alternatives for solving water quality problems in the basin. Alternatives include incorporating water quality features into drainage improvement projects proposed in the 2002 study, constructing additional stormwater treatment facilities, and implementing non-structural controls to reduce stormwater pollution. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	21	25	10	0	0	0	0	0	56
Project Total:	21	25	10	0	0	0	0	0	56
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	21	25	10	0	0	0	0	0	56
Appropriations Total*	21	25	10	0	0	0	0	0	56
O & M Costs (Savings)			0	0	0	0	0	0	0

Spoils Yard & Decant Facility - DWF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:3rd Quarter 2004Project ID:C404603-DWFEnd Date:4th Quarter 2006

Location: S Michigan St./E Marginal Wy. S

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

This project replaces the temporary spoils yard on Ellis Ave. South with a permanent yard located at the intersection of South Michigan Street and East Marginal Way South. It is designed and built to allow SPU to handle spoils materials from repair sites, sewer and drainage vactor grits, future hydro-excavated materials and store replacement fill materials for completing repair jobs. The facility is designed to enable SPU to perform these functions environmentally using best management practices. The project may include partners from Seattle Department of Transportation, City Light and the Department of Parks and Recreation. This project is in a preliminary phase of development and cost estimates will be revised over time. The identification of a suitable site and the acquisition process has delayed the project. In the 2005-2010 Adopted CIP, the project ID for this project was C4NW106-007-DWF.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	10	113	0	0	0	0	0	123
Project Total:	0	10	113	0	0	0	0	0	123
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	10	113	0	0	0	0	0	123
Appropriations Total*	0	10	113	0	0	0	0	0	123
O & M Costs (Savings)			0	0	0	0	0	0	0

Stormwater Mitigation Partnership Program

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353309End 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 implements capital projects that support innovative stormwater management improvements (e.g., low impact development) by partnering with public and/or private entities. All efforts must meet the legal nexus for use of drainage funds and provide sufficient benefit in improving the function and operation of SPU's drainage system. The program has not been through the SPU Asset Management Committee review process. This project supports the Mayor's Restore Our Waters Initiative to improve Seattle's aquatic environments.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	50	50	50	50	50	50	0	300
Project Total:	0	50	50	50	50	50	50	0	300
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	50	50	50	50	50	50	0	300
Appropriations Total*	0	50	50	50	50	50	50	0	300
O & M Costs (Savings)			0	0	0	0	0	0	0

Strategic Asset Management Plan - DRN

BCL/Program Name: Other Drainage BCL/Program Code: C335B

Project Type:New InvestmentStart Date:1st Quarter 2004Project ID:C333507End Date:4th Quarter 2006

Location: N/A

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	52	40	40	0	0	0	0	0	132
Project Total:	52	40	40	0	0	0	0	0	132
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	52	40	40	0	0	0	0	0	132
Appropriations Total*	52	40	40	0	0	0	0	0	132
O & M Costs (Savings)			0	0	0	0	0	0	0

Strategic Asset Management Plan - WW

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

Project Type:New InvestmentStart Date:1st Quarter 2003Project ID:C303204End Date:4th Quarter 2006

Location: N/A

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

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	73	100	100	0	0	0	0	0	273
Project Total:	73	100	100	0	0	0	0	0	273
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	73	100	100	0	0	0	0	0	273
Appropriations Total*	73	100	100	0	0	0	0	0	273
O & M Costs (Savings)			0	0	0	0	0	0	0

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

SW Prescott/Admiral Landslide

BCL/Program Name: Public Asset Protection BCL/Program Code: C334B

Project Type:New FacilityStart Date:3rd Quarter 2002Project ID:C302353End Date:4th Quarter 2008

Location: SW Admiral Wy./SW Spokane Wy.

Neighborhood Plan:AdmiralNeighborhood Plan Matrix:NT-12Neighborhood District:SouthwestUrban Village:Not in an Urban Village

This project mitigates drainage problems and potential landslide conditions in the SW Prescott Place/Admiral Way Landslide Mitigation Study area that may put municipal infrastructure at risk and contribute to flooding of private property. The project is completed in phases. First, it defines and prioritizes stability and flooding problem areas. Currently nine landslide and three flooding areas have been identified in the study area. Next, preliminary engineering, which is expected to last through the third quarter of 2006, identifies cost-effective alternatives for improvements in each area. Finally, the project constructs the selected improvements in stages, beginning in 2004 and ending in 2007. Three of the landslide problem areas in the study area are joint projects with the Seattle Department of Transportation (SDOT) and the Seattle Department of Parks and Recreation. See SDOT project TC36551 for more transportation related information. There is a medium degree of confidence in the cost estimate. SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	541	765	485	623	541	0	0	0	2,955
Project Total:	541	765	485	623	541	0	0	0	2,955
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	541	765	485	623	541	0	0	0	2,955
Appropriations Total*	541	765	485	623	541	0	0	0	2,955
O & M Costs (Savings)			0	0	0	1	1	1	3

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:3rd Quarter 2009

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. There are currently three different types of culverts connected together making up this culvert system under Rainier Avenue S: a short 42-inch diameter section crossing a 20-foot side street; a three-by-four-foot box culvert running under Rainier Avenue S.; and a corrugated metal culvert running under a adjacent apartment. 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. There is a medium degree of confidence in the cost estimate. 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	638	80	315	15	5	5	0	0	1,058
Project Total:	638	80	315	15	5	5	0	0	1,058
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	638	80	315	15	5	5	0	0	1,058
Appropriations Total*	638	80	315	15	5	5	0	0	1,058
O & M Costs (Savings)			0	6	6	6	6	6	30

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 2008

Location: 5th Ave. NE

Neighborhood Plan: Northgate Neighborhood Plan Matrix: Multiple

Neighborhood District: North Urban Village: Northgate

This project includes preliminary engineering, design and construction of a water quality facility on the south lot of Northgate Mall. The facility is located between 3rd and 5th Ave. NE and between NE 100th and NE 103rd St., and provides water quality treatment for public drainage. The project includes excavation of fill material and creation of a creek-like channel for dry weather and small storm flow from the existing public drainage system under NE 100th St. at 3rd Ave. NE. The project facility also includes improvements to pedestrian access and landscaping. Ordinance 121548 created the project in 2004 and provided \$400,000 for property acquisition and closing costs. Ordinance 121547 appropriated \$6.8 million for project design and construction. 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.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	403	6,846	0	0	0	0	0	0	7,249
Project Total:	403	6,846	0	0	0	0	0	0	7,249
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	403	6,846	0	0	0	0	0	0	7,249
Appropriations Total*	403	6,846	0	0	0	0	0	0	7,249
O & M Costs (Savings)			0	0	0	0	71	71	142
Spending Plan		725	1,327	4,057	737	0	0	0	6,846

Venema Creek Natural Drainage System

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:New FacilityStart Date:1st Quarter 2003Project ID:C302317End Date:4th Quarter 2008

Location: 4th Ave. NW/NW 120th St./NW 122nd St.

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 70-acre sub-basin of Piper's Creek to protect downstream aquatic resources. The primarily residential project area includes Greenwood Ave. N. The project may provide code requirements for a portion of Greenwood Ave. N. to cover future requirements associated with redevelopment of the street right-of-way. An option will be provided to residents on project streets to invest in sidewalk and landscaping improvements as part of the project through a local improvement district (LID) funding mechanism. Funding to operate and maintain the project is expected to be included in SPU's operating budget starting in 2009, although surrounding property owners and residents are also expected to provide some level of maintenance. SPU received a \$2.3 million loan from the state Department of Ecology to fund a portion of the project. The confidence level for the current cost estimate is medium. SPU Asset Management Committee review is required prior to the start of the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	118	250	405	2,300	1,500	0	0	0	4,573
Project Total:	118	250	405	2,300	1,500	0	0	0	4,573
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	118	250	405	2,300	1,500	0	0	0	4,573
Appropriations Total*	118	250	405	2,300	1,500	0	0	0	4,573
O & M Costs (Savings)			0	0	0	5	5	5	15

Wastewater Plan

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

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C304201End Date:4th Quarter 2006

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 a long-range plan to guide the development of improvements to the wastewater conveyance system for the next five to 20 years, and provides the framework for organizing and prioritizing the wastewater capital improvement program. It provides a decision model for setting priorities and determining the cost-effectiveness of programs and projects from an asset management perspective. The goal is to provide reliable, high quality, cost-effective wastewater services. While no such comprehensive plan has been prepared for wastewater to date, upcoming federal regulations for the Capacity Management, Operation, and Maintenance Program require a similar planning effort. The confidence level of the current cost estimate is medium for this plan. In the 2005-2011 Adopted CIP this project was titled "Comprehensive Wastewater Plan."

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	530	100	0	0	0	0	0	630
Project Total:	0	530	100	0	0	0	0	0	630
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	530	100	0	0	0	0	0	630
Appropriations Total*	0	530	100	0	0	0	0	0	630
O & M Costs (Savings)			0	0	0	0	0	0	0

Wastewater Rehabilitation Evaluation

BCL/Program Name: Sewer Rehabilitation BCL/Program Code: C340B

Project Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C3AA401End 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 future wastewater rehabilitation projects by investigating existing records, reports, and plans, obtaining field data from closed circuit television inspection and for gauging, developing alternatives and cost estimates, and making recommendations.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	1,261	88	200	96	102	108	114	117	2,086
Project Total:	1,261	88	200	96	102	108	114	117	2,086
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	1,261	88	200	96	102	108	114	117	2,086
Appropriations Total*	1,261	88	200	96	102	108	114	117	2,086
O & M Costs (Savings)			0	0	0	0	0	0	0

Water Reuse - Stormwater

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

Project Type:New FacilityStart Date:4th Quarter 2001Project ID:C353308End Date:4th Quarter 2006

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	50	50	0	0	0	0	0	100
Project Total:	0	50	50	0	0	0	0	0	100
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	50	50	0	0	0	0	0	100
Appropriations Total*	0	50	50	0	0	0	0	0	100
O & M Costs (Savings)			0	0	0	0	0	0	0

Water Reuse - Wastewater

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

Project Type:New FacilityStart Date:4th Quarter 2001Project ID:C301203End Date:4th Quarter 2006

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 funds one or more wastewater reuse projects, selected upon completion of an SPU-sponsored water reuse research study. Funds are used for projects in partnership with other entities (including the Seattle Department of Parks and Recreation and King County), or projects funded only by SPU.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	208	20	14	0	0	0	0	0	242
Project Total:	208	20	14	0	0	0	0	0	242
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	208	20	14	0	0	0	0	0	242
Appropriations Total*	208	20	14	0	0	0	0	0	242
O & M Costs (Savings)			0	0	0	0	0	0	0

Watershed Base Creek Flow Control

BCL/Program Name: Protection of Beneficial Uses

BCL/Program Code: C333B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C353310End Date:4th Quarter 2010

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 conducts preliminary engineering for projects to improve 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 analysis on identified alternatives. A benefit of these preliminary engineering efforts is identification of the most cost-effective capital project options. Additional benefits may include the ability to incorporate multi-objective elements (such as flood control, environment, 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	50	150	425	200	200	200	0	1,225
Project Total:	0	50	150	425	200	200	200	0	1,225
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	50	150	425	200	200	200	0	1,225
Appropriations Total*	0	50	150	425	200	200	200	0	1,225
O & M Costs (Savings)			0	0	0	0	0	0	0

West Seattle Bridge Drainage

BCL/Program Name: Flood Control and Local Drainage BCL/Program Code: C332B

Project Type:Improved FacilityStart Date:1st Quarter 2006Project ID:C363202End Date:4th Quarter 2006

Location: West Seattle

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

The West Seattle Bridge requires frequent maintenance by SPU crews to ensure the drains are clean and functional. Poor drainage on the bridge can lead to ponding and water spilling off the higher road levels to the lower level roadways. This project replaces the older-style drain pipes that have right-angle bends which plug easily and are difficult to clean. The new drains avoid sharp corners and require easier maintenance and fewer plugs. The project also addresses repairs in the existing underground connections from bridge drainage to the storm drains. The project may include new inlets on the ground level roadway. Work is focused on the west end of the bridge. The intended changes likely result in reduced drainage operation and maintenance costs. This planning phase cost estimate has a low confidence level because initial investigations are underway.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	400	0	0	0	0	0	400
Project Total:	0	0	400	0	0	0	0	0	400
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	0	0	400	0	0	0	0	0	400
Appropriations Total*	0	0	400	0	0	0	0	0	400
O & M Costs (Savings)			0	0	0	0	0	0	0

Windermere CSO Storage

BCL/Program Name: Combined Sewer Overflow BCL/Program Code: C310B

Project Type:New FacilityStart Date:1st Quarter 2003Project ID:C302103End Date:4th Quarter 2011

Location: Windemere

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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	448	249	325	395	521	434	552	272	3,196
Project Total:	448	249	325	395	521	434	552	272	3,196
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	448	249	325	395	521	434	552	272	3,196
Appropriations Total*	448	249	325	395	521	434	552	272	3,196
O & M Costs (Savings)			0	0	0	0	0	0	0

Works Progress Administration Drains Study & Repair

BCL/Program Name: Public Asset Protection BCL/Program Code: C334B

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

Project ID: C300338 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 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 project was one of the recommended activities from the Landslide Policy Paper adopted by the City Council in 1998. This project 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	511	250	250	256	263	485	552	566	3,133
Project Total:	511	250	250	256	263	485	552	566	3,133
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	511	250	250	256	263	485	552	566	3,133
Appropriations Total*	511	250	250	256	263	485	552	566	3,133
O & M Costs (Savings)			0	0	0	0	0	0	0

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 at 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: This project implements the Solid Waste CIP Facilities Master Plan. The plan, which guides the construction of facilities that provide the citizens of Seattle with sufficient recycling and solid waste services for the next 30 years, sets objectives and defines options for replacing or rehabilitating the City's solid waste transfer stations and household hazardous waste sheds; constructs a regional, intermodal facility; conducts cost and feasibility analyses of facility options; and determines a preferred approach to implementation. The scope, schedule, and costs of proposed projects are further defined following preliminary engineering and completion of a State Supplemental Environmental Impact Statement (SEIS). Costs include completion of the SEIS, permitting, property acquisition, design, construction, and purchase of facility equipment.
- ♦ Midway Landfill Post-Closure Improvements: This project funds post-closure operations, maintenance, and capital improvements at the Midway Landfill, which SPU operated from 1966 to 1983. The landfill is a 50-acre former gravel quarry located adjacent to Interstate 5 in Kent, Washington. The Washington State Department of Transportation (WSDOT) is widening Interstate 5 by two lanes on the west side. This state project affects SPU's post-closure infrastructure currently in place on the WSDOT right-of-way, and

Seattle Public Utilities - Solid Waste

necessitates the removal of refuse buried in the right-of-way. SPU and WSDOT are working together on this project, which enters the construction phase in 2007 if WSDOT obtains funding.

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 and their 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.

A committee of senior SPU executives, the Asset Management Committee, 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 were approved to create up-to-date improvement and upgrade plans for various groups of assets. Other projects have been expanded or expedited because their benefits exceeded their costs.

Program Category Summaries

The Solid Waste CIP appropriates \$12.8 million in 2006 (including Technology projects funded by the Solid Waste Fund, displayed in a separate section of this CIP). It is comprised of four program categories as summarized below.

New Facilities: This program plans, designs, and constructs new facilities to enhance solid waste operations. In 2006, SPU begins to implement its Solid Waste Facilities Master Plan.

Rehabilitation and Heavy Equipment: This program designs and constructs projects to repair and/or upgrade solid waste facilities and replaces aged heavy equipment.

Shared Cost Projects: This program includes capital improvement projects that receive funding from multiple SPU funds. In 2006 the program includes funding for facility improvements and the SPU Operations Control Center Upgrade.

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

For most projects in the Solid Waste CIP, there are minimal new 2006 operations and maintenance costs, or these costs have not been calculated (N/C). In these cases, the cost impacts of the projects are either insignificant or offset by cost savings realized by other projects.

City Council Changes to the CIP

There are no City Council changes to the CIP.

Project Summary

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
New Facilities						BC	L/Progra	m Code:		C230B
Design Commission Fees - SW	C201004	0	20	25	20	20	20	20	20	145
Facilities Master Plan Implementation	C204002	488	4,817	8,011	7,630	40,740	39,200	35,000	6,250	142,136
Miscellaneous Station Improvements	C203005	158	100	500	103	105	0	0	0	966
New Facilities Development	C205308	0	25	25	26	26	27	28	29	186
New Facilities Total		646	4,962	8,561	7,779	40,891	39,247	35,048	6,299	143,433
Rehabilitation and Ho	eavy Equipm	ent				BC	L/Progra	m Code:		C240B
Heavy Equipment Purchases - SWF	C201002	2,180	850	1,100	1,120	1,160	1,200	1,240	1,280	10,130
Historic Landfill Improvements	C206601	0	0	100	0	0	0	0	0	100
Household Hazard Waste Code Improvements	C205403	0	100	50	0	0	0	0	0	150
Kent Highlands 228th Roadway	C204003	63	100	200	10	0	0	0	0	373
Kent Highlands Agency Negotiations	C205406	0	50	50	50	50	50	50	50	350
Kent Highlands Flare Improvement	C205404	0	100	100	200	50	0	0	0	450
Midway Agency Negotiations	C205407	0	50	50	50	50	50	50	50	350
Midway Landfill Improvements	C203004	15	610	200	100	4,000	0	0	0	4,925
Rehab & Heavy Equipment Development	C205411	0	50	20	51	53	54	55	57	340
Solid Waste Security Improvements	C205402	0	150	100	0	0	0	0	0	250
Street Side Litter Containers	C205408	0	94	0	0	65	0	0	68	227
Rehabilitation and Ho Equipment Total	eavy	2,258	2,154	1,970	1,581	5,428	1,354	1,395	1,505	17,645

^{*}Amounts in thousands of dollars

Project Summary

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Shared Cost Projects						BC	L/Progra	m Code:		C410B
Facility Improvements - SWF	C404602- SWF	341	954	287	0	0	0	0	0	1,582
Fleet Management Study	C405601- SWF	0	48	0	0	0	0	0	0	48
Main Warehouse Improvements - SWF	C406601- SWF	0	0	36	0	0	0	0	0	36
Operational Facilities Plan	C406622- SWF	0	0	135	0	0	0	0	0	135
Operations Control Center Upgrade - SWF	C404501- SWF	46	315	361	35	0	0	0	0	757
Shared Opportunity Projects - SWF	C405603- SWF	0	100	0	103	105	108	110	110	636
Shared Cost Projects Total		387	1,417	819	138	105	108	110	110	3,194
Department Total	_	3,291	8,533	11,350	9,498	46,424	40,709	36,553	7,914	164,272

Fund Summary

Fund Name	LTD	2005	2006	2007	2008	2009	2010	2011	Total
SPU Solid Waste Fund	3,291	8,873	11,350	9,498	46,424	40,709	36,553	7,914	164,612
Department Total	3,291	8,873	11,350	9,498	46,424	40,709	36,553	7,914	164,612

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

Ongoing

End Date:

Design Commission Fees - SW

BCL/Program Name:New FacilitiesBCL/Program Code:C230BProject Type:Improved FacilityStart Date:Ongoing

Project ID: C201004

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 the City Design Commission's review of the environmental and design aspects of capital improvement projects funded by the Solid Waste Fund. Projects reviewed by the Design Commission include those which have a visual impact on the public realm, including buildings, fencing, gates, and landscaping. The allocations shown below are estimates and are expected to be revised over time. This project serves as a central location for fee estimates and once specific projects are reviewed and costs are incurred, the fees are allocated to the appropriate projects.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	20	25	20	20	20	20	20	145
Project Total:	0	20	25	20	20	20	20	20	145
Fund Appropriations/Allocations									
SPU Solid Waste Fund	0	20	25	20	20	20	20	20	145
Appropriations Total*	0	20	25	20	20	20	20	20	145
O & M Costs (Savings)			0	0	0	0	0	0	0

Facilities Master Plan Implementation

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

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C204002End Date:4th Quarter 2011

Location: Multiple locations

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

Neighborhood District: In more than one Neighborhood

Urban Village: In more than one Urban Village

District

This project implements the Solid Waste CIP Facilities Master Plan (C201006). The scope, schedule, and costs of proposed projects are further defined following preliminary engineering and completion of a State Supplemental Environmental Impact Statement (SEIS). Costs below include completion of the SEIS, permitting, property acquisition, design, construction, and facility equipment. The confidence level in the cost estimate is medium as the project is currently defined. SPU's Asset Management Committee has approved the current phase of this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	488	4,817	8,011	7,630	40,740	39,200	35,000	6,250	142,136
Project Total:	488	4,817	8,011	7,630	40,740	39,200	35,000	6,250	142,136
Fund Appropriations/Allocations									
SPU Solid Waste Fund	488	4,817	8,011	7,630	40,740	39,200	35,000	6,250	142,136
Appropriations Total*	488	4,817	8,011	7,630	40,740	39,200	35,000	6,250	142,136
O & M Costs (Savings)			0	0	(600)	600	700	700	1,400

Facility Improvements - SWF

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

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404602-SWFEnd Date:4th Quarter 2006

Location: 700 5th Ave.

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:DowntownUrban Village:Commercial Core

This project funds logistical support services for SPU, including tenant improvements, office buildouts, and furniture. The funding shown below is the Solid Waste Fund's share of the project's cost. The tota 2006 cost for this project across all SPU funds is approximately \$2.8 million.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	341	954	287	0	0	0	0	0	1,582
Project Total:	341	954	287	0	0	0	0	0	1,582
Fund Appropriations/Allocations									
SPU Solid Waste Fund	341	954	287	0	0	0	0	0	1,582
Appropriations Total*	341	954	287	0	0	0	0	0	1,582
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Fleet Management Study

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

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C405601-SWFEnd Date:4th Quarter 2005

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 applies asset management principles to the management of SPU's fleet of heavy equipment. A study conducted by a consultant is complete and the recommendations related to fleet utilization, including which kinds of equipment SPU should be using and how the Department's work practices might be changed either to use existing equipment better or to use different equipment has been presented to the SPU Asset Management Committee. The project supports other work being done by SPU to assess its current system of fleet management, develop performance measures and tracking systems, and modify department processes and practices related to fleet management. It is expected that the implementation of the recommendations identified through this study will lead to lower life cycle costs for fleet management.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	48	0	0	0	0	0	0	48
Project Total:	0	48	0	0	0	0	0	0	48
Fund Appropriations/Allocations									
SPU Solid Waste Fund	0	48	0	0	0	0	0	0	48
Appropriations Total*	0	48	0	0	0	0	0	0	48
O & M Costs (Savings)			0	0	0	0	0	0	0

Heavy Equipment Purchases - SWF

BCL/Program Name:Rehabilitation and Heavy EquipmentBCL/Program Code:C240BProject Type:New InvestmentStart Date:OngoingProject ID:C201002End 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 replaces heavy equipment (such as loaders, bulldozers, road tractors and trailers) used at SPU's North and South Recycling and Disposal Stations. SPU replaces equipment that has reached the end of its useful life with new equipment that meets current environmental standards, and also retrofits existing equipment to meet these standards. In 2005, Ordinance 121883 transferred \$200,000 from this project to the Corporate Management program (C5202) in SPU's Solid Waste Technology Budget Control Level, to support the Solid Waste Data Integration Project. This supplemental appropriation change is reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	2,180	850	1,100	1,120	1,160	1,200	1,240	1,280	10,130
Project Total:	2,180	850	1,100	1,120	1,160	1,200	1,240	1,280	10,130
Fund Appropriations/Allocations									
SPU Solid Waste Fund	2,180	850	1,100	1,120	1,160	1,200	1,240	1,280	10,130
Appropriations Total*	2,180	850	1,100	1,120	1,160	1,200	1,240	1,280	10,130
O & M Costs (Savings)			0	0	0	0	0	0	0

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 2006

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 funds the research and evaluation of possible measures to reduce environmental impacts at old in-City historic landfills. The confidence in the cost estimate is medium.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	0	100	0	0	0	0	0	100
Project Total:	0	0	100	0	0	0	0	0	100
Fund Appropriations/Allocations SPU Solid Waste Fund	0	0	100	0	0	0	0	0	100
Appropriations Total*	0	0	100	0	0	0	0	0	100
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Household Hazard Waste Code Improvements

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

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C205403End Date:4th Quarter 2006

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 funds anticipated upgrades to the City's solid waste facilities required by new state regulations on facilities that handle moderate risk waste. The Washington state Department of Ecology has given the Seattle-King County Health Department the local authority to implement these regulations. SPU works with King County Solid Waste staff and the Health Department to identify necessary improvements to the City's facilities. The confidence in the cost estimate is medium. The SPU Asset Management Committee review is conducted prior to the start of the project. In the 2005-2010 Adopted CIP, the project ID for this project was C2NW402-002. In 2005, Ordinance 121993 transferred \$100,000 from this project to SPU's Solid Waste Administration Budget Control Level, to reflect that fewer general and administrative costs had been charged to the CIP than SPU had originally planned in 2005. This supplemental appropriation change is reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	100	50	0	0	0	0	0	150
Project Total:	0	100	50	0	0	0	0	0	150
Fund Appropriations/Allocations									
SPU Solid Waste Fund	0	100	50	0	0	0	0	0	150
Appropriations Total*	0	100	50	0	0	0	0	0	150
O & M Costs (Savings)			0	0	0	0	0	0	0

Kent Highlands 228th Roadway

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

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C204003End Date:4th Quarter 2007

Location: 228th St. 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 funds the required design work associated with an agreement between the City of Seattle and the City of Kent to relocate the existing Kent Highlands Landfill leachate force main. SPU has agreed in principle to complete the design at SPU's expense, while the City of Kent funds the construction. This relocation is necessitated by Kent's 228th Street road construction project. Additional future project elements include evaluation of the capacity of the existing pump station and possible rehabilitation or replacement of the aging structure, and the abandonment of three existing gas extraction wells on property being transferred to the City of Kent. The project was created in 2004 by Ordinance 121462. The confidence in the cost estimate is medium. The project to replace the leachate pump station has been approved by SPU's Asset Management Committee. In the 2005-2010 Adopted CIP, the project ID for this project was C2NW402-003.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	63	100	200	10	0	0	0	0	373
Project Total:	63	100	200	10	0	0	0	0	373
Fund Appropriations/Allocations						_		_	
SPU Solid Waste Fund	63	100	200	10	0	0	0	0	373
Appropriations Total*	63	100	200	10	0	0	0	0	373
O & M Costs (Savings)			0	0	0	0	0	0	0

Kent Highlands Agency Negotiations

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

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C205406End Date:4th Quarter 2011

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 funds required environmental and feasibility studies to evaluate the effectiveness of the closure of the Kent Highlands 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 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. In the 2005-2010 Adopted CIP, the project ID for this project was C2NW402-011.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	50	50	50	50	50	50	50	350
Project Total:	0	50	50	50	50	50	50	50	350
Fund Appropriations/Allocations									
SPU Solid Waste Fund	0	50	50	50	50	50	50	50	350
Appropriations Total*	0	50	50	50	50	50	50	50	350
O & M Costs (Savings)			0	0	0	0	0	0	0

Kent Highlands Flare Improvement

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

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C205404End 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 funds the required design and construction work associated with the continued operation of 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. These improvements began sequentially in 2005. The confidence in the cost estimate is medium. SPU's Asset Management Committee has not approved the project. In the 2005-2010 Adopted CIP, the project ID for this project was C2NW402-004.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	100	100	200	50	0	0	0	450
Project Total:	0	100	100	200	50	0	0	0	450
Fund Appropriations/Allocations									
SPU Solid Waste Fund	0	100	100	200	50	0	0	0	450
Appropriations Total*	0	100	100	200	50	0	0	0	450
O & M Costs (Savings)			0	0	0	0	0	0	0

Main Warehouse Improvements - SWF

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

Project Type:Improved FacilityStart Date:1st Quarter 2006Project ID:C406601-SWFEnd Date:4th Quarter 2006

Location: 2700 Airport/Way/S

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

This project evaluates, plans, designs and constructs building systems, such as a sprinkler system for fire suppression, and maintenance improvements such as lighting, heating, ventilation and air conditioning, and roof replacement for the main warehouse facility at the Operations Control Center. The funding shown for this project reflect an estimated cost to perform required code improvements and evaluate the overall building needs. The SPU Asset Management Committee approved this project in 2005.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	0	36	0	0	0	0	0	36
Project Total:	0	0	36	0	0	0	0	0	36
Fund Appropriations/Allocations									
SPU Solid Waste Fund	0	0	36	0	0	0	0	0	36
Appropriations Total*	0	0	36	0	0	0	0	0	36
O & M Costs (Savings)			0	0	0	0	0	0	0

Midway Agency Negotiations

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

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C205407End 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 funds 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 the result is avoiding 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 Committee briefings may occur. In the 2005-2010 Adopted CIP, the project ID for this project was C2NW402-012.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	50	50	50	50	50	50	50	350
Project Total:	0	50	50	50	50	50	50	50	350
Fund Appropriations/Allocations									
SPU Solid Waste Fund	0	50	50	50	50	50	50	50	350
Appropriations Total*	0	50	50	50	50	50	50	50	350
O & M Costs (Savings)			0	0	0	0	0	0	0

Midway Landfill Improvements

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

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2003Project ID:C203004End Date:4th Quarter 2008

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 funds post-closure operations, maintenance, and 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 \$700 million 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 below are estimated, and 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 2007, if WSDOT obtains funding for its highway project. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	15	610	200	100	4,000	0	0	0	4,925
Project Total:	15	610	200	100	4,000	0	0	0	4,925
Fund Appropriations/Allocations									
SPU Solid Waste Fund	15	610	200	100	4,000	0	0	0	4,925
Appropriations Total*	15	610	200	100	4,000	0	0	0	4,925
O & M Costs (Savings)			0	0	0	0	0	0	0

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.

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 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 (C204002). 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, 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. Other work is anticipated through 2008. The confidence in the cost estimate is medium. Specific improvements for 2006 are pending review by SPU's Asset Management Committee.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	158	100	500	103	105	0	0	0	966
Project Total:	158	100	500	103	105	0	0	0	966
Fund Appropriations/Allocations									
SPU Solid Waste Fund	158	100	500	103	105	0	0	0	966
Appropriations Total*	158	100	500	103	105	0	0	0	966
O & M Costs (Savings)			0	0	0	0	0	0	0

New Facilities Development

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

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C205308End Date:4th Quarter 2011

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 supports the development of Solid Waste New Facilities 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 has approved the project concept, although additional briefings may occur. In the 2005-2010 Adopted CIP, the project ID for this project was C2NW301-001.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	25	25	26	26	27	28	29	186
Project Total:	0	25	25	26	26	27	28	29	186
Fund Appropriations/Allocations									
SPU Solid Waste Fund	0	25	25	26	26	27	28	29	186
Appropriations Total*	0	25	25	26	26	27	28	29	186
O & M Costs (Savings)			0	0	0	0	0	0	0

Operational Facilities Plan

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

Project Type:Improved FacilityStart Date:1st Quarter 2006Project ID:C406622-SWFEnd Date:4th Quarter 2006

Location:

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

This project provides an inventory of existing facilities and their condition and identifies department functions, and adjacency, facility and space requirements. The information is used to develop a plan for the use of existing facilities, required upgrades, identification of gaps and recommended options for addressing those gaps. The funding shown below is the Sold Waste Fund's share of project costs. The 2006 total cost for this project across all the SPU funds is \$759,000.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	0	135	0	0	0	0	0	135
Project Total:	0	0	135	0	0	0	0	0	135
Fund Appropriations/Allocations SPU Solid Waste Fund	0	0	135	0	0	0	0	0	135
Appropriations Total*	0	0	135	0	0	0	0	0	135
O & M Costs (Savings)			0	0	0	0	0	0	0

Operations Control Center Upgrade - SWF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404501-SWFEnd Date:4th Quarter 2007

Location: 2700 Airport Wy. 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 remodels and upgrades SPU's Operations Control Center building. The project includes reconfiguring internal space to improve security and incorporate the new Supervisory Control And Data Acquisition (SCADA) system. The upgraded center accommodates SPU's new Strategic Operations Division, as well as Field Operations administration and electrical, mechanical, maintenance and emergency response crews.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	46	315	361	35	0	0	0	0	757
Project Total:	46	315	361	35	0	0	0	0	757
Fund Appropriations/Allocations									
SPU Solid Waste Fund	46	315	361	35	0	0	0	0	757
Appropriations Total*	46	315	361	35	0	0	0	0	757
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Rehab & Heavy Equipment Development

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

Project Type:New InvestmentStart Date:1st Quarter 2005Project ID:C205411End 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 project supports development of 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. Extensive documentation and budget implications are included. The confidence in the cost estimate is medium. SPU's Asset Management Committee has approved the project concept, although additional briefings may occur. In the 2005-2010 Adopted CIP, the project ID for this project was C2NW402-013.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	50	20	51	53	54	55	57	340
Project Total:	0	50	20	51	53	54	55	57	340
Fund Appropriations/Allocations									
SPU Solid Waste Fund	0	50	20	51	53	54	55	57	340
Appropriations Total*	0	50	20	51	53	54	55	57	340
O & M Costs (Savings)			0	0	0	0	0	0	0

Shared Opportunity Projects - SWF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type: Rehabilitation or Restoration Start Date: 1st Ouarter 2005

Project ID: C405603-SWF End Date: Ongoing

Location: N/A

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

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

This project provides funding for a preliminary assessment of emerging demands that may develop during the year, such as shared fund water, drainage and wastewater, and solid waste projects, emergency repairs or actions to comply with enforcement orders by regulatory agencies. Funding is used to develop scopes, budgets and schedules for new projects to be included in subsequent CIP proposals. For projects that cannot wait until the next funding cycle, SPU uses these funds to prepare background documentation to seek City Council approval for project design and construction in the year it wants the project to begin. New projects that are developed from these funds are reviewed and approved by SPU's capital planning committees. The committees review expenditures on a monthly basis and establish priorities among projects. In the 2005-2010 Adopted CIP, the project ID for this project was C4NW106-005-SWF.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	100	0	103	105	108	110	110	636
Project Total:	0	100	0	103	105	108	110	110	636
Fund Appropriations/Allocations									
SPU Solid Waste Fund	0	100	0	103	105	108	110	110	636
Appropriations Total*	0	100	0	103	105	108	110	110	636
O & M Costs (Savings)			0	0	0	0	0	0	0

Solid Waste Security Improvements

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

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C205402End Date:4th Quarter 2006

Location: 8100 2nd 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 funds selected security enhancements recommended in the Solid Waste Vulnerability Assessment. Given the status of work on the Facilities Master Plan Implementation project (C204002), SPU does not anticipate implementing all of the recommended improvements (totaling \$1.8 million) at all of the facilities. Several of the recommendations are either critical, or have a relatively high return on investment; SPU plans to implement those recommendations in the next several years. Specific likely projects include improvements to the scale houses to reduce threats to employee safety from robbery, and repairs and modifications to the perimeter fencing at the transfer stations. Other possible improvements are additional security measures at the landfills and other satellite facilities not included in the Facilities Master Plan. The confidence in the cost estimate is low. In the 2005-2010 Adopted CIP, the project ID for this project was C2NW402-001.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	150	100	0	0	0	0	0	250
Project Total:	0	150	100	0	0	0	0	0	250
Fund Appropriations/Allocations SPU Solid Waste Fund	0	150	100	0	0	0	0	0	250
Appropriations Total*	0	150	100	0	0	0	0	0	250
O & M Costs (Savings)			0	0	0	0	0	0	0

Street Side Litter Containers

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

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C205408End Date:4th Quarter 2011

Location: Citywide

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

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

This project funds the replacement of street side litter containers and container lids. These containers are sited throughout the city, often in Business Improvement Areas, for use by pedestrian traffic. Essential to litter abatement, the containers are owned by SPU and serviced by contracted waste haulers between one and seven days per week to meet anticipated pedestrian demand. Currently, SPU has approximately 880 street side litter containers. Under this project, 20% of the entire container inventory and 10% of all lids were replaced in 2005. In addition, 12.5% of the containers and 10% of the lids are replaced on either two- or three-year cycles beginning in 2008, depending on the durability of the lids, in order to change out old container styles and replace missing or broken lids. The confidence in the cost estimate is high. The project has been approved by SPU's Asset Management Committee as part of the City's effort to recycle 60% of its waste stream. In the 2005-2010 Adopted CIP, the project ID for this project was C2NW402-008.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Solid Waste Rates	0	94	0	0	65	0	0	68	227
Project Total:	0	94	0	0	65	0	0	68	227
Fund Appropriations/Allocations									
SPU Solid Waste Fund	0	94	0	0	65	0	0	68	227
Appropriations Total*	0	94	0	0	65	0	0	68	227
O & M Costs (Savings)			0	0	0	0	0	0	0

SPU TECHNOLOGY PROJECTS

Project Summary

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Technology						BCI	_/Prograi	n Code:		C510B
Asset Management - Technology	C5201	4,869	705	1,305	1,429	1,286	475	350	116	10,535
Capital Planning & Development - Technology	C5205	0	0	0	206	2,365	2,857	3,824	6,469	15,721
Corporate Management - Technology	C5202	1,977	3,696	1,414	1,345	476	367	1,729	504	11,508
Customer Management - Technology	C5203	6,729	1,861	2,159	618	530	2,913	523	463	15,796
Operations Management - Technology	C5204	1,250	1,150	1,055	697	223	503	574	348	5,800
Project Management - Technology	C5206	4,626	1,149	1,209	2,566	1,415	1,210	1,182	0	13,357
Technology Infrastructure	C5207	6,936	1,529	1,790	1,292	1,785	0	395	927	14,654
Technology Total		26,387	10,090	8,932	8,153	8,080	8,325	8,577	8,827	87,371
Department Total		26,387	10,090	8,932	8,153	8,080	8,325	8,577	8,827	87,371

Fund Summary

Fund Name	LTD	2005	2006	2007	2008	2009	2010	2011	Total
SPU Drainage and Wastewater Fund	8,027	4,028	3,545	2,478	2,679	2,761	2,845	2,890	29,253
SPU Solid Waste Fund	5,337	1,910	1,193	1,180	1,219	1,256	1,293	1,282	14,670
SPU Water Fund	13,023	4,152	4,194	4,495	4,182	4,308	4,439	4,655	43,448
Department Total	26,387	10,090	8,932	8,153	8,080	8,325	8,577	8,827	87,371

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

<u>Asset Management - Technology</u>

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type:New InvestmentStart Date:OngoingProject ID:C5201End 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 technology improvements to provide information about SPU's assets and performance, to help provide optimum service levels to customers at the lowest cost. Subprojects include development of a database of real property records, a science data management system, some smaller utility geographic information system (GIS) applications, and a data warehouse for utility asset management. Past accomplishments include the development of the Asset Information Management System warehouse and intranet portal, synchronization and integration of the data of the drainage and wastewater infrastructure GIS with the Hansen work management system, and development of a Science Information Catalog. The 2006 workplan includes the implementation of a new Asset Costing System, addition of a data warehouse component to the Science Information Management System, an update of the utility infrastructure applications, and the completion of a multi-year Real Property Records Automation project to organize and digitally index information on SPU's property holdings.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	1,967	353	585	594	505	224	152	0	4,380
Solid Waste Rates	127	8	26	72	44	27	5	0	309
Water Rates	2,775	344	694	763	737	224	193	116	5,846
Project Total:	4,869	705	1,305	1,429	1,286	475	350	116	10,535
Fund Appropriations/Allocations									
SPU Drainage and Wastewater Fund	1,967	353	585	594	505	224	152	0	4,380
SPU Solid Waste Fund	127	8	26	72	44	27	5	0	309
SPU Water Fund	2,775	344	694	763	737	224	193	116	5,846
Appropriations Total*	4,869	705	1,305	1,429	1,286	475	350	116	10,535
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Ongoing

End Date:

<u>Capital Planning & Development - Technology</u>

BCL/Program Name: Technology

Project Type:

New Investment

Start Date: Ongoing

Project ID: C5205

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 sets aside funds for currently unanticipated technology investments in 2007-2010, in recognition that technologies and technology demands continue to evolve and have a shorter life cycle than do public works investments. Funds are spent only after development of specific projects in the 2007-2008 biennial budget cycle.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	0	0	0	103	1,036	1,067	1,379	2,013	5,598
Solid Waste Rates	0	0	0	103	404	179	383	957	2,026
Water Rates	0	0	0	0	925	1,611	2,062	3,499	8,097
Project Total:	0	0	0	206	2,365	2,857	3,824	6,469	15,721
Fund Appropriations/Allocations									
SPU Drainage and Wastewater Fund	0	0	0	103	1,036	1,067	1,379	2,013	5,598
SPU Solid Waste Fund	0	0	0	103	404	179	383	957	2,026
SPU Water Fund	0	0	0	0	925	1,611	2,062	3,499	8,097
Appropriations Total*	0	0	0	206	2,365	2,857	3,824	6,469	15,721
O & M Costs (Savings)			0	0	0	0	0	0	0

Corporate Management - Technology

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type:New InvestmentStart Date:OngoingProject ID:C5202End 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 information technology systems to track financial and human resources data. Major subprojects in this category include SPU's share of funding to upgrade SUMMIT (the City's financial system); development of a new database to support improved drainage rate design; data warehouses for human resources and financial data and for solid waste system management and planning; replacement of obsolete legacy applications, and development of systems to provide financial information from the BANNER billing system. In 2005, Ordinance 121883 transferred \$200,000 to this project from the Heavy Equipment Purchases project (C201002) in the Solid Waste Rehabilitation and Heavy Equipment Budget Control Level, to support the Solid Waste Data Integration Project. This supplemental appropriation change is reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	404	1,535	348	257	90	70	545	96	3,345
Solid Waste Rates	475	987	366	294	105	81	353	111	2,772
Water Rates	1,098	1,174	700	794	281	216	831	297	5,391
Project Total:	1,977	3,696	1,414	1,345	476	367	1,729	504	11,508
Fund Appropriations/Allocations									
SPU Drainage and Wastewater Fund	404	1,535	348	257	90	70	545	96	3,345
SPU Solid Waste Fund	475	987	366	294	105	81	353	111	2,772
SPU Water Fund	1,098	1,174	700	794	281	216	831	297	5,391
Appropriations Total*	1,977	3,696	1,414	1,345	476	367	1,729	504	11,508
O & M Costs (Savings)			0	0	0	0	0	0	0

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

<u>Customer Management - Technology</u>

BCL/Program Name: Technology
Project Type: New Investment

BCL/Program Code: C510B

Start Date: Ongoing

Project ID: C5203 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 systems development, enhancements, and upgrades to support SPU's Customer Service Branch. The project includes participation in the BANNER billing system upgrade, development of web- and telephone-based customer contact technology improvements, an emergency site for the joint SPU/Seattle City Light call center, a centralized complaint management system, and expanded automated meter reading. In 2005, Ordinance 121993 appropriated \$330,000 for this project from the Drainage and Wastewater Fund, to allow SPU to begin work on moving the drainage billing system from the King County property tax billing system to the SPU combined utility billing system. This supplemental appropriation is reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	1,809	807	1,187	126	191	1,013	175	170	5,478
Solid Waste Rates	2,614	473	425	239	140	848	167	115	5,021
Water Rates	2,306	581	547	253	199	1,052	181	178	5,297
Project Total:	6,729	1,861	2,159	618	530	2,913	523	463	15,796
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	1,809	807	1,187	126	191	1,013	175	170	5,478
SPU Solid Waste Fund	2,614	473	425	239	140	848	167	115	5,021
SPU Water Fund	2,306	581	547	253	199	1,052	181	178	5,297
Appropriations Total*	6,729	1,861	2,159	618	530	2,913	523	463	15,796
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Operations Management - Technology

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type:New InvestmentStart Date:OngoingProject ID:C5204End 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 development of new technologies that improve the efficiency and effectiveness of SPU's front-line workers. This includes information technology projects related to laboratory management, emergency dispatching, water resource management, vehicle location technology, Clean City data management, and improved work management and mobile computing for drainage and wastewater field crews.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	208	549	426	162	87	0	141	255	1,828
Solid Waste Rates	222	80	55	60	17	0	180	23	637
Water Rates	820	521	574	475	119	503	253	70	3,335
Project Total:	1,250	1,150	1,055	697	223	503	574	348	5,800
Fund Appropriations/Allocations SPU Drainage and Wastewater Fund	208	549	426	162	87	0	141	255	1,828
SPU Solid Waste Fund	222	80	55	60	17	0	180	23	637
SPU Water Fund	820	521	574	475	119	503	253	70	3,335
Appropriations Total*	1,250	1,150	1,055	697	223	503	574	348	5,800
O & M Costs (Savings)			0	0	0	0	0	0	0

Project Management - Technology

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type:New InvestmentStart Date:OngoingProject ID:C5206End 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 funding for technology investments that improve management of public works projects. This program includes development of a new project tracking system, automation of engineering vault records, development of a project plan circulation system, and several small related projects.

-	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	2,078	368	387	825	430	387	378	0	4,853
Solid Waste Rates	547	115	121	246	117	121	118	0	1,385
Water Rates	2,001	666	701	1,495	868	702	686	0	7,119
Project Total:	4,626	1,149	1,209	2,566	1,415	1,210	1,182	0	13,357
Fund Appropriations/Allocations									
SPU Drainage and Wastewater Fund	2,078	368	387	825	430	387	378	0	4,853
SPU Solid Waste Fund	547	115	121	246	117	121	118	0	1,385
SPU Water Fund	2,001	666	701	1,495	868	702	686	0	7,119
Appropriations Total*	4,626	1,149	1,209	2,566	1,415	1,210	1,182	0	13,357
O & M Costs (Savings)			0	0	0	0	0	0	0

Technology Infrastructure

BCL/Program Name: Technology BCL/Program Code: C510B

Project Type:New InvestmentStart Date:OngoingProject ID:C5207End 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 technology improvements that support SPU's business systems. Funded work includes upgrade or renewal of remote communication links and other network enhancements; an upgrade of SPU's internal and external websites; enhancements designed to keep SPU's operations running during emergencies and after disasters; security enhancements; and an update of the core technology underlying SPU's geographic information systems (GIS).

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Drainage and Wastewater Rates	1,561	416	612	411	340	0	75	356	3,771
Solid Waste Rates	1,352	247	200	166	392	0	87	76	2,520
Water Rates	4,023	866	978	715	1,053	0	233	495	8,363
Project Total:	6,936	1,529	1,790	1,292	1,785	0	395	927	14,654
Fund Appropriations/Allocations									
SPU Drainage and Wastewater Fund	1,561	416	612	411	340	0	75	356	3,771
SPU Solid Waste Fund	1,352	247	200	166	392	0	87	76	2,520
SPU Water Fund	4,023	866	978	715	1,053	0	233	495	8,363
Appropriations Total*	6,936	1,529	1,790	1,292	1,785	0	395	927	14,654
O & M Costs (Savings)			0	0	0	0	0	0	0

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 1.3 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 immediately adjacent areas, and sells wholesale to 26 suburban water utilities 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 to average of 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 project is essentially complete and the Seattle Parks Department is expanding the Cal Anderson Park over the reservoir. Design work for the replacement of Beacon, Myrtle, West Seattle, and Maple Leaf reservoirs commenced in 2005, and construction begins on the Beacon and Myrtle Reservoir projects in 2006 with completion of the project by the end of 2008. Construction of a new buried reservoir to replace 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 2011 and end in 2013. SPU currently plans to decommission Roosevelt Reservoir, and further evaluate the possibility of decommissioning Volunteer Reservoir as well. 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 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 \$34 million is included in the 2006-2011 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 and their 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 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 their costs were higher than their benefits. Several cost-effective master planning efforts were

Seattle Public Utilities - Water

approved to create up-to-date improvement and upgrade plans for several groups of assets. Other projects have been expanded or expedited because their benefits exceeded their costs.

Program Category Summaries

The Water CIP appropriates \$77 million in 2006 (including Technology projects funded by the Water Fund, displayed in a separate section of this CIP). The CIP is comprised of nine program categories, which are summarized below.

Bonneville Agreement: This program includes projects to fund the implementation of Ordinance 121212 related to construction by the Bonneville Power Administration of an electric power transmission line project through the Cedar River Watershed.

Environmental 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.

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.

Infrastructure: This program category repairs and upgrades the City's water lines, pump stations, and other facilities. Included in this program are projects for seismic upgrades to water tanks and pump stations, water main replacements, road and bridge improvements in the watersheds, and service renewals.

Other Agencies: This program category designs and constructs capital improvements for other agencies, or in response to other agencies' projects, often on a reimbursement basis.

Shared Cost Projects: This program includes capital improvement projects that receive funding from multiple SPU funds. In 2006, the program includes funding for the Alaskan Way Viaduct & Seawall, Facility Improvements, the SPU Operations Control Center Upgrade, 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.

Water Quality: The major element of this program category is the covering of the open reservoirs discussed in more detail above. Also included is the upgrade to the Supervisory Control and Data Acquisition (SCADA) system that is used to monitor and control the City's water system, and projects to enhance the security of the water system.

Seattle Public Utilities – Water

Water Supply: This program category repairs and upgrades water transmission pipelines and promotes residential and commercial water conservation. The replacement of the last mile-long segment of the original Tolt Pipeline No. 1 is included in this program. Also included is a new potential project to construct new permanent pump stations and pipelines to increase the reliability of the Cedar supply during severe droughts, although the scope of the project, and its costs and benefits are still being evaluated. Finally, regional and Seattle-only conservation programs are included in this category as an alternative to developing new water sources in the future.

Anticipated Operating Expenses Associated with Capital Facilities Projects

For most projects in the Water CIP, there are no new 2006 operations and maintenance costs, or these costs have not been calculated (N/C). In these cases, the cost impacts of the project are either insignificant or are offset by cost savings realized by other projects.

City Council Changes to the Proposed CIP

At the Executive's request, the City Council amended the description of the Sound Transit Light Rail – Water (C4104-WF) project to reference SPU's plan to participate in preliminary engineering and design by Sound Transit on the North Link system, which is expected to begin in late 2006.

SPU - Water

Project Summary

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Bonneville Agreement						BCI	_/Program	n Code:		C170B
BPA - Aquatic & Riparian Restoration	C1702	234	844	600	140	0	0	0	0	1,818
BPA - Road Decommissioning/Improvements	C1703	162	728	282	32	44	203	0	0	1,451
BPA - Security Measures	C1704	260	312	255	0	0	0	0	0	827
BPA - Upland Forest Restoration	C1705	134	608	390	164	144	0	0	0	1,440
Bonneville Agreement Total		790	2,492	1,527	336	188	203	0	0	5,536
Environmental Stewa	rdship					BCI	_/Progran	n Code:		C130B
Cedar River - Education Center Exhibits	C103001	641	0	155	0	0	0	0	0	796
Cedar River Northridge Trail	C102022	31	51	11	0	0	0	0	0	93
Environmental Steward Project Development	C105084	0	100	103	106	109	113	116	119	766
ESA Chinook Research & Monitoring	C101048	561	217	230	250	271	281	290	299	2,399
ESA Snohomish River Basin	C101003	229	52	21	150	160	164	169	174	1,119
ESA Tolt Levee Modifications	C105095	0	347	258	1,167	546	23	23	0	2,364
Rock Creek Fishway	C101008	84	22	115	555	0	0	0	0	776
Tolt Fisheries Mitigation	C104057	47	185	44	64	0	0	0	0	340
Tolt Watershed Management Plan	C105083	0	300	206	212	219	113	116	0	1,166
Environmental Stewardship Total		1,593	1,274	1,143	2,504	1,305	694	714	592	9,819

^{*}Amounts in thousands of dollars

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Habitat Conservation	Program					BCI	_/Progran	n Code:		C160B
Ballard Locks Improvements	C1606	902	150	155	159	164	113	811	836	3,290
Cedar Sockeye Hatchery	C1605	2,305	750	242	6,153	2,950	0	0	0	12,400
Downstream Fish Habitat	C1607	268	2,213	1,527	2,721	12	0	0	0	6,741
Instream Flow Management Studies	C1608	93	533	623	727	327	208	131	135	2,777
Landsburg Fish Passage Improvements	C1604	12,611	202	226	255	262	10	8	0	13,574
Stream & Riparian Restoration	C1602	2,348	837	890	832	861	661	680	701	7,810
Upland Reserve Forest Restoration	C1603	2,365	854	850	811	798	747	770	793	7,988
Watershed Road Improvement/Decomm ssioning	C1601 i	3,381	864	890	886	919	948	981	1,010	9,879
Habitat Conservation Program Total		24,273	6,403	5,403	12,544	6,293	2,687	3,381	3,475	64,459

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Infrastructure						BCI	L/Prograi	n Code:		C110B
Asset Management	C1126	2,703	2,944	1,417	3,183	3,278	3,377	3,478	3,582	23,962
Cathodic Protection Program	C1NW11 6	0	500	731	530	546	563	580	597	4,047
Cedar Bridges	C1119	19,448	1,014	422	650	229	101	180	185	22,229
Cedar Falls Facility Master Plan	C105092	0	60	247	0	0	0	0	0	307
Cedar Moraine Improvements	C197009	1,072	200	474	53	55	0	0	0	1,854
Cedar River Non-HCP Road Improvements	C191001	917	786	828	828	852	878	904	931	6,924
Cedar River Pipeline 2 Replace Portion	C104013	45	60	217	5,305	0	0	0	0	5,627
Cedar River Watershed - Headquarters Major Maintenance	C100051	1,653	88	91	93	96	99	102	105	2,327
Chamber Upgrades - Distribution	C103002	330	180	124	159	164	169	174	179	1,479
Design Commission Fees - Water	C101050	0	20	21	21	22	23	23	24	154
Distribution Projects Development	C105087	0	100	103	106	109	113	116	119	766
Distribution System In- Line Gate Valves	C199012	411	60	62	64	66	68	70	72	873
Fireflow & Pressure Improvement	C1128	266	300	580	2,652	5,316	6,010	6,191	6,376	27,691
Heavy Equipment Purchases - Water	C199068	9,072	2,934	2,179	3,501	1,639	1,688	4,869	5,015	30,897
Lake Young's Outlet Dam Rehabilitation	C102013	185	125	4	0	0	0	0	0	314
Lake Young's Outlet Dam Warning System	C101006	533	34	41	11	0	0	0	0	619
Landsburg Flood Passage Improvement	C104016	44	450	410	2,649	2,370	0	0	0	5,923
Maple Leaf Gatehouse Pipe Refurbishing	C195001	43	390	10	13	0	0	0	0	456
Painting Program - Myrtle Tank	C104031	22	653	127	0	0	0	0	0	802
Painting Program - Richmond Highland	C104032	26	1,295	314	0	0	0	0	0	1,635

^{*}Amounts in thousands of dollars

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BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Infrastructure						BCl	L/Prograi	m Code:		C110B
Painting Program - Steel Structures	C1NW13 0	0	20	103	530	546	563	580	597	2,939
Pump Station - Install Station Motors	C199052	39	61	62	69	76	79	81	84	551
Pump Station - Queen Anne	C1AA005	1,045	50	3,018	3,071	0	0	0	0	7,184
Purveyor Meters Replace - SPU	C1107	3,624	176	103	106	109	113	116	119	4,466
Replace Air Valve Chambers	C199060	346	61	64	66	66	68	70	72	813
Seismic Upgrade - Buildings	C1118	1,329	141	170	403	705	732	232	239	3,951
Seismic Upgrade - Cedar River Pipelines at Ginger Creek	C197032	414	2,105	6	3	3	0	0	0	2,531
Seismic Upgrade - Pipeline Backbone	C101038	325	205	103	1,432	0	0	0	0	2,065
Seismic Upgrade - Tanks	C1120	6,580	1,445	1,591	4,010	2,748	2,848	2,620	2,699	24,541
Tolt Bridges	C1131	61	6	22	350	0	0	0	0	439
Tolt Instrument and Warning Upgrade	C1AA012	1,903	47	47	28	28	30	32	33	2,148
Tolt Pipeline 1 Cathodic Protection	C100063	1,184	248	5	0	0	0	0	0	1,437
Tolt River Watershed Road Improvements	C196007	203	170	175	186	191	197	203	209	1,534
Transmission Pipelines Rehabilitation	C1127	0	500	103	1,061	1,093	1,126	1,159	1,194	6,236
Water Design Standards & Guideline Program	C102028	115	200	258	265	273	0	0	0	1,111
Water Infrastructure - Hydrant Replacement/Relocatio n	C1110	2,247	222	233	240	247	254	262	270	3,975
Water Infrastructure - New Hydrants	C1112	161	64	12	13	13	14	14	14	305
Water Infrastructure - New Taps	C1113	33,704	4,001	3,708	3,819	3,934	4,052	4,173	4,299	61,690
Water Infrastructure - Service Renewal	C1109	43,294	5,123	5,315	5,489	5,654	5,823	5,998	6,178	82,874

^{*}Amounts in thousands of dollars

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Infrastructure						BC	L/Progra	m Code:		C110B
Water Infrastructure - Watermain Extensions	C1111	7,586	1,191	1,030	1,061	1,093	1,126	1,159	1,194	15,440
Water Infrastructure - Watermain Replacement	C1104	16,074	339	12	0	0	0	0	0	16,425
Water Infrastructure - Tank Site Remediation	C1114	1,350	320	309	318	328	0	0	0	2,625
Water System Dewatering	C1105	1,767	1,056	58	371	382	394	406	418	4,852
Watermain Rehabilitation	C1129	344	1,366	2,369	4,144	4,268	4,396	4,528	4,664	26,079
Infrastructure Total		160,465	31,310	27,278	46,853	36,499	34,904	38,320	39,468	415,097

SPU - Water

BCL/Program	Project ID	Life To	2005	2006	2007	2008	2009	2010	2011	Total
Name & Project		Date								
Other Agencies						BCI	./Progran	n Code:		C120B
Aurora Ave. N (110th - 145th)	C103033	3	8	16	0	0	0	0	0	27
Aurora N Multi-modal Corridor	C103027	73	985	156	53	0	0	0	0	1,267
Cedar Eastside Supply Improvement - East Creek	C145007	245	590	0	0	0	0	0	0	835
Fremont Bridge	C1NW20 1-003	0	0	1	0	0	0	0	0	1
Hidden Lake CSO Betterments	C104066	0	0	188	0	0	0	0	0	188
Hidden Lake CSO Impact Work	C104067	0	54	271	85	0	0	0	0	410
Holgate/Amtrak Water Relocation	C101009	275	10	0	0	0	0	0	0	285
I-405 Widening Cedar River Pipelines Impacts		0	0	46	0	0	0	0	0	46
Marine View/Des Moines Creek	C197021	214	400	31	0	0	0	0	0	645
Multiple Utility Relocation	C1NW20 1-001	0	976	927	1,061	1,093	1,126	1,159	1,194	7,536
Renton Franchise/Line Valve Cedar River	C102023	1,258	970	15	0	0	0	0	0	2,243
SeaTac 3 Runway Pipeline Relocation	C199075	283	545	3	0	0	0	0	0	831
SLU - Watermain Replacement/South Lake Union Park	C104035	0	155	10	0	0	0	0	0	165
SLU Watermain - Utility Coordination	C104036	24	71	62	32	33	0	0	0	222
W Duwamish Waterway Tunnel/Rails	C194034	153	50	52	0	0	0	0	0	255
Westlake Ave. Watermain Decommissioning	C1NW20 1-002	0	0	1,957	21	0	0	0	0	1,978
WSDOT Sound Walls	C104019	6	20	0	0	0	0	0	0	26
Other Agencies Total		2,534	4,834	3,735	1,252	1,126	1,126	1,159	1,194	16,960

^{*}Amounts in thousands of dollars

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Shared Cost Projects						BCL	/Progran	n Code:		C410B
Alaskan Way Viaduct & Seawall	C404201- WF	129	125	765	0	0	0	0	0	1,019
Facility Improvements - Water	C404602- WF	902	2,491	1,421	0	0	0	0	0	4,814
Fleet Management Study	C405601- WF	0	123	0	0	0	0	0	0	123
Main Warehouse Improvements - Water	C406601- WF	0	0	262	0	0	0	0	0	262
Meter Replacement - Water	C4101- WF	11,190	728	718	739	761	784	808	831	16,559
Operational Facilities Plan	C406622- WF	0	0	364	0	0	0	0	0	364
Operations Control Center Upgrade - Wate	C404501- er WF	1,683	2,195	1,393	259	0	0	0	0	5,530
Seattle Monorail Project - Water	C404301- WF	122	400	0	0	0	0	0	0	522
Seattle Monorail Project Watermain Replacement - Water	C405330	0	1,200	0	0	0	0	0	0	1,200
Shared Opportunity Projects - Water	C405603- WF	0	100	0	103	105	108	110	110	636
Sound Transit Light Rail - Water	C4104- WF	890	2,172	762	633	299	11	0	0	4,767
Sound Transit Light Rail - Water Bettermen	C405430	0	1,400	1,452	764	219	0	0	0	3,835
Spoils Yard & Decant Facility - Water	C404603- WF	0	10	116	0	0	0	0	0	126
Shared Cost Projects Total		14,916	10,944	7,253	2,498	1,384	903	918	941	39,757

^{*}Amounts in thousands of dollars

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Water Quality						BC	L/Prograi	m Code:		C140B
Cedar River - Boundary Land Acquisition	C198008	2,212	325	104	107	110	114	117	121	3,210
Cedar Treatment Facility	C196015	100,612	597	10	0	0	0	0	0	101,219
Control & Data Acquisition Upgrade	C195008	4,480	3,625	2,383	2,019	0	0	0	0	12,507
Reservoir Covering - Beacon	C101060	882	1,000	8,799	24,411	4,137	0	0	0	39,229
Reservoir Covering - Lincoln	C196012	18,693	404	21	5	5	0	0	0	19,128
Reservoir Covering - Maple Leaf	C101078	266	513	2	2	0	303	485	16,476	18,047
Reservoir Covering - Myrtle	C101076	291	955	2,695	3,325	0	0	0	0	7,266
Reservoir Covering - Volunteer	C101059	94	0	0	0	0	0	280	1,247	1,621
Reservoir Covering - West Seattle	C101075	264	523	284	489	7,203	14,105	5,560	0	28,428
Water System Security Improvement	C1405	3,348	5,655	5,694	0	0	0	0	0	14,697
Water Quality Total		131,142	13,597	19,992	30,358	11,455	14,522	6,442	17,844	245,352

BCL/Program Name & Project	Project ID	Life To Date	2005	2006	2007	2008	2009	2010	2011	Total
Water Supply						BC	L/Progra	m Code:		C150B
Morse Lake Dead Storage Facilities	C103032	407	900	927	955	983	12,268	7,814	1,194	25,448
Regional Water Conservation Program	C1504	15,706	3,300	3,657	4,138	4,535	5,121	5,796	0	42,253
Seattle Direct Service Additional Conservation	C1505	952	988	1,018	2,016	2,147	2,250	2,317	2,387	14,075
Tolt Pipeline 2 II & III East of Tieline	C100084	28,067	73	33	23	13	0	0	0	28,209
Tolt Pipeline 2 II & III West of Tieline	C100083	26,377	30	5	5	5	0	0	0	26,422
Tolt Pipeline I - Phase 3 - B	C199003	756	4,894	9	5	5	0	0	0	5,669
Tolt Pipeline II - Phase 4	C194029	31,585	55	43	28	0	0	0	0	31,711
Treatment & Transmission Project Development	C1NW50 1-008	0	100	41	106	109	113	116	119	704
Water Resources Project Development	C105100	0	100	103	106	109	113	116	119	766
Water System Plan - 2007	C103058	85	430	399	28	0	0	0	0	942
Water System Plan - 2013	C1NW50 1-006	0	0	0	0	0	50	104	179	333
Water Supply Total		103,935	10,870	6,235	7,410	7,906	19,915	16,263	3,998	176,532
Department Total		439,648	81,724	72,566	103,755	66,156	74,954	67,197	67,512	973,512

^{*}Amounts in thousands of dollars

Fund Summary

Fund Name	LTD	2005	2006	2007	2008	2009	2010	2011	Total
SPU Water Fund	439,648	83,424	72,566	103,755	66,156	74,954	67,197	67,512	975,212
Department Total	439,648	83,424	72,566	103,755	66,156	74,954	67,197	67,512	975,212

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

Alaskan Way Viaduct & Seawall

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:4th Quarter 2001Project ID:C404201-WFEnd Date:4th Quarter 2011

Location: Alaskan Way Viaduct

Neighborhood Plan: Commercial Core Neighborhood Plan Matrix: LT 13

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

This project funds planning, preliminary engineering, and design costs associated with water utility impacts arising from replacing the Alaskan Way Viaduct and Seawall with a new transportation facility. The Alaskan Way Viaduct is part of State Route 99, which carries 25% of the north-south traffic through downtown Seattle and is a major truck route serving the City's industrial areas. The seawall supports the soils under Alaskan Way and the Viaduct. Both facilities were damaged in the February 28, 2001 Nisqually Earthquake. The Federal Highway Administration (FHWA), the Washington State Department of Transportation (WSDOT) and the City of Seattle are partners on the project. WSDOT, in conjunction with the Seattle Department of Transportation (SDOT), is conducting a plan and study for demolition and replacement of the existing facility. At this early stage, a number of options are being evaluated. The costs and timing of improvements, as well as the sources of funding, have not been determined and will be refined as the project scope is further developed. See also projects in the SDOT (project TC36605) and Seattle City Light (project 8307) CIPs. The SPU Asset Management Committee approved the project in 2005.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	129	125	765	0	0	0	0	0	1,019
Project Total:	129	125	765	0	0	0	0	0	1,019
Fund Appropriations/Allocations									
SPU Water Fund	129	125	765	0	0	0	0	0	1,019
Appropriations Total*	129	125	765	0	0	0	0	0	1,019
O & M Costs (Savings)			0	0	0	0	0	0	0

Asset Management

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type: Rehabilitation or Restoration **Start Date:** 4th Ouarter 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 provides funding for managing 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. The confidence level in the current cost estimate is medium for 2006; cost estimates for future years will be revised over time. SPU's Asset Management Committee has approved the Clean and Line Cast Iron Pipes (C104006) and Valve & Pump Station Control (C105069) projects of this program.

In 2005, Ordinance 121780 transferred \$600,000 from the Asset Management program (C1126) to the Tolt Pipeline I - Phase III-B project (C199003) to fund higher than anticipated costs for that project. Also in 2005, Ordinance 121993 transferred \$400,000 from the Asset Management program (C1126) to the Water Infrastructure - New Taps program (C1113) to support increased customer demand for new taps. These supplemental funding changes is reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	2,703	2,944	1,417	3,183	3,278	3,377	3,478	3,582	23,962
Project Total:	2,703	2,944	1,417	3,183	3,278	3,377	3,478	3,582	23,962
Fund Appropriations/Allocations SPU Water Fund	2,703	2,944	1,417	3,183	3,278	3,377	3,478	3,582	23,962
Appropriations Total*	2,703	2,944	1,417	3,183	3,278	3,377	3,478	3,582	23,962
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Aurora Ave. N (110th - 145th)

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:4th Quarter 2003Project ID:C103033End Date:4th Quarter 2006

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 between N 110th St. and N 145th St. This project funds the necessary 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 to address the impacts. The cost estimates will be revised to incorporate new information.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	3	8	16	0	0	0	0	0	27
Project Total:	3	8	16	0	0	0	0	0	27
Fund Appropriations/Allocations SPU Water Fund	3	8	16	0	0	0	0	0	27
Appropriations Total*	3	8	16	0	0	0	0	0	27
O & M Costs (Savings)			0	0	0	0	0	0	0

Aurora N Multi-modal Corridor

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:4th Quarter 2003Project ID:C103027End Date:2nd Quarter 2007

Location: N 145th St./Aurora Ave. N

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

The City of Shoreline is redeveloping Aurora Ave. N between N 145th St. and N. 165th St. This project addresses the impacts of the City of Shoreline's project on the water system, and funds improvements required to increase the fireflow along both sides of Aurora Ave. to current standards. The project includes the replacement of four- and six-inch watermains with 12-inch watermains; the replacement, relocation, and addition of new fire hydrants; and the installation of water service meters. The confidence level of the planning phase cost estimate is medium.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	73	985	156	53	0	0	0	0	1,267
Project Total:	73	985	156	53	0	0	0	0	1,267
Fund Appropriations/Allocations									
SPU Water Fund	73	985	156	53	0	0	0	0	1,267
Appropriations Total*	73	985	156	53	0	0	0	0	1,267
O & M Costs (Savings)			0	0	0	0	0	0	0

^{*}This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts 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 2011

Location: 3015 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	902	150	155	159	164	113	811	836	3,290
Project Total:	902	150	155	159	164	113	811	836	3,290
Fund Appropriations/Allocations									
SPU Water Fund	902	150	155	159	164	113	811	836	3,290
Appropriations Total*	902	150	155	159	164	113	811	836	3,290
O & M Costs (Savings)			0	0	0	0	0	0	0

BPA - Aquatic & Riparian Restoration

BCL/Program Name: Bonneville Agreement BCL/Program Code: C170B

Project Type:Improved FacilityStart Date:2nd Quarter 2004Project ID:C1702End Date:4th Quarter 2007

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 group within the Bonneville Agreement program provides funds to plan and implement 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 (BPA's) power line project on that habitat. SPU's Asset Management Committee has approved this set of projects. The confidence level in the cost estimate is medium as the project is in the early stage of development.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	234	844	600	140	0	0	0	0	1,818
Project Total:	234	844	600	140	0	0	0	0	1,818
Fund Appropriations/Allocations									
SPU Water Fund	234	844	600	140	0	0	0	0	1,818
Appropriations Total*	234	844	600	140	0	0	0	0	1,818
O & M Costs (Savings)			0	0	0	0	0	0	0

BPA - Road Decommissioning/Improvements

BCL/Program Name: Bonneville Agreement BCL/Program Code: C170B

Project Type:Improved FacilityStart Date:2nd Quarter 2004Project ID:C1703End 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 project group within the Bonneville Agreement program provides funds to plan and implement 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 set of projects. The confidence level in the cost estimate is medium as the project is in the early stage of development.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	162	728	282	32	44	203	0	0	1,451
Project Total:	162	728	282	32	44	203	0	0	1,451
Fund Appropriations/Allocations									
SPU Water Fund	162	728	282	32	44	203	0	0	1,451
Appropriations Total*	162	728	282	32	44	203	0	0	1,451
O & M Costs (Savings)			0	0	0	0	0	0	0

BPA - Security Measures

BCL/Program Name: Bonneville Agreement BCL/Program Code: C170B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C1704End Date:4th Quarter 2006

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 group within the Bonneville Agreement program provides funds to plan, purchase and install 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 as the project is in the early stage of development.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	260	312	255	0	0	0	0	0	827
Project Total:	260	312	255	0	0	0	0	0	827
Fund Appropriations/Allocations									
SPU Water Fund	260	312	255	0	0	0	0	0	827
Appropriations Total*	260	312	255	0	0	0	0	0	827
O & M Costs (Savings)			0	0	0	0	0	0	0

BPA - Upland Forest Restoration

BCL/Program Name: Bonneville Agreement BCL/Program Code: C170B

Project Type:Improved FacilityStart Date:2nd Quarter 2004Project ID:C1705End 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 group within the Bonneville Agreement program provides funds to plan and implement forest restoration projects within the Cedar River Municipal Watershed. This program will enhance and accelerate the City's existing Upland Forest Restoration Program. To 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 set of projects. The confidence level in cost estimates is medium as the project is in the early stage of development.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	134	608	390	164	144	0	0	0	1,440
Project Total:	134	608	390	164	144	0	0	0	1,440
Fund Appropriations/Allocations									
SPU Water Fund	134	608	390	164	144	0	0	0	1,440
Appropriations Total*	134	608	390	164	144	0	0	0	1,440
O & M Costs (Savings)			0	0	0	0	0	0	0

Cathodic Protection Program

BCL/Program Name: Infrastructure BCL/Program Code: C110B

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

Project ID: C1NW116 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 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 and submerged surfaces of water storage tanks. They can be used to protect ductile iron, steel, and concrete cylinder pipe. Unprotected, these types of pipe corrode through an electrochemical process; cathodic protection attempts to slow down or even stop this electrochemical process by providing electrical current to the pipe. Projects are accomplished over two years; one year for design and one year for construction. Each project installs new or replacement rectifiers and anodes along a section of pipeline between one and four miles in length.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	500	731	530	546	563	580	597	4,047
Project Total:	0	500	731	530	546	563	580	597	4,047
Fund Appropriations/Allocations									
SPU Water Fund	0	500	731	530	546	563	580	597	4,047
Appropriations Total*	0	500	731	530	546	563	580	597	4,047
O & M Costs (Savings)			0	2	3	3	3	3	14

Cedar Bridges

BCL/Program Name: Infrastructure

BCL/Program Code: C110B

Project Type: Improved Facility Start Date: Ongoing

Project ID: C1119 End Date: 4th Quarter 2011

Location: Cedar 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 at which SPU requires access and the existing bridges are no longer able to carry required loading, resulting in safety and environmental risks. This project may include replacing the bridges at Cedar River 600 Road, Middle Fork Taylor Creek 60 Road, Barneston Bridge, North Fork Taylor 60 Road, Rex 300 Road, Rock 41 Road, Taylor 9 Road, Tinkham 560 Road, North Fork Taylor 62 Road, Cedar 9 Road, and Cedar 560 Road.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	19,448	1,014	422	650	229	101	180	185	22,229
Project Total:	19,448	1,014	422	650	229	101	180	185	22,229
Fund Appropriations/Allocations SPU Water Fund	19,448	1,014	422	650	229	101	180	185	22,229
Appropriations Total*	19,448	1,014	422	650	229	101	180	185	22,229
O & M Costs (Savings)			16	16	16	16	16	16	96

Cedar Eastside Supply Improvement - East Creek

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:2nd Quarter 2001Project ID:C145007End Date:3rd Quarter 2005

Location: East Creek & Camber Rd.

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 responds to improvements initiated by the City of Bellevue to the Kamber Road crossing of East Creek in the Factoria area. The Cedar Eastside Supply Line, located in the Kamber Road roadway, is lowered and encased in concrete to accommodate the creek crossing improvements. The confidence level of the cost estimate is high, and SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	245	590	0	0	0	0	0	0	835
Project Total:	245	590	0	0	0	0	0	0	835
Fund Appropriations/Allocations									
SPU Water Fund	245	590	0	0	0	0	0	0	835
Appropriations Total*	245	590	0	0	0	0	0	0	835
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Cedar Falls Facility Master Plan

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C105092End Date:4th Quarter 2006

Location: Cedar Falls Rd. SE

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 for a preliminary study and creation of a design plan to upgrade the existing facilities at Cedar Falls Headquarters. The existing buildings, which were constructed from the 1920s to 1950s, do not meet building codes or the requirements of current staff, and are in a deteriorated condition that requires constant major repairs. Several of the buildings were constructed for residential occupation and are not well suited to business needs. The study and plan for construction of new facilities addresses ongoing maintenance issues in the current facilities including toxic mold, lack of handicapped access, and rodent infestations, and includes replacing or rebuilding stairs at building entrances. In the 2005-2010 Adopted CIP, the project ID for this project was C1NW101-005.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	60	247	0	0	0	0	0	307
Project Total:	0	60	247	0	0	0	0	0	307
Fund Appropriations/Allocations									
SPU Water Fund	0	60	247	0	0	0	0	0	307
Appropriations Total*	0	60	247	0	0	0	0	0	307
O & M Costs (Savings)			0	0	0	0	0	0	0

Cedar Moraine Improvements

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 1997Project ID:C197009End Date:4th Quarter 2008

Location: Cedar Watershed

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

Cedar Moraine is a porous, glacial deposit abutting Chester Morse Lake. In December 1918, during the initial filling of the reservoir, a massive landslide occurred as a result of high groundwater. Subsequently, a network of observation wells was installed to monitor groundwater levels. Over time, some of the wells became blocked. This project began in 1997 to evaluate the conditions of the network, provide rehabilitation, and recommend further improvements. Current planning studies focus on improving monitoring capabilities along the northwest slopes of the moraine and drilling additional wells, and may lead to a recommendation for a warning system. The confidence level in the cost estimate for the development of the planning phase is high. Development of the warning system is at an early stage, and cost estimates for this stage will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	1,072	200	474	53	55	0	0	0	1,854
Project Total:	1,072	200	474	53	55	0	0	0	1,854
Fund Appropriations/Allocations	1.072	200	477.4	52	5.5	0	0	0	1 054
SPU Water Fund	1,072	200	474	53	55	0	0	0	1,854
Appropriations Total*	1,072	200	474	53	55	0	0	0	1,854
O & M Costs (Savings)			0	0	0	0	0	0	0

Cedar River - Boundary Land Acquisition

BCL/Program Name: Water Quality

BCL/Program Code: C140B

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

Project ID: C198008 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

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. Although funding is not yet allocated for 2012, the project is expected to be ongoing. The confidence level of the cost estimate is medium and the project requires the SPU Asset Management Committee review. Acquisitions to date include 101 acres inside the Cedar Watershed at Yakima Pass through a 2003 agreement with Bonneville Power Administration and non-City property rights formerly used for railroad purposes in the Watershed.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	2,212	325	104	107	110	114	117	121	3,210
Project Total:	2,212	325	104	107	110	114	117	121	3,210
Fund Appropriations/Allocations SPU Water Fund	2,212	325	104	107	110	114	117	121	3,210
Appropriations Total*	2,212	325	104	107	110	114	117	121	3,210
O & M Costs (Savings)			0	0	0	0	0	0	0

Cedar River - Education Center Exhibits

BCL/Program Name: Environmental Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:2nd Quarter 2003Project ID:C103001End Date:2nd Quarter 2006

Location: Crw Education Center North Bend

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

This project funds fabrication and installation of interpretive exhibits (already designed) in the empty Interpretive Hall, to complete the Cedar River Watershed Education Center. These exhibits enhance the experience and understanding gained by the facility's 30,000-40,000 visitors per year. Existing staff performs regular maintenance of exhibits that were completed in 2004. A final exhibit required further evaluation which delayed the project completion until 2006.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	641	0	155	0	0	0	0	0	796
Project Total:	641	0	155	0	0	0	0	0	796
Fund Appropriations/Allocations									
SPU Water Fund	641	0	155	0	0	0	0	0	796
Appropriations Total*	641	0	155	0	0	0	0	0	796
O & M Costs (Savings)			2	2	2	2	2	2	12

Cedar River Non-HCP Road Improvements

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type: Improved Facility Start Date: 1st Ouarter 1991

Project ID: C191001 End Date: Ongoing

Location: Cedar 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, to 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). The City's HCP assumes these projects are completed.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	917	786	828	828	852	878	904	931	6,924
Project Total:	917	786	828	828	852	878	904	931	6,924
Fund Appropriations/Allocations SPU Water Fund	917	786	828	828	852	878	904	931	6,924
Appropriations Total*	917	786	828	828	852	878	904	931	6,924
O & M Costs (Savings)			0	0	0	0	0	0	0

Cedar River Northridge Trail

BCL/Program Name: Environmental Stewardship BCL/Program Code: C130B

Project Type:New FacilityStart Date:1st Quarter 2002Project ID:C102022End Date:4th Quarter 2006

Location: Cedar River Watershed, Northern Boundary

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 involves planning and implementation of an alternative trail connection along the northern ridge boundary of Cedar River Watershed. Planning, public process, construction, and management are done in cooperation with the Washington State Parks Department, the US Forest Service, other agencies, and adjacent landowners.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	31	51	11	0	0	0	0	0	93
Project Total:	31	51	11	0	0	0	0	0	93
Fund Appropriations/Allocations									
SPU Water Fund	31	51	11	0	0	0	0	0	93
Appropriations Total*	31	51	11	0	0	0	0	0	93
O & M Costs (Savings)			0	0	0	0	0	0	0

Cedar River Pipeline 2 Replace Portion

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2004Project ID:C104013End Date:4th Quarter 2007

Location: CRpl #2 Between Volunteer Park And Maple Leaf Gatehouse

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 rehabilitates an 88-year-old 42-inch lockbar steel feeder main that is corroded in some locations. The Cedar River pipeline extends from Volunteer Park to the Maple Leaf neighborhood and crosses the Ship Canal in a tunnel. It is part of the planned seismically hardened backbone of the Seattle distribution system; timely rehabilitation results in less disruption to water service after a major earthquake, and eliminates the risk of property damage associated with a major leak or pipeline failure. The parameters of the replacement are determined during the planning phase of the project. 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 preliminary engineering phase of the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	45	60	217	5,305	0	0	0	0	5,627
Project Total:	45	60	217	5,305	0	0	0	0	5,627
Fund Appropriations/Allocations									
SPU Water Fund	45	60	217	5,305	0	0	0	0	5,627
Appropriations Total*	45	60	217	5,305	0	0	0	0	5,627
O & M Costs (Savings)			0	0	0	0	0	0	0

Cedar River Watershed - Headquarters Major Maintenance

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type: Rehabilitation or Restoration Start Date: 2nd Quarter 2000

Project ID: C100051 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 project replaces leaky roofs, repairs plumbing, paints for existing facilities, and conducts other major maintenance at the Cedar Falls Headquarters.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	1,653	88	91	93	96	99	102	105	2,327
Project Total:	1,653	88	91	93	96	99	102	105	2,327
Fund Appropriations/Allocations									
SPU Water Fund	1,653	88	91	93	96	99	102	105	2,327
Appropriations Total*	1,653	88	91	93	96	99	102	105	2,327
O & M Costs (Savings)			0	0	0	0	0	0	0

^{*}This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts 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 2008

Location: Cedar River

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), implements measures to mitigate 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 trap. SPU's Asset Management Committee approved the HCP at the program level. The confidence level for this cost estimate is medium.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	2,305	750	242	6,153	2,950	0	0	0	12,400
Project Total:	2,305	750	242	6,153	2,950	0	0	0	12,400
Fund Appropriations/Allocations									
SPU Water Fund	2,305	750	242	6,153	2,950	0	0	0	12,400
Appropriations Total*	2,305	750	242	6,153	2,950	0	0	0	12,400
O & M Costs (Savings)			99	130	334	458	458	458	1,937

Cedar Treatment Facility

BCL/Program Name: Water Quality

BCL/Program Code: C140B

Project Type:New FacilityStart Date:1st Quarter 1996Project ID:C196015End Date:4th Quarter 2006

Location: Lake Youngs Reservoir

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 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) are planned, designed, and constructed near the Lake Young's Reservoir. SPU is utilizing a design-build-operate contracting method for this project, similar to that used for the recently commissioned Tolt Treatment Facility. The confidence level of the cost estimate is high, and SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	100,612	597	10	0	0	0	0	0	101,219
Project Total:	100,612	597	10	0	0	0	0	0	101,219
Fund Appropriations/Allocations									
SPU Water Fund	100,612	597	10	0	0	0	0	0	101,219
Appropriations Total*	100,612	597	10	0	0	0	0	0	101,219
O & M Costs (Savings)			3,980	5,100	6,520	6,520	6,917	7,338	36,375

Chamber Upgrades - Distribution

BCL/Program Name: Infrastructure 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.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	330	180	124	159	164	169	174	179	1,479
Project Total:	330	180	124	159	164	169	174	179	1,479
Fund Appropriations/Allocations									
SPU Water Fund	330	180	124	159	164	169	174	179	1,479
Appropriations Total*	330	180	124	159	164	169	174	179	1,479
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Control & Data Acquisition Upgrade

BCL/Program Name: Water Quality

BCL/Program Code: C140B

Project Type:New InvestmentStart Date:1st Quarter 2002Project ID:C195008End Date:4th Quarter 2007

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 upgrades the Supervisory Control and Data Acquisition (SCADA) system. Water system operators use SCADA equipment to acquire and monitor data, such as flow or pressure from remote sensors and from water supply dams, and to remotely operate pumps and valves. This project is broken down into four concurrent stages. Stage one of the project, which includes creating functional specifications, is complete and SPU has selected a vendor. Stage two converts SPU's Operations Control Center control room to a PC workstation-based software system, upgrades approximately 110 pieces of field site data collection equipment, and improves the communications system to allow for a redundant control room at SPU's North Operation Center. The confidence level of the cost estimate for this project stage is high, and the stage has been approved by SPU's Asset Management Committee (AMC). Stage three focuses on improving the capacity of the Water System Control Center to optimize system operations. Stage four integrates SCADA with other SPU business information systems such as SPU's work order system. Stage three has been approved by the AMC.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	4,480	3,625	2,383	2,019	0	0	0	0	12,507
Project Total:	4,480	3,625	2,383	2,019	0	0	0	0	12,507
Fund Appropriations/Allocations									
SPU Water Fund	4,480	3,625	2,383	2,019	0	0	0	0	12,507
Appropriations Total*	4,480	3,625	2,383	2,019	0	0	0	0	12,507
O & M Costs (Savings)			354	405	455	455	483	512	2,664

Design Commission Fees - Water

BCL/Program Name:InfrastructureBCL/Program Code:C110BProject Type:Improved FacilityStart Date:OngoingProject ID:C101050End 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 the City Design Commission's review of the environmental and design aspects of capital improvement projects funded by the Water Fund. Projects reviewed by the Design Commission include those which have a visual impact on the public realm, including buildings, fencing, gates, and landscaping. The allocations shown below are estimates and are expected to be revised over time. This project serves as a central location for fee estimates and once specific projects are reviewed and costs are incurred, the fees are allocated to the appropriate projects.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	20	21	21	22	23	23	24	154
Project Total:	0	20	21	21	22	23	23	24	154
Fund Appropriations/Allocations									
SPU Water Fund	0	20	21	21	22	23	23	24	154
Appropriations Total*	0	20	21	21	22	23	23	24	154
O & M Costs (Savings)			0	0	0	0	0	0	0

Distribution Projects Development

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C105087End Date:4th Quarter 2011

Location: Citywide

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

This project provides funds for planning level work in the Water Distribution System business area prior to the identification of specific capital projects. This work includes policy analysis and program development to address emerging and unanticipated issues at the time of CIP budget development. In the 2005-2010 Adopted CIP, the project ID for this project was C1NW101-001.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	100	103	106	109	113	116	119	766
Project Total:	0	100	103	106	109	113	116	119	766
Fund Appropriations/Allocations									
SPU Water Fund	0	100	103	106	109	113	116	119	766
Appropriations Total*	0	100	103	106	109	113	116	119	766
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Distribution System In-Line Gate Valves

BCL/Program Name: Infrastructure 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 these valves are more than 50 years old and are obsolete. Spare parts are difficult, and in some cases impossible, 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	411	60	62	64	66	68	70	72	873
Project Total:	411	60	62	64	66	68	70	72	873
Fund Appropriations/Allocations									
SPU Water Fund	411	60	62	64	66	68	70	72	873
Appropriations Total*	411	60	62	64	66	68	70	72	873
O & M Costs (Savings)			0	0	0	0	0	0	0

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 2008

Location: Cedar River

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 component of the Cedar River Habitat Conservation Plan (HCP). The project implements downstream habitat protection and restoration measures in the lower 22 miles of the mainstem 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 and restoration work at Walsh Lake. This project is part of the 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	268	2,213	1,527	2,721	12	0	0	0	6,741
Project Total:	268	2,213	1,527	2,721	12	0	0	0	6,741
Fund Appropriations/Allocations									
SPU Water Fund	268	2,213	1,527	2,721	12	0	0	0	6,741
Appropriations Total*	268	2,213	1,527	2,721	12	0	0	0	6,741
O & M Costs (Savings)			0	0	0	0	0	0	0

Environmental Steward Project Development

BCL/Program Name: Environmental Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C105084End Date:4th Quarter 2011

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 funds for performing planning level work on Environmental Stewardship activities prior to the formation of specific capital projects. This work includes development of Strategic Asset Management Plans for the Watershed and Environmental Program Area, policy analysis and program development to deal with issues related to the management of the Tolt & 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. In the 2005-2010 Adopted CIP, the project ID for this project was C1NW301-003.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	100	103	106	109	113	116	119	766
Project Total:	0	100	103	106	109	113	116	119	766
Fund Appropriations/Allocations									
SPU Water Fund	0	100	103	106	109	113	116	119	766
Appropriations Total*	0	100	103	106	109	113	116	119	766
O & M Costs (Savings)			0	0	0	0	0	0	0

ESA Chinook Research & Monitoring

BCL/Program Name: Environmental Stewardship BCL/Program Code: C130B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2001Project ID:C101048End Date:4th Quarter 2011

Location: Lake Washington Watershed

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

This program provides funding for research and monitoring of 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. The results of these research and monitoring activities are used to 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.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	561	217	230	250	271	281	290	299	2,399
Project Total:	561	217	230	250	271	281	290	299	2,399
Fund Appropriations/Allocations SPU Water Fund	561	217	230	250	271	281	290	299	2,399
Appropriations Total*	561	217	230	250	271	281	290	299	2,399
	301	217			_,_				ŕ
O & M Costs (Savings)			0	0	0	0	0	0	0

ESA Snohomish River Basin

BCL/Program Name: Environmental Stewardship BCL/Program Code: C130B

Project Type: Rehabilitation or Restoration **Start Date:** 2nd Quarter 2000

Project ID: C101003 End Date: Ongoing

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 City Light, and projects may occur in cooperation with King County, affected tribes, or other local, state, and federal agencies. Beginning with the 2005-2010 Adopted CIP, funding for "ESA Tolt Levee Modifications" (C1NW301-004), which had been included in this project, is displayed as a separate CIP project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	229	52	21	150	160	164	169	174	1,119
Project Total:	229	52	21	150	160	164	169	174	1,119
Fund Appropriations/Allocations									
SPU Water Fund	229	52	21	150	160	164	169	174	1,119
Appropriations Total*	229	52	21	150	160	164	169	174	1,119
O & M Costs (Savings)			0	0	0	0	0	0	0

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

ESA Tolt Levee Modifications

BCL/Program Name: Environmental Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C105095End Date:4th Quarter 2010

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 is a collaborative project between Seattle Public Utilities, Seattle City Light, and the King County Department of Natural Resources and Parks. The 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 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 approved this project in 2005. In the 2005-2010 Adopted CIP, the project ID for this project was C1NW301-004.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	347	258	1,167	546	23	23	0	2,364
Project Total:	0	347	258	1,167	546	23	23	0	2,364
Fund Appropriations/Allocations									
SPU Water Fund	0	347	258	1,167	546	23	23	0	2,364
Appropriations Total*	0	347	258	1,167	546	23	23	0	2,364
O & M Costs (Savings)			0	0	0	0	0	0	0

Facility Improvements - Water

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

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404602-WFEnd Date:4th Quarter 2006

Location: 700 5th Ave.

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:DowntownUrban Village:Commercial Core

This project funds logistical support services for SPU including tenant improvements, office buildouts, and furniture. The funding shown below is the Water Fund's share of the project's cost. The 2006 total cost for this project across all SPU funds is approximately \$2.8 million.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	902	2,491	1,421	0	0	0	0	0	4,814
Project Total:	902	2,491	1,421	0	0	0	0	0	4,814
Fund Appropriations/Allocations									
SPU Water Fund	902	2,491	1,421	0	0	0	0	0	4,814
Appropriations Total*	902	2,491	1,421	0	0	0	0	0	4,814
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Fireflow & Pressure Improvement

BCL/Program Name: Infrastructure 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.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	266	300	580	2,652	5,316	6,010	6,191	6,376	27,691
Project Total:	266	300	580	2,652	5,316	6,010	6,191	6,376	27,691
Fund Appropriations/Allocations									
SPU Water Fund	266	300	580	2,652	5,316	6,010	6,191	6,376	27,691
Appropriations Total*	266	300	580	2,652	5,316	6,010	6,191	6,376	27,691
O & M Costs (Savings)			0	0	0	0	0	0	0

Fleet Management Study

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C405601-WFEnd Date:4th Quarter 2005

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 applies asset management principles to the management of SPU's fleet of heavy equipment. A consultant study is complete and the recommendations related to fleet utilization, including which kinds of equipment SPU should be using and how the Department's work practices might be changed either to use existing equipment better or to use different equipment, has been presented to the SPU Asset Management Committee. The project supports other work being done by SPU to assess its current system of fleet management, develop performance measures and tracking systems, and modify department processes and practices related to fleet management. It is expected that the implementation of the recommendations identified through this study will lead to lower life cycle costs for fleet management.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	123	0	0	0	0	0	0	123
Project Total:	0	123	0	0	0	0	0	0	123
Fund Appropriations/Allocations									
SPU Water Fund	0	123	0	0	0	0	0	0	123
Appropriations Total*	0	123	0	0	0	0	0	0	123
O & M Costs (Savings)			0	0	0	0	0	0	0

Fremont Bridge

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:3rd Quarter 2004Project ID:C1NW201-003End Date:1st Quarter 2006

Location: South End Of Fremont Bridge

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 support of the Seattle Department of Transportation's project to replace the approaches to the Fremont Bridge. The design is complete for the first phase of construction and there are very few impacts to the water system. The second phase of the project constructs a new maintenance building near the south approach and this will likely require the construction of a new eight-inch watermain to replace the existing two-inch galvanized main. Plans are not yet available for review of the building or the new water main. SPU develops the scope and costs with SDOT plans. The SPU Asset Management Committee review is not required as the project total cost does not exceed \$250,000.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	0	1	0	0	0	0	0	1
Project Total:	0	0	1	0	0	0	0	0	1
Fund Appropriations/Allocations									
SPU Water 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	0	0	0	0	0	0

Heavy Equipment Purchases - Water

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type: New Investment Start Date: 1st Quarter 1999

Project ID: C199068 End Date: Ongoing

Location: N/A

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

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

This program replaces existing heavy equipment (such as loaders and bulldozers) used at Water Utility facilities. These pieces of equipment have reached the end of their useful lives. The project also funds retrofitting of existing equipment to meet environmental standards.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	9,072	2,934	2,179	3,501	1,639	1,688	4,869	5,015	30,897
Project Total:	9,072	2,934	2,179	3,501	1,639	1,688	4,869	5,015	30,897
Fund Appropriations/Allocations SPU Water Fund	9,072	2,934	2,179	3,501	1,639	1,688	4,869	5,015	30,897
Appropriations Total*	9,072	2,934	2,179	3,501	1,639	1,688	4,869	5,015	30,897
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Hidden Lake CSO Betterments

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 2004Project ID:C104066End Date:4th Quarter 2006

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 allows SPU to perform betterment work in conjunction with a King County combined sewer rehab 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 the area at least 20% more than the minimum requirement. Also all hydrants in the area will be replaced with six-inch wide capacity.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	0	188	0	0	0	0	0	188
Project Total:	0	0	188	0	0	0	0	0	188
Fund Appropriations/Allocations									
SPU Water Fund	0	0	188	0	0	0	0	0	188
Appropriations Total*	0	0	188	0	0	0	0	0	188
O & M Costs (Savings)			0	0	0	0	0	0	0

Hidden Lake CSO Impact Work

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 2004Project ID:C104067End Date:4th Quarter 2007

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 made to the City's water system in Shoreline impacted by County sewer improvements 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 replacing 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.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	54	271	85	0	0	0	0	410
Project Total:	0	54	271	85	0	0	0	0	410
Fund Appropriations/Allocations									
SPU Water Fund	0	54	271	85	0	0	0	0	410
Appropriations Total*	0	54	271	85	0	0	0	0	410
O & M Costs (Savings)			0	0	0	0	0	0	0

Holgate/Amtrak Water Relocation

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:4th Quarter 1998Project ID:C101009End Date:4th Quarter 2005

Location: S Holgate St./4th Ave. S/1st Ave. S

Neighborhood Plan: Duwamish Neighborhood Plan Matrix: Multiple

Neighborhood District: Greater Duwamish Urban Village: Duwamish

This project responds to Amtrak's redevelopment of rail yard facilities at S Holgate St. between 3rd Ave. S and 4th Ave. S. As part of the redevelopment, the grade of S Holgate St. was lowered, reducing the cover over the existing 20-inch feeder main under S Holgate St. This project replaced the main at a lower depth (at Amtrak's expense) under the new track and extended the water main replacement under existing tracks on Holgate in the vicinity of 3rd Ave. S (at SPU's expense). Additionally, SPU supported Amtrak's project by performing shutdowns, water service relocations and installation of new services. The construction is complete, and the confidence level in the cost estimate is medium pending a determination of contaminated soil disposal costs.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	275	10	0	0	0	0	0	0	285
Project Total:	275	10	0	0	0	0	0	0	285
Fund Appropriations/Allocations									
SPU Water Fund	275	10	0	0	0	0	0	0	285
Appropriations Total*	275	10	0	0	0	0	0	0	285
O & M Costs (Savings)			0	0	0	0	0	0	0

I-405 Widening Cedar River Pipelines Impacts

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2005Project ID:C105096End Date:4th Quarter 2006

Location: City of Renton

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 in response to the Washington State Department of Transportation's (WSDOT) planned widening of various sections of I-405 and SR-167, at locations that could impact Cedar River Pipelines (CRPLs) 1, 2, 3, 4. Initially, the main impacts seem to be on CRPL 4 where it crosses SR-167, and near Southcenter. The WSDOT project is still in the preliminary engineering stage, so impacts to SPU have not been fully determined at this time. SPU's potential involvement in this project could range from easement work and pipeline monitoring to pipeline replacement. Only planning and coordination costs are included at this time. The confidence level of the current cost estimate is medium, and the project does not require review by the SPU Asset Management Committee.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	0	46	0	0	0	0	0	46
Project Total:	0	0	46	0	0	0	0	0	46
Fund Appropriations/Allocations									
SPU Water Fund	0	0	46	0	0	0	0	0	46
Appropriations Total*	0	0	46	0	0	0	0	0	46
O & M Costs (Savings)			0	0	0	0	0	0	0

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 2011

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 set of projects is part of the Cedar River Habitat Conservation Plan (HCP), which has received approval by SPU's Asset Management Committee. Studies conducted under this project generate information on relationships between stream flow and habitat conditions, with an emphasis on Chinook; support effective allocation of water above guaranteed levels; and address technical issues that emerged in the later stages of developing the HCP. The project includes studies of Chester Morse dead storage, 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. The project also includes an Accretion Flow Study, which studies Cedar River hydrology to confirm assumptions embodied in the HCP. The confidence level of cost estimates for this project is high.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	93	533	623	727	327	208	131	135	2,777
Project Total:	93	533	623	727	327	208	131	135	2,777
Fund Appropriations/Allocations SPU Water Fund	93	533	623	727	327	208	131	135	2,777
Appropriations Total*	93	533	623	727	327	208	131	135	2,777
O & M Costs (Savings)			0	0	0	0	0	0	0

Lake Young's Outlet Dam Rehabilitation

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2003Project ID:C102013End Date:1st Quarter 2006

Location: Lake Youngs Reservoir

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 makes improvements at the dams at Lake Young's to comply with Washington state dam safety requirements. Work identified or completed to date includes installation of survey monuments on all three dams; raising the west portion of the south dam of Lake Young's, which is constructed of semi-structural fill that may fail in an earthquake and release water within the top six feet of the lake into the Kent valley; and replacement of the deteriorated siphon pipes at Lake Young's that are used to provide water to Little Soos Creek. The confidence level of cost estimates is high, and the SPU Asset Management Committee approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	185	125	4	0	0	0	0	0	314
Project Total:	185	125	4	0	0	0	0	0	314
Fund Appropriations/Allocations									
SPU Water Fund	185	125	4	0	0	0	0	0	314
Appropriations Total*	185	125	4	0	0	0	0	0	314
O & M Costs (Savings)			6	6	6	6	6	6	36

Lake Young's Outlet Dam Warning System

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101006End Date:1st Quarter 2007

Location: South Of Lake Youngs Reservoir

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 installs a warning system for detecting dam failure at the Lake Young's Outlet Dam, per regulatory requirement. Operations and maintenance costs listed below are included in the Department's operating budget. The confidence level of cost estimate is high and the SPU Asset Management Committee approved this project for construction.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	533	34	41	11	0	0	0	0	619
Project Total:	533	34	41	11	0	0	0	0	619
Fund Appropriations/Allocations									
SPU Water Fund	533	34	41	11	0	0	0	0	619
Appropriations Total*	533	34	41	11	0	0	0	0	619
O & M Costs (Savings)			15	19	24	24	24	24	130

Landsburg Fish Passage Improvements

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type:Improved FacilityStart Date:2nd Quarter 1999Project ID:C1604End Date:4th Quarter 2010

Location: Cedar River

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 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 project 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 approved the design and construction phases of the project and the confidence level for this cost estimate is high.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	12,611	202	226	255	262	10	8	0	13,574
Project Total:	12,611	202	226	255	262	10	8	0	13,574
Fund Appropriations/Allocations									
SPU Water Fund	12,611	202	226	255	262	10	8	0	13,574
Appropriations Total*	12,611	202	226	255	262	10	8	0	13,574
O & M Costs (Savings)			169	169	169	169	169	169	1,014

Landsburg Flood Passage Improvement

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104016End Date:4th Quarter 2008

Location: Landsburg Dam

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 addresses flood passage deficiencies at the City's Landsburg Dam on the Cedar River, making necessary improvements to reduce the risk of significant damage or loss of the dam in the event of a major flood. Preliminary engineering is proceeding per SPU's Asset Management Committee approval to identify the preferred option. Cost estimates are based on construction of a new 40-foot wide emergency spillway. Other options being considered are debris control and modification of the spillway to install an inflatable rubber dam. The rubber dam portion would be deflated in a major flood to provide increased spillway capacity and to allow better passage of debris. The confidence level of the current cost estimate is medium. The SPU Asset Management Committee approved moving forward on the design and construction phases of this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	44	450	410	2,649	2,370	0	0	0	5,923
Project Total:	44	450	410	2,649	2,370	0	0	0	5,923
Fund Appropriations/Allocations									
SPU Water Fund	44	450	410	2,649	2,370	0	0	0	5,923
Appropriations Total*	44	450	410	2,649	2,370	0	0	0	5,923
O & M Costs (Savings)			0	8	10	10	10	10	48

Main Warehouse Improvements - Water

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2006Project ID:C406601-WFEnd Date:4th Quarter 2006

Location: 2700 Airport/Way/S

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

This project evaluates, plans, designs and constructs building systems, including a sprinkler system for fire suppression and maintenance improvements, such as lighting, heating, ventilation and air conditioning, and roof replacement for the main warehouse facility at the Operations Control Center. The funding shown for this project reflects an estimated cost to perform required code improvements and evaluate the overall building needs. The SPU Asset Management Committee approved this project in 2005. The Project ID was C406604-WF in the 2006-2011 proposed CIP.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	0	262	0	0	0	0	0	262
Project Total:	0	0	262	0	0	0	0	0	262
Fund Appropriations/Allocations SPU Water Fund	0	0	262	0	0	0	0	0	262
Appropriations Total*	0	0	262	0	0	0	0	0	262
O & M Costs (Savings)			0	0	0	0	0	0	0

Maple Leaf Gatehouse Pipe Refurbishing

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:2nd Quarter 1995Project ID:C195001End Date:2nd Quarter 2007

Location: NE 83rd St./12th Ave. NE

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

This project refurbishes valves and piping to allow more water from the Tolt Watershed source to be delivered to areas south of the Lake Washington Ship Canal normally served by the Cedar River. The project makes it possible to supply the indoor water uses of the City's entire water system from the Tolt. The project also addresses seismic issues with the gatehouse structure. The confidence level in the current cost estimate is medium.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	43	390	10	13	0	0	0	0	456
Project Total:	43	390	10	13	0	0	0	0	456
Fund Appropriations/Allocations									
SPU Water Fund	43	390	10	13	0	0	0	0	456
Appropriations Total*	43	390	10	13	0	0	0	0	456
O & M Costs (Savings)			0	5	5	5	5	5	25

^{*}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: Other Agencies BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 1997Project ID:C197021End Date:4th Quarter 2006

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 project includes the installation of thrust restraint system and blowoffs, and the decommissioning of existing facilities. The certainty of the cost estimate is medium-high, and SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	214	400	31	0	0	0	0	0	645
Project Total:	214	400	31	0	0	0	0	0	645
Fund Appropriations/Allocations									
SPU Water Fund	214	400	31	0	0	0	0	0	645
Appropriations Total*	214	400	31	0	0	0	0	0	645
O & M Costs (Savings)			0	0	0	0	0	0	0

Meter Replacement - Water

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C4101-WFEnd 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. In the 2005-2010 Adopted CIP, the project ID for this project was C404102-WF.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	11,190	728	718	739	761	784	808	831	16,559
Project Total:	11,190	728	718	739	761	784	808	831	16,559
Fund Appropriations/Allocations									
SPU Water Fund	11,190	728	718	739	761	784	808	831	16,559
Appropriations Total*	11,190	728	718	739	761	784	808	831	16,559
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Morse Lake Dead Storage Facilities

BCL/Program Name: Water Supply BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C103032End Date:2nd Quarter 2011

Location: Cedar River Watershed, Northern Boundary

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. Depending on the outcome of a preliminary engineering study and approval by SPU's Asset Management Committee, either the existing facilities are improved or new facilities are constructed. Deficiencies in the existing Morse Lake emergency pumping plants found during this project are also corrected while the longer-term improvements are being implemented. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	407	900	927	955	983	12,268	7,814	1,194	25,448
Project Total:	407	900	927	955	983	12,268	7,814	1,194	25,448
Fund Appropriations/Allocations									
SPU Water Fund	407	900	927	955	983	12,268	7,814	1,194	25,448
Appropriations Total*	407	900	927	955	983	12,268	7,814	1,194	25,448
O & M Costs (Savings)			0	0	0	0	0	0	0

Multiple Utility Relocation

BCL/Program Name:Other AgenciesBCL/Program Code:C120BProject Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C1NW201-001End 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 SPU to respond to large projects that are conducted by other agencies and 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 life to date costs for this project is zero as costs are allocated to the individual projects once they are identified.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	976	927	1,061	1,093	1,126	1,159	1,194	7,536
Project Total:	0	976	927	1,061	1,093	1,126	1,159	1,194	7,536
Fund Appropriations/Allocations	0	076	027	1.061	1 002	1 126	1 150	1 104	7.526
SPU Water Fund	0	976	927	1,061	1,093	1,126	1,159	1,194	7,536
Appropriations Total*	0	976	927	1,061	1,093	1,126	1,159	1,194	7,536
O & M Costs (Savings)			0	0	0	0	0	0	0

Operational Facilities Plan

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

Project Type:Improved FacilityStart Date:1st Quarter 2006Project ID:C406622-WFEnd Date:4th Quarter 2006

Location: Various

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

This project provides an inventory of existing facilities and their condition and identifies department functions, and adjacency, facility and space requirements. The information is used to develop a plan for the use of existing facilities, required upgrades, identification of gaps and recommended options for addressing those gaps. The 2006 total cost for this project across all the SPU funds is \$759,000.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	0	364	0	0	0	0	0	364
Project Total:	0	0	364	0	0	0	0	0	364
Fund Appropriations/Allocations									
SPU Water Fund	0	0	364	0	0	0	0	0	364
Appropriations Total*	0	0	364	0	0	0	0	0	364
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Operations Control Center Upgrade - Water

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404501-WFEnd Date:4th Quarter 2007

Location: 2700 Airport Wy. S

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

This project remodels and upgrades SPU's Operations Control Center building. The project includes reconfiguring internal space to improve security and incorporate the new Supervisory Control And Data Acquisition system. The upgraded center accommodates SPU's new Strategic Operations Division, as well as Field Operations administration and electrical, mechanical, maintenance and emergency response crews.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	1,683	2,195	1,393	259	0	0	0	0	5,530
Project Total:	1,683	2,195	1,393	259	0	0	0	0	5,530
Fund Appropriations/Allocations SPU Water Fund	1,683	2,195	1,393	259	0	0	0	0	5,530
Appropriations Total*	1,683	2,195	1,393	259	0	0	0	0	5,530
O & M Costs (Savings)			0	0	0	0	0	0	0

Painting Program - Myrtle Tank

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2004Project ID:C104031End Date:2nd Quarter 2006

Location: 3600 SW Myrtle St.

Neighborhood Plan:Morgan Junction (MOCA)Neighborhood Plan Matrix:RG17Neighborhood District:SouthwestUrban Village:Morgan Junction

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. This project cleans and overcoats the tank exterior of the Myrtle tanks. 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, and SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	22	653	127	0	0	0	0	0	802
Project Total:	22	653	127	0	0	0	0	0	802
Fund Appropriations/Allocations									
SPU Water Fund	22	653	127	0	0	0	0	0	802
Appropriations Total*	22	653	127	0	0	0	0	0	802
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Painting Program - Richmond Highland

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2004Project ID:C104032End Date:2nd Quarter 2006

Location: N 195th St./Fremont Ave. N

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

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. This project cleans and overcoats the tank exterior of the Richmond Highland tanks (located north of Seattle city limits). The interior lining is completely removed and replaced. Minor safety and operational modifications are made. The confidence level of the cost estimate is high, and SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	26	1,295	314	0	0	0	0	0	1,635
Project Total:	26	1,295	314	0	0	0	0	0	1,635
Fund Appropriations/Allocations									
SPU Water Fund	26	1,295	314	0	0	0	0	0	1,635
Appropriations Total*	26	1,295	314	0	0	0	0	0	1,635
O & M Costs (Savings)			0	0	0	0	0	0	0

Painting Program - Steel Structures

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C1NW130End Date:4th Quarter 2011

Location: Citywide

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

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. SPU Asset Management Committee review is not required at this time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	20	103	530	546	563	580	597	2,939
Project Total:	0	20	103	530	546	563	580	597	2,939
Fund Appropriations/Allocations									
SPU Water Fund	0	20	103	530	546	563	580	597	2,939
Appropriations Total*	0	20	103	530	546	563	580	597	2,939
O & M Costs (Savings)			0	0	0	0	0	0	0

Pump Station - Install Station Motors

BCL/Program Name: Infrastructure 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 no replacement parts available. The confidence for this project cost estimate is medium. SPU's Asset Management Committee has approved this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	39	61	62	69	76	79	81	84	551
Project Total:	39	61	62	69	76	79	81	84	551
Fund Appropriations/Allocations									
SPU Water Fund	39	61	62	69	76	79	81	84	551
Appropriations Total*	39	61	62	69	76	79	81	84	551
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Pump Station - Queen Anne

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 1996Project ID:C1AA005End Date:4th Quarter 2007

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 12,000 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 design is proceeding in conjunction with the Queen Anne tank project, and the current plan is to combine the two projects into a single construction contract.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	1,045	50	3,018	3,071	0	0	0	0	7,184
Project Total:	1,045	50	3,018	3,071	0	0	0	0	7,184
Fund Appropriations/Allocations									
SPU Water Fund	1,045	50	3,018	3,071	0	0	0	0	7,184
Appropriations Total*	1,045	50	3,018	3,071	0	0	0	0	7,184
O & M Costs (Savings)			10	13	16	16	16	16	87

Purveyor Meters Replace - SPU

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2000

Project ID: C1107 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. For the most part, SPU costs are directly reimbursed by the wholesale customers. The confidence in the cost estimate is medium, and this program does not require the SPU Asset Management Committee review as it is an ongoing program.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									_
Water Rates	3,624	176	103	106	109	113	116	119	4,466
Project Total:	3,624	176	103	106	109	113	116	119	4,466
Fund Appropriations/Allocations SPU Water Fund	3,624	176	103	106	109	113	116	119	4,466
Appropriations Total*	3,624	176	103	106	109	113	116	119	4,466
O & M Costs (Savings)			0	0	0	0	0	0	0

Regional Water Conservation Program

BCL/Program Name: Water Supply BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 1999Project ID:C1504End 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 project is a cooperative regional effort between SPU and 18 of Seattle's wholesale customers. Not all of Seattle's wholesale customers are participating in this project. In some cases, wholesale customers choose to find other ways to manage supply and demand; in other cases, those wholesale customers do not purchase significant amounts of water from SPU. Fifty percent of the project is paid for from wholesale rates as part of current wholesale contract requirements. The project has the goal of reducing personal and commercial water consumption by one percent per year, which is approximately equal to the projected level of growth in regional water demand over the period 2000 to 2010 (14.5 million gallons per day peak demand savings). The 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 confidence level of the cost estimate is high. SPU's Asset Management Committee has approved this project. In the 2005-2010 Adopted CIP, the project ID for this project was C199032.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	15,706	3,300	3,657	4,138	4,535	5,121	5,796	0	42,253
Project Total:	15,706	3,300	3,657	4,138	4,535	5,121	5,796	0	42,253
Fund Appropriations/Allocations SPU Water Fund	15,706	3,300	3,657	4,138	4,535	5,121	5,796	0	42,253
Appropriations Total*	15,706	3,300	3,657	4,138	4,535	5,121	5,796	0	42,253
O & M Costs (Savings)			0	0	0	0	0	0	0

Renton Franchise/Line Valve Cedar River

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2002Project ID:C102023End Date:4th Quarter 2006

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 blowoffs, replacement of Cedar River Pipeline 1 & 2 valves at Leo Street, automation of the I- 405 ball valves, modifications to Augusta Gatehouse, and other miscellaneous work. This certainty of this project cost estimate is high and the project has been approved by SPU's Asset Management Committee

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	1,258	970	15	0	0	0	0	0	2,243
Project Total:	1,258	970	15	0	0	0	0	0	2,243
Fund Appropriations/Allocations									
SPU Water Fund	1,258	970	15	0	0	0	0	0	2,243
Appropriations Total*	1,258	970	15	0	0	0	0	0	2,243
O & M Costs (Savings)			21	27	35	35	0	0	118

Replace Air Valve Chambers

BCL/Program Name: Infrastructure

BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C199060End 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 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, and SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	346	61	64	66	66	68	70	72	813
Project Total:	346	61	64	66	66	68	70	72	813
Fund Appropriations/Allocations									
SPU Water Fund	346	61	64	66	66	68	70	72	813
Appropriations Total*	346	61	64	66	66	68	70	72	813
O & M Costs (Savings)			0	0	0	0	0	0	0

Reservoir Covering - Beacon

BCL/Program Name: Water Quality

BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101060End Date:2nd Quarter 2008

Location: S Spokane St./Beacon Ave. S

Neighborhood Plan: North Beacon Hill Neighborhood Plan Matrix: WR4

Neighborhood District: Greater Duwamish Urban Village: Beacon Hill

Per Ordinance 121447, this project replaces the existing 49 million gallon open South Beacon Reservoir with a new underground reservoir of approximately the same size, and rehabilitates the pipes and valves connecting the reservoir to the water system. Additionally, the project retires the existing North Beacon Reservoir. The project helps to protect Seattle's water supply from vandalism and contamination, and improves the quality of life in the surrounding neighborhood by creating approximately 29 acres of open space and avoiding the unsightly appearance of other reservoir covering options. Inflation and higher steel and construction costs are reflected below, and the confidence level of the cost estimate is high. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project. 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. See the Parks section of the 2006-2011 Proposed CIP for more information on the Jefferson Park Project (K733131).

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	882	1,000	8,799	24,411	4,137	0	0	0	39,229
Project Total:	882	1,000	8,799	24,411	4,137	0	0	0	39,229
Fund Appropriations/Allocations									
SPU Water Fund	882	1,000	8,799	24,411	4,137	0	0	0	39,229
Appropriations Total*	882	1,000	8,799	24,411	4,137	0	0	0	39,229
O & M Costs (Savings)			0	0	76	76	0	0	152

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

Reservoir Covering - Lincoln

BCL/Program Name: Water Quality

BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 1996Project ID:C196012End Date:1st Quarter 2008

Location: Nagle Pl./E Denny Wy./E Pine St.

Neighborhood Plan:Capitol HillNeighborhood Plan Matrix:B3Neighborhood District:East DistrictUrban Village:Capitol Hill

Per Ordinance 121447, this project replaces the existing 21 million gallon Lincoln reservoir with a new concrete cast-in-place 12.5 million gallon underground reservoir. It also changes out the existing gas chlorinating system to a sodium hypochlorite (bleach) system, replaces pipe and valves connecting the new reservoir to the water system, and restores elements of the park site. The project helps to protect drinking water quality, and creates approximately four acres of open space. The project received SPU's Asset Management Committee approval and is essentially complete. The Seattle Department of Parks and Recreation has expanded the Cal Anderson Park over the reservoir as a 2000 Parks Levy project. See the Parks section of the 2006-2011 Adopted CIP for more details on the Cal Anderson project (K733132).

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	18,693	404	21	5	5	0	0	0	19,128
Project Total:	18,693	404	21	5	5	0	0	0	19,128
Fund Appropriations/Allocations SPU Water Fund	18,693	404	21	5	5	0	0	0	19,128
Appropriations Total*	18,693	404	21	5	5	0	0	0	19,128
O & M Costs (Savings)			43	55	71	91	91	91	442

Reservoir Covering - Maple Leaf

BCL/Program Name: Water Quality BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101078End Date:3rd Quarter 2013

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

Per Ordinance 121447, this project replaces the existing Maple Leaf 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, and improves the quality of life in the surrounding neighborhood by creating open space and avoiding the unsightly appearance of other reservoir covering options. Funds spent to date have been for design. Inflation and higher steel and construction costs are reflected below and the confidence level of the cost estimate is medium as construction is not scheduled to occur for several years in the future. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	266	513	2	2	0	303	485	16,476	18,047
Project Total:	266	513	2	2	0	303	485	16,476	18,047
Fund Appropriations/Allocations									
SPU Water Fund	266	513	2	2	0	303	485	16,476	18,047
Appropriations Total*	266	513	2	2	0	303	485	16,476	18,047
O & M Costs (Savings)			33	54	69	69	0	0	225

Reservoir Covering - Myrtle

BCL/Program Name: Water Quality

BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101076End Date:4th Quarter 2007

Location: 35th Ave. SW

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SouthwestUrban Village:Morgan Junction

Per Ordinance 121447, this project replaces the existing open Myrtle Reservoir with a new underground reservoir of approximately the same size, rehabilitates the pipes and valves connecting the reservoir to the water system, and converts the disinfection system at the reservoir to sodium hypochlorite (bleach). The project helps to protect Seattle's water supply from vandalism and contamination, and improves the quality of life in the surrounding neighborhood by creating open space and avoids the unsightly appearance of other reservoir covering options. Inflation and higher steel and construction costs are reflected below and the confidence level of the cost estimate is high. The SPU Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	291	955	2,695	3,325	0	0	0	0	7,266
Project Total:	291	955	2,695	3,325	0	0	0	0	7,266
Fund Appropriations/Allocations									
SPU Water Fund	291	955	2,695	3,325	0	0	0	0	7,266
Appropriations Total*	291	955	2,695	3,325	0	0	0	0	7,266
O & M Costs (Savings)			0	0	8	9	0	0	17

Reservoir Covering - Volunteer

BCL/Program Name: Water Quality BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101059End Date:2nd Quarter 2015

Location: 12th Ave. E/E Prospect St.

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan Matrix: N/A
Neighborhood District: East District Urban Village: Capitol Hill

Per Ordinance 121447, this project replaces 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 also evaluating the possibility of decommissioning this reservoir instead of undergrounding it. This project was the subject of a budget proviso in 2004, which was lifted by Ordinance 121447. Funding provided in 2010 is intended for design work to underground the reservoir, if a decision is made to keep the reservoir in service. Deferring this project until 2010 helps to reduce near-term pressure on water rates, and allows the costs of the overall reservoir burying program to be slowly phased into commercial and residential water rates. The confidence level of the cost estimate is medium since implementation is several years in the future. The SPU Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	94	0	0	0	0	0	280	1,247	1,621
Project Total:	94	0	0	0	0	0	280	1,247	1,621
Fund Appropriations/Allocations	0.4	0	0	0	0	0	200	1.047	1 (21
SPU Water Fund	94	0	0	0	0	0	280	1,247	1,621
Appropriations Total*	94	0	0	0	0	0	280	1,247	1,621
O & M Costs (Savings)			0	0	0	0	0	0	0

Reservoir Covering - West Seattle

BCL/Program Name: Water Quality

BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101075End Date:3rd Quarter 2010

Location: 8th Ave SW/SW Henderson

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

Per Ordinance 121447, this project replaces the existing West Seattle 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, and improves the quality of life in the surrounding neighborhood by creating open space and avoiding the unsightly appearance of other reservoir covering options. This project was the subject of a budget proviso in 2004, which was lifted by Ordinance 121447. Inflation and higher steel and construction costs are reflected below and the confidence level of the cost estimate is medium as project implementation is not scheduled for a couple years in the future. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	264	523	284	489	7,203	14,105	5,560	0	28,428
Project Total:	264	523	284	489	7,203	14,105	5,560	0	28,428
Fund Appropriations/Allocations SPU Water Fund	264	523	284	489	7,203	14,105	5,560	0	28,428
Appropriations Total*	264	523	284	489	7,203	14,105	5,560	0	28,428
O & M Costs (Savings)			0	0	0	17	0	0	17

Rock Creek Fishway

BCL/Program Name: Environmental Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2002Project ID:C101008End Date:4th Quarter 2007

Location: Lake Youngs

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Not in a Neighborhood DistrictUrban 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 Young's Aqueduct on Rock Creek, approximately 3.5 miles north of Landsburg, does not comply with existing fish passage requirements. This project provides the following 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.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	84	22	115	555	0	0	0	0	776
Project Total:	84	22	115	555	0	0	0	0	776
Fund Appropriations/Allocations									
SPU Water Fund	84	22	115	555	0	0	0	0	776
Appropriations Total*	84	22	115	555	0	0	0	0	776
O & M Costs (Savings)			0	0	0	0	0	0	0

SeaTac 3 Runway Pipeline Relocation

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:4th Quarter 1999Project ID:C199075End Date:2nd Quarter 2006

Location: S 156th Wy./24th 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 relocates the Bow Lake Pipeline away from SeaTac Airport onto a new road along the north perimeter of the airport property. The original pipeline crossed both runways, and was not compatible with the third runway. As a result it was determined that the pipeline should be relocated away from the runways. The Port of Seattle is bearing the majority of the costs, and the amounts shown below are SPU's contribution to the project. The certainty of the cost estimate is high, and SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	283	545	3	0	0	0	0	0	831
Project Total:	283	545	3	0	0	0	0	0	831
Fund Appropriations/Allocations									
SPU Water Fund	283	545	3	0	0	0	0	0	831
Appropriations Total*	283	545	3	0	0	0	0	0	831
O & M Costs (Savings)			0	3	3	3	3	3	15

Seattle Direct Service Additional Conservation

BCL/Program Name: Water Supply 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 provides additional funding for measures to reduce personal and commercial water consumption in SPU's Direct Service Area for water supply. The program implements Ordinance 120532, adopted in 2001, and supplements funding provided under SPU's Regional Water Conservation Program (C1504). The project is designed in three phases. Phase One works with low-income housing providers; Phase Two works with subsidized and non-subsidized low-income households; and Phase Three works on clothes washers and irrigation system upgrades. 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. The SPU Asset Management Committee review is not required for the project. In the 2005-2010 Adopted CIP, the project ID was C102010 for this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	952	988	1,018	2,016	2,147	2,250	2,317	2,387	14,075
Project Total:	952	988	1,018	2,016	2,147	2,250	2,317	2,387	14,075
Fund Appropriations/Allocations SPU Water Fund	952	988	1,018	2,016	2,147	2,250	2,317	2,387	14,075
Appropriations Total*	952	988	1,018	2,016	2,147	2,250	2,317	2,387	14,075
O & M Costs (Savings)			0	0	0	0	0	0	0

Seattle Monorail Project - Water

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C404301-WFEnd Date:1st Quarter 2006

Location: SW Morgan St./NW 85th St.

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

The Seattle Monorail Project (SMP) was planning an initial 14-mile monorail route between Ballard and West Seattle that travels through downtown Seattle. Seattle voters approved the Monorail conceptual plan in November 2002. This project funded planning, design, and coordination with agencies involved in SPU utility relocations associated with implementation of a new monorail. The project does not include funding for construction. An agreement was in place between the SMP and the City in which the former will reimburse the City for all costs incurred by City departments because of the Monorail project. This project was funded by SPU's Drainage & Wastewater and Water Funds. In 2005, the SMP's Board of Directors turned down the financing plan proposed for the SMP, and the project's status was uncertain at the time of the 2006 Proposed Budget. In November 2005, Proposition 1, which concerned constructing a monorail by modifying the Seattle Popular Monorail Plan, was not approved by voters. As a result, the Monorail Green Line will not be built and the Seattle Popular Monorail Authority will be dissolved. See also the Seattle Monorail Project in the Seattle City Light CIP (8306).

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	122	400	0	0	0	0	0	0	522
Project Total:	122	400	0	0	0	0	0	0	522
Fund Appropriations/Allocations									
SPU Water Fund	122	400	0	0	0	0	0	0	522
Appropriations Total*	122	400	0	0	0	0	0	0	522
O & M Costs (Savings)			0	0	0	0	0	0	0

Seattle Monorail Project Watermain Replacement - Water

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2005Project ID:C405330End Date:4th Quarter 2009

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

The Seattle Monorail Project (SMP) was planning an initial 14-mile monorail route between Ballard and West Seattle that travels through downtown Seattle. Seattle voters approved the Monorail conceptual plan in November 2002. This project funded construction of water utility relocations where appropriate, in association with implementation of a new monorail. The costs would be reimbursed by the SMP. In the 2005-2010 Adopted CIP, the project ID for this project was C4NW103-001-WF. In 2005, the SMP's Board of Directors turned down the financing plan proposed for the SMP, and the project's status was uncertain at the time of the 2006 Proposed Budget. In November 2005, Proposition 1, which concerned constructing a monorail by modifying the Seattle Popular Monorail Plan, was not approved by voters. As a result, the Monorail Green Line will not be built and the Seattle Popular Monorail Authority will be dissolved. See also the Seattle Monorail Project (8306) in the Seattle City Light CIP.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	1,200	0	0	0	0	0	0	1,200
Project Total:	0	1,200	0	0	0	0	0	0	1,200
Fund Appropriations/Allocations									
SPU Water Fund	0	1,200	0	0	0	0	0	0	1,200
Appropriations Total*	0	1,200	0	0	0	0	0	0	1,200
O & M Costs (Savings)			0	0	0	0	0	0	0

Seismic Upgrade - Buildings

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:4th Quarter 1994Project ID:C1118End 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

Under this project, the Broadway, Spokane Street, and Volunteer pump stations, Lincoln, Roosevelt, and Landsburg Tunnel gatehouses, Lake Young's Office and Lake Forest Reservoir Chlorination buildings are seismically upgraded. SPU is evaluating the most economical way of addressing seismic vulnerabilities that have been identified in these facilities, which may consist in some cases of connecting the roofs to the walls. Cost estimates shown below are preliminary and will be revised over time. The SPU Asset Management Committee review is not required.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	1,329	141	170	403	705	732	232	239	3,951
Project Total:	1,329	141	170	403	705	732	232	239	3,951
Fund Appropriations/Allocations SPU Water Fund	1,329	141	170	403	705	732	232	239	3,951
Appropriations Total*	1,329	141	170	403	705	732	232	239	3,951
O & M Costs (Savings)			0	0	0	0	0	0	0

Seismic Upgrade - Cedar River Pipelines at Ginger Creek

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 1999Project ID:C197032End Date:4th 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	414	2,105	6	3	3	0	0	0	2,531
Project Total:	414	2,105	6	3	3	0	0	0	2,531
Fund Appropriations/Allocations									
SPU Water Fund	414	2,105	6	3	3	0	0	0	2,531
Appropriations Total*	414	2,105	6	3	3	0	0	0	2,531
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Seismic Upgrade - Pipeline Backbone

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101038End Date:4th Quarter 2007

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 12 isolation valves will be installed at various locations to prevent vulnerable pipelines from draining the system. Types of valves being considered include seismic-actuated, remote controlled and excess flow. The confidence in the cost estimate is medium and the SPU Asset Management Committee review is required for this program.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	325	205	103	1,432	0	0	0	0	2,065
Project Total:	325	205	103	1,432	0	0	0	0	2,065
Fund Appropriations/Allocations									
SPU Water Fund	325	205	103	1,432	0	0	0	0	2,065
Appropriations Total*	325	205	103	1,432	0	0	0	0	2,065
O & M Costs (Savings)			0	5	5	5	5	5	25

Seismic Upgrade - Tanks

BCL/Program Name: Infrastructure 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 to Barton standpipe, Woodland Park standpipe, Foy standpipe, Landsburg Elevated tanks, Maple Leaf elevated tank, Beverly Park elevated tank and the Volunteer Park standpipe. Typical upgrades include improving standpipe anchorage and foundations and adding seismic isolators and strengthening braces of elevated tanks. Under this program to date, SPU has replaced the Charlestown standpipe, and seismically upgraded the Richmond Highlands tanks and the Magnolia tank. Most of the funding allocated for 2005 and 2006 is for construction of Queen Anne standpipes replacement, which has already been approved by SPU's Asset Management Committee (AMC). Seismic upgrades to the remaining tank and standpipes have not yet been approved by the AMC. It is anticipated that some of the facilities listed may not be upgraded as the cost of the upgrades may outweigh the benefit of the facility to the water system. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	6,580	1,445	1,591	4,010	2,748	2,848	2,620	2,699	24,541
Project Total:	6,580	1,445	1,591	4,010	2,748	2,848	2,620	2,699	24,541
Fund Appropriations/Allocations SPU Water Fund	6,580	1,445	1,591	4,010	2,748	2,848	2,620	2,699	24,541
Appropriations Total*	6,580	1,445	1,591	4,010	2,748	2,848	2,620	2,699	24,541
O & M Costs (Savings)			0	0	0	0	0	0	0

Shared Opportunity Projects - Water

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type: Rehabilitation or Restoration Start Date: 1st Ouarter 2005

Project ID: C405603-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 project provides funding for a preliminary assessment of emerging demands that may develop during the year, such as shared fund water, drainage and wastewater, and solid waste projects, emergency repairs or actions to comply with enforcement orders by regulatory agencies. Funding is used to develop scopes, budgets and schedules for new projects to be included in subsequent CIP proposals. For projects that cannot wait until the next funding cycle, SPU uses these funds to prepare background documentation to seek City Council approval for project design and construction in the year it wants the project to begin. New projects that are developed from these funds are reviewed and approved by SPU's capital planning committees. The committees review expenditures on a monthly basis and establish priorities among projects. In the 2005-2010 Adopted CIP, the project ID for this project was C4NW106-005-WF.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	100	0	103	105	108	110	110	636
Project Total:	0	100	0	103	105	108	110	110	636
Fund Appropriations/Allocations									
SPU Water Fund	0	100	0	103	105	108	110	110	636
Appropriations Total*	0	100	0	103	105	108	110	110	636
O & M Costs (Savings)			0	0	0	0	0	0	0

SLU - Watermain Replacement/South Lake Union Park

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:4th Quarter 2004Project ID:C104035End Date:4th Quarter 2006

Location: South Lake Union

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

This project replaces an existing watermain during the South Lake Union Park redevelopment. This work includes the design and construction of a 750-foot eight-inch watermain along Terry Avenue N. from the intersection of Valley St. N. This watermain has a high incidence of leaks and, when combined with the park construction, the leak or failure rate of the water could increase. See also the South Lake Union Park - Development project (K733134) in the Department of Parks and Recreation CIP. The confidence level of the planning phase cost estimate is medium.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	155	10	0	0	0	0	0	165
Project Total:	0	155	10	0	0	0	0	0	165
Fund Appropriations/Allocations SPU Water Fund	0	155	10	0	0	0	0	0	165
Appropriations Total*	0	155	10	0	0	0	0	0	165
O & M Costs (Savings)			0	0	0	0	0	0	0

SLU Watermain - Utility Coordination

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104036End Date:4th Quarter 2008

Location: South Lake Union

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

This project funds planning level coordination with other City departments on projects within the South Lake Union area. This effort identifies SPU water system direct impacts, opportunities for system improvements and cost responsibility. As specific water system impacts are identified, then a separate project number will be created to track the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	24	71	62	32	33	0	0	0	222
Project Total:	24	71	62	32	33	0	0	0	222
Fund Appropriations/Allocations									
SPU Water Fund	24	71	62	32	33	0	0	0	222
Appropriations Total*	24	71	62	32	33	0	0	0	222
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Sound Transit Light Rail - Water

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2003Project ID:C4104-WFEnd Date:4th Quarter 2009

Location: Martin Luther King Jr. Wy. S/S Walden St.

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

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

This program will fund projects for SPU's costs related to Sound Transit's Light Rail system. SPU is currently working on the planning, design and construction of the Central Link Light Rail system. Sound Transit proposes to construct and operate this electrical light rail transit system, which includes more than 14 miles of alignment. The first phase of Sound Transit's project constructs a light rail segment from the Convention Place Station to South 154th Street near Seattle/Tacoma Airport. SPU is also planning to participate in Sound Transit's preliminary engineering and design on the North Link system, which is expected to begin late 2006. The City of Seattle, including SPU, has an ongoing agreement for reimbursement from Sound Transit. See also Sound Transit projects in the City Light (8204) and Seattle Department of Transportation (TC36631) CIPs. In the 2005-2010 Adopted CIP, the project ID for this project was C404401-WF.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	890	2,172	762	633	299	11	0	0	4,767
Project Total:	890	2,172	762	633	299	11	0	0	4,767
Fund Appropriations/Allocations									
SPU Water Fund	890	2,172	762	633	299	11	0	0	4,767
Appropriations Total*	890	2,172	762	633	299	11	0	0	4,767
O & M Costs (Savings)			0	0	0	0	0	0	0

Sound Transit Light Rail - 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 2008

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 project provides funding for "opportunity" water system improvements as Sound Transit implements the Link Light Rail project. In addition, this project provides funding for shared cost improvements by SPU (Water Fund) and Sound Transit where there is a mutual benefit. These improvements include instances where water system relocation or replacement is not a direct impact of Sound Transit's Light Rail project; where SPU and Sound Transit both benefit from an agreement to share the cost of replacements; or where replacing aging water system infrastructure while Sound Transit implements their project creates logistical efficiencies for SPU. The project area is along the present 14-mile light rail alignment in the City of Seattle and King County. The confidence level of current cost estimates is medium. An agreement authorizing all City services related to Sound Transit Light Rail construction (Sound Transit Construction Services Agreement) was adopted via Ordinance 121312 in July 2003. Sound Transit intends to issue task orders authorizing multiple years of City service for each contract segment. For information on other City department involvement see the Sound Transit projects in the City Light (8204) and Seattle Department of Transportation (TC36631) CIPs. In the 2005-2010 Adopted CIP, the project ID for this project was C4NW104-WF.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	1,400	1,452	764	219	0	0	0	3,835
Project Total:	0	1,400	1,452	764	219	0	0	0	3,835
Fund Appropriations/Allocations									
SPU Water Fund	0	1,400	1,452	764	219	0	0	0	3,835
Appropriations Total*	0	1,400	1,452	764	219	0	0	0	3,835
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Spoils Yard & Decant Facility - Water

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:3rd Quarter 2004Project ID:C404603-WFEnd Date:4th Quarter 2006

Location: S Michigan St./E Marginal Wy. S

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

This project replaces the temporary spoils yard on Ellis Ave. South with a permanent yard located at the intersection of South Michigan and East Marginal Way South. It is designed and built to allow SPU to handle spoils materials from repair sites, sewer and drainage vactor grits, future hydro-excavated materials and store replacement fill materials for completing repair jobs. The facility is designed to enable SPU to perform these functions environmentally using best management practices. The project may include partners from Seattle Department of Transportation, City Light and Seattle Department of Parks and Recreation. This project is in a preliminary phase of development and cost estimates will be revised over time. The identification of a suitable site and the acquisition process have delayed the project. In the 2005-2010 Adopted CIP, the project ID for this project was C4NW106-007-WF.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	10	116	0	0	0	0	0	126
Project Total:	0	10	116	0	0	0	0	0	126
Fund Appropriations/Allocations									
SPU Water Fund	0	10	116	0	0	0	0	0	126
Appropriations Total*	0	10	116	0	0	0	0	0	126
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

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

Stream and Riparian Restoration is a category of projects within the Cedar River Habitat Conservation Plan (HCP) that involves mitigation related to streams and forests adjacent to streams and other aquatic habitats. Projects include streambank stabilization, streamside revegetation, large woody debris placement, conifer under-planting, restoration thinning, ecological thinning, stream-crossing projects to improve flow patterns, stream-crossing improvements to reestablish fish passage, and bull trout habitat studies. SPU's Asset Management Committee approved the HCP at the program level. The confidence level for this project cost estimate is high.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	2,348	837	890	832	861	661	680	701	7,810
Project Total:	2,348	837	890	832	861	661	680	701	7,810
Fund Appropriations/Allocations									
SPU Water Fund	2,348	837	890	832	861	661	680	701	7,810
Appropriations Total*	2,348	837	890	832	861	661	680	701	7,810
O & M Costs (Savings)			0	0	0	0	0	0	0

Tolt Bridges

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2004Project ID:C1131End Date:4th Quarter 2007

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 three deteriorated bridges in the Tolt River Watershed. A 2003 cost/benefit analysis determined that access is needed and the existing bridges are no longer able to carry the required loading, resulting in safety and environmental risks. This project combines the following projects: Tolt Bridge Replacement - Dorothy Creek, Siwash Creek and Chuck Judd Creek. The confidence level of the current cost estimate is medium. SPU Asset Management Committee review is not required at this time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	61	6	22	350	0	0	0	0	439
Project Total:	61	6	22	350	0	0	0	0	439
Fund Appropriations/Allocations									
SPU Water Fund	61	6	22	350	0	0	0	0	439
Appropriations Total*	61	6	22	350	0	0	0	0	439
O & M Costs (Savings)			3	3	3	3	3	3	18

Tolt Fisheries Mitigation

BCL/Program Name: Environmental Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104057End Date:4th Quarter 2007

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 funds fish habitat conservation efforts on the South Fork Tolt River based on an agreement between the Tolt Fisheries Advisory Groups and the City of Seattle. This project funds SPU's spending obligation pursuant to the 1989 Tolt Settlement Agreement for the federal relicensing of the South Fork Tolt Dam. The allocation of this funding is under the management of the interagency Tolt Fish Advisory Committee (TFAC). In 2004, a project to place large woody debris in the South Fork Tolt River was approved by TFAC and is now in the planning stages. This project improves habitat conditions for salmon and steelhead in the river.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	47	185	44	64	0	0	0	0	340
Project Total:	47	185	44	64	0	0	0	0	340
Fund Appropriations/Allocations									
SPU Water Fund	47	185	44	64	0	0	0	0	340
Appropriations Total*	47	185	44	64	0	0	0	0	340
O & M Costs (Savings)			0	0	0	0	0	0	0

Tolt Instrument and Warning Upgrade

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type: Improved Facility Start Date: 1st Quarter 1999

Project ID: C1AA012 End Date: Ongoing

Location: Tolt Dam

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 replaces outmoded equipment and improves the reliability of the required Tolt Instrument and Warning System for detecting dam failure. The project cost estimate has a high confidence level. Because this project is in construction, no approval by SPU's Asset Management Committee is required.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	1,903	47	47	28	28	30	32	33	2,148
Project Total:	1,903	47	47	28	28	30	32	33	2,148
Fund Appropriations/Allocations SPU Water Fund	1,903	47	47	28	28	30	32	33	2,148
Appropriations Total*	1,903	47	47	28	28	30	32	33	2,148
O & M Costs (Savings)	-,- 00	.,	0	0	0	0	0	0	0

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

Tolt Pipeline 1 Cathodic Protection

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 1999Project ID:C100063End Date:1st Quarter 2006

Location: Between Tolt Treatment Facility and Kelly Rd.

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 installs an impressed current cathodic protection system on approximately 3.5 miles of the original Tolt Pipeline No. 1 between the new Tolt Treatment Facility and Kelly Road to extend the pipeline's useful life. The pipeline west of the project location has already been replaced. The project includes electrically connecting the 20-foot long individual pipe sections, and installing deep wells to create an electrical circuit and apply voltage to the pipe. The confidence level of the cost estimate is high, and the SPU Asset Management Committee has approved the project. In the 2005-2010 Adopted CIP, the project title for this project was "Cathodic Phase V".

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	1,184	248	5	0	0	0	0	0	1,437
Project Total:	1,184	248	5	0	0	0	0	0	1,437
Fund Appropriations/Allocations									
SPU Water Fund	1,184	248	5	0	0	0	0	0	1,437
Appropriations Total*	1,184	248	5	0	0	0	0	0	1,437
O & M Costs (Savings)			0	0	0	0	0	0	0

Tolt Pipeline 2 II & III East of Tieline

BCL/Program Name: Water Supply BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:3rd Quarter 1987Project ID:C100084End 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

Tolt Pipeline No. 2 has been planned as a 25-mile second regional supply pipeline for the Tolt system, ranging in diameter from 54 to 87 inches, and to be constructed in several phases over a period of decades. Phases II and III include installation of eight miles of 60-, 75- and 81-inch diameter welded steel pipeline between Duvall and Redmond along a different route than the original. The project is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing for several more years. The confidence level in the cost estimate is high, and SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	28,067	73	33	23	13	0	0	0	28,209
Project Total:	28,067	73	33	23	13	0	0	0	28,209
Fund Appropriations/Allocations									
SPU Water Fund	28,067	73	33	23	13	0	0	0	28,209
Appropriations Total*	28,067	73	33	23	13	0	0	0	28,209
O & M Costs (Savings)			10	10	10	10	10	10	60

Tolt Pipeline 2 II & III West of Tieline

BCL/Program Name: Water Supply BCL/Program Code: C150B

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

Tolt Pipeline II is a 25-mile second regional supply pipeline for the Tolt System, ranging in diameter from 54 to 87 inches. This new pipeline improves the reliability of the Tolt system, allows rehabilitation of remaining portions of Tolt Pipeline 1, enhances operational flexibility, increases reliability of the system during a major flood, landslide, or earthquake, and provides increased capacity. Phases II and III include installation of eight miles of 60-, 75- and 81-inch diameter steel-welded joint pipeline. The project 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, and SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	26,377	30	5	5	5	0	0	0	26,422
Project Total:	26,377	30	5	5	5	0	0	0	26,422
Fund Appropriations/Allocations									
SPU Water Fund	26,377	30	5	5	5	0	0	0	26,422
Appropriations Total*	26,377	30	5	5	5	0	0	0	26,422
O & M Costs (Savings)			20	20	20	20	20	20	120

Tolt Pipeline I - Phase 3 - B

BCL/Program Name: Water Supply BCL/Program Code: C150B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 1999Project ID:C199003End Date:4th Quarter 2008

Location: Tolt Pipeline

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 part of a long-term plan to rehabilitate or replace the Tolt Pipeline I. To date, four sections of the pipeline (totaling approximately 12 miles) have been re-lined with a smaller pipe or replaced. This project rehabilitates the last remaining higher-risk section of the original pipeline where it crosses the Snoqualmie River Valley for a length of about one mile. The confidence level in the cost estimate is high, and SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	756	4,894	9	5	5	0	0	0	5,669
Project Total:	756	4,894	9	5	5	0	0	0	5,669
Fund Appropriations/Allocations									
SPU Water Fund	756	4,894	9	5	5	0	0	0	5,669
Appropriations Total*	756	4,894	9	5	5	0	0	0	5,669
O & M Costs (Savings)			6	8	10	10	10	10	54

Tolt Pipeline II - Phase 4

BCL/Program Name: Water Supply BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 1995Project ID:C194029End Date:4th Quarter 2007

Location: Tolt Pipeline Right of Way

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

Tolt Pipeline II is a 25-mile second regional supply pipeline for the Tolt system, ranging in diameter from 54 to 87 inches. This new pipeline improves the reliability of the Tolt system, allows rehabilitation of remaining portions of Tolt Pipeline I, enhances operational flexibility, increases reliability of the system during a major flood, landslide, or earthquake, and provides increased capacity. Phase 4 included the installation of six miles of 54-inch and 60-inch diameter welded steel pipeline. The project 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, and SPU's Asset Management Committee has approved the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	31,585	55	43	28	0	0	0	0	31,711
Project Total:	31,585	55	43	28	0	0	0	0	31,711
Fund Appropriations/Allocations SPU Water Fund	31,585	55	43	28	0	0	0	0	31,711
Appropriations Total*	31,585	55	43	28	0	0	0	0	31,711
O & M Costs (Savings)			15	19	24	24	25	27	134

Tolt River Watershed Road Improvements

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 1996Project ID:C196007End Date:4th Quarter 2011

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 provides drainage and other road improvements on portions of the 70 miles of forest roads in the South Fork Tolt River Watershed. The confidence level of the current cost estimate is medium.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	203	170	175	186	191	197	203	209	1,534
Project Total:	203	170	175	186	191	197	203	209	1,534
Fund Appropriations/Allocations									
SPU Water Fund	203	170	175	186	191	197	203	209	1,534
Appropriations Total*	203	170	175	186	191	197	203	209	1,534
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Tolt Watershed Management Plan

BCL/Program Name: Environmental Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C105083End Date:4th Quarter 2010

Location: Tolt River Watershed

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

This 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. Historically, water supply and watershed management operations have been undertaken in the Tolt Watershed area with little formal written protocol or management guidance. In the 2005-2010 Adopted CIP, the project ID was C1NW301-002 for this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	300	206	212	219	113	116	0	1,166
Project Total:	0	300	206	212	219	113	116	0	1,166
Fund Appropriations/Allocations									
SPU Water Fund	0	300	206	212	219	113	116	0	1,166
Appropriations Total*	0	300	206	212	219	113	116	0	1,166
O & M Costs (Savings)			0	0	0	0	0	0	0

<u>Transmission Pipelines Rehabilitation</u>

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2005

Project ID: C1127 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 repairs and upgrades water transmission pipes as deficiencies are identified. The confidence level of the current cost estimate is low, and the SPU Asset Management Committee review is not required as it is an on-going program.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	500	103	1,061	1,093	1,126	1,159	1,194	6,236
Project Total:	0	500	103	1,061	1,093	1,126	1,159	1,194	6,236
Fund Appropriations/Allocations									
SPU Water Fund	0	500	103	1,061	1,093	1,126	1,159	1,194	6,236
Appropriations Total*	0	500	103	1,061	1,093	1,126	1,159	1,194	6,236
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Treatment & Transmission Project Development

BCL/Program Name: Water Supply BCL/Program Code: C150B

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

Project ID: C1NW501-008 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 provides funds for performing planning level work in SPU's Treatment and Transmission System business area prior to the formation of specific capital projects. This work includes policy analysis and program development to deal with issues related to the management of the distribution system.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	100	41	106	109	113	116	119	704
Project Total:	0	100	41	106	109	113	116	119	704
Fund Appropriations/Allocations									
SPU Water Fund	0	100	41	106	109	113	116	119	704
Appropriations Total*	0	100	41	106	109	113	116	119	704
O & M Costs (Savings)			0	0	0	0	0	0	0

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

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 within the Cedar River Habitat Conservation Plan (HCP) includes 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 approved the HCP at the program level. The confidence level for this cost estimate is high.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	2,365	854	850	811	798	747	770	793	7,988
Project Total:	2,365	854	850	811	798	747	770	793	7,988
Fund Appropriations/Allocations SPU Water Fund	2,365	854	850	811	798	747	770	793	7,988
Appropriations Total*	2,365	854	850	811	798	747	770	793	7,988
O & M Costs (Savings)			0	0	0	0	0	0	0

W Duwamish Waterway Tunnel/Rails

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2003Project ID:C194034End Date:1st Quarter 2006

Location: SW Spokane St.

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

This work is implemented as part of an agreement between SPU and the King County Department of Natural Resources and Parks for the W Duwamish Waterway Tunnel Crossing and the project relocates a watermain. SPU's obligation under the interagency agreement governing this project includes site restoration for the project staging area.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	153	50	52	0	0	0	0	0	255
Project Total:	153	50	52	0	0	0	0	0	255
Fund Appropriations/Allocations									
SPU Water Fund	153	50	52	0	0	0	0	0	255
Appropriations Total*	153	50	52	0	0	0	0	0	255
O & M Costs (Savings)			0	0	0	0	0	0	0

Water Design Standards & Guideline Program

BCL/Program Name: Infrastructure BCL/Program Code: C110B

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, to streamline future design efforts, reduce costs, and increase the quality of future new facilities. The confidence level in the cost estimate is high, and the SPU Asset Management Committee has approved the first phase of the project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	115	200	258	265	273	0	0	0	1,111
Project Total:	115	200	258	265	273	0	0	0	1,111
Fund Appropriations/Allocations									
SPU Water Fund	115	200	258	265	273	0	0	0	1,111
Appropriations Total*	115	200	258	265	273	0	0	0	1,111
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Water Infrastructure - Hydrant Replacement/Relocation

BCL/Program Name:InfrastructureBCL/Program Code:C110BProject Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C1110End 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, the Department repairs or replaces between seven and 25 hydrants per year. This project is in a preliminary phase of development and cost estimates will be 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	2,247	222	233	240	247	254	262	270	3,975
Project Total:	2,247	222	233	240	247	254	262	270	3,975
Fund Appropriations/Allocations SPU Water Fund	2,247	222	233	240	247	254	262	270	3,975
Appropriations Total*	2,247	222	233	240	247	254	262	270	3,975
O & M Costs (Savings)			0	0	0	0	0	0	0

Water Infrastructure - New Hydrants

BCL/Program Name:InfrastructureBCL/Program Code:C110BProject Type:New FacilityStart Date:OngoingProject ID:C1112End 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	161	64	12	13	13	14	14	14	305
Project Total:	161	64	12	13	13	14	14	14	305
Fund Appropriations/Allocations									
SPU Water Fund	161	64	12	13	13	14	14	14	305
Appropriations Total*	161	64	12	13	13	14	14	14	305
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Water Infrastructure - New Taps

BCL/Program Name:InfrastructureBCL/Program Code:C110BProject Type:New FacilityStart Date:OngoingProject 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 installs new water service lines (taps) from the City watermain to customers' property lines. Taps are usually installed within an average of six weeks following a customer's request. The confidence level of the current cost estimate is medium as the number of taps is dependent upon customer requests. The SPU Asset Management Committee has approved this project. In 2005, Ordinance 121993 transferred \$400,000 from the Asset Management program (C1126) to the Water Infrastructure - New Taps program to support increased customer demand for new taps. This supplemental funding change is reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	33,704	4,001	3,708	3,819	3,934	4,052	4,173	4,299	61,690
Project Total:	33,704	4,001	3,708	3,819	3,934	4,052	4,173	4,299	61,690
Fund Appropriations/Allocations									
SPU Water Fund	33,704	4,001	3,708	3,819	3,934	4,052	4,173	4,299	61,690
Appropriations Total*	33,704	4,001	3,708	3,819	3,934	4,052	4,173	4,299	61,690
O & M Costs (Savings)			0	0	0	0	0	0	0

Water Infrastructure - Service Renewal

BCL/Program Name:InfrastructureBCL/Program Code:C110BProject Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C1109End 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 water service lines that are substandard, leaking, or have outlived their useful life, and disconnects service lines that are no longer required. The confidence level of the current cost estimate is medium. The Asset Management Committee has approved this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	43,294	5,123	5,315	5,489	5,654	5,823	5,998	6,178	82,874
Project Total:	43,294	5,123	5,315	5,489	5,654	5,823	5,998	6,178	82,874
Fund Appropriations/Allocations									
SPU Water Fund	43,294	5,123	5,315	5,489	5,654	5,823	5,998	6,178	82,874
Appropriations Total*	43,294	5,123	5,315	5,489	5,654	5,823	5,998	6,178	82,874
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Water Infrastructure - Watermain Extensions

BCL/Program Name:InfrastructureBCL/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

The Watermain Extension program assists private developers to install new standard watermains and fire hydrants to serve properties that are 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, and the program has been approved by the Asset Management Committee.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	7,586	1,191	1,030	1,061	1,093	1,126	1,159	1,194	15,440
Project Total:	7,586	1,191	1,030	1,061	1,093	1,126	1,159	1,194	15,440
Fund Appropriations/Allocations									
SPU Water Fund	7,586	1,191	1,030	1,061	1,093	1,126	1,159	1,194	15,440
Appropriations Total*	7,586	1,191	1,030	1,061	1,093	1,126	1,159	1,194	15,440
O & M Costs (Savings)			0	0	0	0	0	0	0

Water Infrastructure - Watermain Replacement

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2001Project ID:C1104End Date:2nd Quarter 2006

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 systematically replaces older water distribution pipes to reduce leakage and watermain breaks and improve water quality and fire protection. Targeted watermains are prioritized and scheduled for replacement in groups to maintain a steady volume of work and to facilitate quality design and construction management. This program typically only considered replacement of the pipes as the way to improve their performance, and ended in its current form in 2003. Several other targeted programs, including the Watermain Rehabilitation Program (C1129), which began in 2004, include the scope of the Watermain Replacement Program. These other programs implement a broader range of cost effective methods for improving pipe performance, including cleaning and re-lining pipes, retiring pipes and replacing them with longer service lines, and options. The confidence level of the cost estimates is high, and the SPU's Asset Management Committee has approved the program.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	16,074	339	12	0	0	0	0	0	16,425
Project Total:	16,074	339	12	0	0	0	0	0	16,425
Fund Appropriations/Allocations SPU Water Fund	16,074	339	12	0	0	0	0	0	16,425
Appropriations Total*	16,074	339	12	0	0	0	0	0	16,425
O & M Costs (Savings)			0	0	0	0	0	0	0

Water Infrastructure - Tank Site Remediation

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:4th Quarter 1995Project ID:C1114End Date:4th Quarter 2008

Location: Citywide

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

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

This program cleans up soil and other contamination on adjacent private properties around some of SPU's steel water tank sites. The contamination is typically due to lead-based paint and arsenic used in prior sand blasting operations. The contamination of the soil around the SPU tank sites is cleaned up during either the seismic upgrades or tank painting program unless those project timelines warrant earlier action by the utility.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	1,350	320	309	318	328	0	0	0	2,625
Project Total:	1,350	320	309	318	328	0	0	0	2,625
Fund Appropriations/Allocations									
SPU Water Fund	1,350	320	309	318	328	0	0	0	2,625
Appropriations Total*	1,350	320	309	318	328	0	0	0	2,625
O & M Costs (Savings)			0	0	0	0	0	0	0

Water Resources Project Development

BCL/Program Name: Water Supply 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 supports the development of improvements in SPU's Water Resources Business Area 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 develops a Project Development Plan for approval by SPU's Asset Management Committee. Documentation is prepared and budget implications are identified. This project is in a preliminary phase of development and cost estimates will be revised over time. In the 2005-2010 Adopted CIP, the project ID for this project was C1NW501-009.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	100	103	106	109	113	116	119	766
Project Total:	0	100	103	106	109	113	116	119	766
Fund Appropriations/Allocations									
SPU Water Fund	0	100	103	106	109	113	116	119	766
Appropriations Total*	0	100	103	106	109	113	116	119	766
O & M Costs (Savings)			0	0	0	0	0	0	0

Water System Dewatering

BCL/Program Name: Infrastructure BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C1105End 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 improves the configuration and operation of approximately 200 blowoffs. 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: minimizing flooding damage to downstream private development 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 the SPU's Asset Management Committee (AMC). Each individual location is reviewed by the AMC for approval; a few sites have been already approved. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	1,767	1,056	58	371	382	394	406	418	4,852
Project Total:	1,767	1,056	58	371	382	394	406	418	4,852
Fund Appropriations/Allocations	1.767	1.056	5 0	271	202	20.4	40.6	410	4.050
SPU Water Fund	1,767	1,056	58	371	382	394	406	418	4,852
Appropriations Total*	1,767	1,056	58	371	382	394	406	418	4,852
O & M Costs (Savings)			0	0	0	0	0	0	0

Water System Plan - 2007

BCL/Program Name: Water Supply BCL/Program Code: C150B

Project Type:New InvestmentStart Date:2nd Quarter 2004Project ID:C103058End Date:1st Quarter 2007

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

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 funds work on an environmental review and updated Comprehensive Water System Plan to commence in 2004 and finish 2007. SPU's Asset Management Committee has approved this project.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	85	430	399	28	0	0	0	0	942
Project Total:	85	430	399	28	0	0	0	0	942
Fund Appropriations/Allocations SPU Water Fund	85	430	399	28	0	0	0	0	942
Appropriations Total*	85	430	399	28	0	0	0	0	942
O & M Costs (Savings)			0	0	0	0	0	0	0

Water System Plan - 2013

BCL/Program Name: Water Supply BCL/Program Code: C150B

Project Type:New InvestmentStart Date:3rd Quarter 2009Project ID:C1NW501-006End 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

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 funds work on an environmental review and updated Comprehensive Water System Plan, to commence in 2009 and finish 2013. 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	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	0	0	0	0	50	104	179	333
Project Total:	0	0	0	0	0	50	104	179	333
Fund Appropriations/Allocations SPU Water Fund	0	0	0	0	0	50	104	179	333
Appropriations Total*	0	0	0	0	0	50	104	179	333
O & M Costs (Savings)			0	0	0	0	0	0	0

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

Water System Security Improvement

BCL/Program Name: Water Quality

BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:1st Quarter 2002Project ID:C1405End Date:4th Quarter 2006

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 responds to a demand for increased security and water quality protection at SPU facilities. The project includes key card installation at pump stations, improved signage, key and fence upgrades, physical hardening of critical infrastructure at water treatment facilities and facility gates, and improving communications systems at various facilities. In 2005, Ordinance 121916 appropriated \$328,576 (contingent upon execution of grant agreements) to pay for additional water system security improvements. This supplemental appropriation is reflected in the fund table below.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	3,348	5,655	5,694	0	0	0	0	0	14,697
Project Total:	3,348	5,655	5,694	0	0	0	0	0	14,697
Fund Appropriations/Allocations									
SPU Water Fund	3,348	5,655	5,694	0	0	0	0	0	14,697
Appropriations Total*	3,348	5,655	5,694	0	0	0	0	0	14,697
O & M Costs (Savings)			200	250	300	350	350	350	1,800

Watermain Rehabilitation

BCL/Program Name: Infrastructure BCL/Program Code: C110B

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

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									_
Water Rates	344	1,366	2,369	4,144	4,268	4,396	4,528	4,664	26,079
Project Total:	344	1,366	2,369	4,144	4,268	4,396	4,528	4,664	26,079
Fund Appropriations/Allocations									
SPU Water Fund	344	1,366	2,369	4,144	4,268	4,396	4,528	4,664	26,079
Appropriations Total*	344	1,366	2,369	4,144	4,268	4,396	4,528	4,664	26,079
O & M Costs (Savings)			0	0	0	0	0	0	0

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

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

Road improvements and decommissioning are components of the Cedar River Habitat Conservation Plan (HCP). The goal of these projects 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 HCP requires the decommissioning of an average of 10 miles of road per year. The SPU Asset Management Committee approved the HCP at the program level. The confidence level for this cost estimate is high.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	3,381	864	890	886	919	948	981	1,010	9,879
Project Total:	3,381	864	890	886	919	948	981	1,010	9,879
Fund Appropriations/Allocations									
SPU Water Fund	3,381	864	890	886	919	948	981	1,010	9,879
Appropriations Total*	3,381	864	890	886	919	948	981	1,010	9,879
O & M Costs (Savings)			0	0	0	0	0	0	0

Westlake Ave. Watermain Decommissioning

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2006Project ID:C1NW201-002End Date:1st Quarter 2007

Location: Westlake Ave.

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

This project transfers water services from Westlake Avenue between Olive Way and Denny Way to adjacent watermains allowing this section of watermain to be abandoned. This work is coordinated with the construction of the South Lake Union streetcar.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	0	0	1,957	21	0	0	0	0	1,978
Project Total:	0	0	1,957	21	0	0	0	0	1,978
Fund Appropriations/Allocations SPU Water Fund	0	0	1,957	21	0	0	0	0	1,978
Appropriations Total*	0	0	1,957	21	0	0	0	0	1,978
O & M Costs (Savings)			0	0	0	0	0	0	0

WSDOT Sound Walls

BCL/Program Name: Other Agencies BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104019End Date:2nd Quarter 2005

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 utility impacts by the Washington State Department of Transportation's project to install sound walls along the I-5 corridor near E Roanoke St. The project design has been modified to have a low level of construction activities monitoring and some water service relocations may be needed. The project is implemented in phases and the current construction phase has little to no impact on the City utilities.

	LTD	2005	2006	2007	2008	2009	2010	2011	Total
Revenue Sources									
Water Rates	6	20	0	0	0	0	0	0	26
Project Total:	6	20	0	0	0	0	0	0	26
Fund Appropriations/Allocations									
SPU Water Fund	6	20	0	0	0	0	0	0	26
Appropriations Total*	6	20	0	0	0	0	0	0	26
O & M Costs (Savings)			0	0	0	0	0	0	0

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