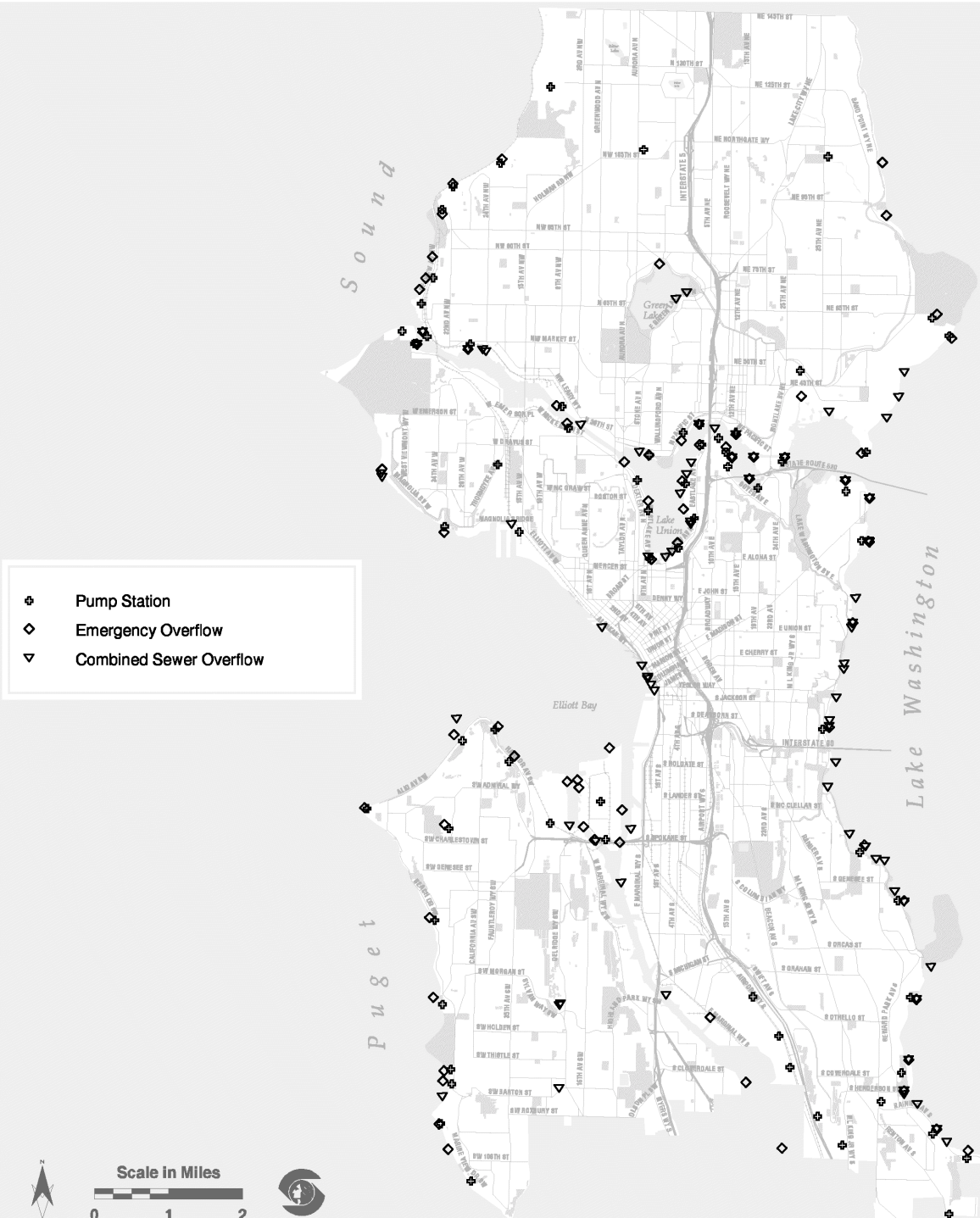


Seattle Public Utilities Drainage and Wastewater Division Facilities



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 and in a few adjacent areas. The system includes approximately 530 miles of sanitary sewers, 500 miles of storm drains, 1,020 miles of combined sewers, 73 pump stations, 120 combined sewer and pump station outfalls, 277 storm drain outfalls, and 43 combined sewer overflow control detention tanks/pipes.

Three different types of systems to control stormwater and collect sanitary sewage from homes and businesses serve the City. One-third of the City is served by combined sewers, which carry sewage and stormwater through one pipe. Combined sewers are designed with overflow pipes so that during heavy rains, excess water in the system flows into lakes, rivers, or Puget Sound rather than back up into houses. Another third of the City has separate piped systems for stormwater and sanitary sewers. Separate sanitary sewers and a drainage system consisting of ditches, culverts, and creeks to carry stormwater runoff serve the remaining third of the City.

The City's sewer collector system connects to large interceptor lines operated by the Water Pollution Control Division of the King County Department of Natural Resources (formerly Metro). Most of Seattle's sewage flows to the West Point Treatment Plant. Following treatment, wastewater from West Point is discharged into the deep waters of Puget Sound. The West Point plant provides secondary treatment in compliance with the federal Clean Water Act. Secondary treatment involves a biological process that removes approximately 90% of solids suspended within the water column.

The City's drainage systems address the flooding problems associated with stormwater and water pollution carried by runoff. The City's Comprehensive Drainage Plan, originally adopted in 1987, was updated in 1995. The initial plan focused on five major drainage basins: Carkeek Park (Pipers Creek), Thornton Creek, Delridge (Longfellow Creek), South Park, and Seola Beach. The 1995 update added five additional basins that also have drainage problems: Broadview, Densmore, Lake Washington North, Puget Ridge, and Norfolk. The plan presents a citywide management program for capital improvements and ongoing maintenance. It establishes a monitoring program and identifies measures to control flooding and pollution, such as regulatory controls and public education.

Highlights

- ◆ **Combined Sewer Overflows (CSO):** Seattle Public Utilities is spending approximately \$42 million in 2001-2006 on the Combined Sewer Overflow Program. The largest project is the design and construction of the Denny Way/Lake Union CSO improvements. The Department completes its update of the CSO Plan in 2001 in order to guide the CSO program until 2006.
- ◆ **Drainage Improvements:** Seattle Public Utilities is spending approximately \$196 million for drainage improvements over the next six years. In addition to local drainage improvements, projects include stormwater detention and fish passage improvements. The Westlake Storm Drain Rehab project replaces a failed storm drain with several promising stormwater treatment technologies, to be evaluated over time for effectiveness.
- ◆ **Endangered Species Act:** Seattle Public Utilities has set aside funding for its share of the City's response to the listing of Chinook salmon under the Endangered Species Act. Approximately \$4.7 million is included in the 2001-2006 Adopted Drainage and Wastewater CIP for these projects.

SPU – Drainage and Wastewater

Anticipated Operating Expenses Associated with Capital Facilities Projects

In some projects, the Department has identified Operations and Maintenance costs of zero, or has not calculated a number (N/C). In these cases, the cost impacts of the project are either insignificant or are offset by cost savings realized by other projects. Total Operations and Maintenance costs of \$690,000 are included in the Department's 2001-2002 budget.

Combined Sewer Overflow Monitoring: The City's Combined Sewer Overflow National Pollutant Discharge Elimination System permit requires that monitoring devices be installed in all CSO outfalls. Since this installation was completed in 2000, funds are used to monitor special locations to assess problem overflows, and for in-system monitoring as needed to support the development of reduction alternatives for the CSO plan. The estimated cost of these monitoring activities is \$315,000 annually.

Public Toilet Program: This project installs freestanding public restrooms in commercial areas of Seattle. These facilities include the capability to automatically wash down the interior of the restroom after each use. The estimated annual lease cost of these restrooms is \$350,000.

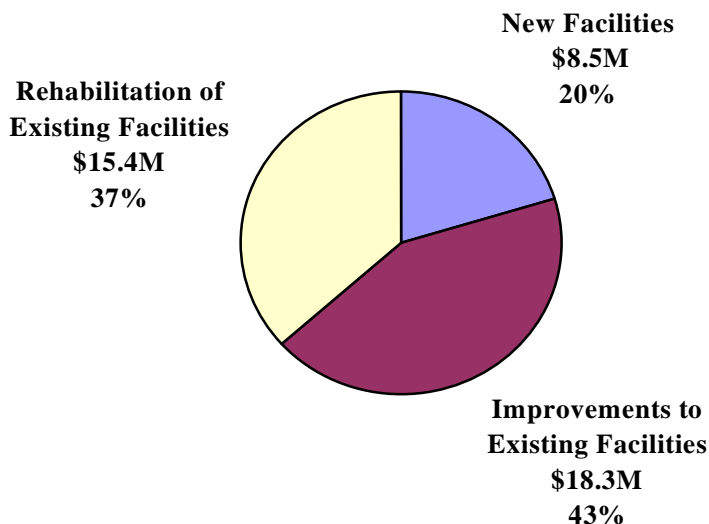
Project Selection Process

In making capital investments in its infrastructure, the City tries to balance three goals:

- ◆ Rehabilitation of existing facilities to avoid the higher costs of deferred maintenance;
- ◆ Increase in the capacity of existing facilities to meet growing demand; and
- ◆ Development of new facilities to provide additional services.

The following chart shows how the Seattle Public Utilities' 2001 Adopted Drainage & Wastewater CIP allocates funding to these types of projects:

**2001 SPU Drainage & Wastewater Adopted CIP by Project Type
(not including Technology CIP projects)**



Seattle Public Utilities used a comprehensive approach to develop the 2001-2006 Adopted Capital Improvement Program. The Department encouraged wide staff participation in the process. The process included the following steps:

Project Identification: In late 1999 and early 2000, staff throughout the Department took part in a department-wide effort to identify new CIP projects and changes and adjustments to existing projects. The general criteria used in identifying projects were the Department's goals of environmental stewardship, customer service, strategic technology implementation, neighborhood benefits, infrastructure maintenance requirements, and meeting growing demand. A detailed list of new and existing projects was then compiled.

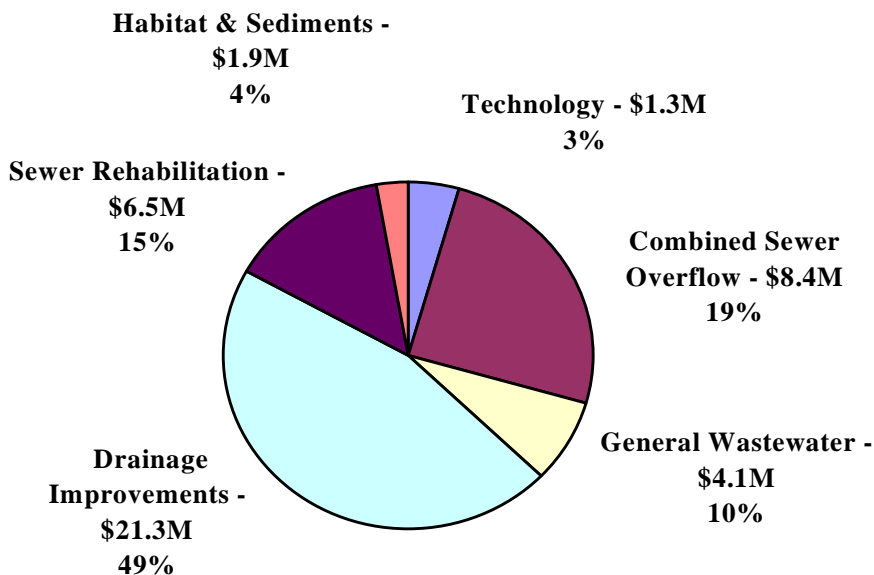
Project Screening, Prioritization, and Selection: Multiple meetings were held with various sections throughout the Department to gain full understanding and consensus of project drivers, demands, and benefits. The full project list was compared to expected available funding based on estimated likely rate increases. The projects were then prioritized and a decision was made not to carry forward some lower priority projects in order to fit within available funding. Various alternatives were considered for other projects where possible and the most cost-effective approach was selected based on analyses of demand, risk, cost, and benefit.

Project Budget and Workload Scheduling: As a final step, detailed budget and workload estimates were prepared for the selected projects.

Program Category Summaries

The Drainage and Wastewater CIP allocates approximately \$338 million during the next six-year period. It is comprised of six program categories as displayed in the following chart and summarized below. A detailed listing of all programs for the Drainage and Wastewater Capital Improvement Program follows this overview. Drainage and Wastewater-supported technology projects are shown grouped with other technology projects following the Department's three CIP sections.

2001 SPU Drainage & Wastewater Adopted CIP By Program Category



Combined Sewer Overflow: This program designs and constructs facilities to control overflows from the combined drainage and wastewater system. Of the City's 113 identified Combined Sewer Overflows (CSOs), 99 are now substantially controlled. Seattle Public Utilities addresses a number of the remaining CSOs over the next three years.

Drainage Improvements: This program makes improvements to the City's drainage system to address flooding, restore urban creeks, and reduce the risk from landslides. Projects address neighborhood drainage problems in areas of the City that have informal drainage systems, and focuses on landslide-prone areas and water quality issues. Projects are also being developed in response to the Endangered Species Act listing of Chinook salmon.

Estuary Program: This program restores and rehabilitates natural resources in or along Seattle's waterways. The program includes funds for a portion of the City's ESA program, as well as sediment and habitat projects the City is completing as an agent of the Elliott Bay/Duwamish Restoration Program Panel.

New Sewer Program: This program improves and increases the effectiveness of the Department's wastewater system and provides new wastewater service to customers.

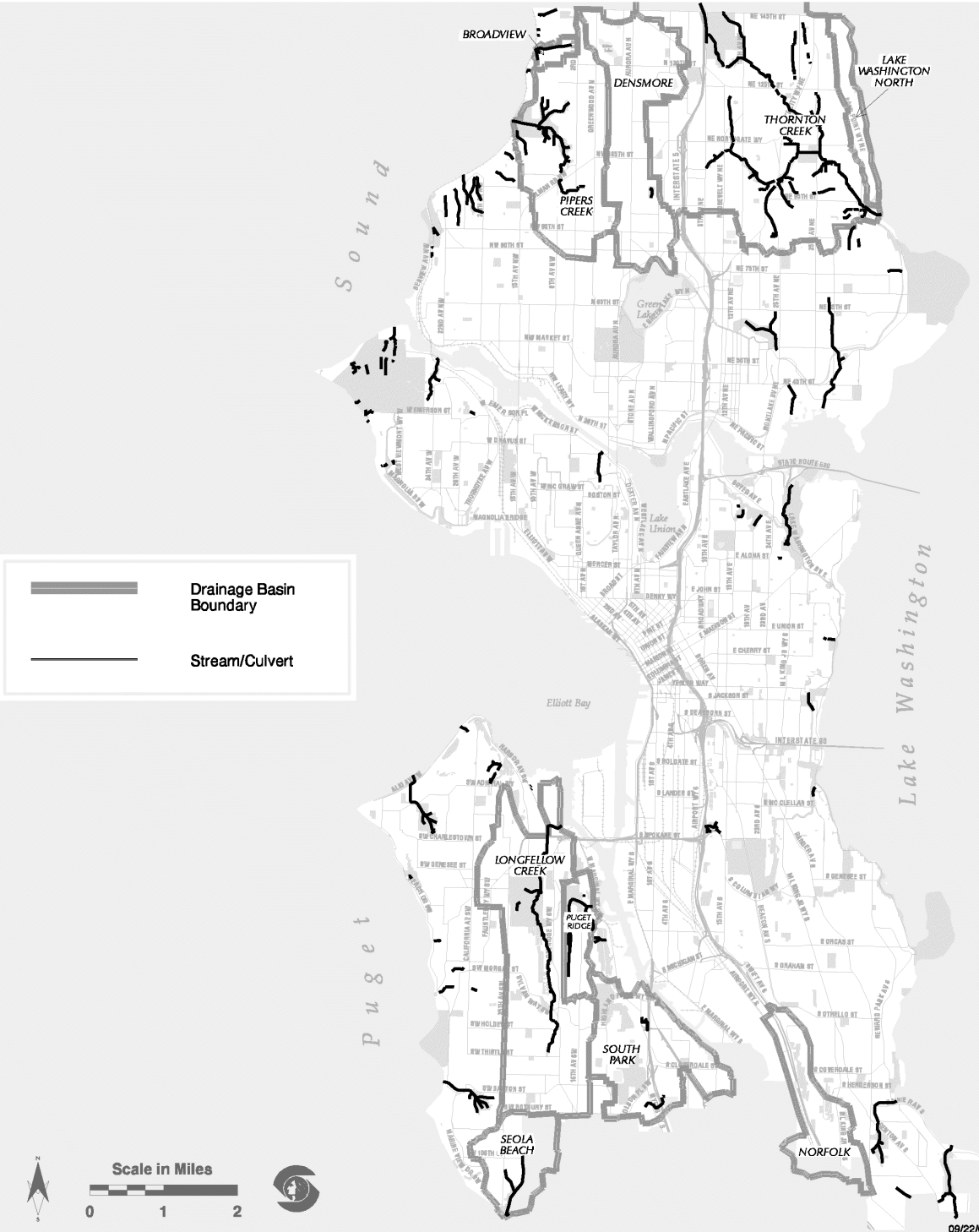
Rehabilitation: This program repairs the City's sewer lines and pump stations. In 2001-2006, work continues on pipe rehabilitation and pump station projects. The spot repair program includes relatively small repair/rehabilitation projects that are identified through inspections.



SPU – Drainage and Wastewater

Technology: This program makes use of recent technology 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.

Seattle Public Utilities Drainage and Wastewater Division Drainage Basins and Creeks



SPU - DRAINAGE & WASTEWATER

Project Summary

Program/Project	Project ID	LTD	2000	2001	2002	2003	2004	2005	2006	Total
Combined Sewer Overflow										
CSO Modeling and Assessment	C399101	59	750	200	50	54	440	451	58	2,062
CSO Monitoring-Installation	C3AA108	251	950	100	100	107	0	0	0	1,508
CSO Plan Implementation	C305199	0	0	0	0	0	0	1,166	2,138	3,304
CSO Plan Update	C3AA103	135	550	500	0	0	275	282	347	2,089
Regulatory Compliance - Wastewater	C34NW02	0	0	800	500	3,532	3,620	3,710	3,803	15,965
South Lake Union Combined Sewer Overflow Phase II	C3AA106	593	150	1,410	1,610	1,510	0	0	0	5,273
South Lake Union CSO - King County Payments	C3AA104	4,106	1,000	5,387	5,742	3,368	471	0	0	20,074
Combined Sewer Overflow Total		5,144	3,400	8,397	8,002	8,571	4,806	5,609	6,346	50,275
Drainage Improvements										
25th Avenue S Assessment	C301NW7	0	0	50	0	0	0	0	0	50
Additional Funding for SEATRAN Projects -Drainage	C33NW08	0	0	293	483	580	594	609	624	3,183
Admiral Way Assessment	C300335	0	90	70	0	0	0	0	0	160
Alki Landslide Mitigation	C399310	189	2,800	300	0	0	0	0	0	3,289
Asset/Infrastructure Management - Drainage	C33NW04	0	0	740	1,659	1,127	1,156	1,185	1,214	7,081
Chinook Research & Monitoring	C300341	0	0	200	200	215	220	0	0	835
College Way N/N 100th Street Drain Assessment	C301NW2	0	0	57	0	0	0	0	0	57
Comp Basin Level Drain Needs Assessment, Inventory	C300307	0	0	350	400	0	0	0	0	750
Comprehensive Creeks Inventory/Needs Assessment	C300308	0	85	85	300	0	0	0	0	470
Comprehensive Ditch and Culvert Program	C3AA307	337	140	140	140	150	0	0	0	907
Comprehensive Retrofit/BMP Study	C300316	0	95	150	0	0	0	0	0	245
Corliss Avenue N/100th Street Drainage Assessment	C301NW3	0	0	50	0	0	0	0	0	50
Creeks CIP Monitoring & Repair Program	C300309	0	100	80	80	86	88	90	116	640
Creeks Emerging Issues Program	C305NW1	0	0	0	0	0	0	564	578	1,142
Creeks Needs Assessment Implementation Program	C302NW3	0	0	0	200	123	1,651	1,692	1,734	5,400

**Amounts in thousands of dollars*

SPU - DRAINAGE & WASTEWATER

Project Summary

Program/Project	Project ID	LTD	2000	2001	2002	2003	2004	2005	2006	Total
Drainage Improvements										
Creekside Reforestation Program	C300312	0	25	0	25	0	0	0	0	50
Creekside Spot Erosion Improvements Program	C300311	0	50	0	25	0	0	0	0	75
Deferred Commitments	C33NW01	0	0	2,060	4,875	7,165	7,344	7,528	7,716	36,688
Delridge Basin Phase II Channel Improvements	C3AA319	704	44	0	0	1,098	0	0	0	1,846
Drainage Improvement/Landslide Prone Area Program	C300302	586	500	750	450	1,611	1,651	1,692	1,734	8,974
Drainage Spot Improvements	C300303	0	400	900	800	859	880	902	925	5,666
Duwamish Assessment	C301NW8	0	0	100	0	0	0	0	0	100
East Boston Terrace Project	C300320	0	45	100	160	0	0	0	0	305
Environmental Stewardship - Drainage	C33NW03	0	0	1,465	1,435	1,879	1,926	1,974	2,024	10,703
Georgetown Drainage Basin Study	C302NW1	0	0	0	75	0	0	0	0	75
Heavy Equipment Purchases- Drainage	C300399	0	1,298	397	320	347	264	177	520	3,323
Jackson Park Detention Phase 2	C399305	204	700	250	3,000	2,416	825	0	0	7,395
Lake Washington/Lower Duwamish Habitat Protection	C300342	0	50	260	500	644	660	902	925	3,941
Landslide Prone Area Projects	C33NW07	0	0	1,290	1,270	1,342	1,376	1,410	1,445	8,133
Linden Avenue Swale	C3AA318	128	35	0	450	0	0	0	0	613
Local Basin Plan Implementation Program	C300325	0	200	349	594	2,446	2,786	3,121	3,023	12,519
Local Emerging Issues Program	C300326	0	200	190	300	3,221	3,852	3,948	4,047	15,758
Longfellow Creek - Graham/Willow Improvements	C399309	119	30	0	0	483	0	0	0	632
Longfellow Creek - SW Brandon to Juneau	C302NW4	0	0	0	500	0	0	0	0	500
Longfellow Creek - Yancy Street Monitoring	C302NW5	0	0	0	75	81	83	0	0	239
Mapes Creek - Dam & Reforest Study	C300333	0	50	150	0	0	0	0	0	200
Marine View Drive Landslide Mitigation	C399321	18	65	200	200	0	0	0	0	483
Neighborhood Planning	C33NW05	0	0	625	1,100	2,147	2,201	2,256	2,313	10,642
Pipers Creek - Watershed Interpretive Center Annex Remodel	C301NW4	0	0	80	0	0	0	0	0	80

**Amounts in thousands of dollars*

SPU - DRAINAGE & WASTEWATER

Project Summary

Program/Project	Project ID	LTD	2000	2001	2002	2003	2004	2005	2006	Total
Drainage Improvements										
Pipers Creek Detention	C304NW1	0	3	0	0	0	880	0	0	883
Pipers Creek Restoration, Monitor and Adjust	C300334	0	50	0	50	54	0	0	0	154
Pipers Creek Twin Culverts Assessment	C302NW6	0	0	0	50	0	0	0	0	50
Regulatory Compliance - Drainage	C33NW02	0	0	70	325	295	303	310	318	1,621
SEATRAN - Drainage	C301388	0	1,135	567	702	787	812	824	844	5,671
SEATRAN Tree Pit Expansion Assessment	C300318	0	60	80	100	0	0	0	0	240
Seola Beach Drive Culvert	C399327	22	50	0	225	0	0	0	0	297
South Park Drainage Phase 2	C399317	11	100	400	400	0	0	0	0	911
Spot Drainage Program	C33NW06	0	0	400	400	537	550	564	578	3,029
Street Edge Alternatives (SEA) Streets Phase 1	C399312	197	589	61	0	0	0	0	0	847
SW Juneau Storm Drain	C302NW2	0	0	0	70	537	0	0	0	607
Taylor Creek - Phase 3 Restoration	C300313	0	50	30	50	107	0	0	0	237
Taylor Creek Culverts Phase 2	C399315	71	270	0	0	1,503	0	0	0	1,844
Thornton Basin Plan Hydraulic Study Implementation	C300330	0	470	2,655	2,827	2,909	5,626	6,632	6,622	27,741
Thornton Creek - 35th Avenue NE/NE 125th	C399322	41	150	1,060	0	0	0	0	0	1,251
Thornton Creek - Culvert on 25th Avenue NE	C301NW5	0	0	150	410	0	0	0	0	560
Thornton Creek - Fish Passage at 95th	C301NW6	0	0	50	300	0	0	0	0	350
Thornton Creek Outfall	C3AA329	96	25	20	147	0	0	0	0	288
Thornton Creek Watershed Action Plan Implementation	C3AA304	264	80	120	0	0	0	0	0	464
W Beacon Hill Assessment	C301NW9	0	0	80	0	0	0	0	0	80
Waterway 18 N/N Lake Storm Drain Replacement	C3AA321	102	3	0	145	0	0	0	0	250
West Seattle Golf - Fish Passage	C399307	236	300	75	2,330	0	0	0	0	2,941
Westlake Drainage	C3AA328	693	100	3,455	1,000	0	0	0	0	5,248
WPA Drains Study & Repair Program	C300338	0	100	200	200	215	220	226	231	1,392
Yancy Street Creek Rehabilitation	C399308	1,183	2,600	75	0	0	0	0	0	3,858
Drainage Improvements Total		5,201	13,137	21,279	29,347	34,964	35,948	36,606	37,531	214,013

**Amounts in thousands of dollars*

SPU - DRAINAGE & WASTEWATER

Project Summary

Program/Project	Project ID	LTD	2000	2001	2002	2003	2004	2005	2006	Total
General Wastewater										
Additional Funding for SEATRAN Projects -Wastewater	C34NW08	0	0	248	200	334	343	351	360	1,836
Carkeek Sewer Overflow - King County	C3AA203	0	100	25	0	0	0	0	0	125
Heavy Equipment Purchases-Wastewater	C300499	0	902	338	480	616	715	804	347	4,202
Meter Replacement - Direct Service	C520000	0	460	699	1,344	1,443	1,690	1,733	1,776	9,145
Public Toilet Program	C399202	0	250	250	0	0	0	0	0	500
SEATRAN - Wastewater	C301488	0	0	583	719	639	438	595	606	3,580
Sewage System Modeling	C3AA206	446	0	100	100	107	110	113	116	1,092
Sewer Backup Prevention Program	C302201	0	0	0	30	32	33	34	35	164
Sewer Improvements Driven by Other Agencies	C34NW05	0	0	1,600	1,100	1,181	1,211	1,241	1,272	7,605
Sewer Outreach Program	C3AA201	119	110	75	150	161	165	169	173	1,122
Sheridan Beach	C300201	0	50	200	0	0	0	0	0	250
General Wastewater Total		565	1,872	4,118	4,123	4,513	4,705	5,040	4,685	29,621
Habitat and Sediments										
Environmental Stewardship - Wastewater	C34NW03	0	0	1,600	1,200	717	735	754	772	5,778
NOAA Habitat-Seaboard	C3AA501	1,741	400	40	0	0	0	0	0	2,181
NOAA Sediment	C3AA502	0	0	100	0	0	0	0	0	100
Potential Sediment Remediation Projects	C300501	0	100	200	0	0	0	0	0	300
Habitat and Sediments Total		1,741	500	1,940	1,200	717	735	754	772	8,359
Sewer Rehabilitation										
"No Dig" Pipe and Maintenance Hole Rehabilitation	C3AA403	7,320	2,444	845	808	1,004	417	538	522	13,898
1234 S Concord-Sewer Rehabilitation	C302401	0	0	0	168	0	0	0	0	168
2223 Western-Sewer Rehabilitation	C302402	0	0	0	265	0	0	0	0	265
2nd Avenue S/S Main Street - Sewer Rehabilitation	C300407	0	100	427	0	0	0	0	0	527
3511 S Dearborn Street - Sewer Rehabilitation	C302403	0	0	0	61	0	0	0	0	61

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Project Summary

Program/Project	Project ID	LTD	2000	2001	2002	2003	2004	2005	2006	Total
Sewer Rehabilitation										
3869 & 4029 Rainier Avenue S- Sewer Rehabilitation	C302404	0	0	0	629	0	0	0	0	629
56th Avenue NE/ NE 73rd Street - Sewer Rehabilitation	C302405	0	0	0	208	0	0	0	0	208
Asset/Infrastructure Management - Wastewater	C34NW04	0	0	2,195	2,195	2,929	3,002	3,077	3,154	16,552
Beach Dr. SW/SW Jacobson Rd. - Sewer Rehabilitation	C302406	0	0	0	111	0	0	0	0	111
Bonair Place SW/ 53rd Avenue SW - Sewer Rehabilitation	C302407	0	0	0	121	0	0	0	0	121
Minor Facility Upgrades - Rehabilitation	C3AA402	396	100	100	100	113	116	169	173	1,267
Occidental Street/Yesler Way S - Sewer Rehabilitation	C399406	65	142	621	0	0	0	0	0	828
Pump Station Rehabilitation	C3AA406	571	190	961	1,000	1,074	1,101	1,410	1,445	7,752
S Brandon Street/27th Avenue S - Sewer Rehabilitation	C302408	0	0	0	134	0	0	0	0	134
S Morgan Street/MLK Jr. Way S - Sewer Rehabilitation	C301401	0	0	110	110	0	0	0	0	220
S Washington/Occidental Avenue S - Sewer Rehabilitation	C300410	0	60	600	0	0	0	0	0	660
Sewer Emergency Repairs	C3AA404	561	150	150	250	268	275	282	289	2,225
Sewer Full Line Replacements	C300488	0	0	0	1,914	3,798	2,881	5,194	5,115	18,902
Spot Sewer Pipe Repairs	C300401	0	661	410	1,310	880	660	790	809	5,520
Wastewater Rehabilitation Project Evaluation	C3AA401	581	75	75	75	86	88	90	93	1,163
Sewer Rehabilitation Total		9,494	3,922	6,494	9,459	10,152	8,540	11,550	11,600	71,211
Department Total		22,145	22,831	42,228	52,131	58,917	54,734	59,559	60,934	373,479

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Fund Source Summary

<u>Funding Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	22,145	22,831	42,228	52,131	58,917	54,734	59,559	60,934	373,479
Department Total	22,145	22,831	42,228	52,131	58,917	54,734	59,559	60,934	373,479

**Amounts in thousands of dollars*

SPU - DRAINAGE & WASTEWATER

"No Dig" Pipe and Maintenance Hole Rehabilitation

Program: Sewer Rehabilitation **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C3AA403
Urban Village: Not applicable **Neighborhood District:** In more than one district

The purpose of this ongoing program is to rehabilitate sewer lines using "No Dig" methods. Also included in this project is a program to repair maintenance holes.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	7,320	2,444	845	808	1,004	417	538	522	13,898
TOTAL FUNDS	7,320	2,444	845	808	1,004	417	538	522	13,898
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

1234 S Concord-Sewer Rehabilitation

Program: Sewer Rehabilitation **Start Date:** 2002 1st Quarter
Type: Rehabilitation or Restoration **End Date:** 2002 4th Quarter
Location: 1234 S CONCORD ST **Project ID:** C302401
Urban Village: South Park **Neighborhood District:** Greater Duwamish

This project replaces a deteriorated section of 8-inch vitrified clay sanitary sewer on S Concord Street between 12th Avenue and 14th Avenue with new 8-inch ductile iron pipe. The depth of this mainline is varied from four to nine feet and has nine active connections to reconnect.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	168	0	0	0	0	168
TOTAL FUNDS	0	0	0	168	0	0	0	0	168
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

2223 Western-Sewer Rehabilitation

Program: Sewer Rehabilitation **Start Date:** 2002 1st Quarter
Type: Rehabilitation or Restoration **End Date:** 2002 4th Quarter
Location: 2223 WESTERN AV **Project ID:** C302402
Urban Village: Commercial Core **Neighborhood District:** Downtown

This project replaces two consecutive mainline sections of 8-inch vitrified clay sanitary sewer which have deteriorated in the alley east of Western Avenue between Bell Street and Blanchard Street. The depth of these mainlines are approximately 17 feet and have four active connections to be reconnected.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	265	0	0	0	0	265
TOTAL FUNDS	0	0	0	265	0	0	0	0	265
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

25th Avenue S Assessment

Program: Drainage Improvements
Type: Rehabilitation or Restoration
Location:
 25TH AV S

Start Date: 2001 1st Quarter
End Date: 2001 4th Quarter
Project ID: C301NW7

Urban Village: Not applicable

Neighborhood District: Southeast

This program conducts assessments and preliminary engineering of landslide mitigation projects described in the Seattle Landslide Study. These projects have been prioritized using a two-tier matrix of criteria taking into account such things as vulnerability of the public facility, history of landslides, ownership of the facility, and effects on public safety.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	50	0	0	0	0	0	50
TOTAL FUNDS	0	0	50	0	0	0	0	0	50
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

2nd Avenue S/S Main Street - Sewer Rehabilitation

Program: Sewer Rehabilitation
Type: Rehabilitation or Restoration
Location:
 2ND AV S and S MAIN ST

Start Date: 2000 2nd Quarter
End Date: 2001 4th Quarter
Project ID: C300407

Urban Village: Pioneer Square

Neighborhood District: Downtown

This project replaces two sections of failing sewer in the alley east of 2nd Avenue S. A 60-linear foot section of badly sagging sewer north of S. Jackson Street is excavated and replaced with new pipe. The other section runs from S. Main Street northwards through the alley into 2nd Avenue S. The end of the sewer at 2nd Avenue S. is abandoned and the remainder is excavated and replaced with new pipe.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	100	427	0	0	0	0	0	527
TOTAL FUNDS	0	100	427	0	0	0	0	0	527
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

3511 S Dearborn Street - Sewer Rehabilitation

Program: Sewer Rehabilitation **Start Date:** 2002 1st Quarter
Type: Rehabilitation or Restoration **End Date:** 2002 4th Quarter
Location: **Project ID:** C302403
 3511 S DEARBORN ST

Urban Village: Not in an urban village **Neighborhood District:** Central

This project repairs two deteriorated side sewer connections at S Dearborn Street between 12th Avenue and 14th Avenue with 12-inch ductile iron pipe.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	61	0	0	0	0	61
TOTAL FUNDS	0	0	0	61	0	0	0	0	61
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

3869 & 4029 Rainier Avenue S-Sewer Rehabilitation

Program: Sewer Rehabilitation **Start Date:** 2002 1st Quarter
Type: Rehabilitation or Restoration **End Date:** 2002 4th Quarter
Location: **Project ID:** C302404
 3869 RAINIER AV S

Urban Village: Columbia City **Neighborhood District:** Southeast

This project replaces two deteriorated mainline sections of 10-inch to 12-inch vitrified clay sanitary sewer at Rainier Avenue S with new 12-inch ductile iron pipe.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	629	0	0	0	0	629
TOTAL FUNDS	0	0	0	629	0	0	0	0	629
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

56th Avenue NE/ NE 73rd Street - Sewer Rehabilitation

Program: Sewer Rehabilitation **Start Date:** 2002 1st Quarter
Type: Rehabilitation or Restoration **End Date:** 2002 4th Quarter
Location: **Project ID:** C302405
 56TH AV NE and NE 73RD ST

Urban Village: Not in an urban village **Neighborhood District:** Northeast

This project replaces 280 linear feet of 8-inch vitrified clay sanitary sewer at 56th Avenue NE and NE 73rd Street with new 8-inch concrete pipe.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	208	0	0	0	0	208
TOTAL FUNDS	0	0	0	208	0	0	0	0	208
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

**Amounts in thousands of dollars*

SPU - DRAINAGE & WASTEWATER

Additional Funding for SEATRAN Projects -Drainage

Program: Drainage Improvements **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: **Project ID:** C33NW08
 Various

Based on a 1999 inter-departmental agreement and subsequent negotiations, SPU is jointly funding drainage code compliance on certain SEATRAN capital improvement projects. Per the negotiations, the amount of funding is limited to 4% of the drainage and wastewater CIP each year. The adopted drainage rate increase augments the drainage CIP, thereby increasing the amount of funding to SEATRAN.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	293	483	580	594	609	624	3,183
TOTAL FUNDS	0	0	293	483	580	594	609	624	3,183
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Additional Funding for SEATRAN Projects -Wastewater

Program: General Wastewater **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: **Project ID:** C34NW08
 Various

Based on a 1999 inter-departmental agreement and subsequent negotiations, SPU is jointly funding drainage code compliance on certain SEATRAN capital improvement projects. Per the negotiations, the amount of funding is limited to 4% of the drainage and wastewater CIP each year. The adopted wastewater rate increase augments the wastewater CIP, thereby increasing the amount of funding to SEATRAN.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	248	200	334	343	351	360	1,836
TOTAL FUNDS	0	0	248	200	334	343	351	360	1,836
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Admiral Way Assessment

Program: Drainage Improvements
Type: Rehabilitation or Restoration
Location:
 Admiral Way

Start Date: 2000 3rd Quarter
End Date: 2001 4th Quarter
Project ID: C300335

Urban Village: Admiral District

Neighborhood District: Southwest

Neighborhood Plan: Admiral

This project conducts assessments and preliminary engineering of landslide mitigation projects described in the Seattle Landslide Study. These projects have been prioritized using a two-tier matrix of criteria taking into account such things as vulnerability of the public facility, history of landslides, ownership of the facility, and effect on public safety.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	90	70	0	0	0	0	0	160
TOTAL FUNDS	0	90	70	0	0	0	0	0	160
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Alki Landslide Mitigation

Program: Drainage Improvements
Type: New Facility
Location:
 Alki Ave SW near Duwamish Head

Start Date: 1998 4th Quarter
End Date: 2001 4th Quarter
Project ID: C399310

Urban Village: Admiral District

Neighborhood District: Southwest

This project is located in the Parks Department's greenbelt above Alki Avenue, between the 1400 and 1600 blocks. This project is intended to protect local residents from potential property damage and personal injury, and to protect City property including streets and existing utilities by constructing a subsurface drainage system to drain the greenbelt above Alki Avenue. The City obtained a \$1.315 million grant from the Federal Emergency Management Agency under the Hazard Mitigation Grant Program to implement this project as a result of disastrous landslides in the Puget Sound region in early 1997.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	189	2,800	300	0	0	0	0	0	3,289
TOTAL FUNDS	189	2,800	300	0	0	0	0	0	3,289
<i>O&M Costs (Savings)</i>			5	5	5	5	5	5	30

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Asset/Infrastructure Management - Drainage

Program: Drainage Improvements **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Location: Various **Project ID:** C33NW04

Urban Village: In more than one urban village **Neighborhood District:** In more than one district

This program category includes projects to increase public safety and protect the City's investment in its drainage infrastructure by addressing ongoing flooding and erosion problems. Typical projects would be construction of storm drains in areas currently under-served by ditch and culvert systems and rehabilitation of bridge drains. The preliminary engineering is already under way for some of this work. Additional projects not already scheduled for 2001-2002 include Schmitz Park Erosion Control, and a Storm Drain at NW 100th Street and 7th Avenue NW.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	740	1,659	1,127	1,156	1,185	1,214	7,081
TOTAL FUNDS	0	0	740	1,659	1,127	1,156	1,185	1,214	7,081
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Asset/Infrastructure Management - Wastewater

Program: Sewer Rehabilitation **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C34NW04

Urban Village: In more than one urban village **Neighborhood District:** In more than one district

This program includes projects required to repair or rehabilitate the current system of pipes and pump stations. Increased funding allows earlier completion of already identified problem locations. The program also includes projects to correct capacity problems that cause sanitary sewer overflows (SSOs). Notice of the proposed rulemaking for SSO control was published in the Federal Register in October 2000.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	2,195	2,195	2,929	3,002	3,077	3,154	16,552
TOTAL FUNDS	0	0	2,195	2,195	2,929	3,002	3,077	3,154	16,552
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Beach Dr. SW/SW Jacobson Rd. - Sewer Rehabilitation

Program: Sewer Rehabilitation	Start Date: 2002 1st Quarter
Type: Rehabilitation or Restoration	End Date: 2002 4th Quarter
Location: S. W. Beach Dr./S. W. Jacobson Road	Project ID: C302406
Urban Village: Not in an urban village	Neighborhood District: Southwest

The mainline is 90 linear feet of 8-inch sanitary ductile iron sewer main, running through an easement south of SW Beach Dr. Terrace, west of SW Jacobson Road. An 8-inch sanitary sewer mainline is replaced with 8-inch ductile iron pipe. The pipe is installed by the pipe bursting method.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	0	111	0	0	0	0	111
TOTAL FUNDS	0	0	0	111	0	0	0	0	111
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Bonair Place SW/ 53rd Avenue SW - Sewer Rehabilitation

Program: Sewer Rehabilitation	Start Date: 2002 1st Quarter
Type: Rehabilitation or Restoration	End Date: 2002 4th Quarter
Location: BONAIR PL SW and 53RD AV SW	Project ID: C302407
Urban Village: Not in an urban village	Neighborhood District: Southwest

SPU crews identified approximately 80 feet of failing 8-inch sewer mainline located on Bonair Place SW, north of 53rd Avenue SW. This project replaces the failing line with a new 8-inch diameter pipe. The new mainline is to be located on or near the center line of Bonair Place SW. Two new sewer lines are installed and the existing line is abandoned.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	0	121	0	0	0	0	121
TOTAL FUNDS	0	0	0	121	0	0	0	0	121
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Carkeek Sewer Overflow - King County

Program: General Wastewater
Type: Rehabilitation or Restoration
Location:
 Carkeek Park

Start Date: 2000 1st Quarter
End Date: Ongoing
Project ID: C3AA203

Urban Village: Not in an urban village

Neighborhood District: Northwest

The King County Carkeek Park Pump Station overflows into Puget Sound. Wastewater flows from Seattle contribute to the overflow. SPU has agreed to pay half of the costs of a study of the overflows, with King County paying the other half.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	100	25	0	0	0	0	0	125
TOTAL FUNDS	0	100	25	0	0	0	0	0	125
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Chinook Research & Monitoring

Program: Drainage Improvements
Type: Rehabilitation or Restoration
Location:
 Various Watershed

Start Date: 2000 3rd Quarter
End Date: 2004 4th Quarter
Project ID: C300341

Urban Village: Not applicable

Neighborhood District: In more than one district

This project identifies and completes research and monitoring programs, studies, and projects to assist the City in determining the most appropriate, scientifically-based and cost-effective actions to take in responding to the listing of the Chinook salmon as a threatened species.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	200	200	215	220	0	0	835
TOTAL FUNDS	0	0	200	200	215	220	0	0	835
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

College Way N/N 100th Street Drain Assessment

Program: Drainage Improvements

Start Date: 2001 1st Quarter

Type: Improved Facility

End Date: 2001 4th Quarter

Location:

Project ID: C301NW2

10049 College Way North

Urban Village: Not in an urban village

Neighborhood District: Northwest

This project provides preliminary engineering of a project to provide storm drain improvements to eliminate repeat flooding problems and reduce maintenance requirements. This project also determines a practical drainage system design to eliminate the current problem of flooding in the police precinct basement and subsequent water damage to police equipment.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	57	0	0	0	0	0	57
TOTAL FUNDS	0	0	57	0	0	0	0	0	57
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Comp Basin Level Drain Needs Assessment, Inventory

Program: Drainage Improvements

Start Date: 2001 1st Quarter

Type: Rehabilitation or Restoration

End Date: 2002 4th Quarter

Location:

Project ID: C300307

Citywide

This project represents Phase II of the Comprehensive Basin Level Drainage Needs Assessment Project. The first phase of the project develops an approach for integrating water quality, fisheries, and local drainage concerns into the current basin planning approach. This phase applies the methodology to a test basin (or basins as needed) and inventories the demands of other basins/planning areas throughout the city.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	350	400	0	0	0	0	750
TOTAL FUNDS	0	0	350	400	0	0	0	0	750
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Comprehensive Creeks Inventory/Needs Assessment

Program: Drainage Improvements **Start Date:** 2000 2nd Quarter
Type: Rehabilitation or Restoration **End Date:** 2002 4th Quarter
Location: Citywide **Project ID:** C300308

Urban Village: Not applicable **Neighborhood District:** In more than one district

This is a multi-year study to investigate Seattle's smaller streams for the following purposes: 1) identify problems and future projects, 2) assess existing conditions, 3) improve existing documentation, and 4) develop criteria to select creeks and define project scopes for SPU's work.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	85	85	300	0	0	0	0	470
TOTAL FUNDS	0	85	85	300	0	0	0	0	470
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Comprehensive Ditch and Culvert Program

Program: Drainage Improvements **Start Date:** 1998 2nd Quarter
Type: Rehabilitation or Restoration **End Date:** 2003 4th Quarter
Location: Citywide **Project ID:** C3AA307

Urban Village: In more than one urban village **Neighborhood District:** In more than one district

This on-going and expanded data collection, analysis, and management program completes the inventory of ditches around the city for input into the City's Geographic Information System. Work to date has involved the use of a Global Positioning System (GPS) to map locations and selected attributes of the surface drainage system. Currently over 1000 miles of City right-of-way have been mapped.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	337	140	140	140	150	0	0	0	907
TOTAL FUNDS	337	140	140	140	150	0	0	0	907
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Comprehensive Retrofit/BMP Study

Program: Drainage Improvements
Type: New Facility
Location:
 Citywide

Start Date: 2000 2nd Quarter
End Date: 2001 4th Quarter
Project ID: C300316

This project identifies, develops, and implements a Best Management Practices (BMP) program. The program identifies appropriate sites and types of structural BMPs to be installed at various locations. The BMPs are installed to improve water quality entering the surrounding receiving waters (e.g. streams or lakes).

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	95	150	0	0	0	0	0	245
TOTAL FUNDS	0	95	150	0	0	0	0	0	245
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Corliss Avenue N/100th Street Drainage Assessment

Program: Drainage Improvements
Type: Improved Facility
Location:
 N. 122nd Pl. and Corliss Ave N.

Start Date: 2001 2nd Quarter
End Date: 2001 4th Quarter
Project ID: C301NW3

Urban Village: Not in an urban village

Neighborhood District: Northwest

This project provides preliminary engineering analysis for installation of a stormwater drainage system within the City right-of-way to replace a current system that runs on non-City property. The current system starts at N 122nd Place and Corliss, then runs south across private property to 2324 - N 117th Street. The new system provides a properly functioning stormwater drainage system, which the City can access for maintenance. The cost is for preliminary engineering only.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	50	0	0	0	0	0	50
TOTAL FUNDS	0	0	50	0	0	0	0	0	50
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Creeks CIP Monitoring & Repair Program

Program: Drainage Improvements **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C300309

Urban Village: Not applicable **Neighborhood District:** In more than one district

This project monitors the success of instream projects and collects data before (baseline) construction. The results are used to adjust projects to ensure maximum performance. In addition, stream data related to fish and habitat are collected.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	100	80	80	86	88	90	116	640
TOTAL FUNDS	0	100	80	80	86	88	90	116	640
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Creeks Emerging Issues Program

Program: Drainage Improvements **Start Date:** 2005 1st Quarter
Type: Improved Facility **End Date:** 2006 4th Quarter
Location: Citywide **Project ID:** C305NW1

Urban Village: Not applicable **Neighborhood District:** In more than one district

This project identifies, designs, and constructs stream related projects. These projects are related to fish passage, erosion control on public property, enhancement of riparian corridor, and habitat improvements. This project also addresses emerging issues which are not foreseeable in the budget process.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	0	0	0	564	578	1,142
TOTAL FUNDS	0	0	0	0	0	0	564	578	1,142
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Creeks Needs Assessment Implementation Program

Program: Drainage Improvements **Start Date:** 2002 1st Quarter
Type: Improved Facility **End Date:** Ongoing
Location: Citywide **Project ID:** C302NW3

Urban Village: Not applicable **Neighborhood District:** In more than one district

This project implements various urban creek and lake projects. These projects address fish passage, water quality improvements, bank stabilization, and habitat improvements. The Comprehensive Creek Inventory and Needs Assessment Study identifies these projects.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	200	123	1,651	1,692	1,734	5,400
TOTAL FUNDS	0	0	0	200	123	1,651	1,692	1,734	5,400
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Creekside Reforestation Program

Program: Drainage Improvements **Start Date:** 2000 3rd Quarter
Type: Improved Facility **End Date:** 2002 4th Quarter
Location: Citywide **Project ID:** C300312

Urban Village: Rainier Beach **Neighborhood District:** In more than one district

This project augments efforts to add native trees to creekside public property. Many park properties lack young conifers, and existing deciduous trees are reaching the end of their lifespan. Trees play a crucial role along streams: roots help stabilize banks and other eroding areas, leaves shade and cool the water, berries and leaves are a food source for aquatic animals, and fallen trees add habitat diversity.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	25	0	25	0	0	0	0	50
TOTAL FUNDS	0	25	0	25	0	0	0	0	50
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Creekside Spot Erosion Improvements Program

Program: Drainage Improvements **Start Date:** 2000 1st Quarter
Type: Improved Facility **End Date:** 2002 4th Quarter
Location: Citywide **Project ID:** C300311

Urban Village: Not in an urban village **Neighborhood District:** In more than one district

This project addresses minor spots of erosion adjacent to creeks. Erosion is a natural process, but many urban activities accelerate erosive rates. Localized erosion problems may be caused by landslides, poorly designed storm drain outfalls, or sharp bends in a stream. This program addresses some minor erosion sites that do not require a major restoration effort.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	50	0	25	0	0	0	0	75
TOTAL FUNDS	0	50	0	25	0	0	0	0	75
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

CSO Modeling and Assessment

Program: Combined Sewer Overflow **Start Date:** 1999 1st Quarter
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C399101

Urban Village: In more than one urban village **Neighborhood District:** In more than one district

Models are being established and calibrated for six priority Combined Sewer Overflow (CSO) basin groups. Priority is based primarily on frequency of overflows, as measured by two years of monitoring data. The Department of Ecology has agreed that the City's 2001 CSO Plan Amendment shall cover these priority basin groups. The models are used during the development of the CSO Plan to evaluate alternative strategies for reducing CSOs. After 2001, models are established for the next group of priority basins, and calibrated using data from monitors installed in 2000. These models are also to be used for the next CSO Plan update in 2006.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	59	750	200	50	54	440	451	58	2,062
TOTAL FUNDS	59	750	200	50	54	440	451	58	2,062
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

CSO Monitoring-Installation

Program: Combined Sewer Overflow **Start Date:** 1999 1st Quarter
Type: Improved Facility **End Date:** 2003 4th Quarter
Location: Citywide **Project ID:** C3AA108

Urban Village: In more than one urban village **Neighborhood District:** In more than one district

The City's Combined Sewer Overflow (CSO) National Pollutant Discharge Elimination System permit requires that monitoring devices be installed in all CSO outfalls. Since this installation was completed in 2000, funds are used to monitor special locations to assess problem overflows, and for in-system monitoring as required to support the development of reduction alternatives for the CSO plan.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	251	950	100	100	107	0	0	0	1,508
TOTAL FUNDS	251	950	100	100	107	0	0	0	1,508
<i>O&M Costs (Savings)</i>			315	315	315	315	315	315	1,890

CSO Plan Implementation

Program: Combined Sewer Overflow **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Location: Citywide **Project ID:** C305199

Urban Village: Not applicable **Neighborhood District:** In more than one district

This project is a placeholder for future Combined Sewer Overflow (CSO) projects to control overflows into Salmon Bay, the Ship Canal, North Lake Union, and other CSO projects.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	0	0	0	1,166	2,138	3,304
TOTAL FUNDS	0	0	0	0	0	0	1,166	2,138	3,304
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

CSO Plan Update

Program: Combined Sewer Overflow
Type: Improved Facility
Location:
 Citywide

Start Date: 1999 1st Quarter
End Date: ongoing
Project ID: C3AA103

Urban Village: Not applicable

Neighborhood District: In more than one district

Combined Sewer Overflow (CSO) plans are required by the Department of Ecology every five years. They are also required by SPU's National Pollutant Discharge Elimination System permit. The next plan is due in 2001, and the subsequent plan is due in 2006. The CIP through 2006 covers preparation of both plans, Environmental Impact Statements, and public participation plans.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	135	550	500	0	0	275	282	347	2,089
TOTAL FUNDS	135	550	500	0	0	275	282	347	2,089
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Deferred Commitments

Program: Drainage Improvements
Type: Improved Facility
Location:
 various

Start Date: Ongoing
End Date: Ongoing
Project ID: C33NW01

Urban Village: In more than one urban village

Neighborhood District: In more than one district

Eleven drainage projects were previously delayed because there was not enough funding to complete them. Some of these projects have been designed, with construction deferred pending acquisition of permits and funding. With the proposed rate increase, the schedule for these projects can be accelerated. Projects included in this category include the Linden Avenue Swale, Longfellow Creek Delridge Basin Improvements, and Thornton Creek Jackson Park Detention Phase II.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	2,060	4,875	7,165	7,344	7,528	7,716	36,688
TOTAL FUNDS	0	0	2,060	4,875	7,165	7,344	7,528	7,716	36,688
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Delridge Basin Phase II Channel Improvements

Program: Drainage Improvements **Start Date:** 1993 2nd Quarter
Type: Improved Facility **End Date:** 2003 4th Quarter
Location: 26th AV SW/SW Myrtle St **Project ID:** C3AA319
Urban Village: Not in an urban village **Neighborhood District:** Delridge
Neighborhood Plan: Delridge

This project includes improvements to the Longfellow Creek stream channel between SW Myrtle Street and SW Andover Street. These improvements increase capacity of the creek by widening the channel and stabilizing the stream banks. Culverts at street crossings are enlarged to remove flow restrictions and to allow fish passage.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	704	44	0	0	1,098	0	0	0	1,846
TOTAL FUNDS	704	44	0	0	1,098	0	0	0	1,846
<i>O&M Costs (Savings)</i>			0	0	0	15	15	15	45

Drainage Improvement/Landslide Prone Area Program

Program: Drainage Improvements **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Location: Citywide **Project ID:** C300302
Urban Village: In more than one urban village **Neighborhood District:** In more than one district

This is a program to control surface and subsurface drainage in landslide prone areas around the city by constructing new facilities, rehabilitating, or improving existing facilities. This program was endorsed by the City Council as part of the Landslide Policies in 1998.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	586	500	750	450	1,611	1,651	1,692	1,734	8,974
TOTAL FUNDS	586	500	750	450	1,611	1,651	1,692	1,734	8,974
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Drainage Spot Improvements

Program: Drainage Improvements **Start Date:** 1998 2nd Quarter
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C300303

Urban Village: In more than one urban village **Neighborhood District:** In more than one district

This project makes a number of spot improvements to drainage systems and creeks throughout the City. The program increases the capacity of the drainage systems, prevents flooding, and restores fish habitat. Typical improvements include installation of inlets and catch basins, construction of ditches and grassed swales, installation of culverts, planting vegetation to reduce erosion, and the construction of check dams.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	400	900	800	859	880	902	925	5,666
TOTAL FUNDS	0	400	900	800	859	880	902	925	5,666
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Duwamish Assessment

Program: Drainage Improvements **Start Date:** 2001 1st Quarter
Type: Improved Facility **End Date:** 2001 4th Quarter
Location: Duwamish **Project ID:** C301NW8

Urban Village: Duwamish **Neighborhood District:** Greater Duwamish

Neighborhood Plan: Duwamish

This program conducts assessments and preliminary engineering of landslide mitigation projects described in the Seattle Landslide Study. These projects have been prioritized using a two-tier matrix of criteria taking into account such things as vulnerability of the public facility, history of landslides, ownership of the facility, and effects on public safety.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	100	0	0	0	0	0	100
TOTAL FUNDS	0	0	100	0	0	0	0	0	100
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

East Boston Terrace Project

Program: Drainage Improvements
Type: New Facility
Location:
 1617 East Boston Terrace

Start Date: 2000 1st Quarter
End Date: 2002 4th Quarter
Project ID: C300320

Urban Village: Not applicable

Neighborhood District: In more than one district

This project provides drainage system improvements at East Boston Terrace and removes City stormwater runoff from a slide prone area. Currently, the stormwater drains down the hillside through an old privately-owned drainage line, a portion of which is a deteriorated old wood stave line. This project intercepts stormwater runoff and drains it to a storm drain constructed of concrete pipe in good condition; this new drain line is to be in the right-of-way where SPU has ready access for maintenance.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	45	100	160	0	0	0	0	305
TOTAL FUNDS	0	45	100	160	0	0	0	0	305
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Environmental Stewardship - Drainage

Program: Drainage Improvements
Type: Improved Facility
Location:
 Citywide

Start Date: Ongoing
End Date: Ongoing
Project ID: C33NW03

Urban Village: In more than one urban village

Neighborhood District: In more than one district

This program includes additional projects to improve fish passage, reduce erosion, and improve habitat along Seattle's creeks. Some of this work can be done by agencies such as the Seattle Conservation Corps. Funding from the proposed drainage rate increase would allow accelerated implementation of some projects that were previously scheduled and would allow us to fund some of the following projects as well, listed in priority order: Phase II Taylor Creek improvements, Fish Passage at 11th and Lake City Way, Pipers-Metro Culvert Fish Passage, Maple Creek Improvements, Shoreline Habitat at Beer Sheva Park, In-stream Improvements and Creek Restoration at three locations on Thornton Creek, Improved Fish Access at the Fauntleroy Creek Fishways, and Homewood Wetland Restoration. This project also includes \$335,000 that was added by City Council to contribute to the purchase and acquisition costs of three properties along Seaview Avenue NW as part of the City's response to the listing of the Chinook salmon as a threatened species under the Endangered Species Act.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	1,465	1,435	1,879	1,926	1,974	2,024	10,703
TOTAL FUNDS	0	0	1,465	1,435	1,879	1,926	1,974	2,024	10,703
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Environmental Stewardship - Wastewater

Program: Habitat and Sediments **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Location: **Project ID:** C34NW03
 ELLIOTT BAY WATERFRONT
Urban Village: Commercial Core **Neighborhood District:** Downtown

This program includes additional projects to be determined by the study of the Elliott Bay central waterfront area. The specific projects remediate sediment pollution in spot locations.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	1,600	1,200	717	735	754	772	5,778
TOTAL FUNDS	0	0	1,600	1,200	717	735	754	772	5,778
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Georgetown Drainage Basin Study

Program: Drainage Improvements **Start Date:** 2002 2nd Quarter
Type: Improved Facility **End Date:** 2002 4th Quarter
Location: **Project ID:** C302NW1
 Area of Georgetown
Urban Village: Not applicable **Neighborhood District:** Greater Duwamish
Neighborhood Plan: Georgetown

This project assesses drainage demands in the Georgetown neighborhood. Information previously developed by City and County Combined Sewer Overflow (CSO) studies as well as past drainage studies is used. This funding pays only for a planning-level analysis of demands. This project is coordinated with the Norfolk basin plan, the City's new CSO Plan, and other new initiatives in the area. A future study addresses any problems found.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	75	0	0	0	0	75
TOTAL FUNDS	0	0	0	75	0	0	0	0	75
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Heavy Equipment Purchases-Drainage

Program: Drainage Improvements **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: **Project ID:** C300399
n/a

This project replaces existing heavy equipment (such as vactors, loaders, and bulldozers) used by SPU field crews. This equipment has reached the end of its useful life.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	1,298	397	320	347	264	177	520	3,323
TOTAL FUNDS	0	1,298	397	320	347	264	177	520	3,323
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Heavy Equipment Purchases-Wastewater

Program: General Wastewater **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: **Project ID:** C300499
n/a

This project replaces existing heavy equipment (such as vactors, loaders, and bulldozers) used by SPU field crews. This equipment has reached the end of its useful life.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	902	338	480	616	715	804	347	4,202
TOTAL FUNDS	0	902	338	480	616	715	804	347	4,202
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Jackson Park Detention Phase 2

Program: Drainage Improvements **Start Date:** 1999 2nd Quarter
Type: New Facility **End Date:** 2004 4th Quarter
Location: **Project ID:** C399305
Jackson Park Golf Course

Urban Village: Not in an urban village

Neighborhood District: North

Neighborhood Plan: North District/Lake City Way

This project constructs three detention ponds in the Jackson Park golf course, including overflow structures for transferring flow between the creek and the ponds. The project reroutes 1,600 feet of Thornton Creek channel within the golf course to accommodate the proposed detention ponds as well as improve habitat for fish and wildlife. The project removes 500 feet of culvert within the golf course and replaces it with open channel.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	204	700	250	3,000	2,416	825	0	0	7,395
TOTAL FUNDS	204	700	250	3,000	2,416	825	0	0	7,395
<i>O&M Costs (Savings)</i>			0	0	0	0	25	25	50

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Lake Washington/Lower Duwamish Habitat Protection

Program: Drainage Improvements **Start Date:** 2000 3rd Quarter
Type: Improved Facility **End Date:** Ongoing
Location: **Project ID:** C300342
 Lower Duwamish River

Urban Village: Not in an urban village **Neighborhood District:** Greater Duwamish

This project acquires and/or develops habitat or other salmon beneficial projects in the Green/ Duwamish River system. The projects or programs may be done in cooperation with the Port of Seattle, King County, the effected Tribes, or other agencies and organizations.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	50	260	500	644	660	902	925	3,941
TOTAL FUNDS	0	50	260	500	644	660	902	925	3,941
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Landslide Prone Area Projects

Program: Drainage Improvements **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Location: **Project ID:** C33NW07
 Citywide

Urban Village: In more than one urban village **Neighborhood District:** In more than one district

This program category includes assessments and projects for improved drainage on steep hillsides to reduce the risk from landslides. Funding from the proposed drainage rate increase would accelerate a few of the already scheduled projects and would allow SPU to fund some of the following projects as well, listed in priority order: Hillcrest Storm Drain, Atlas Place Landslide Mitigation, Jacobsen Landslide Mitigation, Local Ravines Drainage Study, Golden Gardens Assessment, 47th Avenue SW/SW 102nd Assessment, 23rd Avenue SW/SW Dakota Assessment, and Storm Drain Repairs in Landslide Prone Areas.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	1,290	1,270	1,342	1,376	1,410	1,445	8,133
TOTAL FUNDS	0	0	1,290	1,270	1,342	1,376	1,410	1,445	8,133
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Linden Avenue Swale

Program: Drainage Improvements

Start Date: 1999 1st Quarter

Type: Improved Facility

End Date: 2002 4th Quarter

Location:

Project ID: C3AA318

N. Park Ave to Linden Ave N. from 130th St. to N.127th St.

Urban Village: Bitter Lake Village

Neighborhood District: Northwest

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake

This project addresses drainage and flooding problems in an area between N 130th Street and N 125th Street. Drainage from Bitter Lake currently flows through a ditch and culvert system from N 130th Street down North Park Avenue to N 128th Street and along N 128th Street to Linden Avenue N where it crosses the road to enter the City Light transmission corridor. The project replaces the ditch and culvert system with approximately 924 linear feet of 24-inch pipe on the same alignment from N 130th Street discharging into the existing ditch on the City Light property.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	128	35	0	450	0	0	0	0	613
TOTAL FUNDS	128	35	0	450	0	0	0	0	613
<i>O&M Costs (Savings)</i>			0	0	1	1	1	1	4

Local Basin Plan Implementation Program

Program: Drainage Improvements

Start Date: 2000 1st Quarter

Type: Improved Facility

End Date: 2007 4th Quarter

Location:

Project ID: C300325

Citywide

This project is a placeholder for projects developed to respond to community drainage problems, including those formally identified in Neighborhood Plans. This work is consistent with direction provided by the Drainage Policy Study adopted by the City Council in December 1999. It is the beginning of SPU's large-scale involvement in addressing local collector drainage systems, in addition to trunk systems. SPU is conducting a number of preliminary engineering analyses to develop detailed scopes of work with an appropriate schedule and budget for each project. Specific projects are then included in the Capital Improvement Program for subsequent years.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	200	349	594	2,446	2,786	3,121	3,023	12,519
TOTAL FUNDS	0	200	349	594	2,446	2,786	3,121	3,023	12,519
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Local Emerging Issues Program

Program: Drainage Improvements
Type: Improved Facility
Location:
 Citywide

Start Date: 2000 1st Quarter
End Date: Ongoing
Project ID: C300326

This project is a placeholder for projects developed to respond to emerging issues. This includes water quality projects necessary to comply with the City's National Pollution Discharge Elimination System Permit and projects developed to reduce long-term maintenance costs of the drainage system. Work is consistent with direction provided by the Drainage Policy Study adopted by the City Council in December 1999. SPU is conducting a number of preliminary engineering analyses to develop detailed scopes of work with an appropriate schedule and budget for each project. Specific projects are then included in the Capital Improvement Program in subsequent years.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	200	190	300	3,221	3,852	3,948	4,047	15,758
TOTAL FUNDS	0	200	190	300	3,221	3,852	3,948	4,047	15,758
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Longfellow Creek - Graham/Willow Improvements

Program: Drainage Improvements
Type: Improved Facility
Location:
 SW GRAHAM ST and DELRIDGE WY SW

Start Date: 1999 2nd Quarter
End Date: 2003 4th Quarter
Project ID: C399309

Urban Village: Not in an urban village

Neighborhood District: Delridge

Neighborhood Plan: Delridge

The stretch of Longfellow Creek between SW Graham and SW Willow Street has unstable banks and significant erosion. This project designs and constructs improvements to this reach of Longfellow Creek. The project includes bank stabilization, native plants, and instream habitat improvements.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	119	30	0	0	483	0	0	0	632
TOTAL FUNDS	119	30	0	0	483	0	0	0	632
<i>O&M Costs (Savings)</i>			0	0	0	2	2	2	6

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Longfellow Creek - SW Brandon to Juneau

Program: Drainage Improvements **Start Date:** 2002 1st Quarter
Type: Improved Facility **End Date:** 2002 4th Quarter
Location: **Project ID:** C302NW4
 2519 SW JUNEAU ST

Urban Village: Not in an urban village **Neighborhood District:** Delridge
Neighborhood Plan: Delridge

This project constructs habitat improvements on Longfellow Creek. SPU purchased lots on the creek near SW Juneau Street. This project includes wetlands, water quality improvements, native plants and/or interpretive elements.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	0	500	0	0	0	0	500
TOTAL FUNDS	0	0	0	500	0	0	0	0	500
<i>O&M Costs (Savings)</i>			0	0	3	3	3	3	12

Longfellow Creek - Yancy Street Monitoring

Program: Drainage Improvements **Start Date:** 2002 1st Quarter
Type: Improved Facility **End Date:** 2004 4th Quarter
Location: **Project ID:** C302NW5
 SW YANCY ST

Urban Village: Not in an urban village **Neighborhood District:** Delridge
Neighborhood Plan: Delridge

This project makes necessary adjustments to the Yancy Street Creek Rehabilitation project based on on-going monitoring in Longfellow Creek.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	0	75	81	83	0	0	239
TOTAL FUNDS	0	0	0	75	81	83	0	0	239
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

**Amounts in thousands of dollars*

SPU - DRAINAGE & WASTEWATER

Mapes Creek - Dam & Reforest Study

Program: Drainage Improvements
Type: Improved Facility
Location:
 52ND AV SW

Start Date: 2000 2nd Quarter
End Date: 2001 4th Quarter
Project ID: C300333

Urban Village: Not in an urban village

Neighborhood District: Southeast

Mapes Creek flows through Kubota Gardens. Downstream of the Gardens, the creek passes through several natural areas owned by the City's Parks Department. The survival of the existing trees is at risk because of steep ravines overgrown with ivy. At the downstream end of Mapes Creek, the creek passes under a retaining wall and enters a pipe. This wall is failing. This project ensures that the creek can enter the existing culvert, removes ivy and blackberry bushes, and replaces them with native vegetation.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	50	150	0	0	0	0	0	200
TOTAL FUNDS	0	50	150	0	0	0	0	0	200
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Marine View Drive Landslide Mitigation

Program: Drainage Improvements
Type: Improved Facility
Location:
 MARINE VIEW DR SW and SW 106TH ST

Start Date: 1999 3rd Quarter
End Date: 2002 4th Quarter
Project ID: C399321

Urban Village: Not in an urban village

Neighborhood District: Southwest

This project designs and constructs a down-slope drainage system to connect property owners on a bluff along Marine View Drive. The project involves some form of local financing for at least a portion of the project. The project is to be designed to reduce erosion caused by runoff discharging onto the steep hillside and mitigate landslide hazards.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	18	65	200	200	0	0	0	0	483
TOTAL FUNDS	18	65	200	200	0	0	0	0	483
<i>O&M Costs (Savings)</i>			0	0	1	1	1	1	4

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Meter Replacement - Direct Service

Program: General Wastewater **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C520000

Urban Village: In more than one urban village **Neighborhood District:** In more than one district

This project replaces customer meters that are not performing within the American Water Works Association's standard of accuracy due to obsolescence or incorrect application. 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 to be repaired, if possible.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	460	699	1,344	1,443	1,690	1,733	1,776	9,145
TOTAL FUNDS	0	460	699	1,344	1,443	1,690	1,733	1,776	9,145
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Minor Facility Upgrades - Rehabilitation

Program: Sewer Rehabilitation **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C3AA402

Urban Village: Not applicable **Neighborhood District:** In more than one district

This project rehabilitates maintenance holes, catch basins, inlets, and other minor wastewater systems in conjunction with street resurfacing projects.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	396	100	100	100	113	116	169	173	1,267
TOTAL FUNDS	396	100	100	100	113	116	169	173	1,267
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Neighborhood Planning

Program: Drainage Improvements
Type: Improved Facility
Location:
 Various

Start Date: Ongoing
End Date: Ongoing
Project ID: C33NW05

Urban Village: In more than one urban village

Neighborhood District: In more than one district

This program category includes projects identified through the Neighborhood Planning process. Funding from the proposed drainage rate increase would accelerate implementation of the South Park Drainage Improvements and would allow SPU to fund some of the following projects as well (listed in priority order): Pipers Creek/Carkeek Park Detention Study, a Culvert at 30th Avenue NE/NE 107th St, Drainage Improvements at 39th Avenue NE/NE 105th St, the Little Brook Creek Study/Culvert, the 19th Avenue NE Drainage Assessment, and the 19th Avenue SW Drainage Study.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	625	1,100	2,147	2,201	2,256	2,313	10,642
TOTAL FUNDS	0	0	625	1,100	2,147	2,201	2,256	2,313	10,642
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

NOAA Habitat-Seaboard

Program: Habitat and Sediments
Type: Improved Facility
Location:
 Seaboard near Kellogg Island

Start Date: 1990 1st Quarter
End Date: 2001 2nd Quarter
Project ID: C3AA501

This project includes the creation of a natural intertidal basin at the shoreline, the restoration of marsh, meadow and forest in the upland portion of the National Oceanographic and Atmospheric Administration (NOAA) property, and clean up of industrial contamination across the site. It also includes paths, viewpoints, an information kiosk, and parking lot.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	1,741	400	40	0	0	0	0	0	2,181
TOTAL FUNDS	1,741	400	40	0	0	0	0	0	2,181
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

NOAA Sediment

Program: Habitat and Sediments
Type: Improved Facility
Location:
 Elliott Bay waterfront

Start Date: 2001 1st Quarter
End Date: 2001 4th Quarter
Project ID: C3AA502

Urban Village: Commercial Core

Neighborhood District: Downtown

This project studies the Elliott Bay central waterfront area to determine if sediments can be remediated in spot locations without recontamination from adjoining contaminated sediments.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	100	0	0	0	0	0	100
TOTAL FUNDS	0	0	100	0	0	0	0	0	100
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Occidental Street/Yesler Way S - Sewer Rehabilitation

Program: Sewer Rehabilitation
Type: Rehabilitation or Restoration
Location:
 OCCIDENTAL AV S and S WASHINGTON ST

Start Date: 1999 1st Quarter
End Date: 2001 4th Quarter
Project ID: C399406

Urban Village: Pioneer Square

Neighborhood District: Downtown

This project replaces 250 linear feet of 12-inch clay combined sewer mainline with 12-inch ductile iron pipe in the alley north of S Washington Street and east of Occidental Street. Six service connections are to be reinstated at the completion of the project.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	65	142	621	0	0	0	0	0	828
TOTAL FUNDS	65	142	621	0	0	0	0	0	828
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Pipers Creek - Watershed Interpretive Center Annex Remodel

Program: Drainage Improvements
Type: Improved Facility
Location:
 950 NW CARKEEK PARK RD

Start Date: 2001 1st Quarter
End Date: 2001 4th Quarter
Project ID: C301NW4

Urban Village: Not in an urban village

Neighborhood District: Northwest

The Watershed Interpretive Center Annex is a former residential building used as office space in conjunction with the Carkeek Park visitor's center. The Annex requires remodeling to convert the building layout to better support office use. This project may involve outdoor improvements such as trails, signs, and/or interpretive elements.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	80	0	0	0	0	0	80
TOTAL FUNDS	0	0	80	0	0	0	0	0	80
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Pipers Creek Detention

Program: Drainage Improvements
Type: Improved Facility
Location:
 NW CARKEEK PARK RD

Start Date: 2000 1st Qtr
End Date: 2004 4th Qtr
Project ID: C304NW1

Urban Village: Not applicable

Neighborhood District: Northwest

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake

The Pipers Creek drainage system experiences flooding, erosion, and sedimentation problems during significant storm events. This project provides for detention of stormwater before it reaches the creek. The existing pond is loaded with sediment and has little detention capacity in its current condition and requires substantial improvements before it can serve as a detention facility.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	3	0	0	0	880	0	0	883
TOTAL FUNDS	0	3	0	0	0	880	0	0	883
<i>O&M Costs (Savings)</i>			0	0	0	0	15	15	30

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Pipers Creek Restoration, Monitor and Adjust

Program: Drainage Improvements
Type: Improved Facility
Location:
 NW CARKEEK PARK RD

Start Date: 2000 1st Quarter
End Date: 2003 4th Quarter
Project ID: C300334

Urban Village: Not applicable

Neighborhood District: Northwest

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake

During Phases I and II of the Pipers Creek Erosion and Sedimentation Project, numerous in-stream structures were constructed in Pipers and Venema Creeks. The project sought to control erosion and sedimentation in the stream channel, enhance habitat for resident and anadromous salmonids for spawning and rearing, and maintain the stream's ability to convey storm flows. This project allows for any additional adjustments or repair work on previously constructed stream structures.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	50	0	50	54	0	0	0	154
TOTAL FUNDS	0	50	0	50	54	0	0	0	154
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Pipers Creek Twin Culverts Assessment

Program: Drainage Improvements
Type: Improved Facility
Location:
 NW 105TH ST and 8TH AV NW

Start Date: 2002 1st Quarter
End Date: 2002 4th Quarter
Project ID: C302NW6

Urban Village: Not in an urban village

Neighborhood District: Northwest

An on-going petroleum odor has been evident at the Twin Pipes located along Pipers Creek in upper Carkeek Park. The Twin Pipes are the largest stormdrain outfall into Pipers Creek. This project assesses the source and extent of the petroleum problem and prepares preliminary engineering for future project development.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	0	50	0	0	0	0	50
TOTAL FUNDS	0	0	0	50	0	0	0	0	50
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Potential Sediment Remediation Projects

Program: Habitat and Sediments **Start Date:** 2000 3rd Quarter
Type: Improved Facility **End Date:** 2001 4th Quarter
Location: **Project ID:** C300501
 SPOKANE ST - W SEA BR EB RP and W SEATTLE BR WB to W SEATTLE BR EB

Seattle Public Utilities is participating in a two to three year evaluation of the Lower Duwamish River to determine the extent and degree of contamination and the risk it poses to human health and the ecology. The primary goal of the first phase of this work is to summarize existing information concerning the nature and extent of contamination, and to identify priority sites for early action. SPU is participating in this work in a partnership effort with Seattle City Light, the Port of Seattle, King County and Boeing. The work is to be done under a formal Administrative Order on Consent (AOC) with the US Environmental Protection Agency, and the Washington Department of Ecology. This study serves as a Remedial Investigation and Feasibility Study for the Lower Duwamish.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	100	200	0	0	0	0	0	300
TOTAL FUNDS	0	100	200	0	0	0	0	0	300
<i>O&M Costs (Savings)</i>			0	0	52	52	52	52	208

Public Toilet Program

Program: General Wastewater **Start Date:** 1999 3rd Quarter
Type: New Facility **End Date:** 2001 4th Quarter
Location: **Project ID:** C399202
 Pioneer Square and Pike Place Market

Urban Village: Commercial Core

Neighborhood District: In more than one district

This project installs freestanding public restrooms in commercial areas of Seattle. These facilities include the capability to automatically wash down the interior of the restroom after each use.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	250	250	0	0	0	0	0	500
TOTAL FUNDS	0	250	250	0	0	0	0	0	500
<i>O&M Costs (Savings)</i>			0	350	350	350	350	350	1,750

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Pump Station Rehabilitation

Program: Sewer Rehabilitation **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: **Project ID:** C3AA406
 BINMIC (BallardInterbayMftg.&Ind.Ctr), Eastlake

This is an annual capital program to provide for wastewater pump station repairs and rehabilitation including design and installation of emergency generators, material and labor costs for equipment replacement (pumps and valves), and equipment for the remote monitoring system (SCADA).

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	571	190	961	1,000	1,074	1,101	1,410	1,445	7,752
TOTAL FUNDS	571	190	961	1,000	1,074	1,101	1,410	1,445	7,752
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Regulatory Compliance - Drainage

Program: Drainage Improvements **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Location: **Project ID:** C33NW02
 Citywide

This program includes projects necessary to meet state water quality (National Pollutant Discharge Elimination System) regulations. Initially, water quality best management practice (BMP) pilot projects are constructed to meet the Washington State Department of Ecology's requirement for stormwater treatment. These early projects help determine the viability of doing this work on a wider scale throughout the city. Haller Lake and Bitter Lake have also been identified as proposed sites for BMP projects.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	70	325	295	303	310	318	1,621
TOTAL FUNDS	0	0	70	325	295	303	310	318	1,621
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Regulatory Compliance - Wastewater

Program: Combined Sewer Overflow
Type: Improved Facility
Location: Citywide
Start Date: Ongoing
End Date: Ongoing
Project ID: C34NW02

This program includes projects required to comply with National Pollutant Discharge Elimination System (NPDES) regulations for combined sewer overflows (CSOs). The present CSO Plan is currently being revised and is to include specific projects that require implementation over the next several years. The City's current CSO permit also requires regular future updates.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	800	500	3,532	3,620	3,710	3,803	15,965
TOTAL FUNDS	0	0	800	500	3,532	3,620	3,710	3,803	15,965
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

S Brandon Street/27th Avenue S - Sewer Rehabilitation

Program: Sewer Rehabilitation
Type: Rehabilitation or Restoration
Location: S. Brandon St. and 27th Avenue .S.
Start Date: 2002 1st Quarter
End Date: 2002 4th Quarter
Project ID: C302408

Urban Village: Not in an urban village

Neighborhood District: Southeast

This project replaces 60 linear feet of eight-inch concrete sanitary sewer in the S Brandon Street right-of-way with eight-inch ductile iron pipe.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	134	0	0	0	0	134
TOTAL FUNDS	0	0	0	134	0	0	0	0	134
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

S Morgan Street/MLK Jr. Way S - Sewer Rehabilitation

Program: Sewer Rehabilitation
Type: Rehabilitation or Restoration
Location: S MORGAN ST
Start Date: 2001 1st Quarter
End Date: 2002 4th Quarter
Project ID: C301401

Urban Village: MLK Jr. @ Holly

Neighborhood District: Southeast

This project replaces a deteriorated section of clay sanitary sewer located on S Morgan Street west of MLK Jr. Way with 8-inch ductile iron pipe. The depth of this line varies from 12 feet to 14 feet below the surface and has eight active connections that are to be reconnected.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	110	110	0	0	0	0	220
TOTAL FUNDS	0	0	110	110	0	0	0	0	220
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

S Washington/Occidental Avenue S - Sewer Rehabilitation

Program: Sewer Rehabilitation **Start Date:** 2000 2nd Quarter
Type: Rehabilitation or Restoration **End Date:** 2001 4th Quarter
Location: S WASHINGTON ST and 1ST AV S to 2ND AV S **Project ID:** C300410

Urban Village: Pioneer Square

Neighborhood District: Downtown

This project, consisting of two separate sections of sewer running from 1st Avenue S to Occidental Avenue S, requires four side sewers to be reconnected. The section running from the alley east of Occidental Avenue S to 2nd Avenue S is approximately 200 feet long and must be replaced in its entirety.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	60	600	0	0	0	0	0	660
TOTAL FUNDS	0	60	600	0	0	0	0	0	660
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

SEATRAN - Drainage

Program: Drainage Improvements **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C301388

Based on a 1999 interdepartmental agreement and subsequent negotiations, SPU is jointly funding drainage code compliance on certain SEATRAN capital improvement projects. Per the negotiations, the amount of funding is limited to 4% of the drainage and wastewater CIP in each year.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	1,135	567	702	787	812	824	844	5,671
TOTAL FUNDS	0	1,135	567	702	787	812	824	844	5,671
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

SEATRAN - Wastewater

Program: General Wastewater **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: City wide **Project ID:** C301488

Based on a 1999 interdepartmental agreement and subsequent negotiations, SPU is jointly funding drainage code compliance on certain SEATRAN capital improvement projects. Per the negotiations, the amount of funding is limited to 4% of the drainage and wastewater CIP in each year.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	583	719	639	438	595	606	3,580
TOTAL FUNDS	0	0	583	719	639	438	595	606	3,580
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

**Amounts in thousands of dollars*

SPU - DRAINAGE & WASTEWATER

SEATRAN Tree Pit Expansion Assessment

Program: Drainage Improvements
Type: New Facility
Location:
 Citywide

Start Date: 2000 1st Quarter
End Date: 2002 4th Quarter
Project ID: C300318

Urban Village: Not in an urban village

Neighborhood District: In more than one district

SPU is partnering with Seattle Transportation to increase infiltration in the watersheds through tree pit expansions and soil amendments. Project objectives are to improve drainage through increased perviousness of the tree pit areas.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	60	80	100	0	0	0	0	240
TOTAL FUNDS	0	60	80	100	0	0	0	0	240
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Seola Beach Drive Culvert

Program: Drainage Improvements
Type: Rehabilitation or Restoration
Location:
 Seola Beach Drive SW/SW 110th St

Start Date: 2000 1st Quarter
End Date: 2002 4th Quarter
Project ID: C399327

Urban Village: Not in an urban village

Neighborhood District: Southwest

This project repairs or replaces a failing culvert along Seola Beach Drive SW, south of SW 106th Street

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	22	50	0	225	0	0	0	0	297
TOTAL FUNDS	22	50	0	225	0	0	0	0	297
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Sewage System Modeling

Program: General Wastewater
Type: Rehabilitation or Restoration
Location:
 Citywide

Start Date: 1998 1st Quarter
End Date: Ongoing
Project ID: C3AA206

Urban Village: Not applicable

Neighborhood District: In more than one district

This project facilitates development of computer models for the City's sewage system and takes the approach of coordinated system modeling by both in-house staff and consultants.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	446	0	100	100	107	110	113	116	1,092
TOTAL FUNDS	446	0	100	100	107	110	113	116	1,092
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Sewer Backup Prevention Program

Program: General Wastewater **Start Date:** 2002 1st Quarter
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C302201

Urban Village: Not in an urban village **Neighborhood District:** In more than one district

This project develops a sewer backup prevention program in conjunction with system-wide long term planning efforts.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	30	32	33	34	35	164
TOTAL FUNDS	0	0	0	30	32	33	34	35	164
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Sewer Emergency Repairs

Program: Sewer Rehabilitation **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C3AA404

Urban Village: Not applicable **Neighborhood District:** In more than one district

This project repairs sewer lines on an emergency basis for lines that collapse, cause surface problems, or otherwise endanger the health or welfare of the public.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	561	150	150	250	268	275	282	289	2,225
TOTAL FUNDS	561	150	150	250	268	275	282	289	2,225
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Sewer Full Line Replacements

Program: Sewer Rehabilitation **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C300488

Urban Village: Not applicable **Neighborhood District:** In more than one district

As a result of SPU Drainage and Wastewater's continuous closed circuit television (CCTV) inspections, mainline defects are noticed earlier. Each mainline defect is catalogued in the Utility's database and assigned a priority number which designates the urgency of repair.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	1,914	3,798	2,881	5,194	5,115	18,902
TOTAL FUNDS	0	0	0	1,914	3,798	2,881	5,194	5,115	18,902
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Sewer Improvements Driven by Other Agencies

Program: General Wastewater **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: **Project ID:** C34NW05
 Various

This program includes projects in partnership with other agencies such as the Seattle Housing Authority (Holly Park Phase 3), King County, and Sound Transit. Specific projects are changes to the wastewater system required by the other agencies' projects.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	1,600	1,100	1,181	1,211	1,241	1,272	7,605
TOTAL FUNDS	0	0	1,600	1,100	1,181	1,211	1,241	1,272	7,605
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Sewer Outreach Program

Program: General Wastewater **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: **Project ID:** C3AA201
 Citywide

Urban Village: Not in an urban village

Neighborhood District: In more than one district

A number of locations in Seattle have septic systems that are used for sewage disposal. These systems can fail and effect public health adversely. This program provides funds for potential projects in this public health program.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	119	110	75	150	161	165	169	173	1,122
TOTAL FUNDS	119	110	75	150	161	165	169	173	1,122
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Sheridan Beach

Program: General Wastewater **Start Date:** 2000 3rd Quarter
Type: Rehabilitation or Restoration **End Date:** 2001 4th Quarter
Location: **Project ID:** C300201
 Lake Shore Drive

Storms in 1996 and 1997 resulted in sewer backups in the Sheridan Beach area. The City and King County settled claims with claimants and agreed to resolve capacity and maintenance issues in the sewer basin. King County is the lead on this project and the City has committed to share the cost of improvements on a 50/50 basis.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	50	200	0	0	0	0	0	250
TOTAL FUNDS	0	50	200	0	0	0	0	0	250
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

South Lake Union Combined Sewer Overflow Phase II

Program: Combined Sewer Overflow

Start Date: 1995 1st Quarter

Type: New Facility

End Date: 2003 4th Quarter

Location:

Project ID: C3AA106

Valley ST/Western AV N

Urban Village: South Lake Union

Neighborhood District: Lake Union

This project connects the City's new Combined Sewer Overflow project (Phase I), an upsized transport system along the east side of Lake Union, to King County's projects (Phases III and IV), which are storage, conveyance, and primary treatment projects.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	593	150	1,410	1,610	1,510	0	0	0	5,273
TOTAL FUNDS	593	150	1,410	1,610	1,510	0	0	0	5,273
<i>O&M Costs (Savings)</i>			0	0	0	78	78	80	236

South Lake Union CSO - King County Payments

Program: Combined Sewer Overflow

Start Date: 1996 4th Quarter

Type: New Facility

End Date: 2004 4th Quarter

Location:

Project ID: C3AA104

Denny WY/Alaskan WY

Urban Village: South Lake Union

Neighborhood District: Lake Union

This is a joint City/County project to provide combined sewer overflow control near Denny Way and Lake Union. The project is managed by King County. Seattle's share of the project costs is 17 percent.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	4,106	1,000	5,387	5,742	3,368	471	0	0	20,074
TOTAL FUNDS	4,106	1,000	5,387	5,742	3,368	471	0	0	20,074
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

South Park Drainage Phase 2

Program: Drainage Improvements

Start Date: 1999 2nd Quarter

Type: New Facility

End Date: 2002 4th Quarter

Location:

Project ID: C399317

SW HOLLY ST/SW Roxbury St

Urban Village: South Park

Neighborhood District: Southwest

Neighborhood Plan: South Park

This project develops a basin plan for a storm drain system to serve an area in the South Park neighborhood between SR-99 and the Duwamish River, and between 2nd Avenue S and 7th Avenue S. The project alleviates flooding in the vicinity. This area floods partly because of water backing up through the existing drainage system, and partly because of stormwater runoff in the immediate vicinity. The existing culvert system is inadequate because of very flat grades in the area and the very low elevation of the entire neighborhood with respect to the Duwamish River. The new storm drain connects to an existing storm drain in 7th Avenue S that discharges into the river.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	11	100	400	400	0	0	0	0	911
TOTAL FUNDS	11	100	400	400	0	0	0	0	911
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Spot Drainage Program

Program: Drainage Improvements

Start Date: Ongoing

Type: Rehabilitation or Restoration

End Date: Ongoing

Location:

Project ID: C33NW06

Various

Urban Village: In more than one urban village

Neighborhood District: In more than one district

This program includes additional funding to reduce the backlog of localized drainage problems.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	400	400	537	550	564	578	3,029
TOTAL FUNDS	0	0	400	400	537	550	564	578	3,029
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Spot Sewer Pipe Repairs

Program: Sewer Rehabilitation
Type: Rehabilitation or Restoration
Location:
 Citywide

Start Date: Ongoing
End Date: Ongoing
Project ID: C300401

Urban Village: Not applicable

Neighborhood District: In more than one district

This program repairs and replaces broken, crooked, misaligned sewer pipe throughout the City.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	661	410	1,310	880	660	790	809	5,520
TOTAL FUNDS	0	661	410	1,310	880	660	790	809	5,520
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Street Edge Alternatives (SEA) Streets Phase 1

Program: Drainage Improvements
Type: Improved Facility
Location:
 2ND AV NW and NW 177TH ST

Start Date: 1999 2nd Quarter
End Date: 2001 4th Quarter
Project ID: C399312

Urban Village: Not in an urban village

Neighborhood District: Northwest

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake

The Street Edge Alternatives (S.E.A. Streets) Project is one of the City of Seattle's Millennium Projects. Designated for the Pipers Creek Watershed in the northwest portion of the City, this project is intended to showcase the protection of creek ecosystems through alternative drainage and street design.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	197	589	61	0	0	0	0	0	847
TOTAL FUNDS	197	589	61	0	0	0	0	0	847
<i>O&M Costs (Savings)</i>			0	5	5	5	5	5	25

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

SW Juneau Storm Drain

Program: Drainage Improvements

Start Date: 2002 1st Quarter

Type: New Facility

End Date: 2003 4th Quarter

Location:

Project ID: C302NW2

SW JUNEAU ST and 30TH AV SW to 34TH AV SW

Urban Village: Not applicable

Neighborhood District: Delridge

Neighborhood Plan: Delridge

This project provides a completed stormwater drainage system in the area of 30th Avenue SW to 34th Avenue SW from Juneau Street to Brandon Street. This is a slide hazard area and this project provides drainage for stormwater from the hillside to reduce infiltration, decrease groundwater, and increase slope stability of the hillside. Stormwater is drained quickly from the hillside and detained at a level area prior to release into Longfellow Creek, in order to limit peak stormwater flows to the creek.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	0	70	537	0	0	0	607
TOTAL FUNDS	0	0	0	70	537	0	0	0	607
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Taylor Creek - Phase 3 Restoration

Program: Drainage Improvements

Start Date: 2000 1st Quarter

Type: Improved Facility

End Date: 2003 4th Quarter

Location:

Project ID: C300313

LAKE RIDGE DR S

Urban Village: Rainier Beach

Neighborhood District: Southeast

This project addresses upstream habitat restoration in Taylor Creek. The activities include erosion control projects, riparian planting, instream improvements, and modification of an existing culvert.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	50	30	50	107	0	0	0	237
TOTAL FUNDS	0	50	30	50	107	0	0	0	237
<i>O&M Costs (Savings)</i>			0	0	0	2	2	2	6

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Taylor Creek Culverts Phase 2

Program: Drainage Improvements

Start Date: 1998 4th Quarter

Type: New Facility

End Date: 2003 4th Quarter

Location:

Project ID: C399315

Taylor Creek/Rainier Ave S

Urban Village: Not in an urban village

Neighborhood District: Greater Duwamish

This project designs and constructs fish passage improvements at the culvert that conveys Taylor Creek under Rainier Avenue South.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	71	270	0	0	1,503	0	0	0	1,844
TOTAL FUNDS	71	270	0	0	1,503	0	0	0	1,844
<i>O&M Costs (Savings)</i>			0	0	0	5	5	5	15

Thornton Basin Plan Hydraulic Study Implementation

Program: Drainage Improvements

Start Date: 2000 2nd Quarter

Type: Improved Facility

End Date: 2007 4th Quarter

Location:

Project ID: C300330

Various Locations

Urban Village: Not applicable

Neighborhood District: Northeast

This project makes repairs to Mapes Creek, which flows through Kubota Gardens in Southeast Seattle. Currently, the creek passes through steep ravines which are overgrown with ivy, and continues under a failing retaining wall. This project repairs the retaining wall to ensure that the creek can flow into the existing culvert. Ivy and blackberries are also removed and replaced with native vegetation to ensure effective creek flow.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	470	2,655	2,827	2,909	5,626	6,632	6,622	27,741
TOTAL FUNDS	0	470	2,655	2,827	2,909	5,626	6,632	6,622	27,741
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Thornton Creek - 35th Avenue NE/NE 125th

Program: Drainage Improvements **Start Date:** 1999 3rd Quarter
Type: Rehabilitation or Restoration **End Date:** 2001 4th Quarter
Location: **Project ID:** C399322
 35th Ave N. E.

Urban Village: Lake City **Neighborhood District:** North

Neighborhood Plan: North District/Lake City Way

Little Brook Creek is a tributary of Thornton Creek Watershed and located in Northeast Seattle in King County. The culvert to be replaced is located under NE 35th Avenue, one block south of NE 125th Street and east of a newly constructed stormwater detention pond.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	41	150	1,060	0	0	0	0	0	1,251
TOTAL FUNDS	41	150	1,060	0	0	0	0	0	1,251
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Thornton Creek - Culvert on 25th Avenue NE

Program: Drainage Improvements **Start Date:** 2001 1st Quarter
Type: Improved Facility **End Date:** 2002 4th Quarter
Location: **Project ID:** C301NW5
 25TH AV NE and NE 123RD ST to NE 125TH ST

Urban Village: Not in an urban village **Neighborhood District:** North

Neighborhood Plan: North District/Lake City Way

The culvert on 25th Avenue NE blocks passage for migratory fish. This project replaces the existing culvert and/or downstream conditions to enable fish passage. Salmon are then able to access potential spawning and rearing areas in Thornton Creek Park 1 and sections of Jackson Park Golf Course.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	0	150	410	0	0	0	0	560
TOTAL FUNDS	0	0	150	410	0	0	0	0	560
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Thornton Creek - Fish Passage at 95th

Program: Drainage Improvements	Start Date: 2001 1st Quarter
Type: Improved Facility	End Date: 2002 4th Quarter
Location: NE 95TH ST and SAND POINT WY NE	Project ID: C301NW6
Urban Village: Not applicable	Neighborhood District: North
Neighborhood Plan: North District/Lake City Way	

Chinook salmon have been found along the lower reaches of Thornton Creek. This project improves fish habitat in this area in several ways: modifying culverts, adding inserted diversity, adding native plants, and possibly creating a backwater channel.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	50	300	0	0	0	0	350
TOTAL FUNDS	0	0	50	300	0	0	0	0	350
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Thornton Creek Outfall

Program: Drainage Improvements	Start Date: 1998 1st Quarter
Type: Rehabilitation or Restoration	End Date: 2002 4th Quarter
Location: NE 105TH ST	Project ID: C3AA329
Urban Village: Not in an urban village	Neighborhood District: North
Neighborhood Plan: North District/Lake City Way	

This project rehabilitates the existing partially-collapsed outfall from Meadowbrook Pond into Lake Washington.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	96	25	20	147	0	0	0	0	288
TOTAL FUNDS	96	25	20	147	0	0	0	0	288
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

**Amounts in thousands of dollars*

SPU - DRAINAGE & WASTEWATER

Thornton Creek Watershed Action Plan Implementation

Program: Drainage Improvements
Type: Improved Facility
Location:
 LAKE CITY WY NE

Start Date: 1999 1st Quarter
End Date: 2001 4th Quarter
Project ID: C3AA304

Urban Village: Not applicable

Neighborhood District: North

This project creates a Watershed Action Plan in accordance with State of Washington Codes. A background report and action plan are to be produced. The action plan lists numerous strategies designed to control stormwater, reduce non-point pollution, improve habitat and encourage stewardship. Action plans receive public and agency review and eventual approval from the Department of Ecology and City Council. The final step is the implementation of several projects identified in the Action Plan.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	264	80	120	0	0	0	0	0	464
TOTAL FUNDS	264	80	120	0	0	0	0	0	464
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

W Beacon Hill Assessment

Program: Drainage Improvements
Type: Improved Facility
Location:
 North Beacon Hill

Start Date: 2001 2nd Quarter
End Date: 2001 4th Quarter
Project ID: C301NW9

Urban Village: Beacon Hill

Neighborhood District: Southeast

Neighborhood Plan: North Beacon Hill

This program conducts assessments and preliminary engineering of landslide mitigation projects described in the Seattle Landslide Study. These projects have been prioritized using a two-tier matrix of criteria taking into account such things as vulnerability of the public facility, history of landslides, ownership of the facility, and effects on public safety.

Fund Source	LTD	2000	2001	2002	2003	2004	2005	2006	Total
SPU Drainage and Wastewater Fund	0	0	80	0	0	0	0	0	80
TOTAL FUNDS	0	0	80	0	0	0	0	0	80
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

Wastewater Rehabilitation Project Evaluation

Program: Sewer Rehabilitation **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: Citywide **Project ID:** C3AA401

Urban Village: In more than one urban village **Neighborhood District:** In more than one district

This project evaluates future wastewater rehabilitation projects by investigating existing records, reports, and plans; obtaining field data from TV inspection and gauging of flows; developing alternatives and cost estimates; and making recommendations.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	581	75	75	75	86	88	90	93	1,163
TOTAL FUNDS	581	75	75	75	86	88	90	93	1,163
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Waterway 18 N/N Lake Storm Drain Replacement

Program: Drainage Improvements **Start Date:** 1995 2nd Quarter
Type: Improved Facility **End Date:** 2002 4th Quarter
Location: 2201 N NORTHLAKE WY **Project ID:** C3AA321

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

Neighborhood Plan: Wallingford

This project replaces the existing temporary eight-inch diameter outfall pipe with a 24-inch diameter outfall pipe to discharge stormwater to Lake Union via Waterway No. 18. This provides for adequate flow in the storm drain and stops the maintenance hole lid located in N Pacific Street at waterway No. 18 from popping off during heavy rain storms, thereby creating a public safety hazard.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	102	3	0	145	0	0	0	0	250
TOTAL FUNDS	102	3	0	145	0	0	0	0	250
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

West Seattle Golf - Fish Passage

Program: Drainage Improvements **Start Date:** 1999 1st Quarter
Type: New Facility **End Date:** 2002 4th Quarter
Location: SW GENESEE ST **Project ID:** C399307

Urban Village: Not in an urban village **Neighborhood District:** Delridge

This project constructs fish passage and habitat improvements along Longfellow Creek through the West Seattle Golf Course. The improvements include replacing culverts and construction of a fish ladder at a rockery dam that spans the creek.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	236	300	75	2,330	0	0	0	0	2,941
TOTAL FUNDS	236	300	75	2,330	0	0	0	0	2,941
<i>O&M Costs (Savings)</i>			0	0	5	5	5	5	20

Westlake Drainage

Program: Drainage Improvements **Start Date:** 1995 2nd Quarter
Type: Improved Facility **End Date:** 2002 4th Quarter
Location: WESTLAKE AV N/ Blaine **Project ID:** C3AA328

Urban Village: South Lake Union **Neighborhood District:** Lake Union

Neighborhood Plan: BINMIC (Ballard Interbay Northend)

This project complies with an initial investigation that recommended installing the complete drainage system along Westlake Avenue N from north of Blaine Street to Aurora Avenue N, and rehabilitating the existing drainage system from south of Blaine Street to Galer Street. In coordination with construction of the pedestrian/bicycle path, the drainage project also improves surface drainage pickup in adjacent parking areas.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	693	100	3,455	1,000	0	0	0	0	5,248
TOTAL FUNDS	693	100	3,455	1,000	0	0	0	0	5,248
<i>O&M Costs (Savings)</i>			0	0	15	15	15	15	60

*Amounts in thousands of dollars

SPU - DRAINAGE & WASTEWATER

WPA Drains Study & Repair Program

Program: Drainage Improvements **Start Date:** 2000 3rd Quarter
Type: Rehabilitation or Restoration **End Date:** Ongoing
Location: **Project ID:** C300338
 Various locations

Urban Village: In more than one urban village **Neighborhood District:** In more than one district

As a result of extensive landslide damage during the winter of 1933-34, the Works Progress Administration sponsored the construction of landslide mitigation projects at 29 sites around the city between 1935-41. This program prioritizes and makes necessary repairs on the drains. This project was one of the activities to pursue as described in the Landslide Policy Paper that the City Council adopted in 1998.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	0	100	200	200	215	220	226	231	1,392
TOTAL FUNDS	0	100	200	200	215	220	226	231	1,392
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Yancy Street Creek Rehabilitation

Program: Drainage Improvements **Start Date:** 1999 1st Quarter
Type: New Facility **End Date:** 2001 3rd Quarter
Location: **Project ID:** C399308
 Longfellow Creek at SW Yancy St

Urban Village: Not in an urban village **Neighborhood District:** Delridge

Neighborhood Plan: Delridge

This project constructs in-stream habitat and fish passage improvements, culverts, vegetation, forest cover, a wetland, trails, a pavilion, and artwork on open space property along Longfellow Creek between SW Yancy Street and SW Genesee Street.

<u>Fund Source</u>	<u>LTD</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>Total</u>
SPU Drainage and Wastewater Fund	1,183	2,600	75	0	0	0	0	0	3,858
TOTAL FUNDS	1,183	2,600	75	0	0	0	0	0	3,858
<i>O&M Costs (Savings)</i>			0	15	15	15	15	15	75

*Amounts in thousands of dollars