SPU DRAINAGE AND WASTEWATER

Overview of Facilities and Programs

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

- 530 miles of sanitary sewers
- 500 miles of storm drains
- 1,020 miles of combined sewers
- 73 pump stations
- 113 combined sewer and pump station outfalls
- 277 storm drain outfalls
- 43 combined sewer overflow control detention tanks/pipes

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

Historically, the Drainage and Wastewater (DWF) CIP has been funded primarily by revenue bonds. However, new DWF financial policies adopted in 2003 gradually increase cash contributions from the Utility to the CIP to 25% of total CIP costs, by 2007. Overhead costs for the CIP are budgeted in the Seattle Public Utilities operating fund and then repaid as CIP project expenditures are incurred.

Highlights

- Combined Sewer Overflow (CSO) Program: Approximately \$29 million is included in the 2005-2010 Adopted CIP for the Combined Sewer Overflow Program. In many parts of Seattle, sewage and stormwater flow together in pipes through a Combined Sewer System. Heavy rains may cause these pipes to fill, causing overflows through outfalls into Lake Union, Lake Washington, or Puget Sound. Projects in the 2005-2010 Adopted CIP respond to federal regulations requiring that the City monitor and reduce CSOs. The Denny Way/Lake Union project, coordinated and jointly funded by the City and King County, is scheduled to be completed in 2005. Other large construction projects identified in the 2001 CSO Reduction Plan (Plan) are being delayed to realize savings through optimization of the existing facilities prior to construction of large storage projects.
- Flood Control, Local Drainage and Water Quality: The City's Comprehensive Drainage Plan, originally written in 1988, was updated in 2004 to address flooding and water quality needs in a systematic manner citywide, and to establish a long-term schedule of both capital improvements and operating programs. This work is also intended to comply with the requirements of the pending renewal of Seattle's Federal Stormwater Permit. The CIP includes projects to implement both the CDP and the Mayor's Restore Our Waters Strategy to protect Seattle's aquatic environment.
- Habitat and Sediments: The City of Seattle is named as a potentially responsible party (PRP) for the Duwamish River Superfund Site because of alleged contamination of sediments in the river from CSO and storm drain discharges. The City continues to work with the Washington State Department of Ecology, King County, and other PRPs on an assessment of contaminants and sources. Funding for this work is included in two Sediment Remediation projects, which also include funding for other preliminary studies and analysis for cleanup of other contaminated sites in which the City is a participant.

- General Wastewater: The General Wastewater Program Category includes several new initiatives. A Comprehensive Wastewater Plan will be developed for the first time to establish levels of services, define policies, and coordinate and set priorities among SPU's various wastewater programs. The Other Agency Opportunity Program is established to devote staff resources to coordinate with projects such as the Alaskan Way Viaduct/Seawall, Sound Transit, the Seattle Monorail Project, and South Lake Union development. Utility relocation, flow control, and water quality treatment options associated with each of these projects will affect SPU's infrastructure. There will be opportunities for joint projects with other agencies in some instances. The Intergovernmental Shares project provides funding for partnerships with other City departments on code compliance for transportation projects in areas with combined sewer systems. The Pump Station Improvements program designs and constructs projects identified in the Pump Station Rehabilitation Study. For the 2005-2010 Adopted CIP, this program has been moved from Sewer Rehabilitation to General Wastewater. This is done to better link design and management of pump station improvements to system capacity and CSO issues.
- **Sewer Rehabilitation Program**: The Department is continuing a major program to rehabilitate and replace failed sewers. Through the use of asset management principles, the emphasis is shifting from full-line reconstruction to relining and point repairs, with priority for inspection and repair given to critical pipelines. Approximately \$53 million is to be spent on this program in 2005-2010.
- Capital Planning: Several capital planning projects in the 2005-2010 Adopted Drainage and Wastewater CIP provide funding for CIP project development work. Funding is used to develop scopes, budgets and schedules for new projects to be included in subsequent CIP proposals. For projects that cannot wait until the next funding cycle, SPU uses these funds to prepare documentation to seek Council approval for project design and construction for those projects not in the current CIP. New projects developed from these funds are reviewed and approved by SPU's Asset Management Committee (AMC).

Project Selection Process

The Department used the existing CIP management organizational structure to develop the 2005-2010 Adopted Drainage and Wastewater CIP program. The process included the following steps:

Project Identification, Project Prioritization, and Project Budget and Scheduling: In early 2004, a team of engineers and economists gathered information and reviewed projects identified in the 2004 Comprehensive Drainage Plan Update and selected the highest priority projects for further analysis. They analyzed the benefits and costs of each project and laid out a six-year CIP using the new projects together with ongoing existing projects. The prioritized list was presented to the Asset Management Committee (AMC) together with an initial analysis of the rate path needed to support the CIP. The AMC gave a preliminary approval of the list with some modifications. Project managers updated the schedules and cash flow projections for all existing Drainage and Wastewater CIP projects. Labor and non-labor costs were assembled using a new BudPrep tool. New Project Narrative Forms were filled out for all new projects, and existing project forms were updated. The CIP Committee and Capital Fund Manager worked with SPU's Finance Division to make adjustments based on available funding, and developed the 2005-2010 Proposed CIP. SPU's Drainage and Wastewater CIP Committee and Asset Management Committee then reviewed the Proposed CIP in May. Finally, the information was assembled and submitted to the Department of Finance in July.

Program Category Summaries

The Drainage and Wastewater CIP totals \$46 million in 2005 (including Technology projects funded by the Drainage and Wastewater Fund, displayed in a separate section in this CIP). It is composed of 10 program categories, summarized below. A detailed listing of all programs for the Drainage and Wastewater CIP follows this overview.

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

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

General Wastewater: This program funds significant improvements or major changes to the wastewater system and studies to comply with federal regulations or to assess the need for system improvements. For 2005, a Pump Station Improvements program will begin to design and construct projects identified in the Pump Station Rehab Study. This program was moved from Operations to Resource Management and from the Sewer Rehabilitation BCL to the General Wastewater BCL. This was done to better link design and management of pump station improvements to system capacity and CSO issues.

Habitat and Sediments: This program funds sediment remediation studies and analyses for cleanup of contaminated sediment sites in which the City is a participant.

Other Drainage: This program makes improvements to the City's drainage system through partnerships with other agencies. The program also includes funding for other capital costs, such as heavy equipment, and for projects that improve the efficiency of the overall drainage program. In 2005, the program provides funds for drainage designers for the Seattle Department of Transportation (SDOT) to design the drainage portion of street improvements.

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

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

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

Shared Cost Projects: This program includes capital improvement projects that receive funding from multiple SPU funds. In 2005, the program includes \$12 million for projects, including Alaskan Way Viaduct & Seawall, Seattle Monorail Project, Facility Improvements, the City's Joint Training Facility, the SPU Operations Control Center Upgrade, and Sound Transit Light Rail.

Technology: This program makes use of recent technological advances to increase the Department's efficiency and productivity. Drainage and Wastewater-supported technology projects are shown grouped with other technology projects following the Department's three CIP sections.

Anticipated Operating Expenses Associated with Capital Facilities Projects

For most projects in the Drainage and Wastewater CIP, there are no new 2005 operations and maintenance costs, or they have not been calculated (N/C). In these cases, the cost impacts of the projects are either insignificant or offset by cost savings realized by other projects.

City Council Changes to the CIP

The City Council adopted the Mayor's Proposed CIP with the following changes: the Council reduced 2006 funding for Heavy Equipment Purchases – Drainage by \$338,000 and reduced 2006 funding for Heavy Equipment Purchases – Wastewater by \$113,000, reflecting the Council's action to reduce the SPU-implemented 2006 enhanced street sweeping program to a smaller pilot program. The funding had been proposed for SPU to acquire street sweeping equipment. The Council added an Aquatic Habitat Matching Grant Project, with funding of \$300,000 annually in 2005 and 2006, and eliminated the proposed Habitat Restoration Grant and Technical Assistance project. The Council also reduced 2005 funding for the Best Management Practices Program Implementation Project ("BMP Program Implementation") by \$350,000, to allow time to better define the project's implementation plan.

SPU - Drainage & Wastewater Project Summary

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------------------|--------|-------|-------|-------|-------|-------|---------|-------|--------|
| Combined Sewer Over | flow | | | | | | ВС | CL Code | | C310B |
| Ballard Combined Sewer Overflow | C303101 | 0 | 50 | 0 | 0 | 0 | 270 | 220 | 552 | 1,092 |
| Capital Planning - CSO Plan Implementation | C3NW00 1-002 | 0 | 0 | 500 | 500 | 666 | 683 | 1,002 | 1,888 | 5,239 |
| CSO Facility Retrofit | C302102 | 1,272 | 691 | 550 | 500 | 513 | 525 | 538 | 0 | 4,589 |
| CSO Modeling and Assessment | C399101 | 1,626 | 340 | 120 | 120 | 123 | 126 | 129 | 132 | 2,716 |
| CSO Monitoring Installation | C3AA10 8 | 1,821 | 33 | 40 | 40 | 41 | 42 | 43 | 44 | 2,104 |
| CSO Plan Update | C3AA10 3 | 1,307 | 100 | 200 | 362 | 349 | 326 | 420 | 320 | 3,384 |
| CSO-Wastewater Monitoring | C3NW00 1-001 | 0 | 0 | 1,085 | 407 | 325 | 419 | 407 | 382 | 3,025 |
| Fremont-Wallingford CSO | C303102 | 0 | 50 | 0 | 800 | 513 | 525 | 0 | 0 | 1,888 |
| S Genesee Combined Sewer Overflow | C303103 | 8 | 200 | 369 | 324 | 423 | 434 | 1,093 | 1,104 | 3,955 |
| S Henderson CSO Storage | C304102 | 0 | 200 | 263 | 324 | 377 | 556 | 641 | 2,208 | 4,569 |
| SLU Combined Sewer Overflow Ph2 | C3AA10 6 | 3,996 | 1,789 | 260 | 46 | 0 | 0 | 0 | 0 | 6,091 |
| SLU Combined Sewer Overflow-KC | C3AA10 4 | 14,736 | 3,150 | 830 | 50 | 0 | 0 | 0 | 0 | 18,766 |
| Windermere CSO Storage | C302103 | 236 | 58 | 249 | 391 | 395 | 521 | 434 | 552 | 2,836 |
| Combined Sewer Overflow Total | | 25,002 | 6,661 | 4,466 | 3,864 | 3,725 | 4,427 | 4,927 | 7,182 | 60,254 |

^{*}Amounts in thousands of dollars

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----------------|--------|-------|-------|-------|-------|-------|---------|--------|--------|
| Flood Control and Loc | al Drainage | | | | | | В | CL Code | | C332B |
| 20th Ave. NE Local Drainage | C301317 | 130 | 125 | 5 | 5 | 5 | 0 | 0 | 0 | 270 |
| 2500 Fairview Drainage Improvements | C3NW03 2-006 | 0 | 0 | 105 | 320 | 0 | 0 | 0 | 0 | 425 |
| 30th Av NE/NE 107 St. Drainage Improvements | | 0 | 200 | 370 | 50 | 1 | 1 | 1 | 0 | 623 |
| 3rd Ave. NW & NW 107 St. Natural System | C300329 | 2,203 | 1,500 | 77 | 68 | 56 | 0 | 0 | 0 | 3,904 |
| 4th Av S/S Trenton Storm Drain | C3NW03 2-001 | 0 | 0 | 185 | 265 | 1,271 | 137 | 2 | 2 | 1,862 |
| 7 Av S & Duwamish River Drainage | C302318 | 134 | 300 | 37 | 249 | 0 | 0 | 0 | 0 | 720 |
| 8th Av S/S Cambridge St. Drainage | C3NW03 2-002 | 0 | 0 | 0 | 220 | 333 | 1,576 | 167 | 2 | 2,298 |
| Ballard/Fremont Drainage Improvements | C3NW03 2-007 | 0 | 0 | 60 | 90 | 328 | 32 | 0 | 0 | 510 |
| Capital Planning - Flood Control & Local Drainage | C343201 | 0 | 510 | 370 | 375 | 308 | 394 | 323 | 414 | 2,694 |
| Comprehensive Drainage Plan Implementation | C3NW03 2-008 | 0 | 0 | 0 | 0 | 2,463 | 4,349 | 10,573 | 12,950 | 30,335 |
| Delridge Way SW/SW Myrtle - Drainage | C3NW03 2-009 | 0 | 0 | 45 | 60 | 205 | 21 | 0 | 0 | 331 |
| Drainage Spot Improvements | C333201 | 230 | 400 | 500 | 500 | 513 | 525 | 538 | 552 | 3,758 |
| Eastlake Av/Galer- Drainage Imp | C3NW03 2-010 | 0 | 0 | 0 | 0 | 0 | 0 | 162 | 110 | 272 |
| Georgetown Drainage Basin Study | C302311 | 135 | 0 | 0 | 50 | 205 | 158 | 27 | 0 | 575 |
| Greenwood Peat Bog | C333207 | 75 | 7 | 65 | 20 | 21 | 21 | 108 | 22 | 339 |
| High Point Drainage System | C301303 | 227 | 875 | 1,300 | 1,100 | 513 | 53 | 54 | 0 | 4,122 |
| Jackson Park Detention Phase 2 | C399305 | 10,303 | 251 | 88 | 84 | 85 | 87 | 89 | 0 | 10,987 |
| Lake City/NE 92nd Storm Drain | C302312 | 26 | 0 | 0 | 0 | 201 | 0 | 0 | 0 | 227 |
| Linden Ave N&N 143rd Drainage | C301321 | 179 | 300 | 50 | 0 | 0 | 0 | 0 | 0 | 529 |
| Lower Densmore Drainage Improvement | C3NW03 2-004 | 0 | 0 | 225 | 225 | 0 | 0 | 0 | 0 | 450 |

^{*}Amounts in thousands of dollars

SPU - Drainage & Wastewater Project Summary

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----------------|----------|-------|-------|-------|--------|--------|---------|--------|--------|
| Flood Control and Loc | cal Drainage | ; | | | | | В | CL Code | | C332B |
| Meadowbrook Outfall Rehabilitation | C3NW03 2-003 | 0 | 0 | 200 | 378 | 1,333 | 53 | 0 | 0 | 1,964 |
| MLK Way/Norfolk St Storm Improvement | C333205 | 82 | 250 | 440 | 1,790 | 113 | 2 | 2 | 2 | 2,681 |
| N 105th St/Aurora Av N - Drainage Improvement | C3NW03 2-012 | 0 | 0 | 0 | 150 | 103 | 0 | 0 | 0 | 253 |
| N 125th & Aurora N Storm Drain | C302313 | 300 | 852 | 800 | 800 | 1,538 | 1,576 | 1,615 | 1,656 | 9,137 |
| N 85th St/Greenwood Ave - Drainage Improvement | C3NW03 2-013 | 0 | 0 | 0 | 150 | 103 | 0 | 0 | 0 | 253 |
| Natural Drainage System Improvements | C333206 | 0 | 0 | 250 | 326 | 217 | 1,773 | 1,092 | 1,130 | 4,788 |
| Northlake Way Drainage | C343202 | 0 | 100 | 200 | 200 | 0 | 0 | 0 | 0 | 500 |
| Northpark Ave N Drainage Improvement | C3NW03 2-011 | 0 | 0 | 0 | 0 | 51 | 735 | 377 | 28 | 1,191 |
| Outfall Inspection - Drainage | C302304 | 260 | 210 | 50 | 0 | 0 | 0 | 0 | 0 | 520 |
| Outfall Rehab Program- Drainage | C3NW03 2-014 | 0 | 0 | 150 | 200 | 154 | 158 | 162 | 166 | 990 |
| Pinehurst Natural Drainage System | C333202 | 278 | 860 | 1,698 | 1,697 | 91 | 12 | 0 | 0 | 4,636 |
| Piper's Creek - Detention | C399326 | 210 | 100 | 140 | 41 | 41 | 42 | 43 | 44 | 661 |
| So Lake Union Feasibility Study | C3NW03 2-015 | 0 | 175 | 5 | 0 | 0 | 0 | 0 | 0 | 180 |
| Venema Creek Natural Drainage System | C302317 | 109 | 5 | 250 | 250 | 2,300 | 1,500 | 0 | 0 | 4,414 |
| Flood Control and Loo Drainage Total | cal | 14,881 | 7,020 | 7,665 | 9,663 | 12,552 | 13,205 | 15,335 | 17,078 | 97,399 |

SPU - Drainage & Wastewater

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----------------|-------|-------|-------|-------|-------|-------|---------|-------|--------|
| General Wastewater | | | | | | | ВС | CL Code | | C320B |
| Comprehensive Wastewater Plan | C3NW00 2-001 | 0 | 676 | 530 | 0 | 0 | 0 | 0 | 0 | 1,206 |
| Design Commission Fees - WW | C301706 | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 45 |
| Design Standards & Guidelines - WW | C3NW00 2-009 | 0 | 0 | 51 | 316 | 0 | 0 | 0 | 0 | 367 |
| Facility Security Upgrades - WW | C3NW00 2-008 | 0 | 20 | 16 | 0 | 0 | 0 | 0 | 0 | 36 |
| Force Main/Pump Stations Plan | C302204 | 149 | 380 | 288 | 290 | 513 | 525 | 538 | 552 | 3,235 |
| Heavy Equipment Purchases - WW | C300499 | 2,170 | 743 | 987 | 195 | 440 | 684 | 345 | 784 | 6,348 |
| Intergovernmental Shares - WW | C3NW00 2-004 | 0 | 0 | 250 | 250 | 256 | 263 | 269 | 276 | 1,564 |
| Other Agency Opportunity - WW | C3NW00 2-006 | 0 | 0 | 349 | 400 | 410 | 420 | 431 | 442 | 2,452 |
| Outfall Inspection - Wastewater | C302202 | 201 | 140 | 3 | 0 | 0 | 0 | 0 | 0 | 344 |
| Outfall Rehab Program - Wastewater | C3NW00 2-002 | 0 | 0 | 137 | 290 | 297 | 158 | 162 | 166 | 1,210 |
| Pump Station Improvements | C3NW00 2-005 | 0 | 0 | 936 | 784 | 1,853 | 2,095 | 2,154 | 2,208 | 10,030 |
| S Lake Washington Sewer Maintenance Assessment | C303201 | 27 | 500 | 300 | 0 | 0 | 0 | 0 | 0 | 827 |
| Sanitary Sewer Overflow Capacity | C302205 | 207 | 400 | 350 | 550 | 1,025 | 1,051 | 1,077 | 1,104 | 5,764 |
| Sewage System Modeling | C3AA20 6 | 603 | 110 | 163 | 116 | 103 | 105 | 108 | 110 | 1,418 |
| Small Sewer Improvements | C303299 | 0 | 171 | 170 | 170 | 174 | 179 | 183 | 188 | 1,235 |
| South Henderson Street Raincatchers | C3NW00 2-007 | 0 | 0 | 789 | 1,000 | 0 | 0 | 0 | 0 | 1,789 |
| Strategic Asset Management Plan - WW | C303204 | 11 | 50 | 100 | 100 | 0 | 0 | 0 | 0 | 261 |
| Water Reuse - Wastewater | C301203 | 114 | 20 | 20 | 0 | 0 | 0 | 0 | 0 | 154 |
| General Wastewater Total | | 3,491 | 3,215 | 5,444 | 4,466 | 5,076 | 5,485 | 5,272 | 5,836 | 38,285 |

^{*}Amounts in thousands of dollars

SPU - Drainage & Wastewater

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----------------|-------|-------|-------|-------|-------|-------|---------|-------|--------|
| Habitat and Sediment | s | | | | | | ВС | CL Code | | C350B |
| Sediment Remediation - WW | - C300412 | 923 | 1,340 | 1,392 | 1,475 | 1,085 | 320 | 242 | 201 | 6,978 |
| Habitat and Sediments | s | 923 | 1,340 | 1,392 | 1,475 | 1,085 | 320 | 242 | 201 | 6,978 |
| Other Drainage | | | | | | | BC | CL Code | | C335B |
| Design Commission Fees – Drainage | C301704 | 32 | 5 | 15 | 10 | 8 | 11 | 11 | 11 | 103 |
| Design Standards & Guidelines - DRN | C3NW03 5-009 | 0 | 0 | 263 | 90 | 0 | 0 | 0 | 0 | 353 |
| Facility Security Upgrades - Drainage | C3NW03 5-004 | 0 | 20 | 16 | 0 | 0 | 0 | 0 | 0 | 36 |
| GIS System Enhancements | C343502 | 0 | 114 | 45 | 45 | 0 | 0 | 0 | 0 | 204 |
| Heavy Equipment Purchases - Drainage | C300399 | 1,659 | 990 | 270 | 320 | 825 | 1,073 | 485 | 706 | 6,328 |
| Intergovernmental Shares - DRN | C3NW03 5-003 | 0 | 0 | 2,000 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 12,513 |
| Mobility Improvement | C333514 | 0 | 300 | 300 | 300 | 308 | 315 | 323 | 331 | 2,177 |
| Other Agency Opportunity - DRN | C3NW03 5-006 | 0 | 0 | 1,308 | 1,271 | 1,025 | 1,414 | 1,077 | 1,104 | 7,199 |
| Sound Transit Integrated Drainage Plan | C3NW03 5-008 | 0 | 0 | 300 | 300 | 1,538 | 162 | 0 | 0 | 2,300 |
| Strategic Asset Management Plan - Drainage | C333507 | 4 | 48 | 40 | 40 | 0 | 0 | 0 | 0 | 132 |
| Other Drainage Total | | 1,695 | 1,477 | 4,557 | 4,376 | 5,754 | 5,076 | 4,050 | 4,360 | 31,345 |

SPU - Drainage & Wastewater

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----------------|-----|------|------|------|-------|-------|---------|-------|-------|
| Protection of Beneficia | l Uses | | | | | | ВС | CL Code | | C333B |
| 10718 35th NE Sediment Pond | C302305 | 336 | 250 | 250 | 770 | 615 | 5 | 5 | 0 | 2,231 |
| Aquatic Habitat Matching Grant Project | C353301 | 0 | 0 | 300 | 300 | 0 | 0 | 0 | 0 | 600 |
| Beer Sheva Habitat Improvement | C301319 | 125 | 20 | 65 | 50 | 36 | 68 | 13 | 13 | 390 |
| Bitter Lake Dredging | C3NW03 3-002 | 0 | 0 | 0 | 0 | 410 | 0 | 0 | 0 | 410 |
| Bitter Lake/N 137th Stormwater | C301322 | 10 | 0 | 200 | 400 | 1,743 | 210 | 54 | 55 | 2,672 |
| BMP Program Implementation | C300316 | 206 | 0 | 75 | 457 | 1,025 | 1,366 | 1,238 | 1,214 | 5,581 |
| Capital Planning - Protection of Beneficial Uses | C343301 | 0 | 171 | 116 | 121 | 154 | 158 | 162 | 166 | 1,048 |
| Channel Widening Project | C3NW03 3-013 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 300 |
| Creek Flow Control Implementation | C3NW03 3-014 | 0 | 0 | 0 | 0 | 0 | 1,000 | 4,000 | 3,000 | 8,000 |
| Creek Sediment Control Program | C3NW03 3-008 | 0 | 0 | 23 | 27 | 103 | 105 | 135 | 138 | 531 |
| Creeks Habitat Complexity Program | C3NW03 3-009 | 0 | 0 | 75 | 75 | 77 | 79 | 81 | 83 | 470 |
| Creeks Hydrology Program | C3NW03 3-005 | 0 | 0 | 0 | 0 | 63 | 38 | 194 | 237 | 532 |
| Creeks Vegetation Program | C3NW03 3-007 | 0 | 0 | 150 | 150 | 154 | 158 | 162 | 166 | 940 |
| Creekside Erosion Control | C300311 | 99 | 48 | 1 | 0 | 0 | 0 | 0 | 0 | 148 |
| Densmore Basin Water Quality | C333302 | 182 | 40 | 50 | 0 | 0 | 0 | 0 | 0 | 272 |
| Fauntleroy Creek Sediment Control | C333301 | 57 | 30 | 3 | 0 | 0 | 0 | 0 | 0 | 90 |
| Fecal TMDL Feasibility | C343302 | 0 | 100 | 113 | 99 | 256 | 53 | 0 | 0 | 621 |
| Fish Passage Program | C3NW03 3-006 | 0 | 0 | 27 | 28 | 128 | 425 | 140 | 121 | 869 |
| Greenwood Water Quality BMP | C3NW03 3-003 | 0 | 0 | 40 | 70 | 349 | 0 | 0 | 0 | 459 |
| Longfellow Creek- Yancy St Ph3 | C302332 | 148 | 175 | 64 | 12 | 10 | 0 | 0 | 0 | 409 |

^{*}Amounts in thousands of dollars

SPU - Drainage & Wastewater Project Summary

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----------------|-------|-------|-------|-------|-------|-------|---------|-------|--------|
| Protection of Beneficial | l Uses | | | | | | ВС | CL Code | | C333B |
| Monitoring System Upgrades | C343303 | 0 | 230 | 459 | 103 | 0 | 0 | 0 | 0 | 792 |
| Norfolk Basin Water Quality | C302302 | 37 | 45 | 25 | 0 | 0 | 0 | 0 | 0 | 107 |
| Salmon Bay Ph 2 Acquisition & Restoration | C333307 | 336 | 159 | 20 | 0 | 0 | 0 | 0 | 0 | 515 |
| Sediment Remediation - Drainage | C3NW03 3-011 | 0 | 0 | 1,196 | 1,232 | 611 | 287 | 221 | 162 | 3,709 |
| South Park Water Quality Study | C343304 | 0 | 150 | 25 | 0 | 0 | 0 | 0 | 0 | 175 |
| Spokane St Bridge Salmon Habitat | C333305 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| Stormwater Mitigation Partnership Program | C3NW03 3-016 | 0 | 0 | 50 | 50 | 50 | 50 | 50 | 50 | 300 |
| Taylor Creek Culverts Phase 2 | C399315 | 503 | 200 | 80 | 320 | 15 | 5 | 5 | 0 | 1,128 |
| Thornton - Park 6 Instream Improvements | C301333 | 129 | 50 | 50 | 3 | 0 | 0 | 0 | 0 | 232 |
| Thornton Creek - Ravenna Ave NE Habitat | C333306 | 0 | 105 | 15 | 13 | 0 | 0 | 0 | 0 | 133 |
| Thornton Creek Water Quality Channel Project | C3NW03 3-004 | 0 | 7,248 | 0 | 0 | 0 | 0 | 0 | 0 | 7,248 |
| Water Reuse - Stormwater | C3NW03 3-012 | 161 | 20 | 50 | 50 | 0 | 0 | 0 | 0 | 281 |
| Watershed Base Creek Flow Control | C3NW03 3-017 | 0 | 0 | 50 | 188 | 425 | 200 | 200 | 200 | 1,263 |
| Protection of Beneficial Uses Total | I | 2,329 | 9,041 | 3,577 | 4,518 | 6,224 | 4,307 | 6,760 | 5,705 | 42,461 |

^{*}Amounts in thousands of dollars

SPU - Drainage & Wastewater Project Summary

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----------------|-------|-------|-------|-------|-------|-------|---------|-------|--------|
| Public Asset Protection | n | | | | | | ВС | CL Code | | C334B |
| 1500 - 2600 Aurora N Landslide | C3NW03 4-002 | 0 | 0 | 0 | 31 | 62 | 221 | 1,077 | 6 | 1,397 |
| 47 SW & SW Maplewood Pl. Landslide | C3NW03 4-004 | 0 | 0 | 0 | 50 | 103 | 105 | 576 | 0 | 834 |
| Atlas Pl. SW & SW Juneau Landslide | C300344 | 548 | 150 | 25 | 0 | 0 | 0 | 0 | 0 | 723 |
| Burke Gilman/NE 144th Landslide | C301355 | 177 | 250 | 577 | 662 | 715 | 570 | 208 | 0 | 3,159 |
| Capital Planning - Public Asset Protection | C343401 | 0 | 175 | 175 | 175 | 179 | 184 | 377 | 552 | 1,817 |
| Golden Gardens/View Ave. Landslide | C343403 | 0 | 144 | 50 | 100 | 513 | 677 | 0 | 0 | 1,484 |
| Marine View - 47th SW Landslide | C302352 | 216 | 878 | 21 | 0 | 0 | 0 | 0 | 0 | 1,115 |
| Perkins Lane W/W Ruffner Drainage | C301354 | 240 | 350 | 25 | 0 | 0 | 0 | 0 | 0 | 615 |
| Rainier Av S/S Carver - Landslide | C3NW03 4-001 | 0 | 0 | 74 | 86 | 57 | 672 | 11 | 0 | 900 |
| Small Landslide Projects | C343402 | 0 | 585 | 385 | 409 | 718 | 630 | 646 | 1,656 | 5,029 |
| SW Jacobsen & Alaska SW Landslide | C301353 | 186 | 439 | 24 | 0 | 0 | 0 | 0 | 0 | 649 |
| SW Prescott/Admiral Landslide | C302353 | 160 | 361 | 765 | 485 | 623 | 541 | 0 | 0 | 2,935 |
| WPA Drains Study & Repair | C300338 | 377 | 250 | 250 | 250 | 256 | 263 | 485 | 552 | 2,683 |
| Public Asset Protection Total | n | 1,904 | 3,582 | 2,371 | 2,248 | 3,226 | 3,863 | 3,380 | 2,766 | 23,340 |

^{*}Amounts in thousands of dollars

SPU - Drainage & Wastewater

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------------|--------|-------|-------|-------|-------|--------|---------|--------|--------|
| Sewer Rehabilitation | | | | | | | ВС | CL Code | | C340B |
| Minor Facility Upgrades - Rehab | C3AA40 2 | 211 | 0 | 80 | 76 | 81 | 110 | 98 | 100 | 756 |
| No Dig Pipe & Maintenance Rehabilitation | C3AA40 3 | 9,497 | 1,500 | 785 | 1,574 | 1,531 | 2,288 | 2,280 | 2,008 | 21,463 |
| Point Sewer Pipe Rehabilitation - Crews | C303402 | 2,094 | 2,678 | 3,825 | 3,696 | 4,271 | 4,596 | 4,947 | 5,325 | 31,432 |
| Point Sewer Pipe Rehabilitation -Contrac | C303401 | 33 | 1,406 | 810 | 1,514 | 1,421 | 3,071 | 1,616 | 1,651 | 11,522 |
| Sewer Emergency Repairs | C3AA40 4 | 2,173 | 400 | 294 | 408 | 406 | 548 | 490 | 589 | 5,308 |
| Sewer Full Line Replacements | C300488 | 0 | 1,887 | 900 | 228 | 309 | 252 | 254 | 251 | 4,081 |
| Wastewater Rehab Evaluation | C3AA40 1 | 1,122 | 88 | 88 | 94 | 96 | 102 | 108 | 114 | 1,812 |
| Sewer Rehabilitation Total | | 15,130 | 7,959 | 6,782 | 7,590 | 8,115 | 10,967 | 9,793 | 10,038 | 76,374 |

^{*}Amounts in thousands of dollars

SPU - Drainage & Wastewater Project Summary

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------------------------|--------|--------|--------|--------|--------|--------|---------|--------|---------|
| Shared Cost Projects | | | | | | | В | CL Code | | C410B |
| Alaskan Way Viaduct & Seawall | C404201 -DWF | 51 | 218 | 335 | 335 | 88 | 0 | 0 | 0 | 1,027 |
| Facility Improvements | C404602 -DWF | 635 | 380 | 1,855 | 0 | 0 | 0 | 0 | 0 | 2,870 |
| Fleet Management Study | C4NW10 6-006- DWF | 0 | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 54 |
| Joint Training Facility | C4NW10 6-002- DWF | 0 | 0 | 1,360 | 0 | 0 | 0 | 0 | 0 | 1,360 |
| Meter Replacement - Large (DWF) | C404102 -DWF | 2,371 | 692 | 672 | 530 | 543 | 557 | 571 | 0 | 5,936 |
| Operations Control Center Upgrade | C404501 -DWF | 251 | 498 | 970 | 280 | 0 | 0 | 0 | 0 | 1,999 |
| Seattle Monorail Project | t C404301 -DWF | 89 | 230 | 400 | 400 | 303 | 105 | 108 | 110 | 1,745 |
| Shared Opportunity Projects | C4NW10 6-005- DWF | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Sound Transit Light Rail - Drainage | C404401 -DWF | 4 | 1,140 | 733 | 650 | 308 | 84 | 0 | 0 | 2,919 |
| Spoils Yard & Decant Facility (DWF) | C4NW10 6-007- DWF | 0 | 40 | 10 | 0 | 0 | 0 | 0 | 0 | 50 |
| Shared Cost Projects Total | | 3,401 | 3,198 | 6,489 | 2,295 | 1,345 | 851 | 787 | 220 | 18,586 |
| Department Tota | | 68,756 | 43,493 | 42,743 | 40,495 | 47,102 | 48,501 | 50,546 | 53,386 | 395,022 |

Fund Summary

| Fund Name | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| SPU Drainage and Wastewater Fund | 88,076 | 49,739 | 43,063 | 40,713 | 47,276 | 48,870 | 50,672 | 53,486 | 421,895 |
| Department Total | 88,076 | 49,739 | 43,063 | 40,713 | 47,276 | 48,870 | 50,672 | 53,486 | 421,895 |

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

10718 35th NE Sediment Pond

BCL Name: Protection of Beneficial Uses

BCL Code C333B

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

Location: 10718 35th Ave. NE **Neighborhood District:** North

Neighborhood Plan: North District/Lake City Urban Village: Not in an Urban Village

This project constructs a new, efficient off-line sediment collection facility and other site improvements upstream of the Meadowbrook Pond detention facility. Meadowbrook currently has no formal maintenance access; there are no roadways or staging areas for required dredging activities, and access to trashracks is poor. The new facilities provide improved maintenance access and water quality and habitat. SPU's Asset Management Committee approved \$300,000 for the Preliminary Engineering effort in the second quarter of 2003 and the Design Phase is scheduled to start in the fourth quarter of 2004. The confidence level of the cost estimate is medium.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 336 | 250 | 250 | 770 | 615 | 5 | 5 | 0 | 2,231 |
| Project Total: | 336 | 250 | 250 | 770 | 615 | 5 | 5 | 0 | 2,231 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 336 | 250 | 250 | 770 | 615 | 5 | 5 | 0 | 2,231 |
| Appropriations Total* | 336 | 250 | 250 | 770 | 615 | 5 | 5 | 0 | 2,231 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

1500 - 2600 Aurora N Landslide

BCL Name: Public Asset Protection BCL Code C334B

Type:New FacilityStart Date:3rd Quarter 2006Project ID:C3NW034-002End Date:1st Quarter 2010

Location: Aurora Ave. N

Neighborhood District: Magnolia/Queen Anne
Neighborhood Plan: Not in a Neighborhood Plan

Urban Village: Not in an Urban Village

Three combined sewer lines traverse a steep slope down to Aurora Ave. N at the northeast corner of Queen Anne Hill. Preliminary analysis determined these three lines were at risk of damage due to landslides. This project installs the combined sewer lines deeper in the hillside to protect them from landslide damage, possibly using directional drilling techniques. The project also makes improvements in how stormwater is collected from the nearby streets, to reduce the risk of landslides. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|-------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 31 | 62 | 221 | 1,077 | 6 | 1,397 |
| Project Total: | 0 | 0 | 0 | 31 | 62 | 221 | 1,077 | 6 | 1,397 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 31 | 62 | 221 | 1,077 | 6 | 1,397 |
| Appropriations Total* | 0 | 0 | 0 | 31 | 62 | 221 | 1,077 | 6 | 1,397 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

20th Ave. NE Local Drainage

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Location: 20th Ave. NE **Neighborhood District:** North

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 130 | 125 | 5 | 5 | 5 | 0 | 0 | 0 | 270 |
| Project Total: | 130 | 125 | 5 | 5 | 5 | 0 | 0 | 0 | 270 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 130 | 125 | 5 | 5 | 5 | 0 | 0 | 0 | 270 |
| Appropriations Total* | 130 | 125 | 5 | 5 | 5 | 0 | 0 | 0 | 270 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 3 | 3 | 3 | 9 |

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

2500 Fairview Drainage Improvements

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW032-006End Date:4th Quarter 2006

Location:2500 Fairview Ave. NNeighborhood District: Lake UnionNeighborhood Plan:In more than one PlanUrban Village: South Lake Union

This project addresses a lack of adequate collection and conveyance at 2500 Fairview Ave., an approximately one-acre physical depression. Ponding develops when the existing single catch-basin grate is obstructed or a storm taxes the capacity of the six-inch outfall. The flooding extends across the west roadway shoulder, the southbound shoulder and partially into the northbound lane of Fairview Ave. for approximately 300 feet, obstructing traffic and parking. The project removes the existing paved shoulder, redefining it as a Natural Drainage System (NDS) to collect, detain and convey runoff from the one-acre basin, and replaces the existing brick catch-basin with a new, larger structure. The project also inspects and relines the existing six outfalls to Lake Union. The project includes public education and outreach to surrounding neighbors for community maintenance of the NDS vegetation. Funding to maintain the improvements made by this project will be included in SPU's future budgets. The confidence level for the cost estimate is medium.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 105 | 320 | 0 | 0 | 0 | 0 | 425 |
| Project Total: | 0 | 0 | 105 | 320 | 0 | 0 | 0 | 0 | 425 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 105 | 320 | 0 | 0 | 0 | 0 | 425 |
| Appropriations Total* | 0 | 0 | 105 | 320 | 0 | 0 | 0 | 0 | 425 |
| O & M Costs (Savings) | | | 0 | 0 | 1 | 1 | 1 | 1 | 4 |

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

30th Av NE/NE 107 St. Drainage Improvements

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Location:10703 30th Ave. NENeighborhood District: NorthNeighborhood Plan:NorthgateUrban Village: Lake City

This project, titled Thornton Creek Basin Plan in the 2004 Adopted CIP, investigates alternatives that upgrade the flow capacity to achieve a 25-year level of service and reduce maintenance costs. The south fork of Thornton Creek (Maple Leaf) and Kramer ditch intersect on the west side of 30th Ave. NE at NE 107th St. and flow beneath 30th Ave. NE through independent channels to converge on the east side of the bridge. A delta forms where the two streams combine as the result of sediment deposition from Thornton Creek. This results in flooding of houses upstream of the culverts. Areas of investigation include ditch widening, installation of larger culverts at selected driveways, adding berms to protect low lying properties and the possible addition of an overflow line. Funding shown for 2007 through 2009 is for establishment of landscaping. SPU's Asset Management Committee has not approved the project. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 200 | 370 | 50 | 1 | 1 | 1 | 0 | 623 |
| Project Total: | 0 | 200 | 370 | 50 | 1 | 1 | 1 | 0 | 623 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 200 | 370 | 50 | 1 | 1 | 1 | 0 | 623 |
| Appropriations Total* | 0 | 200 | 370 | 50 | 1 | 1 | 1 | 0 | 623 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

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

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Location: NW 107th St. Neighborhood District: Northwest

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake

Urban Village: Not in an Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|-------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 2,203 | 1,500 | 77 | 68 | 56 | 0 | 0 | 0 | 3,904 |
| Project Total: | 2,203 | 1,500 | 77 | 68 | 56 | 0 | 0 | 0 | 3,904 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 2,203 | 1,500 | 77 | 68 | 56 | 0 | 0 | 0 | 3,904 |
| Appropriations Total* | 2,203 | 1,500 | 77 | 68 | 56 | 0 | 0 | 0 | 3,904 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 4 | 4 | 0 | 8 |

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

47 SW & SW Maplewood Pl. Landslide

BCL Name: Public Asset Protection BCL Code C334B

Type:New FacilityStart Date:3rd Quarter 2006Project ID:C3NW034-004End Date:4th Quarter 2009

Location:47th Ave. SWNeighborhood District:SouthwestNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project, which was identified during the Comprehensive Drainage Planning process, evaluates an existing storm drain system that traverses a steep slope between 47th Ave. SW and SW Maplewood Pl., and street runoff that is currently routed through a private drainage system. The project constructs measures to stabilize the slope where the storm drain is located, while rerouting street runoff from a private drainage system and outfall to an existing SPU storm drain system. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 50 | 103 | 105 | 576 | 0 | 834 |
| Project Total: | 0 | 0 | 0 | 50 | 103 | 105 | 576 | 0 | 834 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 50 | 103 | 105 | 576 | 0 | 834 |
| Appropriations Total* | 0 | 0 | 0 | 50 | 103 | 105 | 576 | 0 | 834 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 6 | 6 |

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

4th Av S/S Trenton Storm Drain

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW032-001End Date:4th Quarter 2011

Location: S Trenton **Neighborhood District:** Greater Duwamish

Neighborhood Plan: South Park Urban Village: South Park

This project installs approximately 1,760 linear feet of 12-inch storm drain along South Trenton St., 3rd Ave. S and 4th Ave. S, and approximately 2,380 linear feet of 12-inch storm drain along S Director St. and 7th Ave. S, to resolve a number of documented flooding problems in these areas. The project reduces flows to the combined sewer system in the area by rerouting the drainage from the combined and sanitary system to an existing storm drain on S Henderson Street. This project is in a preliminary phase of development and cost estimates will be revised over time. SPU's Asset Management Committee has not approved the project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 185 | 265 | 1,271 | 137 | 2 | 2 | 1,862 |
| Project Total: | 0 | 0 | 185 | 265 | 1,271 | 137 | 2 | 2 | 1,862 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 185 | 265 | 1,271 | 137 | 2 | 2 | 1,862 |
| Appropriations Total* | 0 | 0 | 185 | 265 | 1,271 | 137 | 2 | 2 | 1,862 |
| O & M Costs (Savings) | | | 0 | 5 | 5 | 5 | 10 | 10 | 35 |

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

7 Av S & Duwamish River Drainage

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type:New FacilityStart Date:3rd Quarter 2002Project ID:C302318End Date:4th Quarter 2006

Location: 7th Ave. S Between SR99 & Duwamish River Neighborhood District: Greater Duwamish

Neighborhood Plan: South Park Urban Village: South Park

This project constructs a 12-inch to 24-inch collection system, including inlets and catch-basins to collect stormwater runoff that floods roadways throughout the South Park lower basin. The project solves flooding problems on public and private property, encourages the economic viability of businesses in the area, and allows street improvements. Most of the pipes are installed on east-west streets and connected to the 72-inch trunk running north through the basin. The project evaluates the adequacy of the 72-inch trunk for conveying the collected flow to the Duwamish River. Alternatives for providing adequate downstream conveyance capacity are addressed in the preliminary engineering phase of the project. A funding source for the roadway improvement must be secured before the project can be constructed.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 134 | 300 | 37 | 249 | 0 | 0 | 0 | 0 | 720 |
| Project Total: | 134 | 300 | 37 | 249 | 0 | 0 | 0 | 0 | 720 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 134 | 300 | 37 | 249 | 0 | 0 | 0 | 0 | 720 |
| Appropriations Total* | 134 | 300 | 37 | 249 | 0 | 0 | 0 | 0 | 720 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

8th Av S/S Cambridge St. Drainage

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type:New FacilityStart Date:1st Quarter 2006Project ID:C3NW032-002End Date:4th Quarter 2012

Location: 8th Ave. S **Neighborhood District:** Greater Duwamish

Neighborhood Plan: South Park Urban Village: South Park

This project installs a 12-inch storm drain along 8th Ave. S to solve several documented flooding problems. The pipe continues east to the S Cambridge St. right-of-way and connects to the existing drainage channel on S Cambridge St., east of 10th Ave. S. The system flows to the King County system and eventually drains to the Duwamish River. This project is in a preliminary phase of development and cost estimates will be revised over time. SPU's Asset Management Committee has not approved the project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|-------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 220 | 333 | 1,576 | 167 | 2 | 2,298 |
| Project Total: | 0 | 0 | 0 | 220 | 333 | 1,576 | 167 | 2 | 2,298 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 220 | 333 | 1,576 | 167 | 2 | 2,298 |
| Appropriations Total* | 0 | 0 | 0 | 220 | 333 | 1,576 | 167 | 2 | 2,298 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Alaskan Way Viaduct & Seawall

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:4th Quarter 2001Project ID:C404201-DWFEnd Date:4th Quarter 2007

Location: Alaskan Way Viaduct Neighborhood District: Downtown

Neighborhood Plan: Commercial Core Urban Village: In more than one Urban Village

This project funds planning, preliminary engineering, and design costs associated with drainage and wastewater utility impacts arising from replacing the Alaskan Way Viaduct and Seawall with a new transportation facility. The Alaskan Way Viaduct is part of State Route 99, which carries 25% of the north-south traffic through downtown Seattle and is a major truck route serving the City's industrial areas. The seawall supports the soils under Alaskan Way and the Viaduct. Both facilities were damaged in the February 28, 2001 Nisqually Earthquake. The Washington State Department of Transportation (WSDOT) and the City of Seattle are co-leads for the project. WDSOT, in conjunction with the Seattle Department of Transportation (SDOT), is conducting a plan and study for demolition and replacement of the existing facility. At this early stage, a number of options are being evaluated. This project provides general estimates of the costs of those improvements, which are to be refined as the project scope is further developed. See also projects in the SDOT (project TC366050) and Seattle City Light (project 8307) CIPs. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not yet been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 51 | 218 | 335 | 335 | 88 | 0 | 0 | 0 | 1,027 |
| Project Total: | 51 | 218 | 335 | 335 | 88 | 0 | 0 | 0 | 1,027 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 51 | 218 | 335 | 335 | 88 | 0 | 0 | 0 | 1,027 |
| Appropriations Total* | 51 | 218 | 335 | 335 | 88 | 0 | 0 | 0 | 1,027 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Aquatic Habitat Matching Grant Project

BCL Name: Protection of Beneficial Uses BCL Code C333B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C353301End Date:4th Quarter 2006

Location: Various Neighborhood District: In more than one District

Neighborhood Plan: In more than one Plan Urban Village: Not in an Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 300 | 300 | 0 | 0 | 0 | 0 | 600 |
| Project Total: | 0 | 0 | 300 | 300 | 0 | 0 | 0 | 0 | 600 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 300 | 300 | 0 | 0 | 0 | 0 | 600 |
| Appropriations Total* | 0 | 0 | 300 | 300 | 0 | 0 | 0 | 0 | 600 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Atlas Pl. SW & SW Juneau Landslide

BCL Name: Public Asset Protection BCL Code C334B

Type:New FacilityStart Date:3rd Quarter 2001Project ID:C300344End Date:1st Quarter 2005

Location:Atlas Pl. SWNeighborhood District:SouthwestNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project improves the surface water collection system in a landslide-prone area (Atlas Place SW and SW Juneau) by replacing five non-standard drainage structures with standard catch-basins. The project installs six additional catch-basins, five inlets and about 135 feet of asphalt-berm at various locations along the road edge to facilitate drainage. It also rehabilitates a formerly abandoned combined sewer line to reroute stormwater out of an existing eight-inch combined sewer located along a steep hillside. The confidence level of the cost estimate is high. This project has already been approved by SPU's Asset Management Committee for construction.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 548 | 150 | 25 | 0 | 0 | 0 | 0 | 0 | 723 |
| Project Total: | 548 | 150 | 25 | 0 | 0 | 0 | 0 | 0 | 723 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 548 | 150 | 25 | 0 | 0 | 0 | 0 | 0 | 723 |
| Appropriations Total* | 548 | 150 | 25 | 0 | 0 | 0 | 0 | 0 | 723 |
| O & M Costs (Savings) | | | 0 | 2 | 2 | 2 | 2 | 2 | 10 |

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

Ballard Combined Sewer Overflow

BCL Name: Combined Sewer Overflow BCL Code C310B

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

Location: Various Neighborhood District: Ballard

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

This project constructs Combined Sewer Overflow (CSO) storage facilities in the Ballard area, at Basins 150/151 and 152, which discharge to Salmon Bay. Major work includes flow monitoring, system modeling, facility planning, preliminary engineering, design, permits, land acquisition (if necessary), and construction. The project was proposed in the 1988 CSO Control Plan as a joint project with King County. The project is on hold until 2008, and the project budget and schedule have been revised to account for project development and potential coordination with King County. Other work performed under SPU's CSO Facility Retrofit project (C302102) may reduce the size of the necessary facilities in this basin. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not yet been approved by SPU's Asset Management Committee. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 50 | 0 | 0 | 0 | 270 | 220 | 552 | 1,092 |
| Project Total: | 0 | 50 | 0 | 0 | 0 | 270 | 220 | 552 | 1,092 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 50 | 0 | 0 | 0 | 270 | 220 | 552 | 1,092 |
| Appropriations Total* | 0 | 50 | 0 | 0 | 0 | 270 | 220 | 552 | 1,092 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Ballard/Fremont Drainage Improvements

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW032-007End Date:2nd Quarter 2008

Location: Various Neighborhood District: In more than one District

Neighborhood Plan: Crown Hill/Ballard Urban Village: Crown Hill

This project constructs drainage improvements to reduce or eliminate flooding in the Ballard and Fremont areas in response to complaints from the public. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 60 | 90 | 328 | 32 | 0 | 0 | 510 |
| Project Total: | 0 | 0 | 60 | 90 | 328 | 32 | 0 | 0 | 510 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 60 | 90 | 328 | 32 | 0 | 0 | 510 |
| Appropriations Total* | 0 | 0 | 60 | 90 | 328 | 32 | 0 | 0 | 510 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Beer Sheva Habitat Improvement

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:New FacilityStart Date: 4th Quarter 2001Project ID:C301319End Date: 4th Quarter 2011

Location:Seward Park Ave. SNeighborhood District:SoutheastNeighborhood Plan:Rainier BeachUrban Village:Not in an Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 125 | 20 | 65 | 50 | 36 | 68 | 13 | 13 | 390 |
| Project Total: | 125 | 20 | 65 | 50 | 36 | 68 | 13 | 13 | 390 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 125 | 20 | 65 | 50 | 36 | 68 | 13 | 13 | 390 |
| Appropriations Total* | 125 | 20 | 65 | 50 | 36 | 68 | 13 | 13 | 390 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Bitter Lake Dredging

BCL Name: Protection of Beneficial Uses

BCL Code C333B

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

Location: N 137th St.

Neighborhood District: Northwest

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake

Urban Village: Not in an Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 0 | 410 | 0 | 0 | 0 | 410 |
| Project Total: | 0 | 0 | 0 | 0 | 410 | 0 | 0 | 0 | 410 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 0 | 410 | 0 | 0 | 0 | 410 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 410 | 0 | 0 | 0 | 410 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Bitter Lake/N 137th Stormwater

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:New FacilityStart Date:2nd Quarter 2001Project ID:C301322End Date:3rd Quarter 2010

Location:Bitter Lake Drainage BasinNeighborhood District:NorthwestNeighborhood Plan:Broadview-Bitter Lake-Haller LakeUrban Village:Bitter Lake Village

This project funds the design and construction of a stormwater treatment project to improve the quality of stormwater discharging to Bitter Lake and to reduce the frequency of required dredging offshore of the Greenwood Ave. N storm drain outfall in the lake. A preliminary engineering report, completed by a Seattle University civil engineering senior design team in 2000, evaluated options for treating runoff from the Greenwood Ave. N storm drain. Treatment options included wet vaults and media filters with swirl concentrators for pretreatment. Additional work includes evaluation of natural drainage system designs, updating the preliminary engineering analysis to determine the most cost-effective option, and constructing the selected project(s). This project was temporarily postponed in the 2004-2009 Adopted CIP, but is included in this document as the Comprehensive Drainage Plan has been completed. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 10 | 0 | 200 | 400 | 1,743 | 210 | 54 | 55 | 2,672 |
| Project Total: | 10 | 0 | 200 | 400 | 1,743 | 210 | 54 | 55 | 2,672 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 10 | 0 | 200 | 400 | 1,743 | 210 | 54 | 55 | 2,672 |
| Appropriations Total* | 10 | 0 | 200 | 400 | 1,743 | 210 | 54 | 55 | 2,672 |
| O & M Costs (Savings) | | | 0 | 0 | 2 | 2 | 2 | 2 | 8 |

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

BMP Program Implementation

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:New FacilityStart Date:2nd Quarter 2000Project ID:C300316End Date:4th Quarter 2010

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This project identifies, develops and implements high priority water quality improvement projects incorporating Best Management Practices and identified by ongoing water quality basin investigations in the Norfolk, South Park, and Densmore drainage basins. These projects are designed to improve the quality of stormwater runoff discharged to nearby receiving water bodies (e.g. streams or lakes) from City-owned storm drains. This project was on hold in 2004 pending completion of the Comprehensive Drainage Plan and several water quality plans. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments. In the 2005 budget process, the City Council reduced 2005 funding from \$425,000 to \$75,000, to allow time for the project's implementation plan to be better defined.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|-------|-------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 206 | 0 | 75 | 457 | 1,025 | 1,366 | 1,238 | 1,214 | 5,581 |
| Project Total: | 206 | 0 | 75 | 457 | 1,025 | 1,366 | 1,238 | 1,214 | 5,581 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 206 | 0 | 75 | 457 | 1,025 | 1,366 | 1,238 | 1,214 | 5,581 |
| Appropriations Total* | 206 | 0 | 75 | 457 | 1,025 | 1,366 | 1,238 | 1,214 | 5,581 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Burke Gilman/NE 144th Landslide

BCL Name: Public Asset Protection BCL Code C334B

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

Location: NE 145th St. **Neighborhood District:** North

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

This project investigates and develops a long-range plan to address flooding and slope instability problems in the area of Burke Gilman/NE 144th in northeast Seattle. The project includes researching historical information, drilling soil samples, and identifying and implementing solutions to problem areas. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 177 | 250 | 577 | 662 | 715 | 570 | 208 | 0 | 3,159 |
| Project Total: | 177 | 250 | 577 | 662 | 715 | 570 | 208 | 0 | 3,159 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 177 | 250 | 577 | 662 | 715 | 570 | 208 | 0 | 3,159 |
| Appropriations Total* | 177 | 250 | 577 | 662 | 715 | 570 | 208 | 0 | 3,159 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Capital Planning - CSO Plan Implementation

BCL Name: Combined Sewer Overflow BCL Code C310B

Type: New Facility Start Date: 1st Ouarter 2005

Project ID: C3NW001-002 End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This project supports implementation of the 2001 CSO Reduction Plan Update. It conducts project studies and engineering to provide for compliance with the City's National Pollutant Discharge Elimination System (NPDES) permit, supports Asset Management Committee (AMC) presentations for projects, and studies and develops small capital projects necessary to implement the plan. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not yet been approved by the SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 500 | 500 | 666 | 683 | 1,002 | 1,888 | 5,239 |
| Project Total: | 0 | 0 | 500 | 500 | 666 | 683 | 1,002 | 1,888 | 5,239 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 500 | 500 | 666 | 683 | 1,002 | 1,888 | 5,239 |
| Appropriations Total* | 0 | 0 | 500 | 500 | 666 | 683 | 1,002 | 1,888 | 5,239 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

<u>Capital Planning - Flood Control & Local Drainage</u>

BCL Name: Flood Control and Local Drainage

BCL Code C332B

Type: New Facility Start Date: 1st Quarter 2004

Project ID: C343201 End Date: Ongoing

Location:VariousNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 510 | 370 | 375 | 308 | 394 | 323 | 414 | 2,694 |
| Project Total: | 0 | 510 | 370 | 375 | 308 | 394 | 323 | 414 | 2,694 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 510 | 370 | 375 | 308 | 394 | 323 | 414 | 2,694 |
| Appropriations Total* | 0 | 510 | 370 | 375 | 308 | 394 | 323 | 414 | 2,694 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

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

BCL Name: Protection of Beneficial Uses BCL Code C333B

Type: New Facility Start Date: 1st Quarter 2004

Project ID: C343301 End Date: Ongoing

Location:VariousNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 171 | 116 | 121 | 154 | 158 | 162 | 166 | 1,048 |
| Project Total: | 0 | 171 | 116 | 121 | 154 | 158 | 162 | 166 | 1,048 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 171 | 116 | 121 | 154 | 158 | 162 | 166 | 1,048 |
| Appropriations Total* | 0 | 171 | 116 | 121 | 154 | 158 | 162 | 166 | 1,048 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Capital Planning - Public Asset Protection

BCL Name: Public Asset Protection BCL Code C334B

Type: New Facility Start Date: 1st Quarter 2004

Project ID: C343401 End Date: Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 175 | 175 | 175 | 179 | 184 | 377 | 552 | 1,817 |
| Project Total: | 0 | 175 | 175 | 175 | 179 | 184 | 377 | 552 | 1,817 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 175 | 175 | 175 | 179 | 184 | 377 | 552 | 1,817 |
| Appropriations Total* | 0 | 175 | 175 | 175 | 179 | 184 | 377 | 552 | 1,817 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Channel Widening Project

BCL Name: Protection of Beneficial Uses

BCL Code C333B

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

Location: Citywide Neighborhood District: In more than one District

Neighborhood Plan: Delridge Urban Village: Not in an Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 300 |
| Project Total: | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 300 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 300 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 300 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 5 | 5 | 10 |

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

Comprehensive Drainage Plan Implementation

BCL Name: Flood Control and Local Drainage

BCL Code C332B

Type: New Facility Start Date: 1st Quarter 2007

Project ID: C3NW032-008 End Date: Ongoing

Location:VariousNeighborhood District:In more than one DistrictNeighborhood Plan:In more than one PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|-------|-------|--------|--------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 0 | 2,463 | 4,349 | 10,573 | 12,950 | 30,335 |
| Project Total: | 0 | 0 | 0 | 0 | 2,463 | 4,349 | 10,573 | 12,950 | 30,335 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 0 | 2,463 | 4,349 | 10,573 | 12,950 | 30,335 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 2,463 | 4,349 | 10,573 | 12,950 | 30,335 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 13 | 40 | 100 | 153 |

Comprehensive Wastewater Plan

BCL Name: General Wastewater BCL Code C320B

Type:New FacilityStart Date:1st Quarter 2004Project ID:C3NW002-001End Date:4th Quarter 2005

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 676 | 530 | 0 | 0 | 0 | 0 | 0 | 1,206 |
| Project Total: | 0 | 676 | 530 | 0 | 0 | 0 | 0 | 0 | 1,206 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 676 | 530 | 0 | 0 | 0 | 0 | 0 | 1,206 |
| Appropriations Total* | 0 | 676 | 530 | 0 | 0 | 0 | 0 | 0 | 1,206 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Creek Flow Control Implementation

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:New FacilityStart Date:1st Quarter 2008Project ID:C3NW033-014End Date:4th Quarter 2010

Location: Citywide Neighborhood District: Not in a Neighborhood District

Neighborhood Plan: Delridge Urban Village: Not in an Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|-------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 0 | 0 | 1,000 | 4,000 | 3,000 | 8,000 |
| Project Total: | 0 | 0 | 0 | 0 | 0 | 1,000 | 4,000 | 3,000 | 8,000 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 0 | 0 | 1,000 | 4,000 | 3,000 | 8,000 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 0 | 1,000 | 4,000 | 3,000 | 8,000 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 15 | 15 | 30 |

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

Creek Sediment Control Program

BCL Name: Protection of Beneficial Uses BCL Code C333B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW033-008End Date:4th Quarter 2010

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This program identifies and implements minor capital projects that address sediment control in urban creeks. The initial program focus is on roadway runoff that is inadequately managed from the roadway edge to the receiving creek, and small, discrete sections of creek located on public land with raw, eroded banks. In the medium term, SPU staff identify more holistic approaches to controlling excessive fine sediments and a shortage of appropriate larger gravels. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 23 | 27 | 103 | 105 | 135 | 138 | 531 |
| Project Total: | 0 | 0 | 23 | 27 | 103 | 105 | 135 | 138 | 531 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 23 | 27 | 103 | 105 | 135 | 138 | 531 |
| Appropriations Total* | 0 | 0 | 23 | 27 | 103 | 105 | 135 | 138 | 531 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Creeks Habitat Complexity Program

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type: New Facility Start Date: 1st Quarter 2005

Project ID: C3NW033-009 End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 75 | 75 | 77 | 79 | 81 | 83 | 470 |
| Project Total: | 0 | 0 | 75 | 75 | 77 | 79 | 81 | 83 | 470 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 75 | 75 | 77 | 79 | 81 | 83 | 470 |
| Appropriations Total* | 0 | 0 | 75 | 75 | 77 | 79 | 81 | 83 | 470 |
| O & M Costs (Savings) | | | 0 | 5 | 5 | 5 | 5 | 5 | 25 |

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

Creeks Hydrology Program

BCL Name: Protection of Beneficial Uses

BCL Code C333B

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

Location: Various Neighborhood District: In more than one District

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

This program addresses altered creek hydrology. The short-term focus is on obtaining easements along undeveloped sections of creek to protect the existing flood plains, developing a strategy for modifying altered hydrology, and implementing some pilot projects. The long term focus is implementing the strategy. This project is in a preliminary phase of development and cost estimates will be revised over time. Beginning in 2006, funding is included in SPU's budget for maintenance of improvements made under this project. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 0 | 63 | 38 | 194 | 237 | 532 |
| Project Total: | 0 | 0 | 0 | 0 | 63 | 38 | 194 | 237 | 532 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 0 | 63 | 38 | 194 | 237 | 532 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 63 | 38 | 194 | 237 | 532 |
| O & M Costs (Savings) | | | 0 | 3 | 3 | 3 | 3 | 3 | 15 |

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

Creeks Vegetation Program

BCL Name: Protection of Beneficial Uses BCL Code C333B

Type: New Facility Start Date: 1st Quarter 2005

Project ID: C3NW033-007 End Date: Ongoing

Location: Citywide Neighborhood District: In more than one District

Neighborhood Plan: Aurora Licton Urban Village: Not in an Urban Village

This project establishes the first six years of a 20-year effort to protect and restore more than 300 acres of publicly-owned forest located along riparian corridors. This project removes invasive plants from selected sites each year, adds native trees and shrubs, and provides maintenance for the first three years. SPU works in partnership with the Seattle Department of Parks and Recreation and the Office of Sustainability and Environment. Restoring the riparian forest helps ensure creeks have cooler water with more oxygen and creek banks remain stable, and reduces the amount of runoff reaching creeks during storm events. The project has not been approved by SPU's Asset Management Committee. The cost estimates have medium confidence. This project supports both the Mayor's Green Seattle Initiative to reforest riparian areas along urban creeks, and the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 150 | 150 | 154 | 158 | 162 | 166 | 940 |
| Project Total: | 0 | 0 | 150 | 150 | 154 | 158 | 162 | 166 | 940 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 150 | 150 | 154 | 158 | 162 | 166 | 940 |
| Appropriations Total* | 0 | 0 | 150 | 150 | 154 | 158 | 162 | 166 | 940 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Creekside Erosion Control

BCL Name: Protection of Beneficial Uses BCL Code C333B

Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C300311End Date:1st Quarter 2005

Location: Citywide Neighborhood District: In more than one District

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

This project addresses minor areas of erosion adjacent to creeks or some minor erosion sites that do not require a major restoration effort. 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. Beginning in 2006, funding is included in SPU's budget for maintenance of improvements made under this project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 99 | 48 | 1 | 0 | 0 | 0 | 0 | 0 | 148 |
| Project Total: | 99 | 48 | 1 | 0 | 0 | 0 | 0 | 0 | 148 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 99 | 48 | 1 | 0 | 0 | 0 | 0 | 0 | 148 |
| Appropriations Total* | 99 | 48 | 1 | 0 | 0 | 0 | 0 | 0 | 148 |
| O & M Costs (Savings) | | | 0 | 1 | 1 | 1 | 1 | 1 | 5 |

CSO Facility Retrofit

BCL Name: Combined Sewer Overflow BCL Code C310B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2002Project ID:C302102End Date:4th Quarter 2009

Location: Various Neighborhood District: In more than one District

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

This project includes retrofit, upgrade, and modifications of existing Combined Sewer Overflow (CSO) reduction facilities in priority CSO basins, to optimize system operation and storage. The project was evaluated during the development of the 2001 CSO Reduction Plan Amendment and provides a cost-effective approach to complying with CSO regulations. The project is in the design and construction phase with medium confidence cost estimate; it has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources Drainage and Wastewater Rates | 1,272 | 691 | 550 | 500 | 513 | 525 | 538 | 0 | 4,589 |
| Project Total: | 1,272 | 691 | 550 | 500 | 513 | 525 | 538 | 0 | 4,589 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 1,272 | 691 | 550 | 500 | 513 | 525 | 538 | 0 | 4,589 |
| Appropriations Total* | 1,272 | 691 | 550 | 500 | 513 | 525 | 538 | 0 | 4,589 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

CSO Modeling and Assessment

BCL Name: Combined Sewer Overflow

BCL Code C310B

Type: Rehabilitation or Restoration Start Date: 1st Ouarter 1999

Project ID: C399101 End Date: Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This project establishes and calibrates models of the City's combined sewer system, in order to support Combined Sewer Overflow (CSO) reduction planning and evaluate alternative strategies for reducing CSOs. These models are also used to assist in the design and operation of CSO reduction facilities. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1,626 | 340 | 120 | 120 | 123 | 126 | 129 | 132 | 2,716 |
| Project Total: | 1,626 | 340 | 120 | 120 | 123 | 126 | 129 | 132 | 2,716 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 1,626 | 340 | 120 | 120 | 123 | 126 | 129 | 132 | 2,716 |
| Appropriations Total* | 1,626 | 340 | 120 | 120 | 123 | 126 | 129 | 132 | 2,716 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

CSO Monitoring Installation

BCL Name: Combined Sewer Overflow BCL Code C310B

Type: Improved Facility Start Date: 1st Quarter 1999

Project ID: C3AA108 End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

The City's Combined Sewer Overflow (CSO) National Pollutant Discharge Elimination System permit, in accordance with state regulations, requires monitoring of all CSO outfalls for volume and frequency. This project provides for the installation and upgrade of CSO compliance monitoring equipment. SPU is investigating other options for acquiring and installing this equipment, and annual cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1,821 | 33 | 40 | 40 | 41 | 42 | 43 | 44 | 2,104 |
| Project Total: | 1,821 | 33 | 40 | 40 | 41 | 42 | 43 | 44 | 2,104 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 1,821 | 33 | 40 | 40 | 41 | 42 | 43 | 44 | 2,104 |
| Appropriations Total* | 1,821 | 33 | 40 | 40 | 41 | 42 | 43 | 44 | 2,104 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

CSO Plan Update

BCL Name: Combined Sewer Overflow BCL Code C310B

Type: Improved Facility Start Date: 1st Quarter 1999

Project ID: C3AA103 End Date: Ongoing

Location:VariousNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

Combined Sewer Overflow (CSO) reduction plans are required by the Department of Ecology. This project funds preparation of the next plan update, Environmental Impact Statement, and public participation activities. The project also prepares feasibility studies to identify potential opportunities for coordination with King County. This project is in a preliminary phase of development and cost estimates will be revised over time; it has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources Drainage and Wastewater Rates | 1,307 | 100 | 200 | 362 | 349 | 326 | 420 | 320 | 3,384 |
| Project Total: | 1,307 | 100 | 200 | 362 | 349 | 326 | 420 | 320 | 3,384 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 1,307 | 100 | 200 | 362 | 349 | 326 | 420 | 320 | 3,384 |
| Appropriations Total* | 1,307 | 100 | 200 | 362 | 349 | 326 | 420 | 320 | 3,384 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

CSO-Wastewater Monitoring

BCL Name: Combined Sewer Overflow BCL Code C310B

Type: New Facility Start Date: 1st Quarter 2005

Project ID: C3NW001-001 End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This project collects data regarding wastewater flows in the combined sewer system to support facility planning and engineering through model calibration and refinement, pre-flow monitoring of CIP project locations, and post-flow monitoring of CIP projects. Funds are used for acquisition of monitoring equipment, identification of monitoring site locations, and data collection and management for use in modeling, planning, design, and NPDES permit compliance. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 1,085 | 407 | 325 | 419 | 407 | 382 | 3,025 |
| Project Total: | 0 | 0 | 1,085 | 407 | 325 | 419 | 407 | 382 | 3,025 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 1,085 | 407 | 325 | 419 | 407 | 382 | 3,025 |
| Appropriations Total* | 0 | 0 | 1,085 | 407 | 325 | 419 | 407 | 382 | 3,025 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Delridge Way SW/SW Myrtle - Drainage

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW032-009End Date:4th Quarter 2008

Location: Delridge Wy. SW Neighborhood District: Delridge

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

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

| , | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 45 | 60 | 205 | 21 | 0 | 0 | 331 |
| Project Total: | 0 | 0 | 45 | 60 | 205 | 21 | 0 | 0 | 331 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 45 | 60 | 205 | 21 | 0 | 0 | 331 |
| Appropriations Total* | 0 | 0 | 45 | 60 | 205 | 21 | 0 | 0 | 331 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 1 | 1 | 2 |

Densmore Basin Water Quality

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:New FacilityStart Date:1st Quarter 2003Project ID:C333302End Date:4th Quarter 2005

Location: Densmore Drainage Basin Neighborhood District: Northwest

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

A drainage improvement study has been completed for the Densmore drainage basin. This project evaluates potential impacts from the proposed drainage improvements on water quality in the basin (which includes Green Lake). The project also identifies and evaluates both structural and non-structural options to improve stormwater quality in the basin and mitigate impacts on Green Lake. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|----------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 182 | 40 | 50 | 0 | 0 | 0 | 0 | 0 | 272 |
| Project Total: | 182 | 40 | 50 | 0 | 0 | 0 | 0 | 0 | 272 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Drainage and Wastewater Fund | 182 | 40 | 50 | 0 | 0 | 0 | 0 | 0 | 272 |
| Appropriations Total* | 182 | 40 | 50 | 0 | 0 | 0 | 0 | 0 | 272 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Design Commission Fees – Drainage

BCL Name:Other DrainageBCL CodeC335BType:Improved FacilityStart Date:OngoingProject ID:C301704End Date:Ongoing

Location: Citywide Neighborhood District: Not in a Neighborhood District

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

This project finds the City Design Commission's review of the environmental and design aspects of drainage capital improvement projects funded by the Drainage and Wastewater Fund. Projects reviewed by the Design Commission include those which have a visual impact on the public realm, including buildings, fencing, gates, and landscaping. The allocations shown below are estimates and are expected to be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 32 | 5 | 15 | 10 | 8 | 11 | 11 | 11 | 103 |
| Project Total: | 32 | 5 | 15 | 10 | 8 | 11 | 11 | 11 | 103 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 32 | 5 | 15 | 10 | 8 | 11 | 11 | 11 | 103 |
| Appropriations Total* | 32 | 5 | 15 | 10 | 8 | 11 | 11 | 11 | 103 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Design Commission Fees - WW

BCL Name:General WastewaterBCL CodeC320BType:Improved FacilityStart Date:OngoingProject ID:C301706End Date:Ongoing

Location: Citywide Neighborhood District: Not in a Neighborhood District

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

This project finds the City Design Commission's review of the environmental and design aspects of wastewater capital improvement projects funded by the Drainage and Wastewater Fund. Projects reviewed by the Design Commission include those which have a visual impact on the public realm, including buildings, fencing, gates, and landscaping. The allocations shown below are estimates and are expected to be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 45 |
| Project Total: | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 45 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 45 |
| Appropriations Total* | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 45 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Design Standards & Guidelines - DRN

BCL Name: Other Drainage BCL Code C335B

Type:New InvestmentStart Date:1st Quarter 2005Project ID:C3NW035-009End Date:4th Quarter 2006

Location: Citywide Neighborhood District: Not in a Neighborhood District

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

This program creates detailed Design Standards and Guidelines for the development of various types of drainage facilities, to streamline future design efforts, reduce costs, and increase the quality of future facilities. This program is being done in conjunction with SPU Wastewater and Water Engineering as well as all SPU operations and maintenance divisions. The project supports benchmarking efforts by SPU's Asset Management Committee and implementation of SPU's Strategic Business Plan. Confidence in the cost estimate is high; this project has been requested by SPU's Director, SPU's Asset Management Committee, and Branch Directors.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 263 | 90 | 0 | 0 | 0 | 0 | 353 |
| Project Total: | 0 | 0 | 263 | 90 | 0 | 0 | 0 | 0 | 353 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 263 | 90 | 0 | 0 | 0 | 0 | 353 |
| Appropriations Total* | 0 | 0 | 263 | 90 | 0 | 0 | 0 | 0 | 353 |
| O & M Costs (Savings) | | | 0 | 0 | 100 | 100 | 100 | 100 | 400 |

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

Design Standards & Guidelines - WW

BCL Name: General Wastewater BCL Code C320B

Type:New InvestmentStart Date:1st Quarter 2005Project ID:C3NW002-009End Date:4th Quarter 2006

Location: N/A Neighborhood District: Not in a Neighborhood District

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

This program creates detailed Design Standards and Guidelines for development of various types of wastewater facilities, to streamline future design efforts, reduce costs, and increase the quality of future facilities. This program is being done in conjunction with Drainage and Water Engineering as well as all SPU operations and maintenance divisions. This program is to meet SPU's Asset Management Committee (AMC) benchmarking needs and to meet the Strategic Business Plan. The confidence level of the cost estimate is high.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 51 | 316 | 0 | 0 | 0 | 0 | 367 |
| Project Total: | 0 | 0 | 51 | 316 | 0 | 0 | 0 | 0 | 367 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 51 | 316 | 0 | 0 | 0 | 0 | 367 |
| Appropriations Total* | 0 | 0 | 51 | 316 | 0 | 0 | 0 | 0 | 367 |
| O & M Costs (Savings) | | | 0 | 0 | 100 | 100 | 100 | 100 | 400 |

Drainage Spot Improvements

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Project ID: C333201 End Date: Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This program makes a number of spot improvements to drainage systems and creeks throughout Seattle. Projects increase the capacity of the drainage systems, and prevent flooding. Typical improvements include installation of inlets and catch-basins, construction of ditches and grassed swales, and installation of culverts. Funding to maintain the improvements made under this program is included in SPU's 2005 Adopted and 2006 Endorsed Budget. The confidence level of the cost estimate is medium.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 230 | 400 | 500 | 500 | 513 | 525 | 538 | 552 | 3,758 |
| Project Total: | 230 | 400 | 500 | 500 | 513 | 525 | 538 | 552 | 3,758 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 230 | 400 | 500 | 500 | 513 | 525 | 538 | 552 | 3,758 |
| Appropriations Total* | 230 | 400 | 500 | 500 | 513 | 525 | 538 | 552 | 3,758 |
| O & M Costs (Savings) | | | 3 | 3 | 3 | 3 | 3 | 3 | 18 |

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

Eastlake Av/Galer-Drainage Imp

BCL Name: Flood Control and Local Drainage

BCL Code C332B

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

Location:Eastlake Ave. ENeighborhood District: Lake UnionNeighborhood Plan:Not in a Neighborhood PlanUrban Village: Not in an Urban Village

This project investigates and improves a drainage problem identified at this location as a result of the Comprehensive Drainage Plan. Little information is available and operations staff have not reviewed the issue. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 0 | 0 | 0 | 162 | 110 | 272 |
| Project Total: | 0 | 0 | 0 | 0 | 0 | 0 | 162 | 110 | 272 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 0 | 0 | 0 | 162 | 110 | 272 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 0 | 0 | 162 | 110 | 272 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Facility Improvements

BCL Name: Shared Cost Projects

BCL Code C410B

Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404602-DWFEnd Date:4th Quarter 2005

Location:700 5th Ave.Neighborhood District: DowntownNeighborhood Plan:Not in a Neighborhood PlanUrban Village: Commercial Core

This project funds logistical support services for SPU, including tenant improvements, office buildouts, and furniture. The total estimated cost of the project is \$7.9 million. The funding shown below is the Drainage and Wastewater Fund's share of the project's cost.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 635 | 380 | 1,855 | 0 | 0 | 0 | 0 | 0 | 2,870 |
| Project Total: | 635 | 380 | 1,855 | 0 | 0 | 0 | 0 | 0 | 2,870 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 635 | 380 | 1,855 | 0 | 0 | 0 | 0 | 0 | 2,870 |
| Appropriations Total* | 635 | 380 | 1,855 | 0 | 0 | 0 | 0 | 0 | 2,870 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Facility Security Upgrades - Drainage

BCL Name: Other Drainage BCL Code C335B

Type:New FacilityStart Date:1st Quarter 2004Project ID:C3NW035-004End Date:4th Quarter 2005

Location: Haller Lake & Charles St. Facilities Neighborhood District: In more than one District

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

This project funds basic physical security upgrades to the Drainage and Wastewater facilities at Haller Lake and Charles St. including installation of card key access systems, high security locks, reinforced doors and windows, and "No Trespassing" signs on perimeter fencing. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 20 | 16 | 0 | 0 | 0 | 0 | 0 | 36 |
| Project Total: | 0 | 20 | 16 | 0 | 0 | 0 | 0 | 0 | 36 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 20 | 16 | 0 | 0 | 0 | 0 | 0 | 36 |
| Appropriations Total* | 0 | 20 | 16 | 0 | 0 | 0 | 0 | 0 | 36 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Facility Security Upgrades - WW

BCL Name: General Wastewater BCL Code C320B

Type:New FacilityStart Date:1st Quarter 2004Project ID:C3NW002-008End Date:4th Quarter 2005

Location: Haller Lake & Charles St. Facilities **Neighborhood District:** In more than one District

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

This project funds basic physical security upgrades to the Drainage and Wastewater facilities at Haller Lake and Charles St. including installation of card key access systems, high security locks, reinforced doors and windows, and "No Trespassing" signs on perimeter fencing. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 20 | 16 | 0 | 0 | 0 | 0 | 0 | 36 |
| Project Total: | 0 | 20 | 16 | 0 | 0 | 0 | 0 | 0 | 36 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 20 | 16 | 0 | 0 | 0 | 0 | 0 | 36 |
| Appropriations Total* | 0 | 20 | 16 | 0 | 0 | 0 | 0 | 0 | 36 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Fauntleroy Creek Sediment Control

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:Rehabilitation or RestorationStart Date:2nd Quarter 2003Project ID:C333301End Date:1st Quarter 2005

Location:California Ave. SWNeighborhood District:SouthwestNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project designs and constructs improvements in Fauntleroy Park to control sediments and reduce erosion, consistent with the Fauntleroy Watershed Plan. The project also improves stream habitat in Fauntleroy Creek, which supports Coho salmon.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 57 | 30 | 3 | 0 | 0 | 0 | 0 | 0 | 90 |
| Project Total: | 57 | 30 | 3 | 0 | 0 | 0 | 0 | 0 | 90 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 57 | 30 | 3 | 0 | 0 | 0 | 0 | 0 | 90 |
| Appropriations Total* | 57 | 30 | 3 | 0 | 0 | 0 | 0 | 0 | 90 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Fecal TMDL Feasibility

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:New FacilityStart Date:1st Quarter 2004Project ID:C343302End Date:4th Quarter 2008

Location: Various Neighborhood District: Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 100 | 113 | 99 | 256 | 53 | 0 | 0 | 621 |
| Project Total: | 0 | 100 | 113 | 99 | 256 | 53 | 0 | 0 | 621 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 100 | 113 | 99 | 256 | 53 | 0 | 0 | 621 |
| Appropriations Total* | 0 | 100 | 113 | 99 | 256 | 53 | 0 | 0 | 621 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Fish Passage Program

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type: New Facility Start Date: 1st Quarter 2005

Project ID: C3NW033-006 End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:In more than one PlanUrban Village:In more than one Urban Village

This program removes top priority fish passage barriers in the city that meet requirements for the use of drainage funds. Within the five fish-bearing creeks in Seattle, there are nearly 90 documented barriers to fish passage. The prioritized list of barriers that this project addresses changes as fish move into new areas, fish populations increase or decrease, and downstream barriers are modified or removed by SPU or others. The project's short-term focus is on removing minor barriers located in downstream Pipers Creek and Taylor Creek near 68th Ave. SE. Currently, returning adult salmon can access approximately five miles of stream. If all the barriers were removed, salmon could potentially use up to 22 miles of stream. The project has not been approved by SPU's Asset Management Committee. This project is in a preliminary phase of development and cost estimates will be revised over time. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 27 | 28 | 128 | 425 | 140 | 121 | 869 |
| Project Total: | 0 | 0 | 27 | 28 | 128 | 425 | 140 | 121 | 869 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 27 | 28 | 128 | 425 | 140 | 121 | 869 |
| Appropriations Total* | 0 | 0 | 27 | 28 | 128 | 425 | 140 | 121 | 869 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Fleet Management Study

BCL Name: Shared Cost Projects

BCL Code C410B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C4NW106-006-DWFEnd Date:4th Quarter 2005

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This study applies asset management principles to the management of SPU's fleet of heavy equipment. A consultant is used because SPU staff does not have the expertise to meet the study's objectives. The study develops recommendations related to fleet utilization, including which kinds of equipment SPU should be using and how the Department's work practices might be changed either to use existing equipment better or to use different equipment. The project supports other work being done by SPU to assess the Department's current system of fleet management, develop performance measures and tracking systems, and modify department processes and practices related to fleet management. It is expected that implementation of the recommendations identified through this study will lead to lower life cycle costs for fleet management.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 54 |
| Project Total: | 0 | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 54 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 54 |
| Appropriations Total* | 0 | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 54 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Force Main/Pump Stations Plan

BCL Name: General Wastewater BCL Code C320B

Type: Improved Facility Start Date: 3rd Quarter 2002

Project ID: C302204 End Date: Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 149 | 380 | 288 | 290 | 513 | 525 | 538 | 552 | 3,235 |
| Project Total: | 149 | 380 | 288 | 290 | 513 | 525 | 538 | 552 | 3,235 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 149 | 380 | 288 | 290 | 513 | 525 | 538 | 552 | 3,235 |
| Appropriations Total* | 149 | 380 | 288 | 290 | 513 | 525 | 538 | 552 | 3,235 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Fremont-Wallingford CSO

BCL Name: Combined Sewer Overflow BCL Code C310B

Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C303102End Date:1st Quarter 2021

Location: TBD Neighborhood District: Not in a Neighborhood District

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

This project constructs Combined Sewer Overflow (CSO) storage facilities and partial separation of stormwater and wastewater in the Fremont/Wallingford area, at Basins 147 and 174. Major work includes flow monitoring, system modeling, facility planning, preliminary engineering, design, permits, land acquisition (if necessary) and construction. Work performed in the initial planning phase collects additional data and reevaluates alternatives prior to allocating and spending additional funds. The project is on hold until 2006, and the project budget and schedule have been revised from the 2001 CSO Plan to account for project development, CSO Retrofit Implementation (which may reduce the size of the necessary facilities in this basin), and potential coordination with King County. Funding allocated in 2006 to 2008 is to conduct monitoring related to this project. Project development, design, and construction occur after 2010 and utilize the data collected during 2006-2008. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 50 | 0 | 800 | 513 | 525 | 0 | 0 | 1,888 |
| Project Total: | 0 | 50 | 0 | 800 | 513 | 525 | 0 | 0 | 1,888 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 50 | 0 | 800 | 513 | 525 | 0 | 0 | 1,888 |
| Appropriations Total* | 0 | 50 | 0 | 800 | 513 | 525 | 0 | 0 | 1,888 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Georgetown Drainage Basin Study

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Location:GeorgetownNeighborhood District:Greater DuwamishNeighborhood Plan:GeorgetownUrban Village:Not in an Urban Village

This project funds a planning-level analysis of drainage demands in the Georgetown neighborhood. Information previously developed by City and County Combined Sewer Overflow (CSO) studies and past drainage studies is used in the analysis. The project is coordinated with implementation of the Norfolk Basin Plan, the City's new CSO Plan (prepared under CSO Plan Update, C3AA103), and other initiatives in the project area. The project is on hold until operations funding is identified for cleaning existing drainage lines so monitoring can be accomplished.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 135 | 0 | 0 | 50 | 205 | 158 | 27 | 0 | 575 |
| Project Total: | 135 | 0 | 0 | 50 | 205 | 158 | 27 | 0 | 575 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 135 | 0 | 0 | 50 | 205 | 158 | 27 | 0 | 575 |
| Appropriations Total* | 135 | 0 | 0 | 50 | 205 | 158 | 27 | 0 | 575 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

GIS System Enhancements

BCL Name: Other Drainage BCL Code C335B

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

Location: Citywide Neighborhood District: Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 114 | 45 | 45 | 0 | 0 | 0 | 0 | 204 |
| Project Total: | 0 | 114 | 45 | 45 | 0 | 0 | 0 | 0 | 204 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 114 | 45 | 45 | 0 | 0 | 0 | 0 | 204 |
| Appropriations Total* | 0 | 114 | 45 | 45 | 0 | 0 | 0 | 0 | 204 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Golden Gardens/View Ave. Landslide

BCL Name: Public Asset Protection BCL Code C334B

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

Location:Golden Garden Dr. NW/View Dr. NWNeighborhood District:NorthwestNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project performs preliminary engineering and initial design of a landslide mitigation project in the area of Golden Gardens Drive NW and View Ave. NW. There is uncontrolled stormwater discharging off of View Ave. NW onto private properties and an eight-inch sewer line and pump station on a steep slope that has experienced several landslides in the past. The Seattle Department of Parks and Recreation (Parks) owns property downslope of both streets and Golden Gardens Drive NW has been damaged from past slides. This project has been identified as a potential joint project between SPU, Parks and SDOT. The project is in the planning phase and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 144 | 50 | 100 | 513 | 677 | 0 | 0 | 1,484 |
| Project Total: | 0 | 144 | 50 | 100 | 513 | 677 | 0 | 0 | 1,484 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 144 | 50 | 100 | 513 | 677 | 0 | 0 | 1,484 |
| Appropriations Total* | 0 | 144 | 50 | 100 | 513 | 677 | 0 | 0 | 1,484 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Greenwood Peat Bog

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Project ID: C333207 End Date: 4th Quarter 2010

Location: NW 85th St. & NW 97th St. & Greenwood Ave. Neighborhood District: Northwest

N & 8th Av. N

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

This project studies the physical features of the Greenwood Peat Bog basin, including water levels, basin morphometry, and peat layers/characteristics. Flow monitors have also been installed in the storm drain system and in Pipers Creek to determine whether the creek is affected by land use impacts, especially dewatering, in the basin. Water level and flow monitoring take place over several years to develop a hydrologic model which supports consideration of land use restrictions to control ongoing subsidence problems, and alternatives to stormwater conveyance where technically feasible. Corrugated metal pipe was used for the storm drain trunk system, and it may be nearing the end of its useful life. The project also supports rehabilitation/replacement options for this system. The cost estimates have medium confidence; this project has not been reviewed by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 75 | 7 | 65 | 20 | 21 | 21 | 108 | 22 | 339 |
| Project Total: | 75 | 7 | 65 | 20 | 21 | 21 | 108 | 22 | 339 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 75 | 7 | 65 | 20 | 21 | 21 | 108 | 22 | 339 |
| Appropriations Total* | 75 | 7 | 65 | 20 | 21 | 21 | 108 | 22 | 339 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Greenwood Water Quality BMP

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW033-003End Date:4th Quarter 2007

Location: N 105th St./N 112th St. **Neighborhood District:** North

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

This project designs and constructs a stormwater treatment facility to meet code requirements for a portion of an SDOT roadway improvement project on Greenwood Ave. N between N 105th and N 112th Streets. SPU and SDOT have agreed that the existing natural drainage system on NW 110th can be modified to meet most of the drainage requirements. This project provides treatment for the section of Greenwood Ave. N between NW 105th and NW 107th via a media filtration vault or other conventional stormwater treatment system. The project is contingent upon SDOT receiving grant funding for the roadway improvement project. There is low confidence in the project cost estimate.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 40 | 70 | 349 | 0 | 0 | 0 | 459 |
| Project Total: | 0 | 0 | 40 | 70 | 349 | 0 | 0 | 0 | 459 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 40 | 70 | 349 | 0 | 0 | 0 | 459 |
| Appropriations Total* | 0 | 0 | 40 | 70 | 349 | 0 | 0 | 0 | 459 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Heavy Equipment Purchases - Drainage

BCL Name:Other DrainageBCL CodeC335BType:New InvestmentStart Date:OngoingProject ID:C300399End Date:Ongoing

Location: N/A **Neighborhood District:** In more than one District

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

This project replaces existing heavy equipment (such as vactors, loaders, and bulldozers) used by SPU field crews. These pieces of equipment have reached the end of their useful lives. The project also funds retrofitting of existing equipment to meet environmental standards.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|------|------|------|------|-------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1,659 | 990 | 270 | 320 | 825 | 1,073 | 485 | 706 | 6,328 |
| Project Total: | 1,659 | 990 | 270 | 320 | 825 | 1,073 | 485 | 706 | 6,328 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 1,659 | 990 | 270 | 320 | 825 | 1,073 | 485 | 706 | 6,328 |
| Appropriations Total* | 1,659 | 990 | 270 | 320 | 825 | 1,073 | 485 | 706 | 6,328 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Heavy Equipment Purchases - WW

BCL Name:General WastewaterBCL CodeC320BType:New InvestmentStart Date:OngoingProject ID:C300499End Date:Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project replaces existing heavy equipment (such as vactors, loaders, and bulldozers) used by SPU field crews. These pieces of equipment have reached the end of their useful lives. The project also funds retrofitting of existing equipment to meet environmental standards.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 2,170 | 743 | 987 | 195 | 440 | 684 | 345 | 784 | 6,348 |
| Project Total: | 2,170 | 743 | 987 | 195 | 440 | 684 | 345 | 784 | 6,348 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 2,170 | 743 | 987 | 195 | 440 | 684 | 345 | 784 | 6,348 |
| Appropriations Total* | 2,170 | 743 | 987 | 195 | 440 | 684 | 345 | 784 | 6,348 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

High Point Drainage System

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Location:SW Juneau St./SW Myrtle St.Neighborhood District:SouthwestNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project funds SPU's share of a partnership with the Seattle Housing Authority (SHA) to construct 34 blocks of natural drainage system in SHA's High Point 120-acre redevelopment. The natural drainage system project retrofits 10% of Longfellow Creek Watershed to meet the pre-developed pasture runoff conditions for the two-year design storm, as well as provide a distributed, block-scale water quality treatment system. The drainage system also includes construction of porous pavement sidewalks and up to three blocks of porous pavement streets. The project enables SPU to achieve flood control and water quality objectives in the project area at a lower cost than through either development of a large regional drainage and water quality facility, or through retrofit of currently developed streets to include natural drainage systems. Funding to maintain the new natural drainage system starting in 2007 will be included in future Department budgets. The High Point Natural Drainage System was approved by City Council in May 2003 as part of SHA's subdivision and street vacation application. The project is partially funded by a \$2.7 million construction loan and a \$157,170 grant for education, water quality monitoring and other activities, both from the Washington Department of Ecology, and a \$192,900 grant from the United States Environmental Protection Agency. These loans and grants were authorized in 2004 by Ordinance 121553. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|-------|-------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 227 | 875 | 1,300 | 1,100 | 513 | 53 | 54 | 0 | 4,122 |
| Project Total: | 227 | 875 | 1,300 | 1,100 | 513 | 53 | 54 | 0 | 4,122 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 227 | 875 | 1,300 | 1,100 | 513 | 53 | 54 | 0 | 4,122 |
| Appropriations Total* | 227 | 875 | 1,300 | 1,100 | 513 | 53 | 54 | 0 | 4,122 |
| O & M Costs (Savings) | | | 0 | 0 | 36 | 64 | 64 | 65 | 229 |

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

Intergovernmental Shares - DRN

BCL Name: Other Drainage BCL Code C335B

Type: New Facility Start Date: 1st Quarter 2005

Project ID: C3NW035-003 End Date: Ongoing

Location: Citywide Neighborhood District: Not in a Neighborhood District

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

This project provides funding of \$2 million per year beginning in 2005 to enable SPU to partner with other City departments that are implementing projects with a drainage fund nexus and creating a benefit for the drainage system. Requests for funding from this project are developed in partnership with other departments and SPU, and involve joint planning of CIP projects. The SPU Asset Management Committee reviews and approves all drainage dollar commitments. The project replaces the SDOT 4% Program – Drainage (C33T101) in the 2004-2009 Adopted CIP. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 2,000 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 12,513 |
| Project Total: | 0 | 0 | 2,000 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 12,513 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 2,000 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 12,513 |
| Appropriations Total* | 0 | 0 | 2,000 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 12,513 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

<u>Intergovernmental Shares - WW</u>

BCL Name: General Wastewater BCL Code C320B

Type: New Facility Start Date: 1st Quarter 2005

Project ID: C3NW002-004 End Date: Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project provides funding of \$250,000 per year beginning in 2005 to enable SPU to partner with other City departments that are implementing projects with a wastewater funding nexus and creating a benefit for the wastewater system. Requests for funding from this project are developed in partnership with other departments and SPU, and involve joint planning of CIP projects. The SPU Asset Management Committee reviews and approves all wastewater dollar commitments. The project replaces the SDOT 4% Program – Wastewater (C32T101) in the 2004-2009 Adopted CIP. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 250 | 250 | 256 | 263 | 269 | 276 | 1,564 |
| Project Total: | 0 | 0 | 250 | 250 | 256 | 263 | 269 | 276 | 1,564 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 250 | 250 | 256 | 263 | 269 | 276 | 1,564 |
| Appropriations Total* | 0 | 0 | 250 | 250 | 256 | 263 | 269 | 276 | 1,564 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Jackson Park Detention Phase 2

BCL Name: Flood Control and Local Drainage

BCL Code C332B

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

Location: Jackson Park Golf Course **Neighborhood District:** North

This project constructs three detention ponds in the Jackson Park golf course, including overflow structures for transferring flow between Thornton Creek and the ponds. The project reroutes 1,600 feet of Thornton Creek channel within the golf course to accommodate the detention ponds 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 creek channel. This project was substantially completed in 2003 and physical completion notice was issued in April 2004. Remaining work includes post construction monitoring, reporting to external agencies, and riparian plants establishment to meet federal permitting requirements. Funding to operate and maintain the detention pond and other facilities is included in the Department's budget starting in 2006.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|--------|------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 10,303 | 251 | 88 | 84 | 85 | 87 | 89 | 0 | 10,987 |
| Project Total: | 10,303 | 251 | 88 | 84 | 85 | 87 | 89 | 0 | 10,987 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 10,303 | 251 | 88 | 84 | 85 | 87 | 89 | 0 | 10,987 |
| Appropriations Total* | 10,303 | 251 | 88 | 84 | 85 | 87 | 89 | 0 | 10,987 |
| O & M Costs (Savings) | | | 0 | 45 | 45 | 45 | 45 | 45 | 225 |

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

Joint Training Facility

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:3rd Quarter 2004Project ID:C4NW106-002-DWFEnd Date:1st Quarter 2006

Location: 9401 Myers Wy. S **Neighborhood District:** Delridge

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

The City of Seattle plans to build a new Joint Training Facility (JTF) Campus to provide classroom and physical job training for members of the Seattle Fire Department (SFD), Seattle Public Utilities (SPU), and Seattle Transportation Department (SDOT) field workers. Funding shown below is for the Drainage and Wastewater Fund's share of the cost of developing the new facility, based on the training requirements of Solid Waste Utility staff and workers. The project is designed to provide training opportunities for the three departments while minimizing its impact on the site and minimizing anticipated maintenance and operations costs. The primary features of the secured campus include a classroom/administration building, a high-bay apparatus/storage building, a six-story high drill tower prop, a two-story burn prop, an EVAP pad, a collapsed building prop, trench digging and rescue props, confined spaces prop, drainage and wastewater training prop, vehicle extrication and foaming area, and an urban road simulation prop. Decisions about the campus, its form and function were determined by the active participation of the user groups, as plans were developed. (See FFERP – Joint Training Facility project A1FL202 in the Fleets and Facilities CIP.)

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 1,360 | 0 | 0 | 0 | 0 | 0 | 1,360 |
| Project Total: | 0 | 0 | 1,360 | 0 | 0 | 0 | 0 | 0 | 1,360 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 1,360 | 0 | 0 | 0 | 0 | 0 | 1,360 |
| Appropriations Total* | 0 | 0 | 1,360 | 0 | 0 | 0 | 0 | 0 | 1,360 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Lake City/NE 92nd Storm Drain

BCL Name: Flood Control and Local Drainage

BCL Code C332B

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

Location: Lake City Wy. NE **Neighborhood District:** Northeast

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

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 26 | 0 | 0 | 0 | 201 | 0 | 0 | 0 | 227 |
| Project Total: | 26 | 0 | 0 | 0 | 201 | 0 | 0 | 0 | 227 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 26 | 0 | 0 | 0 | 201 | 0 | 0 | 0 | 227 |
| Appropriations Total* | 26 | 0 | 0 | 0 | 201 | 0 | 0 | 0 | 227 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Linden Ave N&N 143rd Drainage

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type:New FacilityStart Date:3rd Quarter 2001Project ID:C301321End Date:2nd Quarter 2005

Location: N 143rd St. To N 138TH St.

Neighborhood Plan: Broadview-Bitter Lake-Haller Lake

Urban Village: Bitter Lake Village

This project constructs inlets and catch-basins to collect stormwater runoff that floods the roadway at the intersection of Linden Ave. N and N 143rd St. The project includes constructing connecting pipes to convey the flow to the southwest corner of the intersection, constructing a natural system ditch draining to an existing low area that provides detention, and planting vegetation in the drainage ditch and around the detention facility. Alternatives for carrying the water south from this intersection are evaluated during preliminary engineering, and surveying is conducted to determine the feasibility of each. The project was delayed by negotiations with SDOT in 2003 about future potential road improvements.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 179 | 300 | 50 | 0 | 0 | 0 | 0 | 0 | 529 |
| Project Total: | 179 | 300 | 50 | 0 | 0 | 0 | 0 | 0 | 529 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 179 | 300 | 50 | 0 | 0 | 0 | 0 | 0 | 529 |
| Appropriations Total* | 179 | 300 | 50 | 0 | 0 | 0 | 0 | 0 | 529 |
| O & M Costs (Savings) | | | 0 | 3 | 3 | 3 | 3 | 3 | 15 |

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

Longfellow Creek-Yancy St Ph3

BCL Name: Protection of Beneficial Uses BCL Code C333B

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

Location: SW Yancy St. Neighborhood District: Delridge

Neighborhood Plan: Delridge Urban Village: Not in an Urban Village

This project continues habitat improvements at the Yancy St. site along Longfellow Creek. Work includes additional bank stabilization, landscaping, and wetland enhancements. The project also addresses other repairs as necessary.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 148 | 175 | 64 | 12 | 10 | 0 | 0 | 0 | 409 |
| Project Total: | 148 | 175 | 64 | 12 | 10 | 0 | 0 | 0 | 409 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 148 | 175 | 64 | 12 | 10 | 0 | 0 | 0 | 409 |
| Appropriations Total* | 148 | 175 | 64 | 12 | 10 | 0 | 0 | 0 | 409 |
| O & M Costs (Savings) | | | 0 | 10 | 10 | 10 | 10 | 10 | 50 |

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

Lower Densmore Drainage Improvement

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW032-004End Date:4th Quarter 2006

Location:Aurora Ave. NNeighborhood District:NorthwestNeighborhood Plan:Broadview-Bitter Lake-Haller LakeUrban Village:Not in an Urban Village

This project develops the preliminary engineering analysis, including the modeling, to identify alternatives to constructing a storm drain system in the Lower Densmore subbasin. The project also identifies the additional system requirements for stormwater flow resulting from improvements in the Bitter Lake, Haller Lake and Stone Ave. subbasins. Lower Densmore is a large subbasin on the receiving end of the flow draining through the upper Densmore basin, which includes the Bitter Lake, Haller Lake and Stone Ave. subbasins. This subbasin has experienced numerous flooding incidents for two-year storm levels or higher, in particular at N 107th and Midvale Ave. N, and the Licton Springs area. This preliminary engineering phase defines a scope and budget for the project, and additional funds for design and construction are requested in future CIPs. This project is in a preliminary phase of development and cost estimates will be revised over time. SPU's Asset Management Committee has not yet approved the project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 225 | 225 | 0 | 0 | 0 | 0 | 450 |
| Project Total: | 0 | 0 | 225 | 225 | 0 | 0 | 0 | 0 | 450 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 225 | 225 | 0 | 0 | 0 | 0 | 450 |
| Appropriations Total* | 0 | 0 | 225 | 225 | 0 | 0 | 0 | 0 | 450 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Marine View - 47th SW Landslide

BCL Name: Public Asset Protection BCL Code C334B

Type:Improved FacilityStart Date:2nd Quarter 2002Project ID:C302352End Date:1st Quarter 2005

Location:47th Ave. SWNeighborhood District:SouthwestNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project reduces the potential for landslides by collecting runoff from an existing street and routing it away from landslide prone areas. This project installs catch-basins and thickened pavement edges to reduce the amount of runoff that currently flows into landslide-prone areas below the street. Funding to operate and maintain this project is typical for maintaining a catch-basin and pipe system, and is included in SPU's 2006 Endorsed Budget. Project closeout is anticipated to occur in 2005. The project has a design phase cost estimate with a high confidence level and has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 216 | 878 | 21 | 0 | 0 | 0 | 0 | 0 | 1,115 |
| Project Total: | 216 | 878 | 21 | 0 | 0 | 0 | 0 | 0 | 1,115 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 216 | 878 | 21 | 0 | 0 | 0 | 0 | 0 | 1,115 |
| Appropriations Total* | 216 | 878 | 21 | 0 | 0 | 0 | 0 | 0 | 1,115 |
| O & M Costs (Savings) | | | 0 | 6 | 6 | 6 | 6 | 6 | 30 |

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

Meadowbrook Outfall Rehabilitation

BCL Name: Flood Control and Local Drainage

BCL Code C332B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW032-003End Date:2nd Quarter 2008

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

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

This project repairs or replaces three damaged outfall pipes discharging overflow stormwater from Meadowbrook Pond to Lake Washington at Riviera Place NE between NE 106th St. and NE 105th St. Preliminary engineering investigates alternatives to repair or replace the three outfall pipes, and assesses conditions of related structures, including the seawall next to the outfall pipes, an upstream 90-inch pipe connecting to the outfall pipes, and an upstream 72-inch pipe connecting to the 90-inch pipe. Preliminary engineering also investigates causes to sinkholes near the outfall pipes, and performs a flow analysis and evaluation to check the feasibility of adding another 72-inch overflow pipe at Meadowbrook Pond. The planning phase cost estimate has a medium level of confidence. The project is not yet approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 200 | 378 | 1,333 | 53 | 0 | 0 | 1,964 |
| Project Total: | 0 | 0 | 200 | 378 | 1,333 | 53 | 0 | 0 | 1,964 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 200 | 378 | 1,333 | 53 | 0 | 0 | 1,964 |
| Appropriations Total* | 0 | 0 | 200 | 378 | 1,333 | 53 | 0 | 0 | 1,964 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 12 | 12 | 24 |

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

Meter Replacement - Large (DWF)

BCL Name: Shared Cost Projects

BCL Code C410B

Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C404102-DWFEnd Date:Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 2,371 | 692 | 672 | 530 | 543 | 557 | 571 | 0 | 5,936 |
| Project Total: | 2,371 | 692 | 672 | 530 | 543 | 557 | 571 | 0 | 5,936 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 2,371 | 692 | 672 | 530 | 543 | 557 | 571 | 0 | 5,936 |
| Appropriations Total* | 2,371 | 692 | 672 | 530 | 543 | 557 | 571 | 0 | 5,936 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Minor Facility Upgrades - Rehab

BCL Name: Sewer Rehabilitation BCL Code C340B

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

Project ID: C3AA402 End Date: Ongoing

Location:VariousNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 211 | 0 | 80 | 76 | 81 | 110 | 98 | 100 | 756 |
| Project Total: | 211 | 0 | 80 | 76 | 81 | 110 | 98 | 100 | 756 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 211 | 0 | 80 | 76 | 81 | 110 | 98 | 100 | 756 |
| Appropriations Total* | 211 | 0 | 80 | 76 | 81 | 110 | 98 | 100 | 756 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

MLK Way/Norfolk St Storm Improvement

BCL Name: Flood Control and Local Drainage

BCL Code C332B

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

Location:Norfolk Drainage Basin East Of I-5Neighborhood District:Greater DuwamishNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project reduces flooding problems along Martin Luther King, Jr. Way S and adjacent streets by rehabilitating the existing system, eliminating bypasses to the sanitary sewer system and providing a functioning conveyance system for future roadway and drainage improvements proposed for construction in 2007 along Martin Luther King, Jr. Way by Sound Transit. The project removes petroleum-contaminated sediments from the existing system, provides improved maintenance access for future cleaning, increases the carrying capacity of the system to meet a 25-year performance level, improves storm water quality treatment utilizing funding from Sound Transit, and reduces overall long-term maintenance costs. The design phase of the project has been approved by SPU's Asset Management Committee. The confidence level of the cost estimate is low.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|-------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 82 | 250 | 440 | 1,790 | 113 | 2 | 2 | 2 | 2,681 |
| Project Total: | 82 | 250 | 440 | 1,790 | 113 | 2 | 2 | 2 | 2,681 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 82 | 250 | 440 | 1,790 | 113 | 2 | 2 | 2 | 2,681 |
| Appropriations Total* | 82 | 250 | 440 | 1,790 | 113 | 2 | 2 | 2 | 2,681 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 2 | 2 | 2 | 6 |

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

Mobility Improvement

BCL Name: Other Drainage BCL Code C335B

Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C333514End Date:4th Quarter 2010

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 300 | 300 | 300 | 308 | 315 | 323 | 331 | 2,177 |
| Project Total: | 0 | 300 | 300 | 300 | 308 | 315 | 323 | 331 | 2,177 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 300 | 300 | 300 | 308 | 315 | 323 | 331 | 2,177 |
| Appropriations Total* | 0 | 300 | 300 | 300 | 308 | 315 | 323 | 331 | 2,177 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Monitoring System Upgrades

BCL Name: Protection of Beneficial Uses

BCL Code C333B

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

Location: VariousNeighborhood District: SouthwestNeighborhood Plan: Not in a Neighborhood PlanUrban Village: Not in an Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 230 | 459 | 103 | 0 | 0 | 0 | 0 | 792 |
| Project Total: | 0 | 230 | 459 | 103 | 0 | 0 | 0 | 0 | 792 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 230 | 459 | 103 | 0 | 0 | 0 | 0 | 792 |
| Appropriations Total* | 0 | 230 | 459 | 103 | 0 | 0 | 0 | 0 | 792 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

N 105th St/Aurora Av N - Drainage Improvement

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type:New FacilityStart Date:2nd Quarter 2006Project ID:C3NW032-012End Date:4th Quarter 2007

Location: N 105th St. Neighborhood District: North

Neighborhood Plan: Aurora Licton Urban Village: Not in an Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 150 | 103 | 0 | 0 | 0 | 253 |
| Project Total: | 0 | 0 | 0 | 150 | 103 | 0 | 0 | 0 | 253 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 150 | 103 | 0 | 0 | 0 | 253 |
| Appropriations Total* | 0 | 0 | 0 | 150 | 103 | 0 | 0 | 0 | 253 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

N 125th & Aurora N Storm Drain

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Location:N 125th St.Neighborhood District:NorthwestNeighborhood Plan:Broadview-Bitter Lake-Haller LakeUrban Village:Bitter Lake Village

This project funds a preliminary study for the construction of approximately 2,550 linear feet of new pipe combined with catch-basins and connecting pipes along N 125th St. and Aurora Ave. N, as well as the upgrade of approximately 2,400 linear feet of existing pipe along Aurora Ave. N, to reduce street and property flooding. The project is consistent with SPU's Densmore Drainage Basin Study, and has been accelerated to coordinate with the Seattle Department of Transportation (SDOT), which plans to install new curbs, gutters, and sidewalks on the west side of Aurora Ave. N from N 110th to N 145th St. The shoulder is also upgraded and converted to a new bus lane. While construction of SDOT's project is targeted to begin second quarter of 2006, delay may occur due to lack of funding. SPU plans to proceed with this project on an expedited basis to take advantage of cost sharing opportunities with SDOT. The project is also coordinated with downstream improvements that SPU is making to move stormwater out of the Densmore Basin to Lake Union, and with the Water Quality Study planned for the Densmore Basin, which evaluates alternatives for improving water quality in the basin. This project is in a preliminary phase of development and cost estimates will be revised over time. SPU's Asset Management Committee has approved Preliminary Engineering for the project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|-------|-------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 300 | 852 | 800 | 800 | 1,538 | 1,576 | 1,615 | 1,656 | 9,137 |
| Project Total: | 300 | 852 | 800 | 800 | 1,538 | 1,576 | 1,615 | 1,656 | 9,137 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 300 | 852 | 800 | 800 | 1,538 | 1,576 | 1,615 | 1,656 | 9,137 |
| Appropriations Total* | 300 | 852 | 800 | 800 | 1,538 | 1,576 | 1,615 | 1,656 | 9,137 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

N 85th St/Greenwood Ave - Drainage Improvement

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type:New FacilityStart Date:2nd Quarter 2006Project ID:C3NW032-013End Date:4th Quarter 2007

Location: Greenwood Ave. N/3rd Ave. N Neighborhood District: Northwest

Neighborhood Plan: Not in a Neighborhood Plan Urban Village: Greenwood

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 150 | 103 | 0 | 0 | 0 | 253 |
| Project Total: | 0 | 0 | 0 | 150 | 103 | 0 | 0 | 0 | 253 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 150 | 103 | 0 | 0 | 0 | 253 |
| Appropriations Total* | 0 | 0 | 0 | 150 | 103 | 0 | 0 | 0 | 253 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Natural Drainage System Improvements

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type: Improved Facility Start Date: 1st Quarter 2003

Project ID: C333206 End Date: Ongoing

Location: VariousNeighborhood District: NorthwestNeighborhood Plan: Broadview-Bitter Lake-Haller LakeUrban Village: Not in an Urban Village

This project assesses unimproved right-of-way within the city and identifies areas suitable for enhancing existing ditch drainage systems. In addition to identifying "natural system" drainage areas based on surface water management goals, the project assesses neighborhood, land use, and transportation objectives for unimproved right-of-way. Funding for 2005 through 2007 is mostly allocated for development of a natural drainage system in the area of Venema Creek. The project produces a suitability map for "natural system" surface water management in the right-of-way. The project also identifies a menu of options for natural system enhancement based on local condition criteria and drainage basin performance goals relative to conveyance, detention or treatment. Each option is developed for consideration in the City's Street Improvement Manual update, and includes right-of-way elements, configuration and dimensions. For each option, associated standard plans are developed for consideration in the Standard Plans update to assist SPU in prioritizing drainage improvements, as well as to prescribe how drainage is to be improved by other public and private developers. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|-------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 250 | 326 | 217 | 1,773 | 1,092 | 1,130 | 4,788 |
| Project Total: | 0 | 0 | 250 | 326 | 217 | 1,773 | 1,092 | 1,130 | 4,788 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 250 | 326 | 217 | 1,773 | 1,092 | 1,130 | 4,788 |
| Appropriations Total* | 0 | 0 | 250 | 326 | 217 | 1,773 | 1,092 | 1,130 | 4,788 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

No Dig Pipe & Maintenance Rehabilitation

BCL Name: Sewer Rehabilitation BCL Code C340B

Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C3AA403End Date:Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This ongoing program rehabilitates sewer pipes prior to complete failure. "No Dig" technology avoids surface use disruption and costly surface repairs.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|-------|------|-------|-------|-------|-------|-------|--------|
| Revenue Sources Drainage and Wastewater Rates | 9,497 | 1,500 | 785 | 1,574 | 1,531 | 2,288 | 2,280 | 2,008 | 21,463 |
| Project Total: | 9,497 | 1,500 | 785 | 1,574 | 1,531 | 2,288 | 2,280 | 2,008 | 21,463 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 9,497 | 1,500 | 785 | 1,574 | 1,531 | 2,288 | 2,280 | 2,008 | 21,463 |
| Appropriations Total* | 9,497 | 1,500 | 785 | 1,574 | 1,531 | 2,288 | 2,280 | 2,008 | 21,463 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Norfolk Basin Water Quality

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:New InvestmentStart Date:3rd Quarter 2002Project ID:C302302End Date:2nd Quarter 2005

Location:Norfolk Drainage BasinNeighborhood District:Greater DuwamishNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 37 | 45 | 25 | 0 | 0 | 0 | 0 | 0 | 107 |
| Project Total: | 37 | 45 | 25 | 0 | 0 | 0 | 0 | 0 | 107 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 37 | 45 | 25 | 0 | 0 | 0 | 0 | 0 | 107 |
| Appropriations Total* | 37 | 45 | 25 | 0 | 0 | 0 | 0 | 0 | 107 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Northlake Way Drainage

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Location:N Northlake WyNeighborhood District:Lake UnionNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 100 | 200 | 200 | 0 | 0 | 0 | 0 | 500 |
| Project Total: | 0 | 100 | 200 | 200 | 0 | 0 | 0 | 0 | 500 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 100 | 200 | 200 | 0 | 0 | 0 | 0 | 500 |
| Appropriations Total* | 0 | 100 | 200 | 200 | 0 | 0 | 0 | 0 | 500 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Northpark Ave N Drainage Improvement

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Location: Northpark Ave N & Linden Ave N Neighborhood District: North

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources Drainage and Wastewater Rates | 0 | 0 | 0 | 0 | 51 | 735 | 377 | 28 | 1,191 |
| Project Total: | 0 | 0 | 0 | 0 | 51 | 735 | 377 | 28 | 1,191 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 0 | 51 | 735 | 377 | 28 | 1,191 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 51 | 735 | 377 | 28 | 1,191 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Operations Control Center Upgrade

BCL Name: Shared Cost Projects

BCL Code C410B

Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404501-DWFEnd Date:4th Quarter 2006

Location:2700 Airport Wy. SNeighborhood District: Greater DuwamishNeighborhood Plan:Not in a Neighborhood PlanUrban Village: Not in an Urban Village

This project remodels and upgrades SPU's Operations Control Center building. The project includes reconfiguring internal space to improve security and incorporate the new Supervisory Control And Data Acquisition (SCADA) system. The upgraded center accommodates SPU's new Strategic Operations Division, as well as Field Operations administration and electrical, mechanical, maintenance and emergency response crews. This project has not yet been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 251 | 498 | 970 | 280 | 0 | 0 | 0 | 0 | 1,999 |
| Project Total: | 251 | 498 | 970 | 280 | 0 | 0 | 0 | 0 | 1,999 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 251 | 498 | 970 | 280 | 0 | 0 | 0 | 0 | 1,999 |
| Appropriations Total* | 251 | 498 | 970 | 280 | 0 | 0 | 0 | 0 | 1,999 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Other Agency Opportunity - DRN

BCL Name: Other Drainage BCL Code C335B

Type: New Facility Start Date: 1st Quarter 2005

Project ID: C3NW035-006 End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:In more than one PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|-------|-------|-------|-------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 1,308 | 1,271 | 1,025 | 1,414 | 1,077 | 1,104 | 7,199 |
| Project Total: | 0 | 0 | 1,308 | 1,271 | 1,025 | 1,414 | 1,077 | 1,104 | 7,199 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 1,308 | 1,271 | 1,025 | 1,414 | 1,077 | 1,104 | 7,199 |
| Appropriations Total* | 0 | 0 | 1,308 | 1,271 | 1,025 | 1,414 | 1,077 | 1,104 | 7,199 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Other Agency Opportunity - WW

BCL Name: General Wastewater BCL Code C320B

Type: New Facility Start Date: 1st Quarter 2005

Project ID: C3NW002-006 End Date: Ongoing

Location: Citywide Neighborhood District: Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 349 | 400 | 410 | 420 | 431 | 442 | 2,452 |
| Project Total: | 0 | 0 | 349 | 400 | 410 | 420 | 431 | 442 | 2,452 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 349 | 400 | 410 | 420 | 431 | 442 | 2,452 |
| Appropriations Total* | 0 | 0 | 349 | 400 | 410 | 420 | 431 | 442 | 2,452 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Outfall Inspection - Drainage

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2002Project ID:C302304End Date:4th Quarter 2005

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This project inspects and documents the condition of the City's 250 stormwater outfalls. Size, length, and material of the outfalls are identified, and the information is used to update SPU's Geographic Information Systems (GIS) database. The project sets criteria for identifying necessary inspections and for establishing priorities and an inspection schedule. The project includes conducting a market survey on current outfall inspection technologies, standards and procedures, and the environmental impacts associated with each. If inspections indicate repairs are necessary for some outfalls, separate CIP projects may be developed in subsequent years to fund those repairs.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 260 | 210 | 50 | 0 | 0 | 0 | 0 | 0 | 520 |
| Project Total: | 260 | 210 | 50 | 0 | 0 | 0 | 0 | 0 | 520 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 260 | 210 | 50 | 0 | 0 | 0 | 0 | 0 | 520 |
| Appropriations Total* | 260 | 210 | 50 | 0 | 0 | 0 | 0 | 0 | 520 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Outfall Inspection - Wastewater

BCL Name: General Wastewater BCL Code C320B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2002Project ID:C302202End Date:4th Quarter 2005

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This project inspects and documents the condition of the City's 100 wastewater outfalls. Size, length, and material of the outfalls are identified, and the information is used to update SPU's Geographic Information Systems (GIS) database. The project sets criteria for identifying necessary inspections and for establishing priorities and an inspection schedule. The project includes conducting a market survey on current outfall inspection technologies, standards and procedures, and the environmental impacts associated with each. Mapping, development of criteria and schedules, and market surveying have been completed, with inspections continuing into 2005. If inspections indicate repairs are necessary for some outfalls, separate CIP projects may be developed in subsequent years to fund those repairs.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 201 | 140 | 3 | 0 | 0 | 0 | 0 | 0 | 344 |
| Project Total: | 201 | 140 | 3 | 0 | 0 | 0 | 0 | 0 | 344 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 201 | 140 | 3 | 0 | 0 | 0 | 0 | 0 | 344 |
| Appropriations Total* | 201 | 140 | 3 | 0 | 0 | 0 | 0 | 0 | 344 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Outfall Rehab Program - Wastewater

BCL Name: General Wastewater BCL Code C320B

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

Project ID: C3NW002-002 End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 137 | 290 | 297 | 158 | 162 | 166 | 1,210 |
| Project Total: | 0 | 0 | 137 | 290 | 297 | 158 | 162 | 166 | 1,210 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 137 | 290 | 297 | 158 | 162 | 166 | 1,210 |
| Appropriations Total* | 0 | 0 | 137 | 290 | 297 | 158 | 162 | 166 | 1,210 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Outfall Rehab Program-Drainage

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Project ID: C3NW032-014 End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 150 | 200 | 154 | 158 | 162 | 166 | 990 |
| Project Total: | 0 | 0 | 150 | 200 | 154 | 158 | 162 | 166 | 990 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 150 | 200 | 154 | 158 | 162 | 166 | 990 |
| Appropriations Total* | 0 | 0 | 150 | 200 | 154 | 158 | 162 | 166 | 990 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Perkins Lane W/W Ruffner Drainage

BCL Name: Public Asset Protection BCL Code C334B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2001Project ID:C301354End Date:1st Quarter 2005

Location:Perkins Ln. WNeighborhood District:Magnolia/Queen AnneNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project rehabilitates 3,000 linear feet of deteriorated asphalt-lined drainage ditch system. This reduces stormwater infiltration through the ditches and helps reduce the risk of potential landslides.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 240 | 350 | 25 | 0 | 0 | 0 | 0 | 0 | 615 |
| Project Total: | 240 | 350 | 25 | 0 | 0 | 0 | 0 | 0 | 615 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 240 | 350 | 25 | 0 | 0 | 0 | 0 | 0 | 615 |
| Appropriations Total* | 240 | 350 | 25 | 0 | 0 | 0 | 0 | 0 | 615 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Pinehurst Natural Drainage System

BCL Name: Flood Control and Local Drainage BCL Code C332B

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

Location: Thornton Creek Watershed Neighborhood District: Northeast

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

This project constructs Natural Drainage System improvements to convey stormwater, using the unimproved right-of-way as a starting point for design. The project scope includes: constructing an engineered system of swales or other design alternatives to detain runoff, filter pollutants and allow maximum opportunity for infiltration; using native vegetation as a stormwater management element, as well as for aesthetic appeal; and constructing a sidewalk on one side of each street within the project area (these sidewalks may include alternative design elements such as porous pavements). The project installs natural drainage systems on approximately 11.5 blocks (330 ft. per block) in the project area. In addition, some ditch and culvert systems are installed to mitigate against existing spot drainage problems. In 2004, this project was the subject of a budget proviso, which was lifted by Ordinance 121459. The project is partially funded with a \$3.7 million state Public Works Trust Fund Loan, which was approved by Ordinance 121464 in 2004. Beginning in 2008, costs to operate and maintain the new system will be included in the Department's budget. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|-------|-------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 278 | 860 | 1,698 | 1,697 | 91 | 12 | 0 | 0 | 4,636 |
| Project Total: | 278 | 860 | 1,698 | 1,697 | 91 | 12 | 0 | 0 | 4,636 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 278 | 860 | 1,698 | 1,697 | 91 | 12 | 0 | 0 | 4,636 |
| Appropriations Total* | 278 | 860 | 1,698 | 1,697 | 91 | 12 | 0 | 0 | 4,636 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 1 | 2 | 1 | 4 |

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

Piper's Creek - Detention

BCL Name: Flood Control and Local Drainage BCL Code C332B

Type: Improved Facility Start Date: 3rd Quarter 1999

Project ID: C399326 End Date: Ongoing

Location: 777 NW Carkeek Park Rd. **Neighborhood District:** Northwest

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 210 | 100 | 140 | 41 | 41 | 42 | 43 | 44 | 661 |
| Project Total: | 210 | 100 | 140 | 41 | 41 | 42 | 43 | 44 | 661 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 210 | 100 | 140 | 41 | 41 | 42 | 43 | 44 | 661 |
| Appropriations Total* | 210 | 100 | 140 | 41 | 41 | 42 | 43 | 44 | 661 |
| O & M Costs (Savings) | | | 0 | 3 | 3 | 3 | 3 | 3 | 15 |

Point Sewer Pipe Rehabilitation - Crews

BCL Name: Sewer Rehabilitation BCL Code C340B

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

Project ID: C303402 End Date: Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 2,094 | 2,678 | 3,825 | 3,696 | 4,271 | 4,596 | 4,947 | 5,325 | 31,432 |
| Project Total: | 2,094 | 2,678 | 3,825 | 3,696 | 4,271 | 4,596 | 4,947 | 5,325 | 31,432 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 2,094 | 2,678 | 3,825 | 3,696 | 4,271 | 4,596 | 4,947 | 5,325 | 31,432 |
| Appropriations Total* | 2,094 | 2,678 | 3,825 | 3,696 | 4,271 | 4,596 | 4,947 | 5,325 | 31,432 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Point Sewer Pipe Rehabilitation - Contract

BCL Name: Sewer Rehabilitation BCL Code C340B

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

Project ID: C303401 End Date: Ongoing

Location: Citywide Neighborhood District: In more than one District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|-------|------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 33 | 1,406 | 810 | 1,514 | 1,421 | 3,071 | 1,616 | 1,651 | 11,522 |
| Project Total: | 33 | 1,406 | 810 | 1,514 | 1,421 | 3,071 | 1,616 | 1,651 | 11,522 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 33 | 1,406 | 810 | 1,514 | 1,421 | 3,071 | 1,616 | 1,651 | 11,522 |
| Appropriations Total* | 33 | 1,406 | 810 | 1,514 | 1,421 | 3,071 | 1,616 | 1,651 | 11,522 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Pump Station Improvements

BCL Name: General Wastewater BCL Code C320B

Type: New Facility Start Date: 1st Ouarter 2005

Project ID: C3NW002-005 End Date: Ongoing

Location: Various Neighborhood District: In more than one District

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

This annual capital program provides for wastewater pump station improvements, upgrades, repairs and rehabilitation, including design and installation of emergency generators, and material and labor costs for equipment replacement (pumps and valves), as well as equipment for the remote monitoring system (SCADA). This project implements the Pump Station Asset Management Plan. In the 2004-2009 Adopted CIP, it was titled Pump Station Rehabilitation, and was located in the Sewer Rehabilitation Budget Control Level.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 936 | 784 | 1,853 | 2,095 | 2,154 | 2,208 | 10,030 |
| Project Total: | 0 | 0 | 936 | 784 | 1,853 | 2,095 | 2,154 | 2,208 | 10,030 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 936 | 784 | 1,853 | 2,095 | 2,154 | 2,208 | 10,030 |
| Appropriations Total* | 0 | 0 | 936 | 784 | 1,853 | 2,095 | 2,154 | 2,208 | 10,030 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Rainier Av S/S Carver - Landslide

BCL Name: Public Asset Protection BCL Code C334B

Type:New FacilityStart Date:3rd Quarter 2005Project ID:C3NW034-001End Date:1st Quarter 2009

Location:Rainier Ave. S/S Carver Ave.Neighborhood District:SoutheastNeighborhood Plan:Rainier BeachUrban Village:Not in an Urban Village

This project makes improvements to protect three combined sewer lines which traverse a steep slope down to Rainier Ave. S. Preliminary analysis determined these three lines were at risk of damage due to landslides. The project entails constructing retaining walls along Rainier Ave. S to protect the combined sewer lines from the effects of landslides. The project also makes improvements to the collection of stormwater from the streets that feed stormwater to these combined sewers, to reduce the risk of landslides. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 74 | 86 | 57 | 672 | 11 | 0 | 900 |
| Project Total: | 0 | 0 | 74 | 86 | 57 | 672 | 11 | 0 | 900 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 74 | 86 | 57 | 672 | 11 | 0 | 900 |
| Appropriations Total* | 0 | 0 | 74 | 86 | 57 | 672 | 11 | 0 | 900 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 6 | 6 |

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

S Genesee Combined Sewer Overflow

BCL Name: Combined Sewer Overflow BCL Code C310B

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

Location: S Genesee St. Neighborhood District: Southeast

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

This project constructs storage facilities for Combined Sewer Overflow (CSO) reduction in the S Genesee area. Major work includes flow monitoring, system modeling, facility planning, preliminary engineering, design, permits, land acquisition (if necessary) and construction. The project schedule has been revised from the 2001 CSO Plan to account for project development; work performed under the CSO Facility Retrofit project (C302102), which may reduce the size of the necessary facilities in this basin; and potential co-ordination with King County. This project is in an early phase of development and cost estimates will be revised over time. The project has not yet been approved by SPU's Asset Management Committee. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 8 | 200 | 369 | 324 | 423 | 434 | 1,093 | 1,104 | 3,955 |
| Project Total: | 8 | 200 | 369 | 324 | 423 | 434 | 1,093 | 1,104 | 3,955 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 8 | 200 | 369 | 324 | 423 | 434 | 1,093 | 1,104 | 3,955 |
| Appropriations Total* | 8 | 200 | 369 | 324 | 423 | 434 | 1,093 | 1,104 | 3,955 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

S Henderson CSO Storage

BCL Name: Combined Sewer Overflow BCL Code C310B

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

Location: S Henderson St. Neighborhood District: Southeast

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

This project constructs storage facilities and a pipeline upgrade for Combined Sewer Overflow (CSO) reduction in the S Henderson/Rainier Ave. S area. It also includes work south of S Henderson St. along Rainier Ave. S. Major work includes flow monitoring, system modeling, facility planning, preliminary engineering, design, permits, land acquisition (if necessary) and construction. The project schedule has been revised from the 2001 CSO Plan to account for project development; work performed under the CSO Facility Retrofit project (C302102), which may reduce the size of the necessary facilities in this basin; and potential co-ordination with King County. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not yet been approved by SPU's Asset Management Committee. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 200 | 263 | 324 | 377 | 556 | 641 | 2,208 | 4,569 |
| Project Total: | 0 | 200 | 263 | 324 | 377 | 556 | 641 | 2,208 | 4,569 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 200 | 263 | 324 | 377 | 556 | 641 | 2,208 | 4,569 |
| Appropriations Total* | 0 | 200 | 263 | 324 | 377 | 556 | 641 | 2,208 | 4,569 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

S Lake Washington Sewer Maintenance Assessment

BCL Name: General Wastewater BCL Code C320B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2003Project ID:C303201End Date:4th Quarter 2005

Location: Various Neighborhood District: Southeast

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 27 | 500 | 300 | 0 | 0 | 0 | 0 | 0 | 827 |
| Project Total: | 27 | 500 | 300 | 0 | 0 | 0 | 0 | 0 | 827 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 27 | 500 | 300 | 0 | 0 | 0 | 0 | 0 | 827 |
| Appropriations Total* | 27 | 500 | 300 | 0 | 0 | 0 | 0 | 0 | 827 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Salmon Bay Ph 2 Acquisition & Restoration

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:Improved FacilityStart Date:2nd Quarter 2003Project ID:C333307End Date:4th Quarter 2005

Location:Salmon BayNeighborhood District:NorthwestNeighborhood Plan:Crown Hill/BallardUrban Village:Not in an Urban Village

The Salmon Bay Natural Area is the only remaining wooded shoreline in Ballard that provides refuge and rearing habitat for juvenile salmon as they migrate to Puget Sound. It is a critical transition zone for migrating salmon, which must acclimatize to salt water immediately after passing through the Locks. This project initiates restoration to improve shoreline habitat at the site. The project also improves public access by building pedestrian paths and installing a public "viewing area" with interpretive signage. Environmental restoration continues for three or more years to control invasive species and establish native and other habitat enhancing vegetation.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 336 | 159 | 20 | 0 | 0 | 0 | 0 | 0 | 515 |
| Project Total: | 336 | 159 | 20 | 0 | 0 | 0 | 0 | 0 | 515 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 336 | 159 | 20 | 0 | 0 | 0 | 0 | 0 | 515 |
| Appropriations Total* | 336 | 159 | 20 | 0 | 0 | 0 | 0 | 0 | 515 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Sanitary Sewer Overflow Capacity

BCL Name: General Wastewater BCL Code C320B

Type: New Investment Start Date: 2nd Quarter 2002

Project ID: C302205 End Date: Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|-------|-------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 207 | 400 | 350 | 550 | 1,025 | 1,051 | 1,077 | 1,104 | 5,764 |
| Project Total: | 207 | 400 | 350 | 550 | 1,025 | 1,051 | 1,077 | 1,104 | 5,764 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 207 | 400 | 350 | 550 | 1,025 | 1,051 | 1,077 | 1,104 | 5,764 |
| Appropriations Total* | 207 | 400 | 350 | 550 | 1,025 | 1,051 | 1,077 | 1,104 | 5,764 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Seattle Monorail Project

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:1st Quarter 2004Project ID:C404301-DWFEnd Date:4th Quarter 2009

Location:SW Morgan St./NW 85th St.Neighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

The Seattle Monorail Project (SMP) is planning an initial 14-mile monorail route between Ballard and West Seattle that travels through downtown Seattle. The Monorail conceptual plan was approved by Seattle voters in November, 2002. This project funds planning, design, and coordination with agencies involved in SPU utility relocations associated with implementation of a new monorail. The project does not include funding for construction. An agreement is in place between the SMP and the City in which the former will reimburse the City for all costs incurred by City departments because of the Monorail project. This project is funded by SPU's Drainage & Wastewater and Water Funds, and also includes projects in the City Light, SDOT and Seattle Center CIPs. Cost estimates shown here are preliminary and will be revised over time. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 89 | 230 | 400 | 400 | 303 | 105 | 108 | 110 | 1,745 |
| Project Total: | 89 | 230 | 400 | 400 | 303 | 105 | 108 | 110 | 1,745 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 89 | 230 | 400 | 400 | 303 | 105 | 108 | 110 | 1,745 |
| Appropriations Total* | 89 | 230 | 400 | 400 | 303 | 105 | 108 | 110 | 1,745 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Sediment Remediation - Drainage

BCL Name: Protection of Beneficial Uses BCL Code C333B

Type: New Investment Start Date: 1st Quarter 2005

Project ID: C3NW033-011 End Date: Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project provides drainage funding for preliminary studies and analysis for cleanup of contaminated sediment sites in which the City is a participant. Funding is used to develop studies and analyses required by regulatory agencies for determining the boundaries and cleanup requirements for specific action sites. The study phase of sediment remediation projects often requires multiple years before specific cleanup actions are defined. As regulatory agency cleanup requirements become clear, individual cleanup projects are included in subsequent CIP proposals. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|-------|-------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 1,196 | 1,232 | 611 | 287 | 221 | 162 | 3,709 |
| Project Total: | 0 | 0 | 1,196 | 1,232 | 611 | 287 | 221 | 162 | 3,709 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 1,196 | 1,232 | 611 | 287 | 221 | 162 | 3,709 |
| Appropriations Total* | 0 | 0 | 1,196 | 1,232 | 611 | 287 | 221 | 162 | 3,709 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Sediment Remediation - WW

BCL Name: Habitat and Sediments BCL Code C350B

Type: New Investment Start Date: 4th Quarter 2000

Project ID: C300412 End Date: Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project provides wastewater funding for preliminary studies and analysis for cleanup of contaminated sediment sites in which the City is a participant. Funding is used to develop studies and analyses required by regulatory agencies for determining the boundaries and cleanup requirements for specific action sites. The study phase of sediment remediation projects often requires multiple years before specific cleanup actions are defined. As regulatory agency cleanup requirements become clear, individual cleanup projects are included in subsequent CIP proposals. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|-------|-------|-------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 923 | 1,340 | 1,392 | 1,475 | 1,085 | 320 | 242 | 201 | 6,978 |
| Project Total: | 923 | 1,340 | 1,392 | 1,475 | 1,085 | 320 | 242 | 201 | 6,978 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 923 | 1,340 | 1,392 | 1,475 | 1,085 | 320 | 242 | 201 | 6,978 |
| Appropriations Total* | 923 | 1,340 | 1,392 | 1,475 | 1,085 | 320 | 242 | 201 | 6,978 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Sewage System Modeling

BCL Name: General Wastewater BCL Code C320B

Type: New Investment Start Date: 3rd Quarter 1998

Project ID: C3AA206 End Date: Ongoing

Location: Citywide Neighborhood District: Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 603 | 110 | 163 | 116 | 103 | 105 | 108 | 110 | 1,418 |
| Project Total: | 603 | 110 | 163 | 116 | 103 | 105 | 108 | 110 | 1,418 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 603 | 110 | 163 | 116 | 103 | 105 | 108 | 110 | 1,418 |
| Appropriations Total* | 603 | 110 | 163 | 116 | 103 | 105 | 108 | 110 | 1,418 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Sewer Emergency Repairs

BCL Name: Sewer Rehabilitation BCL Code C340B

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

Project ID: C3AA404 End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

public health or welfare.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 2,173 | 400 | 294 | 408 | 406 | 548 | 490 | 589 | 5,308 |
| Project Total: | 2,173 | 400 | 294 | 408 | 406 | 548 | 490 | 589 | 5,308 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 2,173 | 400 | 294 | 408 | 406 | 548 | 490 | 589 | 5,308 |
| Appropriations Total* | 2,173 | 400 | 294 | 408 | 406 | 548 | 490 | 589 | 5,308 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Sewer Full Line Replacements

BCL Name:Sewer RehabilitationBCL CodeC340BType:Rehabilitation or RestorationStart Date:OngoingProject ID:C300488End Date:Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This program replaces and repairs sewer lines citywide. Closed circuit television (CCTV) inspections identify defects in sewer mainlines. Each mainline defect is catalogued in the Department's database and assigned a priority number, which designates the urgency of repair under this program. SPU uses a criticality analysis as part of an asset management approach to evaluating life cycle costs, and revises priorities among project selection and rehab methodology.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|-------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 1,887 | 900 | 228 | 309 | 252 | 254 | 251 | 4,081 |
| Project Total: | 0 | 1,887 | 900 | 228 | 309 | 252 | 254 | 251 | 4,081 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 1,887 | 900 | 228 | 309 | 252 | 254 | 251 | 4,081 |
| Appropriations Total* | 0 | 1,887 | 900 | 228 | 309 | 252 | 254 | 251 | 4,081 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Shared Opportunity Projects

BCL Name: Shared Cost Projects

BCL Code C410B

Type: Rehabilitation or Restoration Start Date: 1st Quarter 2005

Project ID: C4NW106-005-DWF End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Project Total: | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Appropriations Total* | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

SLU Combined Sewer Overflow Ph2

BCL Name: Combined Sewer Overflow BCL Code C310B

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

Location:Valley St.Neighborhood District:Lake UnionNeighborhood Plan:Not in a Neighborhood PlanUrban Village:South Lake Union

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|-------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 3,996 | 1,789 | 260 | 46 | 0 | 0 | 0 | 0 | 6,091 |
| Project Total: | 3,996 | 1,789 | 260 | 46 | 0 | 0 | 0 | 0 | 6,091 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 3,996 | 1,789 | 260 | 46 | 0 | 0 | 0 | 0 | 6,091 |
| Appropriations Total* | 3,996 | 1,789 | 260 | 46 | 0 | 0 | 0 | 0 | 6,091 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

SLU Combined Sewer Overflow-KC

BCL Name: Combined Sewer Overflow BCL Code C310B

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

Location:Denny Wy.Neighborhood District:Lake UnionNeighborhood Plan:Not in a Neighborhood PlanUrban Village:South Lake Union

This is a joint City of Seattle/King County project to provide combined sewer overflow control near Denny Way and Lake Union. King County manages the project. Seattle's share of the project costs is 17% of the full project budget, and is reflected below. The project is in the construction phase with high confidence cost estimate, and does not require review by SPU's Asset Management Committee as it is a joint project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|--------|-------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 14,736 | 3,150 | 830 | 50 | 0 | 0 | 0 | 0 | 18,766 |
| Project Total: | 14,736 | 3,150 | 830 | 50 | 0 | 0 | 0 | 0 | 18,766 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 14,736 | 3,150 | 830 | 50 | 0 | 0 | 0 | 0 | 18,766 |
| Appropriations Total* | 14,736 | 3,150 | 830 | 50 | 0 | 0 | 0 | 0 | 18,766 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Small Landslide Projects

BCL Name: Public Asset Protection BCL Code C334B

Type: Improved Facility Start Date: 1st Quarter 2004

Project ID: C343402 End Date: Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This project provides for spot improvements in landslide-prone areas throughout Seattle. Typical improvements include installing berms, swales, catch-basins, storm drains, subsurface drains and small slope stability improvement projects. Individual spot improvement projects do not exceed \$150,000. SPU keeps the Executive and the City Council informed about expenditures from this project via the Department's quarterly financial performance report. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 585 | 385 | 409 | 718 | 630 | 646 | 1,656 | 5,029 |
| Project Total: | 0 | 585 | 385 | 409 | 718 | 630 | 646 | 1,656 | 5,029 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 585 | 385 | 409 | 718 | 630 | 646 | 1,656 | 5,029 |
| Appropriations Total* | 0 | 585 | 385 | 409 | 718 | 630 | 646 | 1,656 | 5,029 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Small Sewer Improvements

BCL Name: General Wastewater BCL Code C320B

Type: Improved Facility Start Date: 1st Quarter 2003

Project ID: C303299 End Date: Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This project provides spot improvements and project development support for small-capacity sewer systems throughout Seattle, as well as other small projects related to wastewater. Typical improvements include rerouting of a sewer line or relocation of a maintenance hole. SPU keeps the Executive and the City Council informed about expenditures from this project via the Department's quarterly financial performance report.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 171 | 170 | 170 | 174 | 179 | 183 | 188 | 1,235 |
| Project Total: | 0 | 171 | 170 | 170 | 174 | 179 | 183 | 188 | 1,235 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 171 | 170 | 170 | 174 | 179 | 183 | 188 | 1,235 |
| Appropriations Total* | 0 | 171 | 170 | 170 | 174 | 179 | 183 | 188 | 1,235 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

So Lake Union Feasibility Study

BCL Name: Flood Control and Local Drainage

BCL Code C332B

Type:New FacilityStart Date:3rd Quarter 2004Project ID:C3NW032-015End Date:1st Quarter 2005

Location:Westlake Ave. NorthNeighborhood District:Lake UnionNeighborhood Plan:South Lake UnionUrban Village:South Lake Union

This project analyzes the feasibility of separating stormwater runoff from the combined sewer system in the South Lake Union Drainage Basin. Separation of stormwater runoff from the combined sewer system increases the available flow-related capacity of the combined sewer system and, in turn, reduces the number of combined sewer system back-ups affecting existing and new developments within the South Lake Union Basin. The confidence in the cost estimate is low.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 175 | 5 | 0 | 0 | 0 | 0 | 0 | 180 |
| Project Total: | 0 | 175 | 5 | 0 | 0 | 0 | 0 | 0 | 180 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 175 | 5 | 0 | 0 | 0 | 0 | 0 | 180 |
| Appropriations Total* | 0 | 175 | 5 | 0 | 0 | 0 | 0 | 0 | 180 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Sound Transit Integrated Drainage Plan

BCL Name: Other Drainage BCL Code C335B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW035-008End Date:4th Quarter 2008

Location:VariousNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This project funds SPU's work to implement drainage improvements under an agreement with Sound Transit. Sound Transit has agreed in principle to enter into an Integrated Drainage Plan (IDP) agreement with the City of Seattle to provide funds to the City in lieu of constructing storm water treatment facilities for the Link Light Rail project constructed in the city south of the Downtown Seattle Transit Tunnel. The value established for Sound Transit's payment to the City under terms of the IDP is \$2.3 million, including the at-grade segments of light rail within the city south of the Transit Tunnel. Under the terms of the agreement, SPU develops a project to address drainage and water quality within the Martin Luther King/Norfolk drainage basin area. Transfer of funds from Sound Transit to SPU is anticipated to begin in 2005, and construction commences within five years of receipt of funds. The cost estimate confidence level is low. An agreement authorizing all City services related to Sound Transit light rail construction ("Sound Transit Construction Services Agreement") was adopted via Ordinance 121312 in July 2003. Sound Transit intends to issue task orders authorizing multiple years of City service for each contract segment. See also Sound Transit projects in the City Light and SDOT CIPs.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 300 | 300 | 1,538 | 162 | 0 | 0 | 2,300 |
| Project Total: | 0 | 0 | 300 | 300 | 1,538 | 162 | 0 | 0 | 2,300 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 300 | 300 | 1,538 | 162 | 0 | 0 | 2,300 |
| Appropriations Total* | 0 | 0 | 300 | 300 | 1,538 | 162 | 0 | 0 | 2,300 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Sound Transit Light Rail - Drainage

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:1st Quarter 2003Project ID:C404401-DWFEnd Date:4th Quarter 2008

Location: Martin Luther King Jr. Wy. S/S Walden St. **Neighborhood District:** Southeast

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

This project funds SPU's costs related to Sound Transit's planning, design and construction of the Central Link Light Rail system. Sound Transit proposes to construct and operate this electrical light rail transit system, which includes more than 14 miles of alignment. The first phase of Sound Transit's project constructs a light rail segment from the Convention Place Station to South 154th St. near Seattle/Tacoma Airport. The City of Seattle, including SPU, has an ongoing agreement for reimbursement from Sound Transit. See also Sound Transit projects in the City Light and SDOT CIPs.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|-------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 4 | 1,140 | 733 | 650 | 308 | 84 | 0 | 0 | 2,919 |
| Project Total: | 4 | 1,140 | 733 | 650 | 308 | 84 | 0 | 0 | 2,919 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 4 | 1,140 | 733 | 650 | 308 | 84 | 0 | 0 | 2,919 |
| Appropriations Total* | 4 | 1,140 | 733 | 650 | 308 | 84 | 0 | 0 | 2,919 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

South Henderson Street Raincatchers

BCL Name: General Wastewater BCL Code C320B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW002-007End Date:4th Quarter 2006

Location:S Henderson St.Neighborhood District:SoutheastNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Rainier Beach

This project studies decentralized alternatives to managing the collection and conveyance of wastewater and stormwater in Seattle's South Park neighborhood. The project also implements a stormwater cistern and rain garden demonstration project in the S Henderson St. neighborhood, which includes conducting pre- and post-project monitoring, marketing, and modeling. The project was created in 2004 by Ordinance 121553, and is partially funded by a \$1.3 million grant from the federal Environmental Protection Agency.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|-------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 789 | 1,000 | 0 | 0 | 0 | 0 | 1,789 |
| Project Total: | 0 | 0 | 789 | 1,000 | 0 | 0 | 0 | 0 | 1,789 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 789 | 1,000 | 0 | 0 | 0 | 0 | 1,789 |
| Appropriations Total* | 0 | 0 | 789 | 1,000 | 0 | 0 | 0 | 0 | 1,789 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

South Park Water Quality Study

BCL Name: Protection of Beneficial Uses BCL Code C333B

Type:New FacilityStart Date:1st Quarter 2004Project ID:C343304End Date:3rd Quarter 2005

Location:South Park Drainage BasinNeighborhood District:SouthwestNeighborhood Plan:South ParkUrban Village:Not in an Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 150 | 25 | 0 | 0 | 0 | 0 | 0 | 175 |
| Project Total: | 0 | 150 | 25 | 0 | 0 | 0 | 0 | 0 | 175 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 150 | 25 | 0 | 0 | 0 | 0 | 0 | 175 |
| Appropriations Total* | 0 | 150 | 25 | 0 | 0 | 0 | 0 | 0 | 175 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Spoils Yard & Decant Facility (DWF)

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:3rd Quarter 2004Project ID:C4NW106-007-DWFEnd Date:4th Quarter 2005

Location:S Michigan St./E Marginal Wy. SNeighborhood District: Greater DuwamishNeighborhood Plan:Not in a Neighborhood PlanUrban Village: Not in an Urban Village

This project replaces the temporary spoils yard on Ellis Ave. S with a permanent yard located at the intersection of S Michigan and East Marginal Way S. It will be designed and built to allow SPU to handle spoils materials from repair sites, sewer and drainage vactor grits, future hydro-excavated materials and store replacement fill materials for completing repair jobs. The facility will be designed to enable the Department to perform these functions environmentally using best management practices. The project may include partners from SDOT, City Light and Seattle Parks. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 40 | 10 | 0 | 0 | 0 | 0 | 0 | 50 |
| Project Total: | 0 | 40 | 10 | 0 | 0 | 0 | 0 | 0 | 50 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 40 | 10 | 0 | 0 | 0 | 0 | 0 | 50 |
| Appropriations Total* | 0 | 40 | 10 | 0 | 0 | 0 | 0 | 0 | 50 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Spokane St Bridge Salmon Habitat

BCL Name: Protection of Beneficial Uses BCL Code C333B

Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C333305End Date:4th Quarter 2005

Location:W Marginal Wy. S/S Spokane St.Neighborhood District:SouthwestNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project results in a feasibility study for the regrading of the bank of an existing public access site to provide juvenile salmonids with greater access to shallow water habitat during upper and middle tidal elevations. The project is part of the City's Endangered Species Act (ESA) response to improve habitat in the Duwamish Waterway. The upland portion of this parcel is owned by the Seattle Department of Transportation (SDOT) and is being developed by the Port of Seattle, SDOT, and King County Metro as a public access site to be maintained by SDOT. This project is currently on hold while the project partners seek grant funding for construction of the site.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| Project Total: | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| Appropriations Total* | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Stormwater Mitigation Partnership Program

BCL Name: Protection of Beneficial Uses BCL Code C333B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW033-016End Date:4th Quarter 2010

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This program provides property owners with incentives to make investments on their own property to reduce stormwater runoff. The City assists property owners in installing rain barrels or cisterns, constructing rain gardens, reducing impervious surface, disconnecting gutter downspouts, and making other investments that reduce stormwater runoff impacts and improve the function and operation of SPU's drainage system. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 50 | 50 | 50 | 50 | 50 | 50 | 300 |
| Project Total: | 0 | 0 | 50 | 50 | 50 | 50 | 50 | 50 | 300 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 50 | 50 | 50 | 50 | 50 | 50 | 300 |
| Appropriations Total* | 0 | 0 | 50 | 50 | 50 | 50 | 50 | 50 | 300 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Strategic Asset Management Plan - Drainage

BCL Name: Other Drainage BCL Code C335B

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

Location: N/A Neighborhood District: Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 4 | 48 | 40 | 40 | 0 | 0 | 0 | 0 | 132 |
| Project Total: | 4 | 48 | 40 | 40 | 0 | 0 | 0 | 0 | 132 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 4 | 48 | 40 | 40 | 0 | 0 | 0 | 0 | 132 |
| Appropriations Total* | 4 | 48 | 40 | 40 | 0 | 0 | 0 | 0 | 132 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Strategic Asset Management Plan - WW

BCL Name: General Wastewater BCL Code C320B

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

Location: N/A Neighborhood District: Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 11 | 50 | 100 | 100 | 0 | 0 | 0 | 0 | 261 |
| Project Total: | 11 | 50 | 100 | 100 | 0 | 0 | 0 | 0 | 261 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 11 | 50 | 100 | 100 | 0 | 0 | 0 | 0 | 261 |
| Appropriations Total* | 11 | 50 | 100 | 100 | 0 | 0 | 0 | 0 | 261 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

SW Jacobsen & Alaska SW Landslide

BCL Name: Public Asset Protection BCL Code C334B

Type:New FacilityStart Date:3rd Quarter 2001Project ID:C301353End Date:1st Quarter 2005

Location:SW Jacobsen Rd.Neighborhood District:SouthwestNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project reduces the potential for landslides and related damage by collecting street runoff at this location before it flows onto steep slopes and routing it to an existing storm drain system. The surface drainage improvements consist of berms and additional catch-basins. Construction occurs in 2004. The project has a design phase cost estimate with a high confidence level and has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 186 | 439 | 24 | 0 | 0 | 0 | 0 | 0 | 649 |
| Project Total: | 186 | 439 | 24 | 0 | 0 | 0 | 0 | 0 | 649 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 186 | 439 | 24 | 0 | 0 | 0 | 0 | 0 | 649 |
| Appropriations Total* | 186 | 439 | 24 | 0 | 0 | 0 | 0 | 0 | 649 |
| O & M Costs (Savings) | | | 0 | 0 | 3 | 3 | 3 | 3 | 12 |

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

SW Prescott/Admiral Landslide

BCL Name: Public Asset Protection BCL Code C334B

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

Location:SW Admiral Wy./SW Spokane Wy.Neighborhood District:SouthwestNeighborhood Plan:AdmiralUrban Village:Not in an Urban Village

This project mitigates drainage problems and potential landslide conditions in the SW Prescott Place/Admiral Way Landslide Mitigation Study area that may put municipal infrastructure at risk and contribute to flooding of private property. The project is completed in phases. First, it defines and prioritizes stability and flooding problem areas. Currently nine landslide and three flooding areas have been identified in the study area. Next, preliminary engineering, which is expected to last through the 3rd quarter of 2005, identifies cost-effective alternatives for improvements in each area. Finally, the project constructs the selected improvements, expected to occur in late 2005 through 2007. Three of the landslide problem areas in the study area are joint projects with the Seattle Department of Transportation and the Seattle Department of Parks and Recreation. There is a medium degree of confidence in the cost estimate. The project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 160 | 361 | 765 | 485 | 623 | 541 | 0 | 0 | 2,935 |
| Project Total: | 160 | 361 | 765 | 485 | 623 | 541 | 0 | 0 | 2,935 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 160 | 361 | 765 | 485 | 623 | 541 | 0 | 0 | 2,935 |
| Appropriations Total* | 160 | 361 | 765 | 485 | 623 | 541 | 0 | 0 | 2,935 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 1 | 1 | 2 |

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

Taylor Creek Culverts Phase 2

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:New FacilityStart Date:4th Quarter 1999Project ID:C399315End Date:3rd Quarter 2009

Location:Taylor Creek/Rainier Ave. SNeighborhood District: Greater DuwamishNeighborhood Plan:Not in a Neighborhood PlanUrban Village: Not in an Urban Village

This project designs and constructs fish passage improvements at the culvert that conveys Taylor Creek under Rainier Ave. S. There are currently three different types of culverts connected together making up this culvert system under Rainier Ave. S: a short 42-inch diameter section crossing a 20-foot side street; a three-by-four-foot box culvert running under Rainier Ave. S; and a corrugated metal culvert runing under a adjacent apartment. The points where these three culverts connect have 8-10-inch drops impeding fish passage. In addition, the culverts are velocity barriers during most rainstorms. There is a medium degree of confidence in the cost estimate. The construction phase of the project has been approved by SPU's Asset Management Committee. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 503 | 200 | 80 | 320 | 15 | 5 | 5 | 0 | 1,128 |
| Project Total: | 503 | 200 | 80 | 320 | 15 | 5 | 5 | 0 | 1,128 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 503 | 200 | 80 | 320 | 15 | 5 | 5 | 0 | 1,128 |
| Appropriations Total* | 503 | 200 | 80 | 320 | 15 | 5 | 5 | 0 | 1,128 |
| O & M Costs (Savings) | | | 0 | 0 | 6 | 6 | 6 | 6 | 24 |

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

Thornton - Park 6 Instream Improvements

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type: Improved Facility Start Date: 2nd Quarter 2001

Project ID: C301333 End Date: 2nd Quarter 2006

Location: 5th Ave. NE **Neighborhood District:** North

Neighborhood Plan: Northgate Urban Village: Not in an Urban Village

This project addresses erosion and habitat problems at sections of Thornton Creek along Park 6. Erosion causes sediment to wash downstream and impact habitat, and can undermine road integrity. Urban streams typically lack habitat diversity in terms of wetlands, floodplains, vegetation, and instream structure. This project addresses these issues in Thornton Creek Park 6, a City-owned natural area along Thornton Creek near Northgate Mall. This project includes a strong stewardship component. Local citizens and various non-profit groups are providing design advice and implementing the bulk of the project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 129 | 50 | 50 | 3 | 0 | 0 | 0 | 0 | 232 |
| Project Total: | 129 | 50 | 50 | 3 | 0 | 0 | 0 | 0 | 232 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 129 | 50 | 50 | 3 | 0 | 0 | 0 | 0 | 232 |
| Appropriations Total* | 129 | 50 | 50 | 3 | 0 | 0 | 0 | 0 | 232 |
| O & M Costs (Savings) | | | 0 | 0 | 1 | 1 | 1 | 1 | 4 |

Thornton Creek - Ravenna Ave NE Habitat

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:Improved FacilityStart Date:3rd Quarter 2002Project ID:C333306End Date:4th Quarter 2006

Location: Ravenna Ave. NE Neighborhood District: North

Neighborhood Plan: North District/Lake City Urban Village: Not in an Urban Village

Urban streams typically lack habitat diversity in terms of wetlands, floodplains, vegetation, and instream structure. This project addresses these habitat issues in Ravenna-Bleindheim, a City-owned natural area along Thornton Creek, located downstream of Lake City Way.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 105 | 15 | 13 | 0 | 0 | 0 | 0 | 133 |
| Project Total: | 0 | 105 | 15 | 13 | 0 | 0 | 0 | 0 | 133 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 105 | 15 | 13 | 0 | 0 | 0 | 0 | 133 |
| Appropriations Total* | 0 | 105 | 15 | 13 | 0 | 0 | 0 | 0 | 133 |
| O & M Costs (Savings) | | | 0 | 0 | 1 | 1 | 1 | 1 | 4 |

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

Thornton Creek Water Quality Channel Project

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW033-004End Date:4th Quarter 2009

Location:5th Ave. NENeighborhood District: NorthNeighborhood Plan:NorthgateUrban Village: Northgate

This project includes preliminary engineering, design and construction of a water quality facility on the south lot of Northgate Mall. The facility is located between 3rd and 5th Ave. NE and between NE 100th and NE 103rd St., and provides water quality treatment for public drainage. The project includes excavation of fill material and creation of a creek-like channel for dry weather and small storm flow from the existing public drainage system under NE 100th St. at 3rd Ave. NE. The project facility also includes improvements to pedestrian access and landscaping. Ordinance 121548 created the project in 2004 and provided \$400,000 for property acquisition and closing costs; Ordinance 121547 appropriated \$6.8 million for project design and construction. The project has been approved by SPU's Asset Management Committee. The cost estimates have medium confidence. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|-------|------|------|-------|-------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 7,248 | 0 | 0 | 0 | 0 | 0 | 0 | 7,248 |
| Project Total: | 0 | 7,248 | 0 | 0 | 0 | 0 | 0 | 0 | 7,248 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 7,248 | 0 | 0 | 0 | 0 | 0 | 0 | 7,248 |
| Appropriations Total* | 0 | 7,248 | 0 | 0 | 0 | 0 | 0 | 0 | 7,248 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 71 | 71 |
| Spending Plan | | 430 | 524 | 387 | 3,527 | 2,050 | 330 | 0 | 7,248 |

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

Venema Creek Natural Drainage System

BCL Name: Flood Control and Local Drainage

BCL Code C332B

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

Location:4th Ave. NWNeighborhood District: NorthwestNeighborhood Plan:Not in a Neighborhood PlanUrban Village: Not in an Urban Village

This project reduces the stormwater runoff and pollutants from an approximately 70-acre sub-basin of Piper's Creek to protect downstream aquatic resources. The primarily residential project area includes Greenwood Ave. N and the project will also potentially provide code requirements for a portion of Greenwood Ave. N. to cover future requirements associated with redevelopment of the street right-of-way. An option will be provided to residents on project streets to invest in sidewalk and landscaping improvements as part of the project through a local improvement district (LID) funding mechanism. Funding to operate and maintain the project is expected to be included in SPU's budget starting in 2009, although surrounding property owners and residents are also expected to provide some level of maintenance. SPU has applied for a \$2.3 million loan from the state Department of Ecology to fund a portion of the project. The project cost estimate has a medium confidence level. The project has not yet been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|-------|-------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 109 | 5 | 250 | 250 | 2,300 | 1,500 | 0 | 0 | 4,414 |
| Project Total: | 109 | 5 | 250 | 250 | 2,300 | 1,500 | 0 | 0 | 4,414 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 109 | 5 | 250 | 250 | 2,300 | 1,500 | 0 | 0 | 4,414 |
| Appropriations Total* | 109 | 5 | 250 | 250 | 2,300 | 1,500 | 0 | 0 | 4,414 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 5 | 5 | 10 |

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

Wastewater Rehab Evaluation

BCL Name:Sewer RehabilitationBCL CodeC340BType:Rehabilitation or RestorationStart Date:Ongoing

Project ID: C3AA401 End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This program evaluates future wastewater rehabilitation projects by investigating existing records, reports, and plans, obtaining field data from closed circuit television (CCTV) inspection and for gauging, developing alternatives and cost estimates, and making recommendations. In the 2004-2009 Adopted CIP, this project was titled "Wastewater Rehabilitation Project Evaluation."

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1,122 | 88 | 88 | 94 | 96 | 102 | 108 | 114 | 1,812 |
| Project Total: | 1,122 | 88 | 88 | 94 | 96 | 102 | 108 | 114 | 1,812 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 1,122 | 88 | 88 | 94 | 96 | 102 | 108 | 114 | 1,812 |
| Appropriations Total* | 1,122 | 88 | 88 | 94 | 96 | 102 | 108 | 114 | 1,812 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Water Reuse - Stormwater

BCL Name: Protection of Beneficial Uses

BCL Code C333B

Type:New FacilityStart Date:4th Quarter 2001Project ID:C3NW033-012End Date:4th Quarter 2006

Location: Citywide Neighborhood District: In more than one District

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

This project funds SPU's portion of the cost of rain barrels to be sold to the public. The project also helps to educate SPU's customers about options for reducing the amount of stormwater running into the City's drainage system from their properties, such as through downspout disconnection and landscape irrigation alternatives. Other benefits generated by the project include improvements in localized stormwater drainage, wastewater conveyance, and water conservation. Expenditures to date have supported development of large-building project elements such as a cistern for the new Seattle City Hall and the Carkeek Park Environmental Learning Center rainwater system. In the 2004-2009 Adopted CIP, this project was located in the Other Drainage Budget Control Level (BCL). In the 2005-2010 Adopted CIP, the project is being moved to the Protection of Beneficial Uses BCL, given the project's link with improving water quality.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 161 | 20 | 50 | 50 | 0 | 0 | 0 | 0 | 281 |
| Project Total: | 161 | 20 | 50 | 50 | 0 | 0 | 0 | 0 | 281 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 161 | 20 | 50 | 50 | 0 | 0 | 0 | 0 | 281 |
| Appropriations Total* | 161 | 20 | 50 | 50 | 0 | 0 | 0 | 0 | 281 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Water Reuse - Wastewater

BCL Name: General Wastewater BCL Code C320B

Type:New FacilityStart Date:4th Quarter 2001Project ID:C301203End Date:4th Quarter 2005

Location: Citywide Neighborhood District: Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 114 | 20 | 20 | 0 | 0 | 0 | 0 | 0 | 154 |
| Project Total: | 114 | 20 | 20 | 0 | 0 | 0 | 0 | 0 | 154 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 114 | 20 | 20 | 0 | 0 | 0 | 0 | 0 | 154 |
| Appropriations Total* | 114 | 20 | 20 | 0 | 0 | 0 | 0 | 0 | 154 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Watershed Base Creek Flow Control

BCL Name: Protection of Beneficial Uses BCL Code C333B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C3NW033-017End Date:4th Quarter 2010

Location: Citywide Neighborhood District: In more than one District

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

This project conducts preliminary engineering for projects to improve stormwater flow control in targeted creeks where operation of the City's drainage system has resulted in ecosystem degradation. Under this project, SPU identifies flow control techniques (such as natural drainage system elements, by-pass facilities, and detention), evaluates alternatives, and prepares cost-benefit analysis on identified alternatives. A benefit of these preliminary engineering efforts is identification of the most cost-effective capital project options. Additional benefits may include the ability to incorporate multi-objective elements (such as flood control, environment, and economic benefits). The cost estimates have a medium confidence level. Proposed projects are subject to approval by SPU's Asset Management Committee. This project supports the Mayor's Restore Our Waters Strategy to improve Seattle's aquatic environments.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 50 | 188 | 425 | 200 | 200 | 200 | 1,263 |
| Project Total: | 0 | 0 | 50 | 188 | 425 | 200 | 200 | 200 | 1,263 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 0 | 0 | 50 | 188 | 425 | 200 | 200 | 200 | 1,263 |
| Appropriations Total* | 0 | 0 | 50 | 188 | 425 | 200 | 200 | 200 | 1,263 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Windermere CSO Storage

BCL Name: Combined Sewer Overflow BCL Code C310B

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

Location: TBD Neighborhood District: Northeast

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

This project constructs storage facilities for Combined Sewer Overflow (CSO) reduction in the Windermere area. Major work includes a feasibility study for assessing potential coordination with King County, flow monitoring, system modeling, facility planning, preliminary engineering, design, permitting, and construction. The project schedule has been revised from the 2001 CSO Plan to account for project development; SPU's CSO Facility Retrofit project (C302102), which may reduce the size of the necessary facilities in this basin; and potential co-ordinance with King County. This project is in a preliminary phase of development and cost estimates will be revised over time as the scope of the plan is clarified. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 236 | 58 | 249 | 391 | 395 | 521 | 434 | 552 | 2,836 |
| Project Total: | 236 | 58 | 249 | 391 | 395 | 521 | 434 | 552 | 2,836 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 236 | 58 | 249 | 391 | 395 | 521 | 434 | 552 | 2,836 |
| Appropriations Total* | 236 | 58 | 249 | 391 | 395 | 521 | 434 | 552 | 2,836 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

WPA Drains Study & Repair

BCL Name: Public Asset Protection BCL Code C334B

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

Project ID: C300338 End Date: Ongoing

Location:VariousNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 377 | 250 | 250 | 250 | 256 | 263 | 485 | 552 | 2,683 |
| Project Total: | 377 | 250 | 250 | 250 | 256 | 263 | 485 | 552 | 2,683 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 377 | 250 | 250 | 250 | 256 | 263 | 485 | 552 | 2,683 |
| Appropriations Total* | 377 | 250 | 250 | 250 | 256 | 263 | 485 | 552 | 2,683 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

SPU -SOLID WASTE

Seattle Public Utilities - Solid Waste

Overview of Facilities and Programs

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

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

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

Highlights

- ♦ CIP Facilities Master Plan (Completed 2004): The project completed a Solid Waste CIP Facilities Master Plan to guide SPU towards the construction of facilities that will provide the citizens of Seattle with sufficient recycling and solid waste services for the next 30 years. The plan reflects how the City's system of facilities fits with both King County and private solid waste facilities, and with regional demands for solid waste services. The plan also sets objectives and defines options for replacing or rehabilitating the City's solid waste transfer stations and household hazardous waste sheds; constructing a regional, intermodal facility; conducting cost and feasibility analyses of facility options; and determining a preferred approach to implementation. Funding for implementation of the plan is provided through the Facilities Master Plan Implementation Project. The project's timeframe prepares the City for rebidding of its solid waste collection and disposal contracts in 2009.
- ♦ Master Plan Implementation: This project implements the Solid Waste CIP Facilities Master Plan. The scope, schedule, and costs of proposed projects will be further defined upon approval of the Solid Waste Facilities Master Plan and completion of a State Environmental Impact Statement (SEIS). Costs include completion of a SEIS, permitting, property acquisition, design, construction, and facility equipment.
- ♦ Midway Landfill Post-Closure Improvements: This project funds post-closure operations, maintenance, and capital improvements at the Midway Landfill, which SPU operated from 1966 to 1983. The landfill is a 50-acre former gravel quarry located adjacent to Interstate 5 in Kent, Washington. The Washington State Department of Transportation (WSDOT) is widening Interstate 5 by two lanes on the west side. This state project affects SPU's post-closure infrastructure currently in place on the WSDOT right of way, and necessitates the removal of refuse buried in the right-of-way. SPU and WSDOT are working together on this project, which enters the construction phase in 2007 if WSDOT obtains funding.

Seattle Public Utilities - Solid Waste

Project Selection Process

SPU recently adopted an Asset Management approach for selecting which projects to build. This is an essentially econometric, end-result focused approach in which only projects that provide greater customer benefit (based on adopted service levels) than their respective costs are allowed to proceed. The approach also provides an elaborate analytical and modeling framework to find the most economical balance between capital investments and operations and maintenance expenditures so as to minimize life cycle costs of any facility.

A committee of senior SPU executives, the Asset Management Committee (AMC), was created to guide the Utility into fully adopting Asset Management, and to assure that only projects that meet the benefit criteria move forward. Existing projects already under construction were allowed to proceed, but all remaining projects were subjected to "business case" review. Several projects have since been dropped, as their costs were higher than their benefits. Several cost-effective master planning efforts were approved to create up-to-date improvement and upgrade plans for several groups of assets.

Program Category Summaries

The Solid Waste CIP allocates \$25.2 million during the next biennium (including Technology and Shared Cost projects funded by the Solid Waste Fund), including \$12.7 million in 2005. It is comprised of four program categories as summarized below. A detailed listing of all programs for the Solid Waste CIP follows this overview. Solid Waste-supported technology and shared cost projects are shown grouped with other technology and shared cost projects in the SPU Technology and Shared Cost CIP section.

New Facilities: This program plans, designs, and constructs new facilities to enhance solid waste operations. SPU is in the process of developing a master plan for the Solid Waste system's long-term facility requirements.

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

Shared Cost Projects: This program funds SPU projects that benefit more than one Utility Fund or represent SPU contribution to Citywide efforts that will benefit the Solid Waste Fund.

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

Anticipated Operating Expenses Associated with Capital Facilities Projects

The Department has identified new operations and maintenance costs of \$845,000 between 2005 and 2010. These estimates are predicated on commissioning of new Solid Waste Facilities in 2008, 2009 and 2010 and additional costs related to the collection of recyclable materials from public place and event containers.

City Council Changes to the CIP

There are no City Council changes to the Solid Waste CIP.

Project Summary

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----------------|-------|-------|-------|-------|--------|--------|---------|-------|---------|
| New Facilities | | | | | | | В | CL Code | | C230B |
| Design Commission Fees - SWF | C201004 | 0 | 5 | 20 | 25 | 131 | 144 | 123 | 28 | 476 |
| Facilities Master Plan Implementation | C204002 | 0 | 4,923 | 6,867 | 8,947 | 36,918 | 39,647 | 31,447 | 6,840 | 135,589 |
| Miscellaneous Station Improvements | C203005 | 43 | 130 | 100 | 100 | 103 | 105 | 0 | 0 | 581 |
| New Facilities Development | C2NW30 1-001 | 0 | 0 | 25 | 25 | 26 | 26 | 27 | 28 | 157 |
| New Facilities Total | | 43 | 5,058 | 7,012 | 9,097 | 37,178 | 39,922 | 31,597 | 6,896 | 136,803 |
| Rehabilitation and Hea | avy Equipme | ent | | | | | В | CL Code | | C240B |
| Event Recycling Containers | C2NW40 2-010 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 38 |
| Heavy Equipment Purchases - Solid Waste | C201002 | 1,520 | 1,207 | 1,050 | 1,100 | 1,179 | 1,261 | 1,346 | 1,380 | 10,043 |
| Household Hazard Waste Code Improvements | C2NW40 2-002 | 0 | 0 | 200 | 50 | 0 | 0 | 0 | 0 | 250 |
| Kent Highlands 228th Roadway | C2NW40 2-003 | 0 | 53 | 100 | 200 | 21 | 0 | 0 | 0 | 374 |
| Kent Highlands Agency Negotiations | C2NW40 2-011 | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Kent Highlands Flare Improvement | C2NW40 2-004 | 0 | 0 | 100 | 100 | 205 | 53 | 0 | 0 | 458 |
| Kent Highlands North Pond Diversion | C2NW40 2-005 | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 |
| Midway Agency Negotiations | C2NW40 2-012 | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Midway Landfill Improvements | C203004 | 11 | 500 | 200 | 200 | 4,100 | 0 | 0 | 0 | 5,011 |
| Public Place Recycling Containers | C2NW40 2-009 | 0 | 75 | 75 | 0 | 0 | 0 | 0 | 0 | 150 |
| Rehab & Heavy Equipment Development | C2NW40 2-013 | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Solid Waste Security Improvements | C2NW40 2-001 | 0 | 0 | 150 | 100 | 103 | 0 | 0 | 0 | 353 |
| Street Side Litter Containers | C2NW40 2-008 | 0 | 0 | 94 | 0 | 0 | 65 | 0 | 68 | 227 |
| Rehabilitation and Heavy Equipment Tota | al | 1,531 | 1,835 | 2,207 | 1,950 | 5,761 | 1,538 | 1,508 | 1,613 | 17,943 |

^{*}Amounts in thousands of dollars

Project Summary

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--------------------------------------|-------------------------|-------|-------|--------|--------|--------|--------|---------|-------|---------|
| Shared Cost Projects | | | | | | | В | CL Code | | C410B |
| Facility Improvements | C404602 -SWF | 284 | 170 | 954 | 0 | 0 | 0 | 0 | 0 | 1,408 |
| Fleet Management Study | C4NW10 6-006- SWF | 0 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 48 |
| Joint Training Facility | C4NW10 6-002- SWF | 0 | 0 | 340 | 0 | 0 | 0 | 0 | 0 | 340 |
| Operations Control Center Upgrade | C404501 -SWF | 0 | 74 | 315 | 90 | 0 | 0 | 0 | 0 | 479 |
| Shared Opportunity Projects | C4NW10 6-005- SWF | 0 | 0 | 100 | 100 | 102 | 105 | 107 | 111 | 625 |
| Shared Cost Projects Total | | 284 | 244 | 1,757 | 190 | 102 | 105 | 107 | 111 | 2,900 |
| Department Tota | | 1,858 | 7,137 | 10,976 | 11,237 | 43,041 | 41,565 | 33,212 | 8,620 | 157,646 |

^{*}Amounts in thousands of dollars

Fund Summary

| Fund Name | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|----------------------|-------|-------|--------|--------|--------|--------|--------|-------|---------|
| SPU Solid Waste Fund | 1,858 | 7,137 | 10,976 | 11,237 | 43,041 | 41,565 | 33,212 | 8,620 | 157,646 |
| Department Total | 1,858 | 7,137 | 10,976 | 11,237 | 43,041 | 41,565 | 33,212 | 8,620 | 157,646 |

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

Design Commission Fees - SWF

BCL Name:New FacilitiesBCL CodeC230BType:Improved FacilityStart Date:OngoingProject ID:C201004End Date:Ongoing

Location: N/A Neighborhood District: Not in a Neighborhood District

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

This project funds the City Design Commission's review of the environmental and design aspects of capital improvement projects funded by the Solid Waste Fund. Projects reviewed by the Design Commission include those which have a visual impact on the public realm, including buildings, fencing, gates, and landscaping. The allocations shown below are estimates and are expected to be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 5 | 20 | 25 | 131 | 144 | 123 | 28 | 476 |
| Project Total: | 0 | 5 | 20 | 25 | 131 | 144 | 123 | 28 | 476 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 5 | 20 | 25 | 131 | 144 | 123 | 28 | 476 |
| Appropriations Total* | 0 | 5 | 20 | 25 | 131 | 144 | 123 | 28 | 476 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Event Recycling Containers

BCL Name: Rehabilitation and Heavy Equipment

BCL Code C240B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C2NW402-010End Date:4th Quarter 2005

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This project funds the acquisition of 200 special event recycling containers, as part of the City's overall effort to recycle 60% of its waste stream. Funding for container signage and lid replacement is also included. The new containers will replace approximately 25 containers (20% of SPU's existing inventory) that are in disrepair. The project also increases by approximately 175 the total number of containers, so that the recycling program can be implemented at approximately 10 more special events per year. Operating and maintaining the containers is expected to cost SPU about \$5,000 annually; these costs are provided for in SPU's 2005-2006 Proposed Budget. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee. (See also Public Place Recycling Containers [C2NW402-009] and Street Side Litter Containers [C2NW402-008].)

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 38 |
| Project Total: | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 38 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 38 |
| Appropriations Total* | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 38 |
| O & M Costs (Savings) | | | 0 | 5 | 5 | 5 | 5 | 5 | 25 |

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

Facilities Master Plan Implementation

BCL Name: New Facilities

BCL Code C230B

Type:New FacilityStart Date:1st Quarter 2004Project ID:C204002End Date:4th Quarter 2010

Location:Project Covers Multiple LocationsNeighborhood District: In more than one DistrictNeighborhood Plan:In more than one PlanUrban Village: In more than one Urban Village

This project implements the Solid Waste CIP Facilities Master Plan (C201006). The scope, schedule, and costs of proposed projects are further defined upon approval of the Solid Waste Facilities Master Plan and completion of a State Environmental Impact Statement (SEIS). Costs below include completion of the SEIS, permitting, property acquisition, design, construction, and facility equipment. In 2004, this project was the subject of a budget proviso, which was lifted by Ordinance 121436. The confidence in the estimate is high as the project is currently defined. The current phase of this project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|-------|-------|-------|--------|--------|--------|-------|---------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 4,923 | 6,867 | 8,947 | 36,918 | 39,647 | 31,447 | 6,840 | 135,589 |
| Project Total: | 0 | 4,923 | 6,867 | 8,947 | 36,918 | 39,647 | 31,447 | 6,840 | 135,589 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 4,923 | 6,867 | 8,947 | 36,918 | 39,647 | 31,447 | 6,840 | 135,589 |
| Appropriations Total* | 0 | 4,923 | 6,867 | 8,947 | 36,918 | 39,647 | 31,447 | 6,840 | 135,589 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | (600) | 600 | 700 | 700 |

Facility Improvements

BCL Name: Shared Cost Projects BCL Code C410B

Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404602-SWFEnd Date:4th Quarter 2005

Location:700 5th Ave.Neighborhood District: DowntownNeighborhood Plan:Not in a Neighborhood PlanUrban Village: Commercial Core

This project funds logistical support services for SPU, including tenant improvements, office buildouts, and furniture. The total estimated cost of the project is \$7.9 million. The funding shown below is the Solid Waste Fund's share of the project's cost.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 284 | 170 | 954 | 0 | 0 | 0 | 0 | 0 | 1,408 |
| Project Total: | 284 | 170 | 954 | 0 | 0 | 0 | 0 | 0 | 1,408 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 284 | 170 | 954 | 0 | 0 | 0 | 0 | 0 | 1,408 |
| Appropriations Total* | 284 | 170 | 954 | 0 | 0 | 0 | 0 | 0 | 1,408 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Fleet Management Study

BCL Name: Shared Cost Projects

BCL Code C410B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C4NW106-006-SWFEnd Date:4th Quarter 2005

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This study applies asset management principles to the management of SPU's fleet of heavy equipment. A consultant is used because SPU staff does not have the expertise to meet the study's objectives. The study develops recommendations related to fleet utilization, including which kinds of equipment SPU should be using and how the Department's work practices might be changed either to use existing equipment better or to use different equipment. The project supports other work being done by SPU to assess the Department's current system of fleet management, develop performance measures and tracking systems, and modify department processes and practices related to fleet management. It is expected that implementation of the recommendations identified through this study will lead to lower life cycle costs for fleet management.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 48 |
| Project Total: | 0 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 48 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 48 |
| Appropriations Total* | 0 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 48 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Heavy Equipment Purchases - Solid Waste

BCL Name:Rehabilitation and Heavy EquipmentBCL CodeC240BType:New InvestmentStart Date:OngoingProject ID:C201002End Date:Ongoing

Location: N/A Neighborhood District: Not in a Neighborhood District

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

This project replaces heavy equipment (such as loaders, bulldozers, road tractors and trailers) used at SPU's North and South Recycling and Disposal Stations. SPU replaces old pieces of equipment that have reached the end of their useful lives with new equipment that meets current environmental standards, and also retrofits existing equipment to meet these standards. The confidence in the cost estimate is high. Project spending for 2005 has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 1,520 | 1,207 | 1,050 | 1,100 | 1,179 | 1,261 | 1,346 | 1,380 | 10,043 |
| Project Total: | 1,520 | 1,207 | 1,050 | 1,100 | 1,179 | 1,261 | 1,346 | 1,380 | 10,043 |
| Fund Appropriations/Allocations SPU Solid Waste Fund | 1,520 | 1,207 | 1,050 | 1,100 | 1,179 | 1,261 | 1,346 | 1,380 | 10,043 |
| Appropriations Total* | 1,520 | 1,207 | 1,050 | 1,100 | 1,179 | 1,261 | 1,346 | 1,380 | 10,043 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Household Hazard Waste Code Improvements

BCL Name: Rehabilitation and Heavy Equipment

BCL Code C240B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C2NW402-002End Date:4th Quarter 2006

Location: Various Neighborhood District: Not in a Neighborhood District

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

This project funds anticipated upgrades to the City's solid waste facilities required by new state regulations on facilities that handle moderate risk waste. The state Department of Ecology has given the Seattle King County Health Department the local authority to implement these regulations. SPU works with King County Solid Waste Staff and the Health Department to identify necessary improvements to the City's facilities. The confidence in the cost estimate is medium. Specific project elements are still to be defined, and the project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 200 | 50 | 0 | 0 | 0 | 0 | 250 |
| Project Total: | 0 | 0 | 200 | 50 | 0 | 0 | 0 | 0 | 250 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 0 | 200 | 50 | 0 | 0 | 0 | 0 | 250 |
| Appropriations Total* | 0 | 0 | 200 | 50 | 0 | 0 | 0 | 0 | 250 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Joint Training Facility

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:3rd Quarter 2004Project ID:C4NW106-002-SWFEnd Date:1st Quarter 2006

Location: 9401 Myers Wy. S **Neighborhood District:** Delridge

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

The City of Seattle plans to build a new Joint Training Facility (JTF) Campus to provide classroom and physical job training for members of the Seattle Fire Department (SFD), Seattle Public Utilities (SPU), and Seattle Transportation Department (SDOT) field workers. Funding shown below is for the Solid Waste Fund's share of the cost of developing the new facility, based on the training requirements of Solid Waste Utility staff and workers. The project is designed to provide training opportunities for the three departments while minimizing its impact on the site and minimizing anticipated maintenance and operations costs. The primary features of the secured campus include a classroom/administration building, a high-bay apparatus/storage building, a six-story high drill tower prop, a two-story burn prop, an EVAP pad, a collapsed building prop, trench digging and rescue props, confined spaces prop, drainage and wastewater training prop, vehicle extrication and foaming area, and an urban road simulation prop. Decisions about the campus, its form and function were determined by the active participation of the user groups, as plans were developed. (See FFERP – Joint Training Facility project A1FL202 in the Fleets and Facilities CIP.)

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 340 | 0 | 0 | 0 | 0 | 0 | 340 |
| Project Total: | 0 | 0 | 340 | 0 | 0 | 0 | 0 | 0 | 340 |
| Fund Appropriations/Allocations SPU Solid Waste Fund | 0 | 0 | 340 | 0 | 0 | 0 | 0 | 0 | 340 |
| Appropriations Total* | 0 | 0 | 340 | 0 | 0 | 0 | 0 | 0 | 340 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Kent Highlands 228th Roadway

BCL Name: Rehabilitation and Heavy Equipment

BCL Code C240B

Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C2NW402-003End Date:4th Quarter 2007

Location: 228th St. S Neighborhood District: Not in a Neighborhood District

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

This project funds the required design work associated with an agreement between the City of Seattle and the City of Kent to relocate the existing Kent Highlands Landfill leachate force main. SPU has agreed in principle to complete the design at SPU's expense and the City of Kent funds the construction. This relocation is necessitated by Kent's 228th street road construction project. Additional future project elements include evaluation of the capacity of the existing pump station and possible rehabilitation or replacement of the aging structure, and the abandonment of three existing gas extraction wells on property being transferred to the City of Kent. The project was created in 2004 by Ordinance 121462. The confidence in the estimate is medium. The project to potentially replace the leachate pump station has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 53 | 100 | 200 | 21 | 0 | 0 | 0 | 374 |
| Project Total: | 0 | 53 | 100 | 200 | 21 | 0 | 0 | 0 | 374 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 53 | 100 | 200 | 21 | 0 | 0 | 0 | 374 |
| Appropriations Total* | 0 | 53 | 100 | 200 | 21 | 0 | 0 | 0 | 374 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Kent Highlands Agency Negotiations

BCL Name: Rehabilitation and Heavy Equipment BCL Code C240B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C2NW402-011End Date:4th Quarter 2010

Location: 23076 Military Rd. S **Neighborhood District:** Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Project Total: | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Appropriations Total* | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Kent Highlands Flare Improvement

BCL Name: Rehabilitation and Heavy Equipment BCL Code C240B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C2NW402-004End Date:4th Quarter 2008

Location: 23076 Military Rd. S **Neighborhood District:** Not in a Neighborhood District

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

This project funds the required design and construction work associated with the continued operation of the gas flare facility at the Kent Highlands landfill. As gas flows decrease naturally over time, modifications are necessary to continue operating the flare facility. The original equipment was sized for the gas flows in 1993 and SPU is approaching the limits of system components for decreased flows. Anticipated work elements over time include blower replacement, connection to natural gas for supplemental fuel, and flare replacement. These improvements are anticipated to begin sequentially in 2005. The confidence in the estimate is medium. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 100 | 100 | 205 | 53 | 0 | 0 | 458 |
| Project Total: | 0 | 0 | 100 | 100 | 205 | 53 | 0 | 0 | 458 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 0 | 100 | 100 | 205 | 53 | 0 | 0 | 458 |
| Appropriations Total* | 0 | 0 | 100 | 100 | 205 | 53 | 0 | 0 | 458 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Kent Highlands North Pond Diversion

BCL Name: Rehabilitation and Heavy Equipment BCL Code C240B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C2NW402-005End Date:4th Quarter 2006

Location: 23076 Military Rd. S **Neighborhood District:** Not in a Neighborhood District

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

This project safely diverts water from the Kent Highlands North Pond to surface waters via the Green River. The project allows SPU to avoid incurring high costs related to discharge to the King County Metro sewer system. The confidence in the estimate is medium.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 |
| Project Total: | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 |
| Appropriations Total* | 0 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 100 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Midway Agency Negotiations

BCL Name: Rehabilitation and Heavy Equipment

BCL Code C240B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C2NW402-012End Date:4th Quarter 2010

Location: 24808 Pacific Hwy. S Neighborhood District: Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Project Total: | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Appropriations Total* | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Midway Landfill Improvements

BCL Name: Rehabilitation and Heavy Equipment

BCL Code C240B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2003Project ID:C203004End Date:4th Quarter 2007

Location: 24808 Pacific Hwy. S

Neighborhood District: Not in a Neighborhood District

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

This project funds post-closure operations, maintenance, and capital improvements at the Midway Landfill, a 50-acre former gravel quarry located in Kent, Washington and operated by SPU from 1966 to 1983. The Washington State Department of Transportation (WSDOT) is undertaking a \$700 million project to widen Interstate 5 by two lanes on the west side. This state project impacts landfill post-closure infrastructure that is currently in place on the WSDOT right-of-way, and also requires SPU to remove refuse buried in the right-of-way. Project costs below are estimated, and may change depending on negotiations underway between SPU and WSDOT. SPU and WSDOT are working together on this project, which enters the construction phase in 2007, if WSDOT obtains funding for its highway project. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee yet.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 11 | 500 | 200 | 200 | 4,100 | 0 | 0 | 0 | 5,011 |
| Project Total: | 11 | 500 | 200 | 200 | 4,100 | 0 | 0 | 0 | 5,011 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 11 | 500 | 200 | 200 | 4,100 | 0 | 0 | 0 | 5,011 |
| Appropriations Total* | 11 | 500 | 200 | 200 | 4,100 | 0 | 0 | 0 | 5,011 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Miscellaneous Station Improvements

BCL Name: New Facilities BCL Code C230B

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

Location: 1350 N 34th St. **Neighborhood District:** Not in a Neighborhood District

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

This project funds short-term actions to ensure that the City's existing Recycling & Disposal Stations continue to function reliably, pending development and implementation of the Solid Waste Facilities Master Plan (C204002). The work includes emergency electrical service relocation to maintain safe and reliable power, fuel system control reconfiguration, development of a misting system at the South Recycling & Disposal Station, water line and hydrant replacement, and South Household Hazardous Waste entry relocation. The project also includes installation of electric trucking gates, an important security element as SPU does more trucking in off-peak hour periods. Other emergency work is anticipated through 2008. The confidence in the cost estimate is medium. Specific improvements for 2005 have not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 43 | 130 | 100 | 100 | 103 | 105 | 0 | 0 | 581 |
| Project Total: | 43 | 130 | 100 | 100 | 103 | 105 | 0 | 0 | 581 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 43 | 130 | 100 | 100 | 103 | 105 | 0 | 0 | 581 |
| Appropriations Total* | 43 | 130 | 100 | 100 | 103 | 105 | 0 | 0 | 581 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

New Facilities Development

BCL Name: New Facilities BCL Code C230B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C2NW301-001End Date:4th Quarter 2010

Location: Various Neighborhood District: Not in a Neighborhood District

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

This project supports the development of Solid Waste New Facilities improvements through the preparation of Project Development Plans. Project proposals, including supporting cost-benefit analyses, are reviewed and approved by SPU's Capital Planning Committee. Staff then develops a Project Development Plan for approval by SPU's Asset Management Committee. Documentation is prepared and budget implications are identified. The confidence in the cost estimate is medium. The project concept has been approved by SPU's Asset Management Committee, although additional briefings may occur.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 25 | 25 | 26 | 26 | 27 | 28 | 157 |
| Project Total: | 0 | 0 | 25 | 25 | 26 | 26 | 27 | 28 | 157 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 0 | 25 | 25 | 26 | 26 | 27 | 28 | 157 |
| Appropriations Total* | 0 | 0 | 25 | 25 | 26 | 26 | 27 | 28 | 157 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Operations Control Center Upgrade

BCL Name: Shared Cost Projects

BCL Code C410B

Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404501-SWFEnd Date:4th Quarter 2006

Location: 2700 Airport Wy. S

Neighborhood Plan: Not in a Neighborhood Plan

Urban Village: Not in an Urban Village

This project remodels and upgrades SPU's Operations Control Center building. The project includes reconfiguring internal space to improve security and incorporate the new Supervisory Control And Data Acquisition (SCADA) system. The upgraded center accommodates SPU's new Strategic Operations Division, as well as Field Operations administration and electrical, mechanical, maintenance and emergency response crews. This project has not yet been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 74 | 315 | 90 | 0 | 0 | 0 | 0 | 479 |
| Project Total: | 0 | 74 | 315 | 90 | 0 | 0 | 0 | 0 | 479 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 74 | 315 | 90 | 0 | 0 | 0 | 0 | 479 |
| Appropriations Total* | 0 | 74 | 315 | 90 | 0 | 0 | 0 | 0 | 479 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Public Place Recycling Containers

BCL Name: Rehabilitation and Heavy Equipment BCL Code C240B

Type:New InvestmentStart Date:2nd Quarter 2004Project ID:C2NW402-009End Date:4th Quarter 2005

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This project funds the purchase of recycling containers that will be paired with street side litter containers sited throughout the city, often in Business Improvement Areas, for use by pedestrian traffic. This project, which is part of the City's overall effort to recycle 60% of its waste stream, assumes that 35% of existing street side litter containers will be paired with one recycling container, resulting in approximately 300 total public place recycling containers. The public place recycling containers are purchased over a two-year consecutive period, beginning in 2004. The confidence in the estimate is high and the project has been approved by SPU's Asset Management Committee. (See also Event Recycling Containers [C2NW402-010] and Street Side Litter Containers [C2NW402-008].)

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 75 | 75 | 0 | 0 | 0 | 0 | 0 | 150 |
| Project Total: | 0 | 75 | 75 | 0 | 0 | 0 | 0 | 0 | 150 |
| Fund Appropriations/Allocations | 0 | 7.5 | 7.5 | 0 | 0 | 0 | 0 | 0 | 1.70 |
| SPU Solid Waste Fund | 0 | 75 | 75 | 0 | 0 | 0 | 0 | 0 | 150 |
| Appropriations Total* | 0 | 75 | 75 | 0 | 0 | 0 | 0 | 0 | 150 |
| O & M Costs (Savings) | | | 18 | 18 | 18 | 25 | 18 | 18 | 115 |

Rehab & Heavy Equipment Development

BCL Name: Rehabilitation and Heavy Equipment BCL Code C240B

Type:New InvestmentStart Date:1st Quarter 2005Project ID:C2NW402-013End Date:4th Quarter 2010

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project supports development of Rehabilitation and Heavy Equipment improvements through project development plans. Project proposals, including cost-benefit analyses, are reviewed and approved by SPU's Capital Planning Committee. Staff then develops a Project Development Plan for approval by SPU's Asset Management Committee. Extensive documentation and budget implications are included. The confidence in the estimate is medium. The project concept has been approved by SPU's Asset Management Committee, although additional briefings may occur.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Project Total: | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| Appropriations Total* | 0 | 0 | 50 | 50 | 51 | 53 | 54 | 55 | 313 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Shared Opportunity Projects

BCL Name: Shared Cost Projects

BCL Code C410B

Type: Rehabilitation or Restoration Start Date: 1st Quarter 2005

Project ID: C4NW106-005-SWF End Date: Ongoing

Location:N/ANeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 100 | 100 | 102 | 105 | 107 | 111 | 625 |
| Project Total: | 0 | 0 | 100 | 100 | 102 | 105 | 107 | 111 | 625 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 0 | 100 | 100 | 102 | 105 | 107 | 111 | 625 |
| Appropriations Total* | 0 | 0 | 100 | 100 | 102 | 105 | 107 | 111 | 625 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Solid Waste Security Improvements

BCL Name: Rehabilitation and Heavy Equipment BCL Code C240B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C2NW402-001End Date:4th Quarter 2007

Location: 8100 2nd Ave. S Neighborhood District: Not in a Neighborhood District

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

This project funds selected security enhancements recommended in the Solid Waste Vulnerability Assessment. Given the status of work on the Facilities Master Plan Implementation project (C204002), SPU does not anticipate implementing all of the recommended improvements (totaling \$1.8 million) at all of the facilities. Several of the recommendations are either critical, or have a relatively high return on investment and SPU implements those recommendations in the next several years. Specific likely projects include physical improvements to the scale houses to improve employee safety from robbery, and repairs and modifications to the perimeter fencing at the transfer stations. Other possible improvements are additional security measures at the landfills and other satellite facilities not included in the Facilities Master Plan. The confidence in the estimate is low. The project will be presented to SPU's Asset Management Committee in 2005.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 150 | 100 | 103 | 0 | 0 | 0 | 353 |
| Project Total: | 0 | 0 | 150 | 100 | 103 | 0 | 0 | 0 | 353 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Solid Waste Fund | 0 | 0 | 150 | 100 | 103 | 0 | 0 | 0 | 353 |
| Appropriations Total* | 0 | 0 | 150 | 100 | 103 | 0 | 0 | 0 | 353 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Street Side Litter Containers

BCL Name: Rehabilitation and Heavy Equipment

BCL Code C240B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C2NW402-008End Date:4th Quarter 2010

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This project funds the replacement of street side litter containers and container lids. These containers are sited throughout the city, often in Business Improvement Areas, for use by pedestrian traffic. Essential to litter abatement, the containers are owned by SPU and serviced by contracted waste haulers between one and seven days per week to meet anticipated pedestrian demand. Currently, SPU has approximately 880 street side litter containers. Under this project, 20% of the entire container inventory and 10% of all lids are replaced immediately. In addition, 12.5% of the containers and 10% of the lids are replaced on either two- or three-year cycles beginning in 2008, depending on the durability of the lids, in order to change out old container styles and replace missing or broken lids. The confidence in the cost estimate is high. The project has been approved by SPU's Asset Management Committee as part of the City's effort to recycle 60% of its waste stream. (See also Public Place Recycling Containers [C2NW402-009] and Event Recycling Containers [C2NW402-010]).

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 94 | 0 | 0 | 65 | 0 | 68 | 227 |
| Project Total: | 0 | 0 | 94 | 0 | 0 | 65 | 0 | 68 | 227 |
| Fund Appropriations/Allocations SPU Solid Waste Fund | 0 | 0 | 94 | 0 | 0 | 65 | 0 | 68 | 227 |
| Appropriations Total* | 0 | 0 | 94 | 0 | 0 | 65 | 0 | 68 | 227 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

SPU TECHNOLOGY PROJECTS

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|------------|--------|--------|-------|-------|-------|-------|---------|-------|--------|
| Technology | | | | | | | ВС | CL Code | | C510B |
| Asset Management - Technology | C5201 | 2,959 | 2,207 | 705 | 976 | 581 | 611 | 469 | 342 | 8,850 |
| Capital Planning & Development - Technology | C5205 | 0 | 0 | 0 | 0 | 2,468 | 2,020 | 3,350 | 5,192 | 13,030 |
| Corporate Management - Technology | C5202 | 1,108 | 1,039 | 3,111 | 1,407 | 1,001 | 504 | 361 | 370 | 8,901 |
| Customer Management – Technology | C5203 | 3,524 | 3,427 | 1,531 | 1,428 | 15 | 1,277 | 2,009 | 513 | 13,724 |
| Operations Management - Technology | C5204 | 376 | 1,615 | 1,150 | 720 | 672 | 142 | 495 | 110 | 5,280 |
| Project Management - Technology | C5206 | 3,338 | 1,563 | 1,149 | 1,522 | 1,782 | 1,422 | 1,191 | 1,159 | 13,126 |
| Technology Infrastructure | C5207 | 5,783 | 1,856 | 1,529 | 1,270 | 975 | 1,706 | 0 | 387 | 13,506 |
| Technology Total | | 17,088 | 11,707 | 9,175 | 7,323 | 7,494 | 7,682 | 7,875 | 8,073 | 76,417 |
| Department Tota | | 17,088 | 11,707 | 9,175 | 7,323 | 7,494 | 7,682 | 7,875 | 8,073 | 76,417 |

Fund Summary

| Fund Name | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|-------------------------------------|--------|--------|-------|-------|-------|-------|-------|-------|--------|
| SPU Drainage and Wastewater Fund | 5,411 | 3,887 | 3,313 | 2,336 | 2,390 | 2,450 | 2,511 | 2,576 | 24,874 |
| SPU Solid Waste Fund | 2,823 | 2,476 | 1,710 | 1,272 | 1,305 | 1,337 | 1,372 | 1,406 | 13,701 |
| SPU Water Fund | 8,854 | 5,344 | 4,152 | 3,715 | 3,799 | 3,895 | 3,992 | 4,091 | 37,842 |
| Department Total | 17,088 | 11,707 | 9,175 | 7,323 | 7,494 | 7,682 | 7,875 | 8,073 | 76,417 |

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

<u>Asset Management - Technology</u>

BCL Name:TechnologyBCL CodeC510BType:New InvestmentStart Date:OngoingProject ID:C5201End Date:Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project funds technology improvements to provide information about SPU's assets and performance, to help provide optimum service levels to customers at the lowest cost. Subprojects include development of a database of real property records, a science data management system, some smaller utility geographic information system applications, and a data warehouse for utility asset management.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|-------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 986 | 1,338 | 353 | 457 | 262 | 274 | 221 | 149 | 4,040 |
| Solid Waste Rates | 44 | 76 | 8 | 26 | 29 | 22 | 27 | 4 | 236 |
| Water Rates | 1,929 | 793 | 344 | 493 | 290 | 315 | 221 | 189 | 4,574 |
| Project Total: | 2,959 | 2,207 | 705 | 976 | 581 | 611 | 469 | 342 | 8,850 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 986 | 1,338 | 353 | 457 | 262 | 274 | 221 | 149 | 4,040 |
| SPU Solid Waste Fund | 44 | 76 | 8 | 26 | 29 | 22 | 27 | 4 | 236 |
| SPU Water Fund | 1,929 | 793 | 344 | 493 | 290 | 315 | 221 | 189 | 4,574 |
| Appropriations Total* | 2,959 | 2,207 | 705 | 976 | 581 | 611 | 469 | 342 | 8,850 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Capital Planning & Development - Technology

BCL Name:TechnologyBCL CodeC510BType:New InvestmentStart Date:OngoingProject ID:C5205End Date:Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|----------------------------------|-----|------|------|------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 0 | 788 | 822 | 1,126 | 1,739 | 4,475 |
| Solid Waste Rates | 0 | 0 | 0 | 0 | 642 | 301 | 596 | 956 | 2,495 |
| Water Rates | 0 | 0 | 0 | 0 | 1,038 | 897 | 1,628 | 2,497 | 6,060 |
| Project Total: | 0 | 0 | 0 | 0 | 2,468 | 2,020 | 3,350 | 5,192 | 13,030 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Drainage and Wastewater Fund | 0 | 0 | 0 | 0 | 788 | 822 | 1,126 | 1,739 | 4,475 |
| SPU Solid Waste Fund | 0 | 0 | 0 | 0 | 642 | 301 | 596 | 956 | 2,495 |
| SPU Water Fund | 0 | 0 | 0 | 0 | 1,038 | 897 | 1,628 | 2,497 | 6,060 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 2,468 | 2,020 | 3,350 | 5,192 | 13,030 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Corporate Management - Technology

BCL Name:TechnologyBCL CodeC510BType:New InvestmentStart Date:OngoingProject ID:C5202End Date:Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project develops information technology systems to track financial and human resources data. Major subprojects in this category include SPU's share of funding to upgrade SUMMIT (the City's financial system); development of a new database to support improved drainage rate design, and data warehouses for human resources and financial data and for solid waste system management and planning; replacement of obsolete legacy applications, and development of systems to provide financial information from the BANNER billing system. In the 2004-2009 Adopted CIP, many of these costs were funded under the Business Technology Improvements Program (spending in SPU's 2005-2010 Adopted Technology CIP is organized into new information technology projects that better align with SPU's business operations).

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|----------------------------------|-------|-------|-------|-------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 207 | 235 | 1,150 | 302 | 238 | 110 | 69 | 71 | 2,382 |
| Solid Waste Rates | 262 | 302 | 787 | 303 | 205 | 106 | 79 | 81 | 2,125 |
| Water Rates | 639 | 502 | 1,174 | 802 | 558 | 288 | 213 | 218 | 4,394 |
| Project Total: | 1,108 | 1,039 | 3,111 | 1,407 | 1,001 | 504 | 361 | 370 | 8,901 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Drainage and Wastewater Fund | 207 | 235 | 1,150 | 302 | 238 | 110 | 69 | 71 | 2,382 |
| SPU Solid Waste Fund | 262 | 302 | 787 | 303 | 205 | 106 | 79 | 81 | 2,125 |
| SPU Water Fund | 639 | 502 | 1,174 | 802 | 558 | 288 | 213 | 218 | 4,394 |
| Appropriations Total* | 1,108 | 1,039 | 3,111 | 1,407 | 1,001 | 504 | 361 | 370 | 8,901 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

<u>Customer Management – Technology</u>

BCL Name:TechnologyBCL CodeC510BType:New InvestmentStart Date:OngoingProject ID:C5203End Date:Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project funds systems development, enhancements and upgrades to support SPU's Customer Service Branch. The project includes participation in the BANNER billing system upgrade, and development of web- and telephone-based customer contact technology improvements, an emergency site for the joint SPU/Seattle City Light call center, a centralized complaint management system, and expanded automated meter reading.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|----------------------------------|-------|-------|-------|-------|------|-------|-------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1,189 | 746 | 477 | 374 | 7 | 424 | 714 | 172 | 4,103 |
| Solid Waste Rates | 925 | 1,602 | 473 | 557 | 0 | 416 | 551 | 164 | 4,688 |
| Water Rates | 1,410 | 1,079 | 581 | 497 | 8 | 437 | 744 | 177 | 4,933 |
| Project Total: | 3,524 | 3,427 | 1,531 | 1,428 | 15 | 1,277 | 2,009 | 513 | 13,724 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Drainage and Wastewater Fund | 1,189 | 746 | 477 | 374 | 7 | 424 | 714 | 172 | 4,103 |
| SPU Solid Waste Fund | 925 | 1,602 | 473 | 557 | 0 | 416 | 551 | 164 | 4,688 |
| SPU Water Fund | 1,410 | 1,079 | 581 | 497 | 8 | 437 | 744 | 177 | 4,933 |
| Appropriations Total* | 3,524 | 3,427 | 1,531 | 1,428 | 15 | 1,277 | 2,009 | 513 | 13,724 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Operations Management - Technology

BCL Name:TechnologyBCL CodeC510BType:New InvestmentStart Date:OngoingProject ID:C5204End Date:Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project funds development of new technologies that improve the efficiency and effectiveness of SPU's front-line workers. This category includes information technology projects related to laboratory management, emergency dispatching, water resource management, vehicle location technology, Clean City data management, and improved work management and mobile computing for Drainage and Wastewater field crews.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|----------------------------------|-----|-------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 34 | 615 | 549 | 349 | 307 | 71 | 0 | 0 | 1,925 |
| Solid Waste Rates | 34 | 3 | 80 | 44 | 90 | 0 | 0 | 0 | 251 |
| Water Rates | 308 | 997 | 521 | 327 | 275 | 71 | 495 | 110 | 3,104 |
| Project Total: | 376 | 1,615 | 1,150 | 720 | 672 | 142 | 495 | 110 | 5,280 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Drainage and Wastewater Fund | 34 | 615 | 549 | 349 | 307 | 71 | 0 | 0 | 1,925 |
| SPU Solid Waste Fund | 34 | 3 | 80 | 44 | 90 | 0 | 0 | 0 | 251 |
| SPU Water Fund | 308 | 997 | 521 | 327 | 275 | 71 | 495 | 110 | 3,104 |
| Appropriations Total* | 376 | 1,615 | 1,150 | 720 | 672 | 142 | 495 | 110 | 5,280 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Project Management - Technology

BCL Name:TechnologyBCL CodeC510BType:New InvestmentStart Date:OngoingProject ID:C5206End Date:Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This program provides funding for technology investments that improve management of public works projects. This program includes development of a new project tracking system, automation of engineering vault records, development of a project plan circulation system, and several small related projects.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1,709 | 500 | 368 | 487 | 542 | 424 | 381 | 371 | 4,782 |
| Solid Waste Rates | 420 | 156 | 115 | 152 | 168 | 118 | 119 | 116 | 1,364 |
| Water Rates | 1,209 | 907 | 666 | 883 | 1,072 | 880 | 691 | 672 | 6,980 |
| Project Total: | 3,338 | 1,563 | 1,149 | 1,522 | 1,782 | 1,422 | 1,191 | 1,159 | 13,126 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater Fund | 1,709 | 500 | 368 | 487 | 542 | 424 | 381 | 371 | 4,782 |
| SPU Solid Waste Fund | 420 | 156 | 115 | 152 | 168 | 118 | 119 | 116 | 1,364 |
| SPU Water Fund | 1,209 | 907 | 666 | 883 | 1,072 | 880 | 691 | 672 | 6,980 |
| Appropriations Total* | 3,338 | 1,563 | 1,149 | 1,522 | 1,782 | 1,422 | 1,191 | 1,159 | 13,126 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Technology Infrastructure

BCL Name:TechnologyBCL CodeC510BType:New InvestmentStart Date:OngoingProject ID:C5207End Date:Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project funds technology improvements that support SPU's business systems. Funded work includes upgrade or renewal of remote communication links and other network enhancements; an upgrade of SPU's internal and external websites; enhancements designed to keep SPU's business running during emergencies and after disasters; security enhancements; and an update of the core technology underlying SPU's geographic information systems (GIS).

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|-------|-------|-------|------|-------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1,286 | 453 | 416 | 367 | 246 | 325 | 0 | 74 | 3,167 |
| Solid Waste Rates | 1,138 | 337 | 247 | 190 | 171 | 374 | 0 | 85 | 2,542 |
| Water Rates | 3,359 | 1,066 | 866 | 713 | 558 | 1,007 | 0 | 228 | 7,797 |
| Project Total: | 5,783 | 1,856 | 1,529 | 1,270 | 975 | 1,706 | 0 | 387 | 13,506 |
| Fund Appropriations/Allocations SPU Drainage and Wastewater | 1,286 | 453 | 416 | 367 | 246 | 325 | 0 | 74 | 3,167 |
| Fund | | | | | | | | | |
| SPU Solid Waste Fund | 1,138 | 337 | 247 | 190 | 171 | 374 | 0 | 85 | 2,542 |
| SPU Water Fund | 3,359 | 1,066 | 866 | 713 | 558 | 1,007 | 0 | 228 | 7,797 |
| Appropriations Total* | 5,783 | 1,856 | 1,529 | 1,270 | 975 | 1,706 | 0 | 387 | 13,506 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

SPU - WATER

Seattle Public Utilities - Water

Overview of Facilities and Programs

Seattle Public Utilities (SPU) operates the City-owned water system serving a population of approximately 1.3 million people in a 450 square mile area. The system extends from Edmonds to Des Moines and from Puget Sound to Lake Joy near Duvall. SPU retails water in Seattle and immediately adjacent areas, and sells wholesale to 26 suburban water utilities for distribution of water to their customers. Seattle Public Utilities' Capital Improvement Program (CIP) is the vehicle for upgrading and expanding Water infrastructure as well as constructing projects that protect, conserve, and enhance our region's environmental resources. The overriding goal of the CIP is to assure that the water system is properly upgraded and expanded to reliably deliver high-quality, safe drinking water to customers, protect the environment, and comply with regulations.

The Utility's financial policies (as proposed by the Executive in Fall 2004) call for cash contributions to the CIP to average of 20% of total CIP costs over any given rate period. The remaining portion of the CIP is bondfunded. Overhead costs for the CIP are budgeted in the operating fund and are reimbursed as CIP expenditures are incurred

Highlights

- Open Distribution System Reservoirs: To comply with water quality regulations and to enhance water system security, the City plans to cover all of its drinking-water reservoirs over the next several years. Two reservoirs, Bitter Lake and Lake Forest Park, have already been covered with floating covers. A new buried reservoir is in the final stages of construction as a replacement for the open Lincoln Reservoir, which has been out of service since late 2002. Design work for the replacement of Beacon, Myrtle, West Seattle, and Maple Leaf reservoirs will commence by the end of 2004, and two of them Beacon and Myrtle will proceed into construction in 2006 to be completed by 2008. Construction of a new buried reservoir to replace West Seattle Reservoir will begin in 2008 and be completed in 2010, with construction of Maple Leaf Reservoir's replacement starting in 2011, and ending in 2013. SPU currently plans to decommission Roosevelt Reservoir, and further evaluate the possibility of decommissioning Volunteer Reservoir as well. However, specific actions at these two reservoirs are expected to occur after 2010, which falls outside the six-year budgetary period.
- Cedar River Watershed Habitat Conservation Plan (HCP): In 2000, after seven years of intensive study and negotiation with state, federal, and tribal authorities, the City entered into a 50-year habitat conservation plan on the Cedar River Watershed. This agreement commits the City to certain projects and management practices to mitigate the environmental impact of drinking water diversions. Major HCP components include investments in fisheries enhancement projects such as the Landsburg Fish Passage Improvements, which was completed in 2004. The remaining large fisheries enhancement project within the Cedar HCP Program is the Cedar Sockeye Hatchery, which has been delayed at least a year as it undergoes appeal of its Environmental Impact Statement (EIS). Other HCP projects within the municipal watershed include culvert improvements and other stream restoration work, removal of logging roads and restoration of forestlands. Research and monitoring are also being conducted in association with many of these projects. Approximately \$31 million is included in the 2005-2010 CIP for these projects.

Project Selection Process

SPU recently adopted an Asset Management approach for selecting which projects to build. This is an essentially econometric, end-result focused approach in which only projects that provide greater customer benefit (based on adopted service levels) than their respective costs are allowed to proceed. The approach also provides an elaborate analytical and modeling framework to find the most economical balance between capital investments and operation and maintenance expenditures so as to minimize life cycle costs of any facility.

A committee of senior SPU executives, the Asset Management Committee (AMC), was created to guide the Utility into fully adopting Asset Management, and to assure that only projects that meet the benefit criteria move

Seattle Public Utilities - Water

forward. Existing projects already under construction were allowed to proceed, but all remaining projects were subjected to "business case" review. Several projects have since been dropped, as their costs were higher than their benefits. Several cost-effective master planning efforts were approved to create up-to-date improvement and upgrade plans for several groups of assets.

Program Category Summaries

The Water CIP allocates \$164 million during the next biennium (including Technology projects funded by the Water Fund) including \$83 million in 2005. The CIP is comprised of nine program categories, which are summarized below.

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

Environmental Stewardship: Projects and programs in this program category provide protection, sustain the environment, and enhance environmental quality, both locally and regionally. Several of the projects are implemented in response to the listing of the Chinook salmon as a threatened species under the Endangered Species Act.

Habitat Conservation Program: This program category includes projects and programs directly related to implementation of the Cedar River Watershed Habitat Conservation Plan. Projects are grouped into eight areas of focus: road improvements and decommissioning; stream and riparian restoration; upland forest restoration; Landsburg fish passage improvements; Cedar sockeye hatchery; Ballard Locks improvements; downstream fish habitat; and Cedar permanent dead storage evaluations.

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

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

Shared Projects: This program category includes projects that benefit, and are thus paid for by more than one of SPU's utility funds. Included are the large transportation projects like the Seattle Monorail, the Sound Transit Light Rail, and the potential replacement of the Alaskan Way Viaduct and Seawall.

Technology: This program category makes use of recent technology advances to increase efficiency and productivity. Water-supported technology projects are shown grouped with technology projects supported by SPU's other fund sources.

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

Seattle Public Utilities - Water

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

Anticipated Operating Expenses Associated with Capital Facilities Projects

For most projects in the Water CIP, there are no new 2005 operations and maintenance costs, or they have not been calculated (N/C). In these cases, the cost impacts of the project are either insignificant or are offset by cost savings realized by other projects.

City Council Changes to the CIP

The Council adopted the following two capital budget provisos that limit SPU's spending on the South Lake Union Water Main/Utility Coordination Project (project C104036):

- No more than \$71,000 of the money appropriated for 2005 for SPU's Water Utility Other Agencies Budget Control Level can be spent to pay for the South Lake Union Water Main/Utility Coordination Project.
- None of the money appropriated for 2005 for SPU's Water Utility Other Agencies Budget Control Level
 can be spent to pay for the South Lake Union Water Main/Utility Coordination Project, until the Seattle
 Department of Transportation (SDOT) and SPU have signed a Memorandum of Agreement that explicitly
 requires SDOT to fully reimburse SPU from the funds appropriated in Ordinance 121565 for the
 expenditures incurred by SPU in support of preliminary design and engineering for the South Lake Union
 Street Car project.

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----------------|-----|-------|-------|-------|------|-------|--------|------|-------|
| Bonneville Agreement | | | | | | | ВС | L Code | | C170B |
| BPA - Aquatic & Riparian Restoration | C1702 | 0 | 109 | 844 | 539 | 27 | 0 | 0 | 0 | 1,519 |
| BPA - Road Decommissioning/Improvements | C1703 | 0 | 546 | 728 | 174 | 51 | 52 | 162 | 110 | 1,823 |
| BPA - Security Measures | C1704 | 0 | 347 | 312 | 215 | 0 | 0 | 0 | 0 | 874 |
| BPA - Upland Forest Restoration | C1705 | 0 | 169 | 608 | 384 | 56 | 53 | 0 | 0 | 1,270 |
| Bonneville Agreement Total | | 0 | 1,171 | 2,492 | 1,312 | 134 | 105 | 162 | 110 | 5,486 |
| Environmental Stewar | dship | | | | | | BC | L Code | | C130B |
| Cedar River - Education Center Exhibits | C103001 | 321 | 320 | 0 | 150 | 0 | 0 | 0 | 0 | 791 |
| Cedar River Northridge Trail | C102022 | 19 | 13 | 51 | 0 | 0 | 0 | 0 | 0 | 83 |
| Environmental Steward Project Development | C1NW30 1-003 | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| ESA - Tolt Levee Modifications | C1NW30 1-004 | 0 | 0 | 347 | 276 | 290 | 306 | 314 | 322 | 1,855 |
| ESA Chinook Research & Monitoring | C101048 | 429 | 210 | 217 | 223 | 236 | 248 | 0 | 0 | 1,563 |
| ESA Snohomish River Basin | C101003 | 103 | 396 | 52 | 130 | 145 | 153 | 157 | 161 | 1,297 |
| Rock Creek Fishway | C101008 | 64 | 19 | 22 | 112 | 0 | 0 | 0 | 0 | 217 |
| Tolt Fisheries Mitigation | C104057 | 0 | 138 | 185 | 9 | 0 | 0 | 0 | 0 | 332 |
| Tolt Watershed Management Plan | C1NW30 1-002 | 0 | 0 | 300 | 200 | 205 | 210 | 108 | 0 | 1,023 |
| Environmental Stewardship Total | | 936 | 1,096 | 1,274 | 1,200 | 979 | 1,022 | 687 | 593 | 7,787 |

^{*}Amounts in thousands of dollars

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|------------|--------|-------|-------|--------|-------|-------|---------|-------|--------|
| Habitat Conservation | Program | | | | | | BC | CL Code | | C160B |
| Ballard Locks Improvements | C1606 | 865 | 66 | 150 | 150 | 154 | 998 | 0 | 0 | 2,383 |
| Cedar Sockeye Hatcher | y C1605 | 1,848 | 606 | 564 | 6,419 | 2,600 | 0 | 0 | 0 | 12,037 |
| Downstream Fish Habitat | C1607 | 242 | 4,267 | 1,447 | 214 | 327 | 11 | 0 | 0 | 6,508 |
| Instream Flow Management Studies | C1608 | 31 | 203 | 533 | 613 | 708 | 319 | 204 | 0 | 2,611 |
| Landsburg Fish Passage Improvements | c C1604 | 11,760 | 872 | 202 | 203 | 226 | 210 | 4 | 11 | 13,488 |
| Stream & Riparian Restoration | C1602 | 1,776 | 726 | 837 | 827 | 799 | 826 | 832 | 852 | 7,475 |
| Upland Reserve Forest Restoration | C1603 | 1,861 | 689 | 854 | 825 | 825 | 767 | 715 | 733 | 7,269 |
| Watershed Road Improvement/Decommi sioning | C1601 s | 2,393 | 871 | 864 | 830 | 856 | 884 | 907 | 934 | 8,539 |
| Habitat Conservation Program Total | | 20,776 | 8,300 | 5,451 | 10,081 | 6,495 | 4,015 | 2,662 | 2,530 | 60,310 |

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------------------|--------|-------|-------|-------|--------|--------|---------|--------|--------|
| Infrastructure | | | | | | | В | CL Code | | C110B |
| Asset Management | C1126 | 462 | 1,304 | 3,944 | 2,416 | 11,322 | 11,289 | 11,256 | 11,868 | 53,861 |
| Burien Feeder Upgrade | C1NW10 1-002 | 0 | 0 | 0 | 0 | 0 | 0 | 291 | 1,982 | 2,273 |
| Cathodic Phase V | C100063 | 195 | 947 | 248 | 0 | 0 | 0 | 0 | 0 | 1,390 |
| Cathodic Protection Program | C1NW11 6 | 0 | 5 | 500 | 1,000 | 1,025 | 1,051 | 1,077 | 1,104 | 5,762 |
| Cedar Bridges | C1119 | 19,395 | 350 | 1,014 | 665 | 256 | 210 | 97 | 171 | 22,158 |
| Cedar Falls Facility Master Plan | C1NW10 1-005 | 0 | 0 | 60 | 56 | 0 | 0 | 0 | 0 | 116 |
| Cedar Moraine Improvements | C197009 | 966 | 357 | 200 | 250 | 51 | 53 | 0 | 0 | 1,877 |
| Cedar River Non-HCP Road Improvements | C191001 | 5,028 | 886 | 786 | 804 | 800 | 819 | 840 | 861 | 10,824 |
| Cedar River Watershed - Headquarters Major Maintenance | C100051 | 1,508 | 88 | 88 | 86 | 90 | 54 | 56 | 57 | 2,027 |
| Chamber Upgrades - Distribution | C103002 | 203 | 160 | 180 | 150 | 154 | 158 | 162 | 166 | 1,333 |
| Control Works Upgrade | c C1NW10 1-003 | 0 | 0 | 0 | 0 | 0 | 0 | 604 | 620 | 1,224 |
| CRPL #2 Replace Portion | C104013 | 0 | 39 | 60 | 211 | 5,125 | 0 | 0 | 0 | 5,435 |
| Design Commission Fees - Water | C101050 | 34 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 180 |
| Distribution Projects Development | C1NW10 1-001 | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Distribution System In- Line Gate Valves | C199012 | 311 | 45 | 60 | 60 | 62 | 63 | 65 | 66 | 732 |
| Fireflow & Pressure Improvement | C1128 | 30 | 528 | 700 | 700 | 2,723 | 5,111 | 5,751 | 5,894 | 21,437 |
| Heavy Equipment Purchases - Water | C199068 | 6,922 | 3,200 | 1,240 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 21,875 |
| Lake Youngs Outlet Dam Rehabilitation | C102013 | 16 | 309 | 125 | 4 | 0 | 0 | 0 | 0 | 454 |
| Lake Youngs Outlet Dam Warning System | C101006 | 231 | 779 | 34 | 30 | 10 | 0 | 0 | 0 | 1,084 |
| Landsburg Flood Passage Improvement | C104016 | 0 | 125 | 450 | 500 | 4,408 | 0 | 0 | 0 | 5,483 |
| Maple Leaf Gatehouse Pipe Refurbishing | C195001 | 20 | 40 | 390 | 500 | 12 | 0 | 0 | 0 | 962 |

^{*}Amounts in thousands of dollars

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----------------|--------|-------|-------|-------|-------|-------|---------|-------|--------|
| Infrastructure | | | | | | | ВС | CL Code | | C110B |
| Painting Program - Myrtle Tank | C104031 | 0 | 74 | 653 | 8 | 0 | 0 | 0 | 0 | 735 |
| Painting Program - Richmond Highland | C104032 | 0 | 152 | 1,295 | 110 | 0 | 0 | 0 | 0 | 1,557 |
| Painting Program - Steel Structures | C1NW13 0 | 0 | 0 | 20 | 100 | 513 | 525 | 538 | 552 | 2,248 |
| Pump Station - Install Station Motors | C199052 | 310 | 60 | 61 | 60 | 67 | 74 | 75 | 77 | 784 |
| Pump Station - Queen Anne | C1AA00 5 | 1,045 | 5 | 50 | 3,000 | 523 | 0 | 0 | 0 | 4,623 |
| Purveyor Meters Replace - SPU | C1107 | 3,199 | 450 | 176 | 6 | 0 | 0 | 0 | 0 | 3,831 |
| Replace Air Valve Chambers | C199060 | 312 | 60 | 61 | 62 | 62 | 63 | 65 | 66 | 751 |
| Seismic Upgrade - Buildings | C1118 | 1,289 | 15 | 141 | 578 | 748 | 657 | 350 | 110 | 3,888 |
| Seismic Upgrade - CRPLs at Ginger Creek | C197032 | 293 | 208 | 2,105 | 3 | 3 | 0 | 0 | 0 | 2,612 |
| Seismic Upgrade - Pipeline Backbone | C101038 | 194 | 205 | 205 | 1,700 | 154 | 0 | 0 | 0 | 2,458 |
| Seismic Upgrade - Tanks | C1120 | 5,988 | 139 | 1,445 | 4,011 | 723 | 1,534 | 2,719 | 4,548 | 21,107 |
| Tolt Bridges | C1131 | 0 | 202 | 6 | 210 | 359 | 0 | 0 | 0 | 777 |
| Tolt Eastside Supply Line Upgrade | C1NW10 1-004 | 0 | 0 | 0 | 0 | 0 | 0 | 1,059 | 1,858 | 2,917 |
| Tolt Instrument and Warning Upgrade | C1AA01 2 | 1,857 | 25 | 47 | 46 | 26 | 26 | 27 | 28 | 2,082 |
| Tolt River Watershed Road Improvements | C196007 | 1,774 | 170 | 170 | 170 | 174 | 179 | 0 | 0 | 2,637 |
| Transmission Pipeline Analysis | C101043 | 213 | 115 | 200 | 150 | 154 | 158 | 162 | 166 | 1,318 |
| Transmission Pipelines Rehabilitation | C1127 | 0 | 0 | 500 | 500 | 1,025 | 1,051 | 1,077 | 1,104 | 5,257 |
| Water Design Standards & Guideline Program | C102028 | 23 | 186 | 200 | 200 | 256 | 263 | 0 | 0 | 1,128 |
| Water Infrastruc - Service Renewal | C1109 | 38,654 | 5,122 | 5,123 | 4,146 | 4,278 | 4,385 | 4,495 | 4,607 | 70,810 |
| Water Infrastructure - Hydrant Replacement/Relocation | C1110 | 2,076 | 208 | 222 | 226 | 232 | 237 | 243 | 0 | 3,444 |

^{*}Amounts in thousands of dollars

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------------|---------|--------|--------|--------|--------|--------|---------|--------|---------|
| Infrastructure | | | | | | | В | CL Code | | C110B |
| Water Infrastructure - New Hydrants | C1112 | 94 | 65 | 64 | 12 | 12 | 13 | 13 | 0 | 273 |
| Water Infrastructure - New Taps | C1113 | 29,372 | 3,354 | 3,601 | 3,600 | 3,690 | 3,782 | 3,877 | 0 | 51,276 |
| Water Infrastructure - Watermain Extensions | C1111 | 6,644 | 1,019 | 1,191 | 1,108 | 1,025 | 1,051 | 1,077 | 1,104 | 14,219 |
| Water Infrastructure - Watermain Replacemen | C1104 nt | 15,189 | 860 | 339 | 3 | 0 | 0 | 0 | 0 | 16,391 |
| Water Infrastructure - Tank Site Remediation | C1114 | 1,326 | 312 | 320 | 251 | 256 | 263 | 0 | 0 | 2,728 |
| Water System Dewatering | C1105 | 1,305 | 633 | 1,056 | 350 | 359 | 368 | 377 | 386 | 4,834 |
| Watermain Rehabilitation | C1129 | 0 | 1,372 | 1,366 | 2,301 | 4,772 | 4,892 | 5,014 | 5,139 | 24,856 |
| Infrastructure Total | | 146,478 | 24,193 | 30,816 | 32,463 | 47,623 | 40,556 | 43,651 | 44,874 | 410,654 |

^{*}Amounts in thousands of dollars

SPU - Water

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----------------|-------|-------|-------|-------|-------|-------|---------|-------|--------|
| Other Agencies | | | | | | | ВС | CL Code | | C120B |
| Aurora Ave N (110th - 145th) | C103033 | 2 | 12 | 8 | 16 | 0 | 0 | 0 | 0 | 38 |
| Aurora N Multi-modal Corridor | C103027 | 4 | 49 | 985 | 151 | 51 | 0 | 0 | 0 | 1,240 |
| Cedar Eastside Supply Improvement - East Creek | C145007 | 242 | 9 | 590 | 0 | 0 | 0 | 0 | 0 | 841 |
| Denny Combined Sewer Overflow | C145002 | 202 | 124 | 10 | 0 | 0 | 0 | 0 | 0 | 336 |
| Fremont Bridge | C1NW20 1-003 | 0 | 10 | 50 | 13 | 0 | 0 | 0 | 0 | 73 |
| Holgate/Amtrak Water Relocation | C101009 | 12 | 238 | 10 | 2 | 0 | 0 | 0 | 0 | 262 |
| Marine View/Des Moines Creek | C197021 | 184 | 496 | 400 | 2 | 0 | 0 | 0 | 0 | 1,082 |
| Multiple Utility Relocation | C1NW20 1-001 | 115 | 966 | 980 | 1,000 | 1,025 | 1,051 | 1,077 | 1,104 | 7,318 |
| Renton Franchise/Line Valve CR | C102023 | 542 | 1,254 | 970 | 0 | 0 | 0 | 0 | 0 | 2,766 |
| SeaTac 3 Runway Pipeline Relocat | C199075 | 251 | 57 | 545 | 20 | 0 | 0 | 0 | 0 | 873 |
| SLU - Water Main Replacement/South Lake Union Park | C104035 | 0 | 15 | 155 | 30 | 0 | 0 | 0 | 0 | 200 |
| Snoqualmie River Bank Stabilization | C1NW20 1-007 | 0 | 0 | 0 | 47 | 513 | 0 | 0 | 0 | 560 |
| South Lake Union Water Main/Utility Coordination | C104036 | 0 | 36 | 71 | 2,000 | 0 | 0 | 0 | 0 | 2,107 |
| Valley St. Connector Water Utility | C145009 | 24 | 60 | 5 | 0 | 0 | 0 | 0 | 0 | 89 |
| W Duwamish Waterway Tunnel/Rails | C194034 | 153 | 0 | 50 | 2 | 0 | 0 | 0 | 0 | 205 |
| WSDOT Sound Walls | C104019 | 0 | 30 | 20 | 0 | 0 | 0 | 0 | 0 | 50 |
| Other Agencies Total | | 1,731 | 3,356 | 4,849 | 3,283 | 1,589 | 1,051 | 1,077 | 1,104 | 18,040 |

^{*}Amounts in thousands of dollars

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|------------------------|-------|-------|--------|-------|-------|-------|---------|------|--------|
| Shared Cost Projects | | | | | | | ВС | CL Code | | C410B |
| Alaskan Way Viaduct & Seawall | C404201 -WF | 15 | 65 | 125 | 160 | 30 | 0 | 0 | 0 | 395 |
| Facility Improvements | C404602 -WF | 752 | 450 | 2,491 | 0 | 0 | 0 | 0 | 0 | 3,693 |
| Fleet Management Study | C4NW10 6-006- WF | 0 | 0 | 123 | 0 | 0 | 0 | 0 | 0 | 123 |
| Joint Training Facility | C4NW10 6-002- WF | 0 | 0 | 1,700 | 0 | 0 | 0 | 0 | 0 | 1,700 |
| Meter Replacement - Large (WF) | C404102 -WF | 6,348 | 724 | 728 | 574 | 588 | 603 | 618 | 0 | 10,183 |
| Operations Control Center Upgrade | C404501 -WF | 0 | 325 | 2,195 | 631 | 0 | 0 | 0 | 0 | 3,151 |
| Seattle Monorail Projec | et C404301 -WF | 89 | 230 | 400 | 400 | 410 | 420 | 188 | 0 | 2,137 |
| Seattle Monorail Proj- WM Rplc (WF) | C4NW10 3-001- WF | 0 | 0 | 1,200 | 2,550 | 1,819 | 1,340 | 0 | 0 | 6,909 |
| Shared Opportunity Projects | C4NW10 6-005- WF | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Sound Transit Light Rail - Water | C404401 -WF | 0 | 1,260 | 1,476 | 1,445 | 964 | 0 | 0 | 0 | 5,145 |
| Sound Transit Light Rail - Wtr Btmnt (WF) | C4NW10 4-WF | 0 | 0 | 1,400 | 2,000 | 718 | 0 | 0 | 0 | 4,118 |
| Spoils Yard & Decant Facility (WF) | C4NW10 6-007- WF | 0 | 40 | 10 | 0 | 0 | 0 | 0 | 0 | 50 |
| Shared Cost Projects Total | | 7,204 | 3,094 | 11,948 | 7,860 | 4,632 | 2,468 | 914 | 110 | 38,230 |

^{*}Amounts in thousands of dollars

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|------------|---------|--------|--------|--------|--------|-------|---------|-------|---------|
| Water Quality | | | | | | | В | CL Code | | C140B |
| Cedar Falls - Railroad Hazardous Material Remediation | C100078 | 137 | 99 | 120 | 0 | 0 | 0 | 0 | 0 | 356 |
| Cedar River - Boundary Land Acquisition | C198008 | 2,192 | 95 | 325 | 101 | 103 | 105 | 108 | 0 | 3,029 |
| Cedar Treatment Facility | C196015 | 92,240 | 5,145 | 19 | 0 | 0 | 0 | 0 | 0 | 97,404 |
| Control & Data Acquisition Upgrade | C195008 | 6,160 | 4,430 | 3,625 | 1,905 | 1,951 | 0 | 0 | 0 | 18,071 |
| Reservoir Covering - Beacon | C101060 | 684 | 222 | 1,000 | 6,816 | 18,706 | 3,152 | 0 | 0 | 30,580 |
| Reservoir Covering - Lincoln | C196012 | 13,599 | 5,460 | 404 | 20 | 5 | 5 | 0 | 0 | 19,493 |
| Reservoir Covering - Maple Leaf | C101078 | 159 | 251 | 513 | 2 | 0 | 0 | 277 | 442 | 1,644 |
| Reservoir Covering - Myrtle | C101076 | 198 | 226 | 955 | 2,108 | 2,563 | 0 | 0 | 0 | 6,050 |
| Reservoir Covering - Volunteer | C101059 | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 255 | 349 |
| Reservoir Covering - West Seattle | C101075 | 164 | 251 | 523 | 272 | 308 | 5,568 | 10,769 | 4,222 | 22,077 |
| Water System Security Improvement | C1405 | 1,076 | 2,200 | 5,263 | 978 | 0 | 0 | 0 | 0 | 9,517 |
| Water Quality Total | | 116,703 | 18,379 | 12,747 | 12,202 | 23,636 | 8,830 | 11,154 | 4,919 | 208,570 |

^{*}Amounts in thousands of dollars

| BCL Name/Projec | Project ID | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----------------|---------|--------|--------|--------|---------|--------|---------|--------|---------|
| Water Supply | | | | | | | В | CL Code | | C150B |
| CRPL #4 Upgrade | C1NW50 1-003 | 0 | 0 | 0 | 0 | 0 | 0 | 145 | 192 | 337 |
| Decision Tree Model | C104040 | 0 | 90 | 112 | 0 | 0 | 0 | 0 | 0 | 202 |
| Demand Forecast Mode | l C104041 | 0 | 155 | 40 | 0 | 0 | 0 | 0 | 0 | 195 |
| Morse Lake Dead Storage Facilities | C103032 | 48 | 138 | 900 | 900 | 9,225 | 5,673 | 0 | 0 | 16,884 |
| Regional Water Conservation Program | C199032 | 12,649 | 3,358 | 3,300 | 3,550 | 3,998 | 4,360 | 4,900 | 5,519 | 41,634 |
| Seattle Direct Service Additional Conservation | C102010 | 999 | 939 | 988 | 3,198 | 3,280 | 3,677 | 3,877 | 4,305 | 21,263 |
| Tolt Pipeline I - Phase III-B | C199003 | 417 | 319 | 3,430 | 61 | 0 | 0 | 0 | 0 | 4,227 |
| Tolt Pipeline II - Phase IV | C194029 | 31,377 | 126 | 55 | 12 | 0 | 0 | 0 | 0 | 31,570 |
| TPL2 II&III East of Tieline | C100084 | 27,638 | 572 | 73 | 32 | 23 | 13 | 0 | 0 | 28,351 |
| TPL2 II&III West of Tieline | C100083 | 26,338 | 70 | 30 | 5 | 5 | 5 | 0 | 0 | 26,453 |
| Treatment & Transmission Project Development | C1NW50 1-008 | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Water Resources Project Development | C1NW50 1-009 | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Water System Plan - 2007 | C103058 | 0 | 147 | 430 | 387 | 27 | 0 | 0 | 0 | 991 |
| Water System Plan - 2013 | C1NW50 1-006 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 150 | 200 |
| Water Supply Total | | 99,466 | 5,914 | 9,558 | 8,345 | 16,764 | 13,938 | 9,188 | 10,386 | 173,559 |
| Department Tota | | 393,294 | 65,503 | 79,135 | 76,746 | 101,852 | 71,985 | 69,495 | 64,626 | 922,636 |

^{*}Amounts in thousands of dollars

Fund Summary

| Fund Name | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|-------------------------|---------|--------|--------|--------|---------|--------|--------|--------|---------|
| SPU Water Fund | 393,294 | 65,503 | 79,135 | 76,746 | 101,852 | 71,985 | 69,495 | 64,626 | 922,636 |
| Department Total | 393,294 | 65,503 | 79,135 | 76,746 | 101,852 | 71,985 | 69,495 | 64,626 | 922,636 |

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

Alaskan Way Viaduct & Seawall

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:4th Quarter 2001Project ID:C404201-WFEnd Date:4th Quarter 2007

Location: Alaskan Way Viaduct Neighborhood District: Downtown

Neighborhood Plan: Commercial Core Urban Village: In more than one Urban Village

This project funds planning, preliminary engineering, and design costs associated with water utility impacts arising from replacing the Alaskan Way Viaduct and seawall with a new transportation facility. The Alaskan Way Viaduct is part of State Route 99, which carries 25% of the north-south traffic through downtown Seattle and is a major truck route serving the city's industrial areas. The seawall supports the soils under Alaskan Way and the Viaduct. Both facilities were damaged in the February 28, 2001 Nisqually Earthquake. The Washington State Department of Transportation (WSDOT) and the City of Seattle are co-leads for the project. WDSOT, in conjunction with the Seattle Department of Transportation, is conducting a plan and study for demolition and replacement of the existing facility. At this early stage, a number of options are being evaluated. This project provides general estimates of the costs of those improvements, which are to be refined as the project scope is further developed. See also projects in the Seattle Department of Transportation (project TC366050) and Seattle City Light (project 8307) CIPs. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not yet been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 15 | 65 | 125 | 160 | 30 | 0 | 0 | 0 | 395 |
| Project Total: | 15 | 65 | 125 | 160 | 30 | 0 | 0 | 0 | 395 |
| Fund Appropriations/Allocations SPU Water Fund | 15 | 65 | 125 | 160 | 30 | 0 | 0 | 0 | 395 |
| Appropriations Total* | 15 | 65 | 125 | 160 | 30 | 0 | 0 | 0 | 395 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Asset Management

BCL Name: Infrastructure BCL Code C110B

Type: Rehabilitation or Restoration Start Date: 4th Quarter 2002

Project ID: C1126 End Date: Ongoing

Location: Citywide Neighborhood District: In more than one District

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

This program provides funding for managing the City's water system assets as optimally as possible by using sound asset management principles and practices. Project elements include the following: developing, monitoring, and reporting on measurable customer and environmental service levels; preparing Strategic Asset Management Plans; developing and implementing asset decision models; developing information technology applications; replacing and rehabilitating water infrastructure; collecting data and assessing the condition of SPU's assets; and evaluating SPU's current operating and maintenance practices and processes. Funding is allocated from the Asset Management Program to these various programs once they are clearly defined. The confidence in the cost estimate is medium for 2005 and 2006; cost estimates for future years will be revised over time. Some elements of this program have been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|-------|-------|-------|--------|--------|--------|--------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 462 | 1,304 | 3,944 | 2,416 | 11,322 | 11,289 | 11,256 | 11,868 | 53,861 |
| Project Total: | 462 | 1,304 | 3,944 | 2,416 | 11,322 | 11,289 | 11,256 | 11,868 | 53,861 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 462 | 1,304 | 3,944 | 2,416 | 11,322 | 11,289 | 11,256 | 11,868 | 53,861 |
| Appropriations Total* | 462 | 1,304 | 3,944 | 2,416 | 11,322 | 11,289 | 11,256 | 11,868 | 53,861 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Aurora Ave N (110th - 145th)

BCL Name: Other Agencies BCL Code C120B

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

Location: N 110th St./Aurora Ave. N **Neighborhood District:** North

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

The Seattle Department of Transportation is developing a scope of work for rehabilitating or improving Aurora Ave. N between N 110th St. and N 145th St. This project funds the necessary preliminary engineering to determine the water system impacts of that transportation project. If the transportation project goes forward, then additional funds will be requested at that time to address these impacts. The confidence level of the cost estimate is low.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 2 | 12 | 8 | 16 | 0 | 0 | 0 | 0 | 38 |
| Project Total: | 2 | 12 | 8 | 16 | 0 | 0 | 0 | 0 | 38 |
| Fund Appropriations/Allocations SPU Water Fund | 2 | 12 | 8 | 16 | 0 | 0 | 0 | 0 | 38 |
| Appropriations Total* | 2 | 12 | 8 | 16 | 0 | 0 | 0 | 0 | 38 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Aurora N Multi-modal Corridor

BCL Name: Other Agencies BCL Code C120B

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

Location: N 145th St./Aurora Ave. N Neighborhood District: North

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 4 | 49 | 985 | 151 | 51 | 0 | 0 | 0 | 1,240 |
| Project Total: | 4 | 49 | 985 | 151 | 51 | 0 | 0 | 0 | 1,240 |
| Fund Appropriations/Allocations SPU Water Fund | 4 | 49 | 985 | 151 | 51 | 0 | 0 | 0 | 1,240 |
| Appropriations Total* | 4 | 49 | 985 | 151 | 51 | 0 | 0 | 0 | 1,240 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Ballard Locks Improvements

BCL Name: Habitat Conservation Program

BCL Code C160B

Type:Improved FacilityStart Date:1st Quarter 2000Project ID:C1606End Date:4th Quarter 2008

Location: 3015 NW 54th St. **Neighborhood District:** Ballard

Neighborhood Plan: Not in a Neighborhood Plan Urban Village: Ballard

This project is a sub-element of the Cedar River Habitat Conservation Plan (HCP) and associated Cedar River Instream Flow Agreement. Improvements include the planning, design, and construction of freshwater conservation and smolt passage facilities at the Ballard Locks to improve fish passage and survival. The project is part of a comprehensive instream flow management program for the Cedar River that protects the City's continued ability to divert adequate amounts of high quality water for regional use while protecting instream resources and the U.S. Army Corps of Engineers' ability to provide adequate flows for operating the Locks. SPU's Asset Management Committee has approved the HCP at the program level. The confidence level for this cost estimate is high.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 865 | 66 | 150 | 150 | 154 | 998 | 0 | 0 | 2,383 |
| Project Total: | 865 | 66 | 150 | 150 | 154 | 998 | 0 | 0 | 2,383 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 865 | 66 | 150 | 150 | 154 | 998 | 0 | 0 | 2,383 |
| Appropriations Total* | 865 | 66 | 150 | 150 | 154 | 998 | 0 | 0 | 2,383 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

BPA - Aquatic & Riparian Restoration

BCL Name: Bonneville Agreement BCL Code C170B

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

Location: Cedar River Watershed **Neighborhood District:** Not in a Neighborhood District

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

This project group within the Bonneville Agreement program provides funds to plan and implement aquatic and riparian restoration projects within the Cedar River Municipal Watershed. These projects enhance and accelerate the City's existing efforts to restore riparian, aquatic, and wetland habitat in the watershed, and compensate for the impacts of the Bonneville Power Administration's (BPA's) power line project on that habitat. SPU's Asset Management Committee has approved this set of projects. The confidence in the cost estimate is medium due to the early stage of project development.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 109 | 844 | 539 | 27 | 0 | 0 | 0 | 1,519 |
| Project Total: | 0 | 109 | 844 | 539 | 27 | 0 | 0 | 0 | 1,519 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 109 | 844 | 539 | 27 | 0 | 0 | 0 | 1,519 |
| Appropriations Total* | 0 | 109 | 844 | 539 | 27 | 0 | 0 | 0 | 1,519 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

BPA - Road Decommissioning/Improvements

BCL Name: Bonneville Agreement BCL Code C170B

Type:Improved FacilityStart Date:2nd Quarter 2004Project ID:C1703End Date:4th Quarter 2010

Location: Cedar River Watershed **Neighborhood District:** Not in a Neighborhood District

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

This project group within the Bonneville Agreement program provides funds to plan and implement road decommissioning and road improvement projects within the Cedar River Municipal Watershed. These projects enhance and accelerate the City's existing programs to improve or abandon watershed roads, and compensate for the effects of the additional road length added to the watershed as a result of the Bonneville Power Administration's power line project. SPU's Asset Management Committee has approved this set of projects. The confidence in the cost estimate is medium due to the early stage of project development.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 546 | 728 | 174 | 51 | 52 | 162 | 110 | 1,823 |
| Project Total: | 0 | 546 | 728 | 174 | 51 | 52 | 162 | 110 | 1,823 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 546 | 728 | 174 | 51 | 52 | 162 | 110 | 1,823 |
| Appropriations Total* | 0 | 546 | 728 | 174 | 51 | 52 | 162 | 110 | 1,823 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

BPA - Security Measures

BCL Name: Bonneville Agreement BCL Code C170B

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

Location: Cedar River Watershed **Neighborhood District:** Not in a Neighborhood District

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

This project group within the Bonneville Agreement program provides funds to plan, purchase and install watershed security improvements within the Cedar River Municipal Watershed to protect watershed resources and restrict watershed access. These projects compensate for the impacts of the Bonneville Power Administration's power line project on security within the watershed. SPU's Asset Management Committee has reviewed and approved this set of projects. The confidence in current cost estimates is medium due to the early stage of project development.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 347 | 312 | 215 | 0 | 0 | 0 | 0 | 874 |
| Project Total: | 0 | 347 | 312 | 215 | 0 | 0 | 0 | 0 | 874 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 347 | 312 | 215 | 0 | 0 | 0 | 0 | 874 |
| Appropriations Total* | 0 | 347 | 312 | 215 | 0 | 0 | 0 | 0 | 874 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

BPA - Upland Forest Restoration

BCL Name: Bonneville Agreement BCL Code C170B

Type:Improved FacilityStart Date:2nd Quarter 2004Project ID:C1705End Date:4th Quarter 2008

Location: Cedar River Watershed **Neighborhood District:** Not in a Neighborhood District

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

This project group within the Bonneville Agreement program provides funds to plan and implement forest restoration projects within the Cedar River Municipal Watershed to enhance and accelerate the City's existing Upland Forest Restoration Program and to compensate for the impacts of the Bonneville Power Administration's power line project on older second-growth forest and other upland habitats in the watershed. SPU's Asset Management Committee has reviewed and approved this set of projects. The confidence in current cost estimates is medium due to the early stage of project development.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 169 | 608 | 384 | 56 | 53 | 0 | 0 | 1,270 |
| Project Total: | 0 | 169 | 608 | 384 | 56 | 53 | 0 | 0 | 1,270 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 169 | 608 | 384 | 56 | 53 | 0 | 0 | 1,270 |
| Appropriations Total* | 0 | 169 | 608 | 384 | 56 | 53 | 0 | 0 | 1,270 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Burien Feeder Upgrade

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2009Project ID:C1NW101-002End Date:4th Quarter 2011

Location: S 146 St., Between 24 Ave. S And 8 Av. S

Neighborhood District: Not in a Neighborhood District

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

This project rehabilitates the Burien Feeder by replacing or slip-lining the existing 24-inch concrete cylinder pipe. The feeder pipeline provides water for drinking, sanitation, and fighting fires in the Burien area. The demand for the project is highly uncertain as the existing pipe may have a much longer useful life. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not yet been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 0 | 0 | 0 | 0 | 291 | 1,982 | 2,273 |
| Project Total: | 0 | 0 | 0 | 0 | 0 | 0 | 291 | 1,982 | 2,273 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 0 | 0 | 0 | 0 | 0 | 291 | 1,982 | 2,273 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 0 | 0 | 291 | 1,982 | 2,273 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Cathodic Phase V

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:1st Quarter 1999Project ID:C100063End Date:4th Quarter 2005

Location: Between Tolt Treatment Facility And Kelly Rd. Neighborhood District: Not in a Neighborhood District

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

This project installs an impressed current cathodic protection system on approximately 3.5 miles of the original Tolt Pipeline No. 1 between the new Tolt Treatment Facility and Kelly Road to extend the pipeline's useful life. The pipeline west of the project location has already been replaced. The project includes electrically connecting the 20-foot long individual pipe sections that the pipeline is made of, and installing deep wells to create an electrical circuit and apply voltage onto the pipe. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 195 | 947 | 248 | 0 | 0 | 0 | 0 | 0 | 1,390 |
| Project Total: | 195 | 947 | 248 | 0 | 0 | 0 | 0 | 0 | 1,390 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 195 | 947 | 248 | 0 | 0 | 0 | 0 | 0 | 1,390 |
| Appropriations Total* | 195 | 947 | 248 | 0 | 0 | 0 | 0 | 0 | 1,390 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Cathodic Protection Program

BCL Name: Infrastructure BCL Code C110B

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

Project ID: C1NW116 End Date: Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This program implements SPU's Cathodic Protection Master Plan, by installing pipe exterior corrosion protection systems along the major water transmission pipelines. Cathodic protection systems are a relatively low cost method of extending the life of buried pipelines and submerged surfaces of water storage tanks. They can be used to protect ductile iron, steel, and concrete cylinder pipe. Unprotected, these types of pipe corrode through an electrochemical process; cathodic protection attempts to slow down or even stop this electrochemical process by providing electrical current to the pipe. Projects are accomplished over two years; one year for design and one year for construction. Each project installs new or replacement rectifiers and anodes along a section of pipeline between one and four miles in length. The project replaces the Cathodic Protection – Phase V, Phase VI, and Phase VII projects that were displayed in the 2004-2009 Adopted CIP.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|-------|-------|-------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 5 | 500 | 1,000 | 1,025 | 1,051 | 1,077 | 1,104 | 5,762 |
| Project Total: | 0 | 5 | 500 | 1,000 | 1,025 | 1,051 | 1,077 | 1,104 | 5,762 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 5 | 500 | 1,000 | 1,025 | 1,051 | 1,077 | 1,104 | 5,762 |
| Appropriations Total* | 0 | 5 | 500 | 1,000 | 1,025 | 1,051 | 1,077 | 1,104 | 5,762 |
| O & M Costs (Savings) | | | 0 | 0 | 2 | 3 | 3 | 3 | 11 |

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

Cedar Bridges

BCL Name: Infrastructure

BCL Code C110B

Type: Improved Facility

Start Date: Ongoing

Project ID: C1119 End Date: 4th Quarter 2020

Location: Cedar Watershed Neighborhood District: Not in a Neighborhood District

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

This project replaces bridges in the Cedar River Watershed at which SPU requires access and the existing bridges are no longer able to carry required loading, resulting in safety and environmental risks. This project combines several Cedar Bridge Replacement projects that were displayed separately in the 2004-2009 Adopted CIP, and includes replacing the bridges at Cedar River 600 Road, Middle Fork Taylor Creek 60 Road, Barneston Bridge, North Fork Taylor 60 Road, Rex 300 Road, Rock 41 Road, Taylor 9 Road, Tinkham 560 Road, North Fork Taylor 62 Road, Cedar 9 Road, and Cedar 560 Road.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|--------|------|-------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 19,395 | 350 | 1,014 | 665 | 256 | 210 | 97 | 171 | 22,158 |
| Project Total: | 19,395 | 350 | 1,014 | 665 | 256 | 210 | 97 | 171 | 22,158 |
| Fund Appropriations/Allocations SPU Water Fund | 19,395 | 350 | 1.014 | 665 | 256 | 210 | 97 | 171 | 22,158 |
| - | | | , · | | | | | | |
| Appropriations Total* | 19,395 | 350 | 1,014 | 665 | 256 | 210 | 97 | 171 | 22,158 |
| O & M Costs (Savings) | | | 0 | 16 | 16 | 16 | 16 | 16 | 80 |

Cedar Eastside Supply Improvement - East Creek

BCL Name: Other Agencies BCL Code C120B

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

Location: East Creek & Camber Rd. Neighborhood District: Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 242 | 9 | 590 | 0 | 0 | 0 | 0 | 0 | 841 |
| Project Total: | 242 | 9 | 590 | 0 | 0 | 0 | 0 | 0 | 841 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 242 | 9 | 590 | 0 | 0 | 0 | 0 | 0 | 841 |
| Appropriations Total* | 242 | 9 | 590 | 0 | 0 | 0 | 0 | 0 | 841 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Cedar Falls - Railroad Hazardous Material Remediation

BCL Name: Water Quality

BCL Code C140B

Type:Rehabilitation or RestorationStart Date:2nd Quarter 2001Project ID:C100078End Date:4th Quarter 2005

Location: Cedar Falls Neighborhood District: Not in a Neighborhood District

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

This project addresses contamination left by historical railroad operations in the Cedar River Municipal Watershed. It has three components: 1) assess the nature and risks posed by the contamination; 2) determine the scope and cost of an appropriate cleanup; and 3) support negotiations with Burlington Northern Santa Fe (BNSF) that lead to remedial action. The first two of these components have been completed. A small portion of the contaminated material is located on lands where BNSF and its predecessor operated under an easement granted by the City, while the majority of the contaminated material is located on land that BNSF owns. The project funds staff time to negotiate an agreement to share a portion of the cleanup costs, and is consistent with SPU's long-term effort to consolidate ownership of watershed lands, after proper cleanup by the responsible parties of any contamination. The confidence level of the cost estimate is medium. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 137 | 99 | 120 | 0 | 0 | 0 | 0 | 0 | 356 |
| Project Total: | 137 | 99 | 120 | 0 | 0 | 0 | 0 | 0 | 356 |
| Fund Appropriations/Allocations SPU Water Fund | 137 | 99 | 120 | 0 | 0 | 0 | 0 | 0 | 356 |
| Appropriations Total* | 137 | 99 | 120 | 0 | 0 | 0 | 0 | 0 | 356 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Cedar Falls Facility Master Plan

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C1NW101-005End Date:4th Quarter 2006

Location: Cedar Falls Rd. SE

Neighborhood District: Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 60 | 56 | 0 | 0 | 0 | 0 | 116 |
| Project Total: | 0 | 0 | 60 | 56 | 0 | 0 | 0 | 0 | 116 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 0 | 60 | 56 | 0 | 0 | 0 | 0 | 116 |
| Appropriations Total* | 0 | 0 | 60 | 56 | 0 | 0 | 0 | 0 | 116 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Cedar Moraine Improvements

BCL Name: Infrastructure BCL Code C110B

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

Location: Cedar Watershed **Neighborhood District:** Not in a Neighborhood District

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

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 966 | 357 | 200 | 250 | 51 | 53 | 0 | 0 | 1,877 |
| Project Total: | 966 | 357 | 200 | 250 | 51 | 53 | 0 | 0 | 1,877 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 966 | 357 | 200 | 250 | 51 | 53 | 0 | 0 | 1,877 |
| Appropriations Total* | 966 | 357 | 200 | 250 | 51 | 53 | 0 | 0 | 1,877 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Cedar River - Boundary Land Acquisition

BCL Name: Water Quality

BCL Code C140B

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

Project ID: C198008 End Date: Ongoing

Location: Cedar River Watershed Neighborhood District: Not in a Neighborhood District

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

Although the City owns virtually all lands draining to the municipal water supply intake on the Cedar River, some exceptions remain along the boundary. The past decade has seen significant changes in ownership and land use of properties immediately adjoining the City's property. This project enables SPU to evaluate risks to watershed protection and security posed by these changes, and to respond as opportunities arise by acquiring property. All property acquisitions require specific legislative authority. Although funding is not yet allocated for 2010, the project is expected to be ongoing. The confidence level of the cost estimate is medium. This project has not been formally approved by the Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 2,192 | 95 | 325 | 101 | 103 | 105 | 108 | 0 | 3,029 |
| Project Total: | 2,192 | 95 | 325 | 101 | 103 | 105 | 108 | 0 | 3,029 |
| Fund Appropriations/Allocations SPU Water Fund | 2,192 | 95 | 325 | 101 | 103 | 105 | 108 | 0 | 3,029 |
| Appropriations Total* | 2,192 | 95 | 325 | 101 | 103 | 105 | 108 | 0 | 3,029 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Cedar River - Education Center Exhibits

BCL Name: Environmental Stewardship BCL Code C130B

Type:Improved FacilityStart Date:2nd Quarter 2003Project ID:C103001End Date:2nd Quarter 2006

Location: Crw Education Center North Bend Neighborhood District: North

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

This project funds fabrication and installation of interpretive exhibits (already designed) in the empty Interpretive Hall, to complete the Cedar River Watershed Education Center. These exhibits enhance the experience and understanding gained by the facility's 30,000-40,000 visitors per year. Regular maintenance of exhibits is done by existing staff.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 321 | 320 | 0 | 150 | 0 | 0 | 0 | 0 | 791 |
| Project Total: | 321 | 320 | 0 | 150 | 0 | 0 | 0 | 0 | 791 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 321 | 320 | 0 | 150 | 0 | 0 | 0 | 0 | 791 |
| Appropriations Total* | 321 | 320 | 0 | 150 | 0 | 0 | 0 | 0 | 791 |
| O & M Costs (Savings) | | | 2 | 2 | 2 | 2 | 2 | 0 | 10 |

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

Cedar River Non-HCP Road Improvements

BCL Name: Infrastructure BCL Code C110B

Type: Improved Facility Start Date: 1st Quarter 1991

Project ID: C191001 End Date: Ongoing

Location: Cedar Watershed Neighborhood District: Not in a Neighborhood District

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

The Cedar River Watershed contains over 615 miles of forest roads. This project funds major improvements (beyond routine maintenance) on roads designated as having long-term purpose for watershed management including forest fire suppression, fish and wildlife management, forest management, security, and public education. Roads not deemed to be of long-term necessity are "deconstructed" by removing potentially unstable sidecast and fill material, constructing frequent waterbars, and re-establishing stream crossings. This work is designed to provide long-term stability, to approximate the drainage flows that existed prior to management activities, and to be complementary to road improvement and decommissioning projects included in the Cedar River Watershed Habitat Conservation Plan (HCP). The City's commitment to the HCP assumes that these projects are completed.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-------|------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 5,028 | 886 | 786 | 804 | 800 | 819 | 840 | 861 | 10,824 |
| Project Total: | 5,028 | 886 | 786 | 804 | 800 | 819 | 840 | 861 | 10,824 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 5,028 | 886 | 786 | 804 | 800 | 819 | 840 | 861 | 10,824 |
| Appropriations Total* | 5,028 | 886 | 786 | 804 | 800 | 819 | 840 | 861 | 10,824 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Cedar River Northridge Trail

BCL Name: Environmental Stewardship BCL Code C130B

Type:New FacilityStart Date:1st Quarter 2002Project ID:C102022End Date:3rd Quarter 2005

Location: Cedar River Watershed, Northern Boundary

Neighborhood District: Not in a Neighborhood District

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

This project involves planning and implementation of an alternative trail connection along the northern ridge boundary of Cedar River Watershed. Planning, public process, construction, and management are done in cooperation with the Washington State Parks Department, the US Forest Service, other agencies, and adjacent landowners.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 19 | 13 | 51 | 0 | 0 | 0 | 0 | 0 | 83 |
| Project Total: | 19 | 13 | 51 | 0 | 0 | 0 | 0 | 0 | 83 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 19 | 13 | 51 | 0 | 0 | 0 | 0 | 0 | 83 |
| Appropriations Total* | 19 | 13 | 51 | 0 | 0 | 0 | 0 | 0 | 83 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

<u>Cedar River Watershed - Headquarters Major Maintenance</u>

BCL Name: Infrastructure BCL Code C110B

Type: Rehabilitation or Restoration Start Date: 2nd Quarter 2000

Project ID: C100051 End Date: Ongoing

Location: Cedar River Watershed Neighborhood District: Not in a Neighborhood District

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

This project replaces leaky roofs, repairs plumbing, paints existing facilities, and conducts other major maintenance at the Cedar Falls Headquarters.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,508 | 88 | 88 | 86 | 90 | 54 | 56 | 57 | 2,027 |
| Project Total: | 1,508 | 88 | 88 | 86 | 90 | 54 | 56 | 57 | 2,027 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 1,508 | 88 | 88 | 86 | 90 | 54 | 56 | 57 | 2,027 |
| Appropriations Total* | 1,508 | 88 | 88 | 86 | 90 | 54 | 56 | 57 | 2,027 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Cedar Sockeye Hatchery

BCL Name: Habitat Conservation Program

BCL Code C160B

Type:New FacilityStart Date:1st Quarter 2000Project ID:C1605End Date:4th Quarter 2007

Location: Cedar River Neighborhood District: Not in a Neighborhood District

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

This project, a component of the Cedar River Habitat Conservation Plan (HCP), implements measures to mitigate impacts on sockeye salmon caused by the migration barrier formed by the Landsburg Diversion Dam. The hatchery's purpose is to produce fry in lieu of the production that could occur if sockeye were allowed to spawn above Landsburg Dam. The project consists of spring-fed water supply improvements, a broodstock holding facility, an incubation and short-term holding facility capable of producing 34 million fry, housing for two employees, and a broodstock collection trap. The HCP was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is medium.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-------|------|------|-------|-------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,848 | 606 | 564 | 6,419 | 2,600 | 0 | 0 | 0 | 12,037 |
| Project Total: | 1,848 | 606 | 564 | 6,419 | 2,600 | 0 | 0 | 0 | 12,037 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 1,848 | 606 | 564 | 6,419 | 2,600 | 0 | 0 | 0 | 12,037 |
| Appropriations Total* | 1,848 | 606 | 564 | 6,419 | 2,600 | 0 | 0 | 0 | 12,037 |
| O & M Costs (Savings) | | | 0 | 99 | 130 | 334 | 458 | 458 | 1479 |

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

Cedar Treatment Facility

BCL Name: Water Quality

BCL Code C140B

Type:New FacilityStart Date:1st Quarter 1996Project ID:C196015End Date:2nd Quarter 2005

Location: Lake Youngs Reservoir Neighborhood District: Not in a Neighborhood District

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

This project develops and implements water treatment improvements to the Cedar River water supply to improve water quality, ensure compliance with drinking water regulations, and mitigate the periodic taste and odor problems that occur on the Cedar source. Under this project, new ozone disinfecting facilities (compatible with filtration) are planned, designed, and constructed near the Lake Youngs Reservoir. SPU is utilizing a design-build-operate contracting method for this project, similar to that used for the recently commissioned Tolt Treatment Facility. Starting in 2004, funding to operate and maintain the new facilities is included in SPU's operating budget. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|--------|-------|-------|-------|-------|-------|-------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 92,240 | 5,145 | 19 | 0 | 0 | 0 | 0 | 0 | 97,404 |
| Project Total: | 92,240 | 5,145 | 19 | 0 | 0 | 0 | 0 | 0 | 97,404 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 92,240 | 5,145 | 19 | 0 | 0 | 0 | 0 | 0 | 97,404 |
| Appropriations Total* | 92,240 | 5,145 | 19 | 0 | 0 | 0 | 0 | 0 | 97,404 |
| O & M Costs (Savings) | | | 3,110 | 3,980 | 5,100 | 6,520 | 6,520 | 0 | 25230 |

Chamber Upgrades - Distribution

BCL Name: Infrastructure BCL Code C110B

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

Project ID: C103002 End Date: Ongoing

Location: Citywide Neighborhood District: In more than one District

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

This program allows SPU to meet current Occupational Safety and Health Administration (OSHA) and Washington State Health Administration (WSHA) standards for confined space entry by replacing undersized underground chamber access openings (rings and covers) throughout the City's water system. The program was titled "Chamber Ring and Cover Replacements" in the 2004-2009 Adopted CIP.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 203 | 160 | 180 | 150 | 154 | 158 | 162 | 166 | 1,333 |
| Project Total: | 203 | 160 | 180 | 150 | 154 | 158 | 162 | 166 | 1,333 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 203 | 160 | 180 | 150 | 154 | 158 | 162 | 166 | 1,333 |
| Appropriations Total* | 203 | 160 | 180 | 150 | 154 | 158 | 162 | 166 | 1,333 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Control & Data Acquisition Upgrade

BCL Name: Water Quality

BCL Code C140B

Type:New InvestmentStart Date:1st Quarter 2002Project ID:C195008End Date:4th Quarter 2007

Location: Various Neighborhood District: Not in a Neighborhood District

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

This project upgrades the Supervisory Control and Data Acquisition (SCADA) system. Water system operators use SCADA equipment to acquire and monitor data, such as flow or pressure from remote sensors and from water supply dams, and to remotely operate pumps and valves. This project is broken down into four concurrent stages. Stage 1 of the project is complete. Stage 2 converts SPU's Operations Control Center control room to a PC workstation-based software system, upgrades approximately 110 pieces of field site data collection equipment, and improves the communications system to allow for a redundant control room at SPU's North Operation Center. The confidence level in the cost estimate for this project stage is high, and the stage has been approved by SPU's Asset Management Committee (AMC). Stage 3 focuses on improving the capacity of the Water System Control Center to optimize system operations. The confidence level of the cost estimate for this stage is medium, and the stage has not been approved by the AMC. Stage 4 integrates SCADA with various other SPU business information systems such as SPU's work order system. The confidence in the cost estimate for this stage is high, but the stage has not been approved by the AMC. This project was titled "Supervisory Control And Data Acquisition Upgrades (Water)" in the 2004-2009 Adopted CIP.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-------|-------|-------|-------|-------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 6,160 | 4,430 | 3,625 | 1,905 | 1,951 | 0 | 0 | 0 | 18,071 |
| Project Total: | 6,160 | 4,430 | 3,625 | 1,905 | 1,951 | 0 | 0 | 0 | 18,071 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 6,160 | 4,430 | 3,625 | 1,905 | 1,951 | 0 | 0 | 0 | 18,071 |
| Appropriations Total* | 6,160 | 4,430 | 3,625 | 1,905 | 1,951 | 0 | 0 | 0 | 18,071 |
| O & M Costs (Savings) | | | 227 | 354 | 405 | 455 | 455 | 0 | 1896 |

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

Control Works Upgrade

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:1st Quarter 2009Project ID:C1NW101-003End Date:1st Quarter 2015

Location: Lake Youngs Reservoir Neighborhood District: Not in a Neighborhood District

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

This project improves the seismic reliability of the Lake Youngs Control Works Facility, a large diameter piping interchange, by constructing duplicate connections at another location nearby. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 0 | 0 | 0 | 0 | 604 | 620 | 1,224 |
| Project Total: | 0 | 0 | 0 | 0 | 0 | 0 | 604 | 620 | 1,224 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 0 | 0 | 0 | 0 | 0 | 604 | 620 | 1,224 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 0 | 0 | 604 | 620 | 1,224 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

CRPL #2 Replace Portion

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2004Project ID:C104013End Date:4th Quarter 2007

Location: Crpl #2 Between Volunteer Park And Maple Neighborhood District: In more than one District

Leaf Gatehouse

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

This project rehabilitates an 88-year-old 42-inch riveted steel feeder main that is corroded in some locations. The pipeline extends from Volunteer Park to the Maple Leaf neighborhood and crosses the Ship Canal in a tunnel. It is part of the planned seismically-hardened backbone of the Seattle distribution system; timely rehabilitation results in less disruption to water service after a major earthquake, and eliminates the risk of property damage associated with a major leak or pipeline failure. The parameters of the replacement are determined during the planning phase of the project. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 39 | 60 | 211 | 5,125 | 0 | 0 | 0 | 5,435 |
| Project Total: | 0 | 39 | 60 | 211 | 5,125 | 0 | 0 | 0 | 5,435 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 39 | 60 | 211 | 5,125 | 0 | 0 | 0 | 5,435 |
| Appropriations Total* | 0 | 39 | 60 | 211 | 5,125 | 0 | 0 | 0 | 5,435 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

CRPL #4 Upgrade

BCL Name: Water Supply

BCL Code C150B

Type: Improved Facility Start Date: 1st Quarter 2009

Project ID: C1NW501-003 End Date: TBD

Location: Cedar River Pipeline Neighborhood District: Not in a Neighborhood District

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

This project rehabilitates about 2,300 feet of Cedar River Pipeline No. 4 across the Duwamish River where the original concrete cylinder pipe may have some deterioration. The need for the project is highly uncertain as the existing pipe may have a much longer useful life. The confidence in the cost estimate is low, and the project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 0 | 0 | 0 | 0 | 145 | 192 | 337 |
| Project Total: | 0 | 0 | 0 | 0 | 0 | 0 | 145 | 192 | 337 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 0 | 0 | 0 | 0 | 0 | 145 | 192 | 337 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 0 | 0 | 145 | 192 | 337 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Decision Tree Model

BCL Name: Water Supply

BCL Code C150B

Type:New InvestmentStart Date:2nd Quarter 2004Project ID:C104040End Date:4th Quarter 2005

Location: N/A Neighborhood District: Not in a Neighborhood District

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

Long range water supply planning is now done in an environment of great uncertainty, both in terms of what sources are available and what demand will be imposed on the City's water system. In the face of this uncertainty, decisions must be made about when and how much to invest in supply development, based on various levels of risk. This project develops a Decision Tree Model to conduct technical analysis to help with those decisions. The model weighs the uncertainties and probabilities of risk to reach analytical conclusions about when and what would be the most cost-effective water supply investments. The model is developed by a consultant with input by SPU staff, and is used and updated by SPU staff. There is high confidence in the cost estimate. The project is approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 90 | 112 | 0 | 0 | 0 | 0 | 0 | 202 |
| Project Total: | 0 | 90 | 112 | 0 | 0 | 0 | 0 | 0 | 202 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 90 | 112 | 0 | 0 | 0 | 0 | 0 | 202 |
| Appropriations Total* | 0 | 90 | 112 | 0 | 0 | 0 | 0 | 0 | 202 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Demand Forecast Model

BCL Name: Water Supply

BCL Code C150B

Type:New InvestmentStart Date:2nd Quarter 2004Project ID:C104041End Date:4th Quarter 2005

Location: N/A Neighborhood District: Not in a Neighborhood District

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

This project provides an overhaul of SPU's current water demand forecast model, which has been in use for the past 10 years and which SPU uses for long range water supply planning purposes. The project includes a review of current state-of-the-art demand forecast models, and development of a new model that meets SPU's forecasting requirements and provides SPU with the ability to assess different future scenarios. There is high confidence in the cost estimate. The project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 155 | 40 | 0 | 0 | 0 | 0 | 0 | 195 |
| Project Total: | 0 | 155 | 40 | 0 | 0 | 0 | 0 | 0 | 195 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 155 | 40 | 0 | 0 | 0 | 0 | 0 | 195 |
| Appropriations Total* | 0 | 155 | 40 | 0 | 0 | 0 | 0 | 0 | 195 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Denny Combined Sewer Overflow

BCL Name: Other Agencies

BCL Code C120B

Type:Rehabilitation or RestorationStart Date:1st Quarter 1998Project ID:C145002End Date:2nd Quarter 2005

Location:8th Ave. NNeighborhood District: DowntownNeighborhood Plan:Not in a Neighborhood PlanUrban Village: Queen Anne

This project relocates watermains in conjunction with construction of Combined Sewer Overflow (CSO) facilities near Myrtle Edwards Park. The City and King County are constructing CSO improvements in order to meet federal and state requirements for control of the combined sewer discharges into Lake Union and Elliott Bay. Watermains are being relocated due to location and construction conflicts. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 202 | 124 | 10 | 0 | 0 | 0 | 0 | 0 | 336 |
| Project Total: | 202 | 124 | 10 | 0 | 0 | 0 | 0 | 0 | 336 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 202 | 124 | 10 | 0 | 0 | 0 | 0 | 0 | 336 |
| Appropriations Total* | 202 | 124 | 10 | 0 | 0 | 0 | 0 | 0 | 336 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Design Commission Fees - Water

BCL Name:InfrastructureBCL CodeC110BType:Improved FacilityStart Date:OngoingProject ID:C101050End Date:Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project funds the City Design Commission's review of the environmental and design aspects of capital improvement projects funded by the Water Fund. Projects reviewed by the Design Commission include those which have a visual impact on the public realm, including buildings, fencing, gates, and landscaping. The allocations shown below are estimates and are expected to be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 34 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 180 |
| Project Total: | 34 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 180 |
| Fund Appropriations/Allocations SPU Water Fund | 34 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 180 |
| Appropriations Total* | 34 | 20 | 20 | 20 | 21 | 21 | 22 | 22 | 180 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Distribution Projects Development

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C1NW101-001End Date:4th Quarter 2011

Location: Citywide Neighborhood District: In more than one District

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

This project provides funds for planning level work in the Water Distribution System business area prior to the identification of specific capital projects. This work includes policy analysis and program development to address emerging and unanticipated issues at the time of CIP budget development.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Project Total: | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Appropriations Total* | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Distribution System In-Line Gate Valves

BCL Name: Infrastructure BCL Code C110B

Type: Rehabilitation or Restoration Start Date: 1st Quarter 1999

Project ID: C199012 End Date: Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This project replaces aging in-line gate valves throughout the water distribution system. Many of these valves are more than 50 years old and are obsolete. Spare parts are difficult, and in some cases impossible, to obtain. The confidence in the cost estimates is medium, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 311 | 45 | 60 | 60 | 62 | 63 | 65 | 66 | 732 |
| Project Total: | 311 | 45 | 60 | 60 | 62 | 63 | 65 | 66 | 732 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 311 | 45 | 60 | 60 | 62 | 63 | 65 | 66 | 732 |
| Appropriations Total* | 311 | 45 | 60 | 60 | 62 | 63 | 65 | 66 | 732 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Downstream Fish Habitat

BCL Name: Habitat Conservation Program

BCL Code C160B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2001Project ID:C1607End Date:4th Quarter 2008

Location: Cedar River Neighborhood District: Not in a Neighborhood District

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

This project is a component of the Cedar River Habitat Conservation Plan (HCP). The project implements downstream habitat protection and restoration measures in the lower 22 miles of the mainstem Cedar River for the benefit of anadromous salmonid species, especially Chinook salmon, and to enhance natural ecological processes that shape and maintain riparian and aquatic habitat. Activities include habitat land acquisition in collaboration with King County and restoration work at Walsh Lake. This project is part of the HCP, which was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is high.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|-------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 242 | 4,267 | 1,447 | 214 | 327 | 11 | 0 | 0 | 6,508 |
| Project Total: | 242 | 4,267 | 1,447 | 214 | 327 | 11 | 0 | 0 | 6,508 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 242 | 4,267 | 1,447 | 214 | 327 | 11 | 0 | 0 | 6,508 |
| Appropriations Total* | 242 | 4,267 | 1,447 | 214 | 327 | 11 | 0 | 0 | 6,508 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Environmental Steward Project Development

BCL Name: Environmental Stewardship

BCL Code C130B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C1NW301-003End Date:4th Quarter 2010

Location: Cedar & Tolt River Watershed Neighborhood District: Not in a Neighborhood District

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

This project provides funds for performing planning level work on Environmental Stewardship activities prior to the formation of specific capital projects. This work includes development of Strategic Asset Management Plans for the Watershed and Environmental Program Area, policy analysis and program development to deal with issues related to the management of the Tolt & Cedar River Municipal Watersheds, and other work that assists in the identification of capital needs and development of concept level scopes and estimates for new capital projects.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Project Total: | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Appropriations Total* | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

ESA - Tolt Levee Modifications

BCL Name: Environmental Stewardship

BCL Code C130B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C1NW301-004End Date:4th Quarter 2010

Location: City Of Carnation Neighborhood District: Not in a Neighborhood District

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

This is a collaborative project between Seattle Public Utilities, Seattle City Light, and the King County Department of Natural Resources and Parks. The project removes approximately 1,000 feet of riverbank levee along the lower right bank of the Tolt River adjacent to the Tolt MacDonald Park. It constructs a new setback levee at the edge of the floodplain to provide reconnection to off-channel salmon habitat, and to allow for the creation of new spawning and rearing habitat for Chinook salmon. There is high confidence in the estimated cost of \$650,000 to complete design, which is primarily funded by King County and grant funds. Construction costs are under development. The preliminary estimate of the total project cost is approximately \$3 million, of which SPU expects to provide between \$1.5 and \$1.8 million. In the 2004-2009 Adopted CIP, funding for this project was displayed under "Endangered Species Act — Snohomish River Basin" (C1011003). The project has not yet been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 347 | 276 | 290 | 306 | 314 | 322 | 1,855 |
| Project Total: | 0 | 0 | 347 | 276 | 290 | 306 | 314 | 322 | 1,855 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 0 | 347 | 276 | 290 | 306 | 314 | 322 | 1,855 |
| Appropriations Total* | 0 | 0 | 347 | 276 | 290 | 306 | 314 | 322 | 1,855 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

ESA Chinook Research & Monitoring

BCL Name: Environmental Stewardship BCL Code C130B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2001Project ID:C101048End Date:4th Quarter 2008

Location: Lake Washington Watershed **Neighborhood District:** Not in a Neighborhood District

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

This program provides funding for research and monitoring of Seattle's salmon populations, with emphasis on their habitat use in Lake Washington, the Ship Canal/Lake Union, and Ballard Locks. This program is part of the City's response to the listing of Chinook salmon as a threatened species under the federal Endangered Species Act. The results of these research and monitoring activities are used to minimize adverse impacts to endangered species from capital facilities and facility operations, as well as design salmon habitat restoration projects within the City of Seattle.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 429 | 210 | 217 | 223 | 236 | 248 | 0 | 0 | 1,563 |
| Project Total: | 429 | 210 | 217 | 223 | 236 | 248 | 0 | 0 | 1,563 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 429 | 210 | 217 | 223 | 236 | 248 | 0 | 0 | 1,563 |
| Appropriations Total* | 429 | 210 | 217 | 223 | 236 | 248 | 0 | 0 | 1,563 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

ESA Snohomish River Basin

BCL Name: Environmental Stewardship BCL Code C130B

Type: Rehabilitation or Restoration Start Date: 2nd Quarter 2000

Project ID: C101003 End Date: Ongoing

Location: Snohomish River Basin Neighborhood District: Not in a Neighborhood District

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

This program acquires and develops critical habitat for salmon in the Tolt River Watershed. The program is coordinated with similar efforts undertaken by City Light, and projects may occur in cooperation with King County, affected tribes, or other local, state, and federal agencies. In the 2005-2010 Proposed CIP, funding for "ESA Tolt Levee Modifications" (C1NW301-004), which had been included in this project previously, is displayed in a separate CIP project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 103 | 396 | 52 | 130 | 145 | 153 | 157 | 161 | 1,297 |
| Project Total: | 103 | 396 | 52 | 130 | 145 | 153 | 157 | 161 | 1,297 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 103 | 396 | 52 | 130 | 145 | 153 | 157 | 161 | 1,297 |
| Appropriations Total* | 103 | 396 | 52 | 130 | 145 | 153 | 157 | 161 | 1,297 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Facility Improvements

BCL Name: Shared Cost Projects

BCL Code C410B

Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404602-WFEnd Date:4th Quarter 2005

Location:700 5th Ave.Neighborhood District:DowntownNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Commercial Core

This project funds logistical support services for SPU, including tenant improvements, office buildouts, and furniture. The total estimated cost of the project is \$7.9 million. The funding shown below is the Water Fund's share of the project's cost.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 752 | 450 | 2,491 | 0 | 0 | 0 | 0 | 0 | 3,693 |
| Project Total: | 752 | 450 | 2,491 | 0 | 0 | 0 | 0 | 0 | 3,693 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 752 | 450 | 2,491 | 0 | 0 | 0 | 0 | 0 | 3,693 |
| Appropriations Total* | 752 | 450 | 2,491 | 0 | 0 | 0 | 0 | 0 | 3,693 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Fireflow & Pressure Improvement

BCL Name: Infrastructure BCL Code C110B

Type: Improved Facility Start Date: 1st Quarter 2003

Project ID: C1128 End Date: Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This project improves the water distribution system by adding new water lines; replacing, relining, or slip-lining existing lines; adjusting pressure zone boundaries; and installing pressure reducing and pressure boosting installations to meet evolving customer service levels for continuity of service, pressure, water quality, and fire protection. The project was titled "Distribution System Fireflow & Pressure Improvements" in the 2004-2009 Adopted CIP.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 30 | 528 | 700 | 700 | 2,723 | 5,111 | 5,751 | 5,894 | 21,437 |
| Project Total: | 30 | 528 | 700 | 700 | 2,723 | 5,111 | 5,751 | 5,894 | 21,437 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 30 | 528 | 700 | 700 | 2,723 | 5,111 | 5,751 | 5,894 | 21,437 |
| Appropriations Total* | 30 | 528 | 700 | 700 | 2,723 | 5,111 | 5,751 | 5,894 | 21,437 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Fleet Management Study

BCL Name: Shared Cost Projects

BCL Code C410B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C4NW106-006-WFEnd Date:4th Quarter 2005

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This study applies asset management principles to the management of SPU's fleet of heavy equipment. A consultant is used because SPU staff does not have the expertise to meet the study's objectives. The study develops recommendations related to fleet utilization, including which kinds of equipment SPU should be using and how the Department's work practices might be changed either to use existing equipment better or to use different equipment. The project supports other work being done by SPU to assess the Department's current system of fleet management, develop performance measures and tracking systems, and modify department processes and practices related to fleet management. It is expected that implementation of the recommendations identified through this study will lead to lower life cycle costs for fleet management.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 123 | 0 | 0 | 0 | 0 | 0 | 123 |
| Project Total: | 0 | 0 | 123 | 0 | 0 | 0 | 0 | 0 | 123 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 0 | 123 | 0 | 0 | 0 | 0 | 0 | 123 |
| Appropriations Total* | 0 | 0 | 123 | 0 | 0 | 0 | 0 | 0 | 123 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Fremont Bridge

BCL Name: Other Agencies BCL Code C120B

Type: Improved Facility Start Date: 3rd Quarter 2004
Project ID: C1NW201-003 End Date: 1st Quarter 2006

Location: South End Of Fremont Bridge Neighborhood District: Not in a Neighborhood District

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

This project is in support of the Seattle Department of Transportation's project to replace the approach the Fremont Bridge. The plans are preliminary and the scope is not yet defined with regard to watermain impacts. An aging two-inch galvanized iron watermain below the south approach will most likely be replaced with an eight-inch ductile iron main to provide improved service and fire flow. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 10 | 50 | 13 | 0 | 0 | 0 | 0 | 73 |
| Project Total: | 0 | 10 | 50 | 13 | 0 | 0 | 0 | 0 | 73 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 10 | 50 | 13 | 0 | 0 | 0 | 0 | 73 |
| Appropriations Total* | 0 | 10 | 50 | 13 | 0 | 0 | 0 | 0 | 73 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Heavy Equipment Purchases - Water

BCL Name: Infrastructure BCL Code C110B

Type: New Investment Start Date: 1st Ouarter 1999

Project ID: C199068 End Date: Ongoing

Location: N/A **Neighborhood District:** In more than one District

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

This program replaces existing heavy equipment (such as loaders and bulldozers) used at Water Utility facilities. These pieces of equipment have reached the end of their useful lives. The project also funds retrofitting of existing equipment to meet these environmental standards. The confidence in the cost estimate is medium, and the 2005 acquisitions have been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources Water Rates | 6,922 | 3,200 | 1,240 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 21,875 |
| Project Total: | 6,922 | 3,200 | 1,240 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 21,875 |
| Fund Appropriations/Allocations SPU Water Fund | 6,922 | 3,200 | 1,240 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 21,875 |
| Appropriations Total* | 6,922 | 3,200 | 1,240 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 21,875 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Holgate/Amtrak Water Relocation

BCL Name: Other Agencies

BCL Code C120B

Type:Rehabilitation or RestorationStart Date:4th Quarter 1998Project ID:C101009End Date:1st Quarter 2006

Location: S Holgate St. Neighborhood District: Greater Duwamish

Neighborhood Plan: Duwamish Urban Village: Duwamish

This project responds to Amtrak's redevelopment of rail yard facilities at S Holgate St. between 3rd Ave. S and 4th Ave. S. As part of this redevelopment, the grade of S Holgate St. is lowered, reducing the cover over the existing 20-inch feeder main in S Holgate St. This project replaces the main at a lower depth (at Amtrak's expense) under the new track and extends the water main replacement under existing tracks in Holgate in the vicinity of 3rd Ave. S (at SPU's expense). Additionally, SPU supports Amtrak's project by performing shutdowns, water service relocations and installation of new services. The project is in construction, and the confidence in the cost estimate is high. No further review by SPU's Asset Management Committee is expected.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 12 | 238 | 10 | 2 | 0 | 0 | 0 | 0 | 262 |
| Project Total: | 12 | 238 | 10 | 2 | 0 | 0 | 0 | 0 | 262 |
| Fund Appropriations/Allocations SPU Water Fund | 12 | 238 | 10 | 2 | 0 | 0 | 0 | 0 | 262 |
| Appropriations Total* | 12 | 238 | 10 | 2 | 0 | 0 | 0 | 0 | 262 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Instream Flow Management Studies

BCL Name: Habitat Conservation Program

BCL Code C160B

Type:Improved FacilityStart Date:4th Quarter 2003Project ID:C1608End Date:4th Quarter 2009

Location: Citywide Neighborhood District: Ballard

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

This set of projects is part of the Cedar River Habitat Conservation Plan (HCP), which has received approval by SPU's Asset Management Committee. Studies conducted under this project generate information on relationships between stream flow and habitat conditions, with an emphasis on Chinook; support effective allocation of water above guaranteed levels; and address technical issues that emerged in the later stages of developing the HCP. The project includes studies of Chester Morse Dead Storage, to evaluate the feasibility of using dead storage in Chester Morse Lake to augment future water supply and flows, taking into account engineering, environmental, and economic issues. The project also includes a Accretion Flow Study, which studies Cedar River hydrology to confirm assumptions embodied in the HCP. The confidence in cost estimates for this project is high.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 31 | 203 | 533 | 613 | 708 | 319 | 204 | 0 | 2,611 |
| Project Total: | 31 | 203 | 533 | 613 | 708 | 319 | 204 | 0 | 2,611 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 31 | 203 | 533 | 613 | 708 | 319 | 204 | 0 | 2,611 |
| Appropriations Total* | 31 | 203 | 533 | 613 | 708 | 319 | 204 | 0 | 2,611 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Joint Training Facility

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:3rd Quarter 2004Project ID:C4NW106-002-WFEnd Date:1st Quarter 2006

Location: 9401 Myers Wy. S **Neighborhood District:** Delridge

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

The City of Seattle plans to build a new Joint Training Facility (JTF) Campus to provide classroom and physical job training for members of the Seattle Fire Department (SFD), Seattle Public Utilities (SPU), and Seattle Transportation Department (SDOT) field workers. Funding shown below is for the Water Fund's share of the cost of developing the new facility, based on the training requirements of Water Utility staff and workers. The project is designed to provide training opportunities for the three departments while minimizing its impact on the site and minimizing anticipated maintenance and operations costs. The primary features of the secured campus include a classroom/administration building, a high-bay apparatus/storage building, a six-story high drill tower prop, a two-story burn prop, an EVAP pad, a collapsed building prop, trench digging and rescue props, confined spaces prop, drainage and wastewater training prop, vehicle extrication and foaming area, and an urban road simulation prop. Decisions about the campus, its form and function were determined by the active participation of the user groups, as plans were developed. (See FFERP – Joint Training Facility project A1FL202 in the Fleets and Facilities CIP.)

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 1,700 | 0 | 0 | 0 | 0 | 0 | 1,700 |
| Project Total: | 0 | 0 | 1,700 | 0 | 0 | 0 | 0 | 0 | 1,700 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 0 | 1,700 | 0 | 0 | 0 | 0 | 0 | 1,700 |
| Appropriations Total* | 0 | 0 | 1,700 | 0 | 0 | 0 | 0 | 0 | 1,700 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Lake Youngs Outlet Dam Rehabilitation

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:2nd Quarter 2003Project ID:C102013End Date:1st Quarter 2006

Location: Lake Youngs Reservoir Neighborhood District: Not in a Neighborhood District

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

This project makes improvements at the dams at Lake Youngs to comply with Washington State dam safety requirements. Work identified or completed to date includes installation of survey monuments on all three dams; raising the west portion of the south dam of Lake Youngs, which is constructed of semi-structural fill that may fail in an earthquake and release water within the top six feet of the lake into the Kent valley; and replacement of the deteriorated siphon pipes at Lake Youngs that are used to provide water to Little Soos Creek. The cost estimates have a high confidence level, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 16 | 309 | 125 | 4 | 0 | 0 | 0 | 0 | 454 |
| Project Total: | 16 | 309 | 125 | 4 | 0 | 0 | 0 | 0 | 454 |
| Fund Appropriations/Allocations | 16 | 200 | 105 | 4 | 0 | 0 | 0 | 0 | 454 |
| SPU Water Fund | 16 | 309 | 125 | 4 | 0 | 0 | 0 | 0 | 454 |
| Appropriations Total* | 16 | 309 | 125 | 4 | 0 | 0 | 0 | 0 | 454 |
| O & M Costs (Savings) | | | 0 | 6 | 6 | 6 | 6 | 6 | 30 |

Lake Youngs Outlet Dam Warning System

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101006End Date:1st Quarter 2007

Location: South Of Lake Youngs Reservoir **Neighborhood District:** Not in a Neighborhood District

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

This project installs a warning system for detecting dam failure at the Lake Youngs Outlet Dam, per regulatory requirement. Operations and maintenance costs listed below are included in the Department's operating budget. The cost estimate confidence level is high. This project is approved for construction by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 231 | 779 | 34 | 30 | 10 | 0 | 0 | 0 | 1,084 |
| Project Total: | 231 | 779 | 34 | 30 | 10 | 0 | 0 | 0 | 1,084 |
| Fund Appropriations/Allocations SPU Water Fund | 231 | 779 | 34 | 30 | 10 | 0 | 0 | 0 | 1,084 |
| Appropriations Total* | 231 | 779 | 34 | 30 | 10 | 0 | 0 | 0 | 1,084 |
| O & M Costs (Savings) | | | 11 | 15 | 19 | 24 | 24 | 24 | 117 |

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

Landsburg Fish Passage Improvements

BCL Name: Habitat Conservation Program

BCL Code C160B

Type:Improved FacilityStart Date:2nd Quarter 1999Project ID:C1604End Date:4th Quarter 2010

Location: Cedar River Neighborhood District: Not in a Neighborhood District

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

This project mitigates the effects of the fish migration blockage on the Cedar River created by the Landsburg Dam, and is a key element of the Cedar River Watershed Habitat Conservation Plan (HCP). The project includes the planning, design, and construction of four major fish passage facilities; interim studies; and the implementation of monitoring and other mitigation measures to help restore Chinook, Coho and steelhead populations. Landsburg is the site of the City of Seattle's municipal water diversion and treatment facilities on the Cedar River, and the Landsburg Dam has blocked all anadromous fish migration since 1900. The HCP was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is high.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|--------|------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 11,760 | 872 | 202 | 203 | 226 | 210 | 4 | 11 | 13,488 |
| Project Total: | 11,760 | 872 | 202 | 203 | 226 | 210 | 4 | 11 | 13,488 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 11,760 | 872 | 202 | 203 | 226 | 210 | 4 | 11 | 13,488 |
| Appropriations Total* | 11,760 | 872 | 202 | 203 | 226 | 210 | 4 | 11 | 13,488 |
| O & M Costs (Savings) | | | 169 | 169 | 169 | 169 | 169 | 169 | 1014 |

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

Landsburg Flood Passage Improvement

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104016End Date:4th Quarter 2007

Location: Landsburg Dam Neighborhood District: Not in a Neighborhood District

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

This project addresses flood passage deficiencies at the City's Landsburg Dam on the Cedar River, making necessary improvements to reduce the risk of significant damage or loss of the dam in the event of a major flood. Preliminary engineering is proceeding per SPU's Asset Management Committee approval to identify the preferred option. Cost estimates are based on construction of a new 40-foot wide emergency spillway. Other options being considered are debris control and modification of the spillway to install an inflatable rubber dam. The rubber dam portion would be deflated in a major flood to provide increased spillway capacity and to allow better passage of debris. The cost estimate has a medium confidence level. Design and construction phases require SPU's Asset Management Committee approval.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 125 | 450 | 500 | 4,408 | 0 | 0 | 0 | 5,483 |
| Project Total: | 0 | 125 | 450 | 500 | 4,408 | 0 | 0 | 0 | 5,483 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 125 | 450 | 500 | 4,408 | 0 | 0 | 0 | 5,483 |
| Appropriations Total* | 0 | 125 | 450 | 500 | 4,408 | 0 | 0 | 0 | 5,483 |
| O & M Costs (Savings) | | | 0 | 0 | 8 | 10 | 10 | 10 | 38 |

Maple Leaf Gatehouse Pipe Refurbishing

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:2nd Quarter 1995Project ID:C195001End Date:2nd Quarter 2007

Location:NE 83rd St.Neighborhood District:NortheastNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project refurbishes valves and piping to allow more water from the Tolt source to be delivered to areas south of the Lake Washington Ship Canal normally served by the Cedar. The project makes it possible to supply the indoor water use of the City's entire water system from the Tolt. The project improves circulation in the Maple Leaf Reservoir. The project also addresses seismic issues with the gatehouse structure. The confidence in the cost estimate is medium.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 20 | 40 | 390 | 500 | 12 | 0 | 0 | 0 | 962 |
| Project Total: | 20 | 40 | 390 | 500 | 12 | 0 | 0 | 0 | 962 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 20 | 40 | 390 | 500 | 12 | 0 | 0 | 0 | 962 |
| Appropriations Total* | 20 | 40 | 390 | 500 | 12 | 0 | 0 | 0 | 962 |
| O & M Costs (Savings) | | | 0 | 0 | 5 | 5 | 5 | 5 | 20 |

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

Marine View/Des Moines Creek

BCL Name: Other Agencies BCL Code C120B

Type:Rehabilitation or RestorationStart Date:3rd Quarter 1997Project ID:C197021End Date:1st Quarter 2006

Location: Marine View Dr. Neighborhood District: Not in a Neighborhood District

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

This project responds to a project by the City of Des Moines that replaces an existing embankment and box culvert over the Des Moines Creek with a bridge. As a result of the City of Des Moines' project, SPU's Des Moines Way Pipeline over the embankment is decommissioned. The project includes the installation of thrust restraint system and blowoffs, and the decommissioning of existing facilities. The certainty of the cost estimate is medium-high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 184 | 496 | 400 | 2 | 0 | 0 | 0 | 0 | 1,082 |
| Project Total: | 184 | 496 | 400 | 2 | 0 | 0 | 0 | 0 | 1,082 |
| Fund Appropriations/Allocations SPU Water Fund | 184 | 496 | 400 | 2 | 0 | 0 | 0 | 0 | 1,082 |
| Appropriations Total* | 184 | 496 | 400 | 2 | 0 | 0 | 0 | 0 | 1,082 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Meter Replacement - Large (WF)

BCL Name:Shared Cost ProjectsBCL CodeC410BType:Rehabilitation or RestorationStart Date:OngoingProject ID:C404102-WFEnd Date:Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 6,348 | 724 | 728 | 574 | 588 | 603 | 618 | 0 | 10,183 |
| Project Total: | 6,348 | 724 | 728 | 574 | 588 | 603 | 618 | 0 | 10,183 |
| Fund Appropriations/Allocations SPU Water Fund | 6,348 | 724 | 728 | 574 | 588 | 603 | 618 | 0 | 10,183 |
| Appropriations Total* | 6,348 | 724 | 728 | 574 | 588 | 603 | 618 | 0 | 10,183 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Morse Lake Dead Storage Facilities

BCL Name: Water Supply

BCL Code C150B

Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C103032End Date:4th Quarter 2008

Location: Cedar River Watershed, Northern Boundary Neighborhood District: Not in a Neighborhood District

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

This project implements a cost-effective system for reliably delivering water from Cedar Dead Storage during drought conditions for water supply and instream flows. Depending on the outcome of a preliminary engineering study and approval by SPU's Asset Management Committee (AMC), either the existing facilities are improved or new facilities are constructed. Deficiencies in the existing Morse Lake Emergency Pumping Plants found during this project are also corrected while the longer-term improvements are being implemented. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|-------|-------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 48 | 138 | 900 | 900 | 9,225 | 5,673 | 0 | 0 | 16,884 |
| Project Total: | 48 | 138 | 900 | 900 | 9,225 | 5,673 | 0 | 0 | 16,884 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 48 | 138 | 900 | 900 | 9,225 | 5,673 | 0 | 0 | 16,884 |
| Appropriations Total* | 48 | 138 | 900 | 900 | 9,225 | 5,673 | 0 | 0 | 16,884 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Multiple Utility Relocation

BCL Name:Other AgenciesBCL CodeC120BType:Rehabilitation or RestorationStart Date:OngoingProject ID:C1NW201-001End Date:Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This program enables SPU to respond to large projects that are conducted by other agencies and that impact Seattle's water system. Impacts include utility conflicts that require relocations, construction impacts, and coordination to minimize impacts to SPU's customers and supply. Often, these agencies reimburse SPU for some or all of the costs incurred. In the 2004-2009 Adopted CIP, this program was called the Other Agency - Multiple Utility Relocation Program.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|-------|-------|-------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 115 | 966 | 980 | 1,000 | 1,025 | 1,051 | 1,077 | 1,104 | 7,318 |
| Project Total: | 115 | 966 | 980 | 1,000 | 1,025 | 1,051 | 1,077 | 1,104 | 7,318 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 115 | 966 | 980 | 1,000 | 1,025 | 1,051 | 1,077 | 1,104 | 7,318 |
| Appropriations Total* | 115 | 966 | 980 | 1,000 | 1,025 | 1,051 | 1,077 | 1,104 | 7,318 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Operations Control Center Upgrade

BCL Name: Shared Cost Projects

BCL Code C410B

Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C404501-WFEnd Date:4th Quarter 2006

Location:2700 Airport Wy. SNeighborhood District: Greater DuwamishNeighborhood Plan:Not in a Neighborhood PlanUrban Village: Not in an Urban Village

This project remodels and upgrades SPU's Operations Control Center building. The project includes reconfiguring internal space to improve security and incorporate the new Supervisory Control And Data Acquisition (SCADA) system. The upgraded center accommodates SPU's new Strategic Operations Division, as well as Field Operations administration and electrical, mechanical, maintenance and emergency response crews. This project has not yet been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 325 | 2,195 | 631 | 0 | 0 | 0 | 0 | 3,151 |
| Project Total: | 0 | 325 | 2,195 | 631 | 0 | 0 | 0 | 0 | 3,151 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 325 | 2,195 | 631 | 0 | 0 | 0 | 0 | 3,151 |
| Appropriations Total* | 0 | 325 | 2,195 | 631 | 0 | 0 | 0 | 0 | 3,151 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Painting Program - Myrtle Tank

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:2nd Quarter 2004Project ID:C104031End Date:2nd Quarter 2006

Location:3600 SW Myrtle St.Neighborhood District:SouthwestNeighborhood Plan:Morgan Junction (MOCA)Urban Village:Morgan Junction

The Tank Painting program involves interior and exterior surface preparation and painting, minor structural repairs, and safety modifications on a regular maintenance cycle at the City's various tank sites. This project cleans and overcoats the tank exterior of the Myrtle Tanks. The interior lining on one of the tanks is also removed and replaced. Minor safety and operational modifications are made. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 74 | 653 | 8 | 0 | 0 | 0 | 0 | 735 |
| Project Total: | 0 | 74 | 653 | 8 | 0 | 0 | 0 | 0 | 735 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 74 | 653 | 8 | 0 | 0 | 0 | 0 | 735 |
| Appropriations Total* | 0 | 74 | 653 | 8 | 0 | 0 | 0 | 0 | 735 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Painting Program - Richmond Highland

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:2nd Quarter 2004Project ID:C104032End Date:2nd Quarter 2006

Location: N 195th St. Neighborhood District: Not in a Neighborhood District

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

The Tank Painting program involves interior and exterior surface preparation and painting, minor structural repairs, and safety modifications on a regular maintenance cycle at the City's various tank sites. This project cleans and overcoats the tank exterior of the Richmond Highland Tanks (located north of Seattle city limits). The interior lining is completely removed and replaced. Minor safety and operational modifications are made. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 152 | 1,295 | 110 | 0 | 0 | 0 | 0 | 1,557 |
| Project Total: | 0 | 152 | 1,295 | 110 | 0 | 0 | 0 | 0 | 1,557 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 152 | 1,295 | 110 | 0 | 0 | 0 | 0 | 1,557 |
| Appropriations Total* | 0 | 152 | 1,295 | 110 | 0 | 0 | 0 | 0 | 1,557 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Painting Program - Steel Structures

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C1NW130End Date:4th Quarter 2010

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

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

The Steel Structures Painting program involves rehabilitation of the coating, lining, and paint systems on exposed steel pipelines, elevated tanks, standpipes, and other steel structures in the water system. The work involves minor structural repairs and safety modifications, surface preparation, and the application of a new coating system. This program is in a preliminary phase of development and cost estimates will be revised over time. The program has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 20 | 100 | 513 | 525 | 538 | 552 | 2,248 |
| Project Total: | 0 | 0 | 20 | 100 | 513 | 525 | 538 | 552 | 2,248 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 0 | 20 | 100 | 513 | 525 | 538 | 552 | 2,248 |
| Appropriations Total* | 0 | 0 | 20 | 100 | 513 | 525 | 538 | 552 | 2,248 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Pump Station - Install Station Motors

BCL Name: Infrastructure BCL Code C110B

Type: Rehabilitation or Restoration Start Date: 4th Ouarter 1999

Project ID: C199052 End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This program replaces aging pump station motors throughout the water distribution system with new, more efficient motors. Some of the existing motors were installed 30 or more years ago and are now obsolete, with no replacement parts available. The project cost estimate has a medium confidence level. This project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 310 | 60 | 61 | 60 | 67 | 74 | 75 | 77 | 784 |
| Project Total: | 310 | 60 | 61 | 60 | 67 | 74 | 75 | 77 | 784 |
| Fund Appropriations/Allocations SPU Water Fund | 310 | 60 | 61 | 60 | 67 | 74 | 75 | 77 | 784 |
| Appropriations Total* | 310 | 60 | 61 | 60 | 67 | 74 | 75 | 77 | 784 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Pump Station - Queen Anne

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:1st Quarter 1996Project ID:C1AA005End Date:4th Quarter 2007

Location:110 Lee St.Neighborhood District:Magnolia/Queen AnneNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project constructs a concrete underground booster pump station by the Queen Anne Tanks and modifies the distribution system on Queen Anne Hill to isolate two areas of low water pressure so that the pressure can be boosted using the pump station. The project also improves fire flows along Queen Anne Avenue, and other areas on Queen Anne Hill where redevelopment has increased nominal fire flows above the single family residential limit for which the water system was originally designed. Design is complete, however, the project cannot proceed until the Queen Anne Tanks are replaced. The confidence in the cost estimate is high. Life-to-date costs were incurred before SPU began its Asset Management Committee (AMC) review process. Future spending on the project has not yet been approved by the AMC.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-------|------|------|-------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,045 | 5 | 50 | 3,000 | 523 | 0 | 0 | 0 | 4,623 |
| Project Total: | 1,045 | 5 | 50 | 3,000 | 523 | 0 | 0 | 0 | 4,623 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 1,045 | 5 | 50 | 3,000 | 523 | 0 | 0 | 0 | 4,623 |
| Appropriations Total* | 1,045 | 5 | 50 | 3,000 | 523 | 0 | 0 | 0 | 4,623 |
| O & M Costs (Savings) | | | 0 | 10 | 13 | 16 | 16 | 16 | 71 |

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

Purveyor Meters Replace - SPU

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2000Project ID:C1107End Date:1st Quarter 2006

Location: Citywide Neighborhood District: In more than one District

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

This project replaces SPU wholesale customer meters that are not performing within industry standards of accuracy. The project also funds customer-requested wholesale meter changes and upgrades. For the most part, SPU costs are directly reimbursed by the wholesale customers. The confidence in the cost estimate is medium, and the 2005 sites have not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 3,199 | 450 | 176 | 6 | 0 | 0 | 0 | 0 | 3,831 |
| Project Total: | 3,199 | 450 | 176 | 6 | 0 | 0 | 0 | 0 | 3,831 |
| Fund Appropriations/Allocations SPU Water Fund | 3,199 | 450 | 176 | 6 | 0 | 0 | 0 | 0 | 3,831 |
| Appropriations Total* | 3,199 | 450 | 176 | 6 | 0 | 0 | 0 | 0 | 3,831 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Regional Water Conservation Program

BCL Name: Water Supply

BCL Code C150B

Type: Improved Facility Start Date: 1st Quarter 1999

Project ID: C199032 End Date: Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This project is a cooperative regional project between SPU and 18 of Seattle's wholesale customers. Not all of Seattle's wholesale customers are participating. In cases, wholesale customers choose to find others ways to manage supply and demand, while in other cases, those wholesale customers do not purchase significant amounts of water from SPU. Fifty percent of the project is paid for from wholesale rates as part of current wholesale contract requirements. The project has the goal of reducing personal and commercial water consumption by 1% per year, which is approximately equal to the projected level of growth in regional water demand over the period 2000 to 2010 (14.5 million gallons per day peak demand savings). The project is required by Seattle's Water System Plan, wholesale contracts, and by City Council adopted legislation, including Resolutions 30091 and 30259 and Ordinance 120532. The confidence level of the cost estimate is high. This project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|--------|-------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 12,649 | 3,358 | 3,300 | 3,550 | 3,998 | 4,360 | 4,900 | 5,519 | 41,634 |
| Project Total: | 12,649 | 3,358 | 3,300 | 3,550 | 3,998 | 4,360 | 4,900 | 5,519 | 41,634 |
| Fund Appropriations/Allocations SPU Water Fund | 12,649 | 3,358 | 3,300 | 3,550 | 3,998 | 4,360 | 4,900 | 5,519 | 41,634 |
| Appropriations Total* | 12,649 | 3,358 | 3,300 | 3,550 | 3,998 | 4,360 | 4,900 | 5,519 | 41,634 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Renton Franchise/Line Valve CR

BCL Name: Other Agencies BCL Code C120B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2002Project ID:C102023End Date:4th Quarter 2005

Location: Cedar River Pipeline **Neighborhood District:** Not in a Neighborhood District

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

In 1998, the Cities of Seattle and Renton signed an agreement which addresses Renton's request that SPU add line valves east of downtown Renton to reduce flooding in the event of a pipeline failure. This project responds to that agreement. Project components include improvement or relocation of pipeline blowoffs, replacement of Cedar River Pipeline 1 & 2 Valves at Leo Street, automation of the I- 405 ball valves, modifications to Augusta Gatehouse, and other miscellaneous work. This project cost estimate has a high confidence level, and the project has been approved by SPU's Asset Management Committee

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|------|-------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 542 | 1,254 | 970 | 0 | 0 | 0 | 0 | 0 | 2,766 |
| Project Total: | 542 | 1,254 | 970 | 0 | 0 | 0 | 0 | 0 | 2,766 |
| Fund Appropriations/Allocations | 5.40 | 1.054 | 070 | 0 | 0 | 0 | 0 | 0 | 2766 |
| SPU Water Fund | 542 | 1,254 | 970 | 0 | 0 | 0 | 0 | 0 | 2,766 |
| Appropriations Total* | 542 | 1,254 | 970 | 0 | 0 | 0 | 0 | 0 | 2,766 |
| O & M Costs (Savings) | | | 17 | 21 | 27 | 35 | 35 | 0 | 135 |

Replace Air Valve Chambers

BCL Name:InfrastructureBCL CodeC110BType:Rehabilitation or RestorationStart Date:OngoingProject ID:C199060End Date:Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This program replaces existing valve chamber tops and access chimneys with larger diameter tops and chimneys, and makes minor air valve improvements as needed. The project provides SPU staff safer access to valves, and complies with industry safety standards. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 312 | 60 | 61 | 62 | 62 | 63 | 65 | 66 | 751 |
| Project Total: | 312 | 60 | 61 | 62 | 62 | 63 | 65 | 66 | 751 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 312 | 60 | 61 | 62 | 62 | 63 | 65 | 66 | 751 |
| Appropriations Total* | 312 | 60 | 61 | 62 | 62 | 63 | 65 | 66 | 751 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Reservoir Covering - Beacon

BCL Name: Water Quality

BCL Code C140B

Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101060End Date:2nd Quarter 2008

Location: S Spokane St./Beacon Ave. S

Neighborhood District: Greater Duwamish

Neighborhood Plan: North Beacon Hill Urban Village: Beacon Hill

Per Ordinance 121447, this project replaces the existing 49-million gallon open South Beacon Reservoir with a new underground reservoir of approximately the same size, and rehabilitates the pipes and valves connecting the reservoir to the water system. Additionally, the project retires the existing North Beacon Reservoir. The project helps to protect Seattle's water supply from vandalism and contamination, and improves the quality of life in the surrounding neighborhood by creating approximately 29 acres of open space and avoiding the unsightly appearance of other reservoir covering options. The confidence in the cost estimate is high. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|-------|-------|--------|-------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 684 | 222 | 1,000 | 6,816 | 18,706 | 3,152 | 0 | 0 | 30,580 |
| Project Total: | 684 | 222 | 1,000 | 6,816 | 18,706 | 3,152 | 0 | 0 | 30,580 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 684 | 222 | 1,000 | 6,816 | 18,706 | 3,152 | 0 | 0 | 30,580 |
| Appropriations Total* | 684 | 222 | 1,000 | 6,816 | 18,706 | 3,152 | 0 | 0 | 30,580 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 76 | 76 | 0 | 152 |

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

Reservoir Covering - Lincoln

BCL Name: Water Quality

BCL Code C140B

Type: Improved Facility Start Date: 4th Quarter 1996
Project ID: C196012 End Date: 1st Quarter 2008

Location: Nagle Pl. Neighborhood District: East District

Neighborhood Plan: Capitol Hill Urban Village: Capitol Hill

Per Ordinance 121447, this project replaces the existing 21-million gallon Lincoln reservoir with a new concrete cast-in-place 12.5-million gallon reservoir. It also changes out the existing gas chlorinating system to a sodium hypochlorite (bleach) system, replaces pipe and valves connecting the new reservoir to the water system, and restores elements of the park site. The project helps to protect drinking water quality, and creates approximately four acres of open space. The Seattle Parks Department is conducting related work under the Cal Anderson (Lincoln) Park - Development - 2000 Parks Levy project (K733132). This project was the subject of a budget proviso in 2004, which was lifted by Ordinance 121447. The confidence in the cost estimate is high as the project is close to completion. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|--------|-------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 13,599 | 5,460 | 404 | 20 | 5 | 5 | 0 | 0 | 19,493 |
| Project Total: | 13,599 | 5,460 | 404 | 20 | 5 | 5 | 0 | 0 | 19,493 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 13,599 | 5,460 | 404 | 20 | 5 | 5 | 0 | 0 | 19,493 |
| Appropriations Total* | 13,599 | 5,460 | 404 | 20 | 5 | 5 | 0 | 0 | 19,493 |
| O & M Costs (Savings) | | | 0 | 43 | 55 | 71 | 91 | 91 | 351 |

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

Reservoir Covering - Maple Leaf

BCL Name: Water Quality

BCL Code C140B

Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101078End Date:3rd Quarter 2013

Location: NE 86th St. **Neighborhood District:** Northeast

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

Per Ordinance 121447, this project replaces the existing Maple Leaf Reservoir with a new underground reservoir, and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination, and improves the quality of life in the surrounding neighborhood by creating open space and avoiding the unsightly appearance of other reservoir covering options. Funds spent to date have been for design. The total estimated cost of undergrounding the reservoir through 2013 is \$32 million. The confidence in the cost estimate is medium since construction is not scheduled to occur until 2011. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 159 | 251 | 513 | 2 | 0 | 0 | 277 | 442 | 1,644 |
| Project Total: | 159 | 251 | 513 | 2 | 0 | 0 | 277 | 442 | 1,644 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 159 | 251 | 513 | 2 | 0 | 0 | 277 | 442 | 1,644 |
| Appropriations Total* | 159 | 251 | 513 | 2 | 0 | 0 | 277 | 442 | 1,644 |
| O & M Costs (Savings) | | | 26 | 33 | 54 | 69 | 69 | 0 | 251 |

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

Reservoir Covering - Myrtle

BCL Name: Water Quality

BCL Code C140B

Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101076End Date:4th Quarter 2007

Location:35th Ave. SWNeighborhood District: SouthwestNeighborhood Plan:Not in a Neighborhood PlanUrban Village: Morgan Junction

Per Ordinance 121447, this project replaces the existing open Myrtle Reservoir with a new underground reservoir of approximately the same size, rehabilitates the pipes and valves connecting the reservoir to the water system, and converts the disinfection system at the reservoir to sodium hypochlorite (bleach). The project helps to protect Seattle's water supply from vandalism and contamination, and improves the quality of life in the surrounding neighborhood by creating approximately three acres of open space and avoiding the unsightly appearance of other reservoir covering options. The confidence in the cost estimate is high. This project was the subject of a budget proviso in 2004, which was lifted by Ordinance 121447. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|-------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 198 | 226 | 955 | 2,108 | 2,563 | 0 | 0 | 0 | 6,050 |
| Project Total: | 198 | 226 | 955 | 2,108 | 2,563 | 0 | 0 | 0 | 6,050 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 198 | 226 | 955 | 2,108 | 2,563 | 0 | 0 | 0 | 6,050 |
| Appropriations Total* | 198 | 226 | 955 | 2,108 | 2,563 | 0 | 0 | 0 | 6,050 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 8 | 9 | 0 | 17 |

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

Reservoir Covering - Volunteer

BCL Name: Water Quality

BCL Code C140B

Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101059End Date:2nd Quarter 2015

Location: 12th Ave. E/E Prospect St. **Neighborhood District:** East District

Neighborhood Plan: Not in a Neighborhood Plan Urban Village: Capitol Hill

Per Ordinance 121447, this project replaces the existing Volunteer Reservoir with a new underground reservoir, and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination. SPU is also evaluating the possibility of decommissioning this reservoir instead of undergrounding it. This project was the subject of a budget proviso in 2004, which was lifted by Ordinance 121447. Funding provided in 2010 is to begin design work to underground the reservoir, if a decision is made to keep the reservoir in service. Deferring this project until 2010 helps to reduce near-term pressure on water rates, and allows the costs of the overall reservoir burying program to be slowly phased into commercial and residential water rates. The confidence in the cost estimate is medium since implementation is several years out. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 255 | 349 |
| Project Total: | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 255 | 349 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 255 | 349 |
| Appropriations Total* | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 255 | 349 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Reservoir Covering - West Seattle

BCL Name: Water Quality

BCL Code C140B

Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101075End Date:3rd Quarter 2010

Location:8th Ave SW/SW HendersonNeighborhood District:SouthwestNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

Per Ordinance 121447, this project replaces the existing West Seattle Reservoir with a new underground reservoir, and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination, and improves the quality of life in the surrounding neighborhood by creating open space and avoiding the unsightly appearance of other reservoir covering options. This project was the subject of a budget proviso in 2004, which was lifted by Ordinance 121447. The confidence in the cost estimate is medium since the project's implementation is several years in the future. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|-------|--------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 164 | 251 | 523 | 272 | 308 | 5,568 | 10,769 | 4,222 | 22,077 |
| Project Total: | 164 | 251 | 523 | 272 | 308 | 5,568 | 10,769 | 4,222 | 22,077 |
| Fund Appropriations/Allocations SPU Water Fund | 164 | 251 | 523 | 272 | 308 | 5,568 | 10,769 | 4,222 | 22,077 |
| Appropriations Total* | 164 | 251 | 523 | 272 | 308 | 5,568 | 10,769 | 4,222 | 22,077 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 17 | 0 | 17 |

Rock Creek Fishway

BCL Name: Environmental Stewardship BCL Code C130B

Type:Improved FacilityStart Date:1st Quarter 2002Project ID:C101008End Date:3rd Quarter 2006

Location: Lake Youngs Neighborhood District: Not in a Neighborhood District

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

In 2000, SPU received notification from the Washington Department of Fish and Wildlife that the culvert crossing under the Lake Youngs Aqueduct on Rock Creek, approximately 3.5 miles north of Landsburg, does not comply with existing fish passage requirements. This project provides the following: an independent consultant assessment of the nature and magnitude of fish passage impairment at the current structure; conceptual development of a range of improvement options for the facility; and design, permitting, and construction of the selected improvement option.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 64 | 19 | 22 | 112 | 0 | 0 | 0 | 0 | 217 |
| Project Total: | 64 | 19 | 22 | 112 | 0 | 0 | 0 | 0 | 217 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 64 | 19 | 22 | 112 | 0 | 0 | 0 | 0 | 217 |
| Appropriations Total* | 64 | 19 | 22 | 112 | 0 | 0 | 0 | 0 | 217 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

SeaTac 3 Runway Pipeline Relocat

BCL Name: Other Agencies BCL Code C120B

Type:Rehabilitation or RestorationStart Date:4th Quarter 1999Project ID:C199075End Date:2nd Quarter 2006

Location: S 156th Wy. **Neighborhood District:** Not in a Neighborhood District

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

This project relocates the Bow Lake Pipeline away from SeaTac Airport onto a new road along the north perimeter of the airport property. The original pipeline crossed both runways, and was not compatible with the third runway. As a result it was determined that the pipeline should be relocated away from the runways. The Port of Seattle is bearing the majority of the costs, and the amounts shown below are SPU's contribution to the project. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 251 | 57 | 545 | 20 | 0 | 0 | 0 | 0 | 873 |
| Project Total: | 251 | 57 | 545 | 20 | 0 | 0 | 0 | 0 | 873 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 251 | 57 | 545 | 20 | 0 | 0 | 0 | 0 | 873 |
| Appropriations Total* | 251 | 57 | 545 | 20 | 0 | 0 | 0 | 0 | 873 |
| O & M Costs (Savings) | | | 0 | 0 | 3 | 3 | 3 | 3 | 12 |

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

Seattle Direct Service Additional Conservation

BCL Name: Water Supply

BCL Code C150B

Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C102010End Date:4th Quarter 2010

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This program provides additional funding for measures to reduce personal and commercial water consumption in SPU's Direct Service Area for water supply. The program implements Ordinance 120532, adopted in 2001, and supplements funding provided under SPU's Regional Water Conservation Program (C199032). The project is designed in three phases. Phase One works with low-income housing providers; Phase Two works with subsidized and non-subsidized low-income households; and Phase Three work on clothes washers and irrigation system upgrades. Commercial and Industrial facility and equipment upgrades are done in all three phases, and may include reclaimed water projects if cost-effective. The confidence level of the cost estimate is low. The project has not been reviewed by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 999 | 939 | 988 | 3,198 | 3,280 | 3,677 | 3,877 | 4,305 | 21,263 |
| Project Total: | 999 | 939 | 988 | 3,198 | 3,280 | 3,677 | 3,877 | 4,305 | 21,263 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 999 | 939 | 988 | 3,198 | 3,280 | 3,677 | 3,877 | 4,305 | 21,263 |
| Appropriations Total* | 999 | 939 | 988 | 3,198 | 3,280 | 3,677 | 3,877 | 4,305 | 21,263 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Seattle Monorail Project

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:1st Quarter 2004Project ID:C404301-WFEnd Date:4th Quarter 2008

Location:SW Morgan St./NW 85th St.Neighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

The Seattle Monorail Project (SMP) is planning an initial 14-mile monorail route between Ballard and West Seattle that travels through downtown Seattle. The Monorail conceptual plan was approved by Seattle voters in November, 2002. This project funds planning, design, and coordination with agencies involved in SPU utility relocations associated with implementation of a new monorail. The project does not include funding for construction. An agreement is in place between the SMP and the City in which the former will reimburse the City for all costs incurred by City departments because of the Monorail project. This project is funded by SPU's Drainage & Wastewater and Water Funds, and also includes projects in the City Light, SDOT and Seattle Center CIPs. Cost estimates shown here are preliminary and will be revised over time. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 89 | 230 | 400 | 400 | 410 | 420 | 188 | 0 | 2,137 |
| Project Total: | 89 | 230 | 400 | 400 | 410 | 420 | 188 | 0 | 2,137 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 89 | 230 | 400 | 400 | 410 | 420 | 188 | 0 | 2,137 |
| Appropriations Total* | 89 | 230 | 400 | 400 | 410 | 420 | 188 | 0 | 2,137 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Seattle Monorail Proj-WM Rplc (WF)

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:1st Quarter 2005Project ID:C4NW103-001-WFEnd Date:4th Quarter 2008

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

The Seattle Monorail Project (SMP) is planning an initial 14-mile monorail route between Ballard and West Seattle that travels through downtown Seattle. The Monorail conceptual plan was approved by Seattle voters in November, 2002. This project funds construction of water utility relocations where appropriate, in association with implementation of a new monorail. The costs will be reimbursed by the SMP. Cost estimates shown here are preliminary and will be revised over time. The project has not been approved by the Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|-------|-------|-------|-------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 1,200 | 2,550 | 1,819 | 1,340 | 0 | 0 | 6,909 |
| Project Total: | 0 | 0 | 1,200 | 2,550 | 1,819 | 1,340 | 0 | 0 | 6,909 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 0 | 1,200 | 2,550 | 1,819 | 1,340 | 0 | 0 | 6,909 |
| Appropriations Total* | 0 | 0 | 1,200 | 2,550 | 1,819 | 1,340 | 0 | 0 | 6,909 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Seismic Upgrade - Buildings

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:4th Quarter 1994Project ID:C1118End Date:4th Quarter 2010

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

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

Under this project, the Broadway, Spokane Street, and Volunteer pump stations, Lincoln, Roosevelt, and Landsburg Tunnel gatehouses, and Tolt Screenhouse, Lake Youngs Office and Lake Forest Reservoir Chlorination buildings are seismically upgraded. SPU is evaluating the most economical way of addressing seismic vulnerabilities that have been identified in these facilities, which may consist in some cases of connecting the roofs to the walls. Cost estimates shown here are preliminary and will be revised over time. This project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,289 | 15 | 141 | 578 | 748 | 657 | 350 | 110 | 3,888 |
| Project Total: | 1,289 | 15 | 141 | 578 | 748 | 657 | 350 | 110 | 3,888 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 1,289 | 15 | 141 | 578 | 748 | 657 | 350 | 110 | 3,888 |
| Appropriations Total* | 1,289 | 15 | 141 | 578 | 748 | 657 | 350 | 110 | 3,888 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Seismic Upgrade - CRPLs at Ginger Creek

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:1st Quarter 1999Project ID:C197032End Date:4th Quarter 2007

Location: Lake Youngs Wy. SE & Kirkland Wy. SE

Neighborhood District: Not in a Neighborhood District

(Renton)

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

This project upgrades support systems for Cedar River Pipelined 1, 2, and 3 where they cross a boggy area at Ginger Creek so they can better withstand and remain operational after a medium to large earthquake. The confidence in the cost estimates is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 293 | 208 | 2,105 | 3 | 3 | 0 | 0 | 0 | 2,612 |
| Project Total: | 293 | 208 | 2,105 | 3 | 3 | 0 | 0 | 0 | 2,612 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 293 | 208 | 2,105 | 3 | 3 | 0 | 0 | 0 | 2,612 |
| Appropriations Total* | 293 | 208 | 2,105 | 3 | 3 | 0 | 0 | 0 | 2,612 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Seismic Upgrade - Pipeline Backbone

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101038End Date:4th Quarter 2007

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This program makes seismic improvements to keep the essential components of the backbone pipeline system operational during and after a major earthquake. The program includes seismic vulnerability and hydraulic modeling of the system to determine pipeline vulnerabilities, earthquake failure effects on the system, and cost effective mitigation approaches. For budgeting purposes, it is anticipated that approximately 12 isolation valves will be installed at various locations to prevent vulnerable pipelines from draining the system. Types of valves being considered include seismic-actuated, remote controlled, and excess flow. The confidence in the cost estimate is medium. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|-------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 194 | 205 | 205 | 1,700 | 154 | 0 | 0 | 0 | 2,458 |
| Project Total: | 194 | 205 | 205 | 1,700 | 154 | 0 | 0 | 0 | 2,458 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 194 | 205 | 205 | 1,700 | 154 | 0 | 0 | 0 | 2,458 |
| Appropriations Total* | 194 | 205 | 205 | 1,700 | 154 | 0 | 0 | 0 | 2,458 |
| O & M Costs (Savings) | | | 0 | 0 | 5 | 5 | 5 | 5 | 20 |

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

Seismic Upgrade - Tanks

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:4th Quarter 1994Project ID:C1120End Date:4th Quarter 2011

Location: Citywide Neighborhood District: In more than one District

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

This project makes seismic upgrades to Barton Standpipe 2, Woodland Park Standpipe 1, 2, Foy Standpipe 2, Landsburg Elevated Tank 1 and 2, Maple Leaf Elevated Tank 1, Beverly Park Elevated Tank 1 and the Volunteer Park Standpipe1. Typical upgrades include improving standpipe anchorage and foundations and adding a seismic isolators and strengthening braces of elevated tanks. Under this program to date, SPU has replaced the Charlestown Standpipe, and seismically upgraded the Richmond Highlands Tanks and the Magnolia Tank. Most of the funding allocated for 2005 and 2006 is for construction of Queen Anne Standpipes replacement, which has already been approved by SPU's Asset Management Committee (AMC). Seismic upgrades to the remaining tank and standpipes have not yet been approved by the AMC. It is anticipated that some of the facilities listed may not be upgraded as the cost of the upgrades may outweigh the benefit from the facility to the water system. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|------|-------|-------|------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 5,988 | 139 | 1,445 | 4,011 | 723 | 1,534 | 2,719 | 4,548 | 21,107 |
| Project Total: | 5,988 | 139 | 1,445 | 4,011 | 723 | 1,534 | 2,719 | 4,548 | 21,107 |
| Fund Appropriations/Allocations SPU Water Fund | 5,988 | 139 | 1,445 | 4,011 | 723 | 1,534 | 2,719 | 4,548 | 21,107 |
| Appropriations Total* | 5,988 | 139 | 1,445 | 4,011 | 723 | 1,534 | 2,719 | 4,548 | 21,107 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Shared Opportunity Projects

BCL Name: Shared Cost Projects

BCL Code C410B

Type: Rehabilitation or Restoration Start Date: 1st Quarter 2005

Project ID: C4NW106-005-WF End Date: Ongoing

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

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

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Project Total: | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Appropriations Total* | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

SLU - Water Main Replacement/South Lake Union Park

BCL Name: Other Agencies BCL Code C120B

Type:Improved FacilityStart Date: 4th Quarter 2004Project ID:C104035End Date: 4th Quarter 2006

Location:South Lake UnionNeighborhood District:Lake UnionNeighborhood Plan:Not in a Neighborhood PlanUrban Village:South Lake Union

This project replaces an existing and aging watermain during the South Lake Union Park Redevelopment. This work includes the design and construction of a 750-foot eight-inch watermain along Terry Avenue N, from the intersection of Valley St. N. This watermain has a high incidence of leaks and, when combined with the park construction, the leak or failure rate of the water could increase. See also the South Lake Union Park - Development project (K733134) in the Parks CIP. The planning phase cost estimate has medium confidence.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 15 | 155 | 30 | 0 | 0 | 0 | 0 | 200 |
| Project Total: | 0 | 15 | 155 | 30 | 0 | 0 | 0 | 0 | 200 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 15 | 155 | 30 | 0 | 0 | 0 | 0 | 200 |
| Appropriations Total* | 0 | 15 | 155 | 30 | 0 | 0 | 0 | 0 | 200 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Snoqualmie River Bank Stabilization

BCL Name: Other Agencies BCL Code C120B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2006Project ID:C1NW201-007End Date:4th Quarter 2007

Location: Snoqualmie River Near Tolt Pipeline Crossing **Neighborhood District:** Not in a Neighborhood District

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

This project stabilizes the north bank of the Snoqualmie River, near river-mile 13.5, to minimize further erosion and thereby protect the Tolt Pipelines. Work takes place on private property. The Water and Land Resource Division of the King County Department of Natural Resources and Parks plans to design and construct the project with funding support from SPU. There is some uncertainty about the schedule and timing of this project, which is driven by King County. The confidence in the cost estimate is low, and the project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 0 | 47 | 513 | 0 | 0 | 0 | 560 |
| Project Total: | 0 | 0 | 0 | 47 | 513 | 0 | 0 | 0 | 560 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 0 | 0 | 47 | 513 | 0 | 0 | 0 | 560 |
| Appropriations Total* | 0 | 0 | 0 | 47 | 513 | 0 | 0 | 0 | 560 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Sound Transit Light Rail - Water

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:1st Quarter 2003Project ID:C404401-WFEnd Date:4th Quarter 2008

Location: Martin Luther King Jr. Wy. S/S Walden St. **Neighborhood District:** Southeast

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

This project funds SPU's costs related to Sound Transit's planning, design and construction of the Central Link Light Rail system. Sound Transit proposes to construct and operate this electrical light rail transit system, which includes more than 14 miles of alignment. The first phase of Sound Transit's project constructs a light rail segment from the Convention Place Station to S 154th St. near Seattle/Tacoma Airport. An agreement authorizing all City services related to Sound Transit light rail construction ("Sound Transit Construction Services Agreement") was adopted via Ordinance 121312 in July 2003. Sound Transit intends to issue task orders authorizing multiple years of City service for each contract segment. See also Sound Transit projects in the City Light and SDOT CIPs.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|-------|-------|-------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 1,260 | 1,476 | 1,445 | 964 | 0 | 0 | 0 | 5,145 |
| Project Total: | 0 | 1,260 | 1,476 | 1,445 | 964 | 0 | 0 | 0 | 5,145 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 1,260 | 1,476 | 1,445 | 964 | 0 | 0 | 0 | 5,145 |
| Appropriations Total* | 0 | 1,260 | 1,476 | 1,445 | 964 | 0 | 0 | 0 | 5,145 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Sound Transit Light Rail - Wtr Btmnt (WF)

BCL Name: Shared Cost Projects

BCL Code C410B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C4NW104-WFEnd Date:4th Quarter 2007

Location:RegionalNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This project funds the relocation/replacement of water mains, hydrants, water services, transmission lines and other water system facilities affected by Sound Transit's Link Light Rail construction where the costs are funded by SPU (Water Fund) or shared by SPU (Water Fund) and Sound Transit for the following reasons: relocation/replacement is not a total direct impact by Sound Transit's Light Rail project; agreements to share in the cost of replacements because of a mutual benefit to SPU and Sound Transit; to address water system relocations caused by other improvements made for the City's benefit (e.g.. undergrounding of Seattle City Light power lines); or opportunities to replace aging water system infrastructure in or adjacent to the Light Rail project that are not affected by the Light Rail project. The area affected is along the present 14-mile light rail alignment in the City of Seattle and King County. The cost certainty is medium-high. An agreement authorizing all City services related to Sound Transit light rail construction ("Sound Transit Construction Services Agreement") was adopted via Ordinance 121312 in July 2003. Sound Transit intends to issue task orders authorizing multiple years of City service for each contract segment. See also Sound Transit projects in the City Light and SDOT CIPs.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|-------|-------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 1,400 | 2,000 | 718 | 0 | 0 | 0 | 4,118 |
| Project Total: | 0 | 0 | 1,400 | 2,000 | 718 | 0 | 0 | 0 | 4,118 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 0 | 1,400 | 2,000 | 718 | 0 | 0 | 0 | 4,118 |
| Appropriations Total* | 0 | 0 | 1,400 | 2,000 | 718 | 0 | 0 | 0 | 4,118 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

South Lake Union Water Main/Utility Coordination

BCL Name: Other Agencies BCL Code C120B

Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104036End Date:1st Quarter 2006

Location:South Lake UnionNeighborhood District:Lake UnionNeighborhood Plan:Not in a Neighborhood PlanUrban Village:South Lake Union

This project funds design and construction to relocate or replace one or more water mains that are located along the route of the South Lake Union Streetcar. The project also provides for related water system reconfigurations. SPU anticipates being able to complete this work in conjunction with the construction of the South Lake Union Streetcar project (see project TC366260 in the Seattle Department of Transportation CIP), to avoid multiple street disruptions. It is anticipated that watermain replacement and relocation work will be performed by the streetcar contractor whereas water service and temporary watermains work will be done by SPU crews. Funding provided includes \$2 million for construction to occur in 2006. Some funding is also included in this project to address the impacts to SPU water infrastructure from the possible undergrounding of Seattle City Light power facilities and the development of other possible transportation improvements in the South Lake Union area. This effort identifies SPU water system direct impacts, opportunities for system improvements, and cost responsibilities. This project is in a preliminary phase of development and cost estimates will be revised over time.

In the 2005 budget process, the City Council adopted the following two budget provisos related to this project:

No more than \$71,000 of the money appropriated for 2005 for SPU's Water Utility Other Agencies Budget Control Level can be spent to pay for the South Lake Union Water Main/Utility Coordination project.

None of the money appropriated for 2005 for SPU's Water Utility Other Agencies Budget Control Level can be spent to pay for the South Lake Union Water Main/Utility Coordination project, until the Seattle Department of Transportation (SDOT) and SPU have signed a Memorandum of Agreement that explicitly requires SDOT to fully reimburse SPU from the funds appropriated in Ordinance 121565 for the expenditures incurred by SPU in support of preliminary design and engineering for the South Lake Union Street Car project.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|-------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 36 | 71 | 2,000 | 0 | 0 | 0 | 0 | 2,107 |
| Project Total: | 0 | 36 | 71 | 2,000 | 0 | 0 | 0 | 0 | 2,107 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 36 | 71 | 2,000 | 0 | 0 | 0 | 0 | 2,107 |
| Appropriations Total* | 0 | 36 | 71 | 2,000 | 0 | 0 | 0 | 0 | 2,107 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Spoils Yard & Decant Facility (WF)

BCL Name: Shared Cost Projects

BCL Code C410B

Type:New FacilityStart Date:3rd Quarter 2004Project ID:C4NW106-007-WFEnd Date:4th Quarter 2005

Location:S Michigan St./E Marginal Wy. SNeighborhood District: Greater DuwamishNeighborhood Plan:Not in a Neighborhood PlanUrban Village: Not in an Urban Village

This project would replace the temporary spoils yard on Ellis Ave. S with a permanent yard located at the intersection of S Michigan and East Marginal Way S. It would be designed and built to allow SPU to handle spoils materials from repair sites, sewer and drainage vactor grits, future hydro-excavated materials and store replacement fill materials for completing repair jobs. The facility would be designed to enable the department to perform these functions environmentally using best management practices. The project may include partners from SDOT, City Light and Seattle Parks. This project is in a preliminary phase of coping and development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 40 | 10 | 0 | 0 | 0 | 0 | 0 | 50 |
| Project Total: | 0 | 40 | 10 | 0 | 0 | 0 | 0 | 0 | 50 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 40 | 10 | 0 | 0 | 0 | 0 | 0 | 50 |
| Appropriations Total* | 0 | 40 | 10 | 0 | 0 | 0 | 0 | 0 | 50 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Stream & Riparian Restoration

BCL Name: Habitat Conservation Program BCL Code C160B

Type: Rehabilitation or Restoration Start Date: 2nd Quarter 2000

Project ID: C1602 End Date: Ongoing

Location: Cedar River Neighborhood District: Not in a Neighborhood District

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

Stream and Riparian Restoration is a category of projects within the Cedar River Watershed Habitat Conservation Plan (HCP) that involves mitigation related to streams, and forests adjacent to streams and other aquatic habitats. Projects include streambank stabilization, streamside revegetation, large woody debris placement, conifer under-planting, restoration thinning, ecological thinning, stream-crossing projects to improve flow patterns, stream-crossing improvements to re-establish fish passage, and bull trout habitat studies. The HCP was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is high.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,776 | 726 | 837 | 827 | 799 | 826 | 832 | 852 | 7,475 |
| Project Total: | 1,776 | 726 | 837 | 827 | 799 | 826 | 832 | 852 | 7,475 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 1,776 | 726 | 837 | 827 | 799 | 826 | 832 | 852 | 7,475 |
| Appropriations Total* | 1,776 | 726 | 837 | 827 | 799 | 826 | 832 | 852 | 7,475 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Tolt Bridges

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2004Project ID:C1131End Date:4th Quarter 2007

Location: Tolt River Watershed Neighborhood District: Not in a Neighborhood District

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

This project replaces three deteriorated bridges in the Tolt River Watershed. A 2003 cost/benefit analysis determined that access is needed and the existing bridges are no longer able to carry the required loading, resulting in safety and environmental risks. This project combines the following projects, which were displayed as separate projects in the 2004-2009 Adopted CIP: Tolt Bridge Replacement - Dorothy Creek (C103018), Tolt Bridge Replacement - Siwash Creek (C197029), and Tolt Bridge Replacement - Chuck Judd Creek (C1NW119-010). Confidence in the cost estimate is medium. This project has not yet been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 202 | 6 | 210 | 359 | 0 | 0 | 0 | 777 |
| Project Total: | 0 | 202 | 6 | 210 | 359 | 0 | 0 | 0 | 777 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 202 | 6 | 210 | 359 | 0 | 0 | 0 | 777 |
| Appropriations Total* | 0 | 202 | 6 | 210 | 359 | 0 | 0 | 0 | 777 |
| O & M Costs (Savings) | | | 0 | 3 | 3 | 3 | 3 | 3 | 15 |

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

Tolt Eastside Supply Line Upgrade

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2009Project ID:C1NW101-004End Date:4th Quarter 2016

Location: Tolt Pipeline **Neighborhood District:** Not in a Neighborhood District

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

This project rehabilitates part of the Tolt Eastside Supply Line by replacing approximately 19,495 linear feet of old 48-inch pipe with new 48-inch steel pipe, and approximately 699 linear feet of existing 42-inch pipe with new 48-inch steel pipe. The demand for the project is uncertain as the existing pipe may have a much longer useful life. Factors that guide SPU in determining when and to what extent to implement the project include performance of the existing pipe, as measured by leak and break history, as well the possible availability of innovative non-destructive and no-dig pipe inspection methods. This project is in a preliminary phase of development and cost estimates will be revised over time, if the project proceeds. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 0 | 0 | 0 | 0 | 1,059 | 1,858 | 2,917 |
| Project Total: | 0 | 0 | 0 | 0 | 0 | 0 | 1,059 | 1,858 | 2,917 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 0 | 0 | 0 | 0 | 0 | 1,059 | 1,858 | 2,917 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 0 | 0 | 1,059 | 1,858 | 2,917 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Tolt Fisheries Mitigation

BCL Name: Environmental Stewardship BCL Code C130B

Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104057End Date:2nd Quarter 2006

Location: South Fork Tolt River Neighborhood District: Not in a Neighborhood District

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

This project funds fish habitat conservation efforts on the South Fork Tolt River based on an agreement between the Tolt Fisheries Advisory Groups and the City of Seattle. This project funds SPU's spending obligation pursuant to the 1989 Tolt Settlement Agreement for the federal relicensing of the South Fork Tolt Dam. The allocation of this funding is under the management of the interagency Tolt Fish Advisory Committee (TFAC). In 2004, a project to place large woody debris in the South Fork Tolt River was approved by TFAC and is now in the planning stages. This project improves habitat conditions for salmon and steelhead in the river and is scheduled for completion in 2005. A portion of the mitigation fund is allocated for this project. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 138 | 185 | 9 | 0 | 0 | 0 | 0 | 332 |
| Project Total: | 0 | 138 | 185 | 9 | 0 | 0 | 0 | 0 | 332 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 138 | 185 | 9 | 0 | 0 | 0 | 0 | 332 |
| Appropriations Total* | 0 | 138 | 185 | 9 | 0 | 0 | 0 | 0 | 332 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Tolt Instrument and Warning Upgrade

BCL Name: Infrastructure BCL Code C110B

Type: Improved Facility Start Date: 1st Quarter 1999

Project ID: C1AA012 End Date: Ongoing

Location: Tolt Dam

Neighborhood District: Not in a Neighborhood District

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

This project replaces outmoded equipment and improves the reliability of the required Tolt Instrument and Warning System for detecting dam failure. The project cost estimate has a high confidence level. Because this project is in construction, no approval by SPU's Asset Management Committee is required.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,857 | 25 | 47 | 46 | 26 | 26 | 27 | 28 | 2,082 |
| Project Total: | 1,857 | 25 | 47 | 46 | 26 | 26 | 27 | 28 | 2,082 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 1,857 | 25 | 47 | 46 | 26 | 26 | 27 | 28 | 2,082 |
| Appropriations Total* | 1,857 | 25 | 47 | 46 | 26 | 26 | 27 | 28 | 2,082 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Tolt Pipeline I - Phase III-B

BCL Name: Water Supply

BCL Code C150B

Type:Rehabilitation or RestorationStart Date:1st Quarter 1999Project ID:C199003End Date:2nd Quarter 2006

Location: Tolt Pipeline Neighborhood District: Not in a Neighborhood District

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

This project is part of a long-term plan to rehabilitate or replace the Tolt Pipeline I. To date, four sections of the pipeline (totaling approximately 12 miles) have been re-lined with a smaller pipe or replaced. This project rehabilitates the last remaining higher-risk section of the original pipeline where it crosses the Snoqualmie River Valley for a length of about one mile. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 417 | 319 | 3,430 | 61 | 0 | 0 | 0 | 0 | 4,227 |
| Project Total: | 417 | 319 | 3,430 | 61 | 0 | 0 | 0 | 0 | 4,227 |
| Fund Appropriations/Allocations SPU Water Fund | 417 | 319 | 3,430 | 61 | 0 | 0 | 0 | 0 | 4,227 |
| Appropriations Total* | 417 | 319 | 3,430 | 61 | 0 | 0 | 0 | 0 | 4,227 |
| O & M Costs (Savings) | | | 5 | 6 | 8 | 10 | 10 | 0 | 39 |

Tolt Pipeline II - Phase IV

BCL Name: Water Supply

BCL Code C150B

Type:Improved FacilityStart Date:1st Quarter 1995Project ID:C194029End Date:4th Quarter 2006

Location: Tolt Pipeline Right of Way

Neighborhood District: Not in a Neighborhood District

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

Tolt Pipeline II is a 25-mile second regional supply pipeline for the Tolt System, ranging in diameter from 54 to 87 inches. This new pipeline improves the reliability of the Tolt system, allows rehabilitation of remaining portions of Tolt Pipeline I, enhances operational flexibility, increases reliability of the system during a major flood, landslide, or earthquake, and provides increased capacity. Phase IV included the installation of six miles of 54-inch and 60-inch diameter welded steel pipeline. The project is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | - | | _ | | | | | | |
|---|--------|------|------|------|------|------|------|------|--------|
| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
| Revenue Sources | | | | | | | | | |
| Water Rates | 31,377 | 126 | 55 | 12 | 0 | 0 | 0 | 0 | 31,570 |
| Project Total: | 31,377 | 126 | 55 | 12 | 0 | 0 | 0 | 0 | 31,570 |
| Fund Appropriations/Allocations SPU Water Fund | 31,377 | 126 | 55 | 12 | 0 | 0 | 0 | 0 | 31,570 |
| Appropriations Total* | 31,377 | 126 | 55 | 12 | 0 | 0 | 0 | 0 | 31,570 |
| O & M Costs (Savings) | | | 11 | 15 | 19 | 24 | 24 | 0 | 93 |

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

Tolt River Watershed Road Improvements

BCL Name: Infrastructure BCL Code C110B

Type:Improved FacilityStart Date:1st Quarter 1996Project ID:C196007End Date:4th Quarter 2008

Location: Tolt Watershed Neighborhood District: Not in a Neighborhood District

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

This project provides drainage and other road improvements on portions of the 70 miles of forest roads in the South Fork Tolt River Watershed. The confidence level of the cost estimate is medium. The project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,774 | 170 | 170 | 170 | 174 | 179 | 0 | 0 | 2,637 |
| Project Total: | 1,774 | 170 | 170 | 170 | 174 | 179 | 0 | 0 | 2,637 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 1,774 | 170 | 170 | 170 | 174 | 179 | 0 | 0 | 2,637 |
| Appropriations Total* | 1,774 | 170 | 170 | 170 | 174 | 179 | 0 | 0 | 2,637 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Tolt Watershed Management Plan

BCL Name: Environmental Stewardship

BCL Code C130B

Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C1NW301-002End Date:4th Quarter 2009

Location: Tolt River Watershed Neighborhood District: Not in a Neighborhood District

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

This project develops a Tolt Watershed Management Plan to bring operations in the Tolt municipal watershed area into alignment with the operation of other major watershed facilities, and to provide guidance for a wide array of management activities into the future. Major elements addressed in the plan include forestland management, facility security and protection, road maintenance and operations, and fish and wildlife management. Historically, water supply and watershed management operations have been undertaken in the Tolt Watershed area with little formal written protocol or management guidance.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 300 | 200 | 205 | 210 | 108 | 0 | 1,023 |
| Project Total: | 0 | 0 | 300 | 200 | 205 | 210 | 108 | 0 | 1,023 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 0 | 300 | 200 | 205 | 210 | 108 | 0 | 1,023 |
| Appropriations Total* | 0 | 0 | 300 | 200 | 205 | 210 | 108 | 0 | 1,023 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

TPL2 II&III East of Tieline

BCL Name: Water Supply

BCL Code C150B

Type:Improved FacilityStart Date:3rd Quarter 1987Project ID:C100084End Date:4th Quarter 2008

Location: Various Neighborhood District: Not in a Neighborhood District

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

Tolt Pipeline No. 2 has been planned as a 25-mile second regional supply pipeline for the Tolt System, ranging in diameter from 54 to 87 inches, and to be constructed in several phases over a period of decades. Phases II and III include installation of eight miles of 60-, 75- and 81-inch diameter welded steel pipeline between Duvall and Redmond along a different route than the original and still in use Tolt Pipeline No. 1. The project is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|--------|------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 27,638 | 572 | 73 | 32 | 23 | 13 | 0 | 0 | 28,351 |
| Project Total: | 27,638 | 572 | 73 | 32 | 23 | 13 | 0 | 0 | 28,351 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 27,638 | 572 | 73 | 32 | 23 | 13 | 0 | 0 | 28,351 |
| Appropriations Total* | 27,638 | 572 | 73 | 32 | 23 | 13 | 0 | 0 | 28,351 |
| O & M Costs (Savings) | | | 10 | 10 | 10 | 10 | 10 | 0 | 50 |

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

TPL2 II&III West of Tieline

BCL Name: Water Supply

BCL Code C150B

Type:Improved FacilityStart Date:3rd Quarter 1987Project ID:C100083End Date:4th Quarter 2008

Location: Various Neighborhood District: Not in a Neighborhood District

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

Tolt Pipeline II is a 25-mile second regional supply pipeline for the Tolt System, ranging in diameter from 54 to 87 inches. This new pipeline improves the reliability of the Tolt system, allows rehabilitation of remaining portions of Tolt Pipeline I, enhances operational flexibility, increases reliability of the system during a major flood, landslide, or earthquake, and provides increased capacity. Phases II and III include installation of eight miles of 60-, 75- and 81-inch diameter steel-welded joint pipeline. The project is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|--------|------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 26,338 | 70 | 30 | 5 | 5 | 5 | 0 | 0 | 26,453 |
| Project Total: | 26,338 | 70 | 30 | 5 | 5 | 5 | 0 | 0 | 26,453 |
| Fund Appropriations/Allocations SPU Water Fund | 26,338 | 70 | 30 | 5 | 5 | 5 | 0 | 0 | 26,453 |
| Appropriations Total* | 26,338 | 70 | 30 | 5 | 5 | 5 | 0 | 0 | 26,453 |
| O & M Costs (Savings) | | | 20 | 20 | 20 | 20 | 20 | 0 | 100 |

Transmission Pipeline Analysis

BCL Name: Infrastructure BCL Code C110B

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

Project ID: C101043 End Date: Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This project assesses the condition of water transmission pipelines, the physical environment surrounding them, and the total cost of repair, rehabilitation, and maintenance. This project enables pipeline replacement and rehabilitation decisions to be based on improved estimates of the condition and service life of pipelines. Condition data along with other parameters are modeled to allow for longer-term prioritization of pipeline replacements. The confidence in the cost estimate is low, and the project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 213 | 115 | 200 | 150 | 154 | 158 | 162 | 166 | 1,318 |
| Project Total: | 213 | 115 | 200 | 150 | 154 | 158 | 162 | 166 | 1,318 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 213 | 115 | 200 | 150 | 154 | 158 | 162 | 166 | 1,318 |
| Appropriations Total* | 213 | 115 | 200 | 150 | 154 | 158 | 162 | 166 | 1,318 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Transmission Pipelines Rehabilitation

BCL Name: Infrastructure BCL Code C110B

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

Project ID: C1127 End Date: Ongoing

Location: Citywide Neighborhood District: In more than one District

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

This program repairs and upgrades water transmission pipes as deficiencies are identified. The confidence in the cost estimate is low, and the project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|-------|-------|-------|-------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 500 | 500 | 1,025 | 1,051 | 1,077 | 1,104 | 5,257 |
| Project Total: | 0 | 0 | 500 | 500 | 1,025 | 1,051 | 1,077 | 1,104 | 5,257 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 0 | 500 | 500 | 1,025 | 1,051 | 1,077 | 1,104 | 5,257 |
| Appropriations Total* | 0 | 0 | 500 | 500 | 1,025 | 1,051 | 1,077 | 1,104 | 5,257 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Treatment & Transmission Project Development

BCL Name: Water Supply

BCL Code C150B

Type: Improved Facility Start Date: 1st Quarter 2005

Project ID: C1NW501-008 End Date: Ongoing

Location: Various Neighborhood District: Not in a Neighborhood District

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

This project provides funds for performing planning level work in SPU's Treatment and Transmission System business area prior to the formation of specific capital projects. This work includes policy analysis and program development to deal with issues related to the management of the distribution system.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Project Total: | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Appropriations Total* | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

<u>Upland Reserve Forest Restoration</u>

BCL Name: Habitat Conservation Program

BCL Code C160B

Type: Rehabilitation or Restoration Start Date: 2nd Quarter 2000

Project ID: C1603 End Date: Ongoing

Location: Cedar River Neighborhood District: Not in a Neighborhood District

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

This program within the Cedar River Habitat Conservation Plan (HCP) includes restoration planting, and restoration and ecological thinning within previously harvested upland forests. Planting occurs in selected areas of forest to promote the development of more natural and diverse ecological communities of vegetation. Restoration thinning reduces the density of trees to encourage tree growth. Ecological thinning accelerates the development of characteristics of mature forests. Work also includes marbled murrelet surveys and forest inventory and modeling. The inventory is used to plan restoration work, and the modeling is used to project effects of restoration treatments in development of the forest over time. This project was titled "Upland Forest Restoration" in the 2004-2009 Adopted CIP. The HCP was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is high.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,861 | 689 | 854 | 825 | 825 | 767 | 715 | 733 | 7,269 |
| Project Total: | 1,861 | 689 | 854 | 825 | 825 | 767 | 715 | 733 | 7,269 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 1,861 | 689 | 854 | 825 | 825 | 767 | 715 | 733 | 7,269 |
| Appropriations Total* | 1,861 | 689 | 854 | 825 | 825 | 767 | 715 | 733 | 7,269 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Valley St. Connector Water Utility

BCL Name: Other Agencies BCL Code C120B

Type:Improved FacilityStart Date:1st Quarter 1998Project ID:C145009End Date:2nd Quarter 2005

Location:VariousNeighborhood District:Lake UnionNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

The project relocates watermains in conjunction with construction of Combined Sewer Overflow (CSO) facilities near South Lake Union. The City and King County are constructing CSO improvements at E. Denny Way and Lake Union in order to meet federal and state requirements for control of combined sewer discharges into Lake Union and Elliott Bay. Watermains are being relocated due to location and construction conflicts. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 24 | 60 | 5 | 0 | 0 | 0 | 0 | 0 | 89 |
| Project Total: | 24 | 60 | 5 | 0 | 0 | 0 | 0 | 0 | 89 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 24 | 60 | 5 | 0 | 0 | 0 | 0 | 0 | 89 |
| Appropriations Total* | 24 | 60 | 5 | 0 | 0 | 0 | 0 | 0 | 89 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

W Duwamish Waterway Tunnel/Rails

BCL Name: Other Agencies BCL Code C120B

Type:Rehabilitation or RestorationStart Date:2nd Quarter 2003Project ID:C194034End Date:1st Quarter 2006

Location:SW Spokane St.Neighborhood District:Greater DuwamishNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This work is implemented as part of an agreement between SPU and the King County Department of Natural Resources and Parks for the W Duwamish Waterway Tunnel Crossing. The project relocates a watermain.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 153 | 0 | 50 | 2 | 0 | 0 | 0 | 0 | 205 |
| Project Total: | 153 | 0 | 50 | 2 | 0 | 0 | 0 | 0 | 205 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 153 | 0 | 50 | 2 | 0 | 0 | 0 | 0 | 205 |
| Appropriations Total* | 153 | 0 | 50 | 2 | 0 | 0 | 0 | 0 | 205 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Water Design Standards & Guideline Program

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:2nd Quarter 2002Project ID:C102028End Date:4th Quarter 2008

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project creates detailed design standards for various types of water facilities, to streamline future design efforts, reduce costs, and increase the quality of future new facilities. The confidence in the cost estimate is high, and the first phase of the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 23 | 186 | 200 | 200 | 256 | 263 | 0 | 0 | 1,128 |
| Project Total: | 23 | 186 | 200 | 200 | 256 | 263 | 0 | 0 | 1,128 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 23 | 186 | 200 | 200 | 256 | 263 | 0 | 0 | 1,128 |
| Appropriations Total* | 23 | 186 | 200 | 200 | 256 | 263 | 0 | 0 | 1,128 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Water Infrastruc - Service Renewal

BCL Name:InfrastructureBCL CodeC110BType:Rehabilitation or RestorationStart Date:OngoingProject ID:C1109End Date:Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This program replaces water service lines that are substandard, leaking, or have outlived their useful life, and disconnects service lines that are no longer required. This estimate is at a medium confidence level. This project has been approved by the Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|--------|-------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 38,654 | 5,122 | 5,123 | 4,146 | 4,278 | 4,385 | 4,495 | 4,607 | 70,810 |
| Project Total: | 38,654 | 5,122 | 5,123 | 4,146 | 4,278 | 4,385 | 4,495 | 4,607 | 70,810 |
| Fund Appropriations/Allocations SPU Water Fund | 38,654 | 5,122 | 5,123 | 4,146 | 4,278 | 4,385 | 4,495 | 4,607 | 70,810 |
| Appropriations Total* | 38,654 | 5,122 | 5,123 | 4,146 | 4,278 | 4,385 | 4,495 | 4,607 | 70,810 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Water Infrastructure - Hydrant Replacement/Relocation

BCL Name: Infrastructure

BCL Code C110B

Type: Republikation or Restoration

Type: Rehabilitation or Restoration Start Date: Ongoing

Project ID: C1110 End Date: 4th Quarter 2009

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This program replaces older and damaged hydrants to ensure a reliable and adequate supply of water for fire protection. The Seattle Fire Department provides SPU with information on hydrants that are found to be malfunctioning. Other repairs or replacements occur when hydrants are damaged by vehicles. On average, the Department repairs or replaces between 7 and 25 hydrants per year. The project was titled "Hydrant Program – Replacement & Relocation" in the 2004-2009 Adopted CIP. This project is in a preliminary phase of development and cost estimates will be revised over time, reflecting uncertainty about how many hydrants will be found to be malfunctioning in a given year. The project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 2,076 | 208 | 222 | 226 | 232 | 237 | 243 | 0 | 3,444 |
| Project Total: | 2,076 | 208 | 222 | 226 | 232 | 237 | 243 | 0 | 3,444 |
| Fund Appropriations/Allocations SPU Water Fund | 2,076 | 208 | 222 | 226 | 232 | 237 | 243 | 0 | 3,444 |
| Appropriations Total* | 2,076 | 208 | 222 | 226 | 232 | 237 | 243 | 0 | 3,444 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Water Infrastructure - New Hydrants

BCL Name:InfrastructureBCL CodeC110BType:New FacilityStart Date: Ongoing

Project ID: C1112 End Date: 4th Quarter 2009

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This program provides new fire hydrants citywide. The number of new hydrants installed each year varies with demand. The confidence in the cost estimates is medium, and the project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 94 | 65 | 64 | 12 | 12 | 13 | 13 | 0 | 273 |
| Project Total: | 94 | 65 | 64 | 12 | 12 | 13 | 13 | 0 | 273 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 94 | 65 | 64 | 12 | 12 | 13 | 13 | 0 | 273 |
| Appropriations Total* | 94 | 65 | 64 | 12 | 12 | 13 | 13 | 0 | 273 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Water Infrastructure - New Taps

BCL Name: Infrastructure

BCL Code C110B

Type: New Facility

Start Date: Ongoing

Project ID: C1113 End Date: 4th Quarter 2009

Location:CitywideNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This program installs new water service lines (taps) from the City watermain to customers' property lines. Taps are usually installed within an average of six weeks following a customer's request. These cost estimates are at a medium confidence level. This project has been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|--------|-------|-------|-------|-------|-------|-------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 29,372 | 3,354 | 3,601 | 3,600 | 3,690 | 3,782 | 3,877 | 0 | 51,276 |
| Project Total: | 29,372 | 3,354 | 3,601 | 3,600 | 3,690 | 3,782 | 3,877 | 0 | 51,276 |
| Fund Appropriations/Allocations SPU Water Fund | 29,372 | 3,354 | 3,601 | 3,600 | 3,690 | 3,782 | 3,877 | 0 | 51,276 |
| Appropriations Total* | 29,372 | 3,354 | 3,601 | 3,600 | 3,690 | 3,782 | 3,877 | 0 | 51,276 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Water Infrastructure - Watermain Extensions

BCL Name:InfrastructureBCL CodeC110BType:New FacilityStart Date:OngoingProject ID:C1111End Date:Ongoing

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

The Watermain Extension Program assists private developers to install new standard watermains and fire hydrants to serve properties that are being developed or re-developed. Once constructed and commissioned, the new watermains are turned over to SPU to own, operate, and maintain. Costs incurred by SPU under this program are almost fully reimbursed by the parties triggering the need for the new watermains. The confidence in the cost estimates is medium, and the program has been approved by the Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 6,644 | 1,019 | 1,191 | 1,108 | 1,025 | 1,051 | 1,077 | 1,104 | 14,219 |
| Project Total: | 6,644 | 1,019 | 1,191 | 1,108 | 1,025 | 1,051 | 1,077 | 1,104 | 14,219 |
| Fund Appropriations/Allocations SPU Water Fund | 6,644 | 1,019 | 1,191 | 1,108 | 1,025 | 1,051 | 1,077 | 1,104 | 14,219 |
| Appropriations Total* | 6,644 | 1,019 | 1,191 | 1,108 | 1,025 | 1,051 | 1,077 | 1,104 | 14,219 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Water Infrastructure - Watermain Replacement

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:1st Quarter 2001Project ID:C1104End Date:2nd Quarter 2006

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This program systematically replaces older water distribution pipes to reduce leakage and watermain breaks and improve water quality and fire protection. Targeted watermains are prioritized and scheduled for replacement in groups to maintain a steady volume of work and to facilitate quality design and construction management. This program typically only considers replacement of the pipes as the way to improve their performance, and ends in its current form in 2003. Several other targeted programs, including the Watermain Rehabilitation Program (WFNEW455), which began in 2004, take over the scope of the Watermain Replacement Program. These other programs implement a broader range of cost effective methods for improving pipe performance, including cleaning and re-lining pipes, retiring pipes and replacing them with longer service lines, and options. This project was titled "Water Main Replacement Program" in the 2004-2009 Adopted CIP. The confidence in the cost estimates is high, and the program has been approved by the SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|--------|------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 15,189 | 860 | 339 | 3 | 0 | 0 | 0 | 0 | 16,391 |
| Project Total: | 15,189 | 860 | 339 | 3 | 0 | 0 | 0 | 0 | 16,391 |
| Fund Appropriations/Allocations SPU Water Fund | 15,189 | 860 | 339 | 3 | 0 | 0 | 0 | 0 | 16,391 |
| Appropriations Total* | 15,189 | 860 | 339 | 3 | 0 | 0 | 0 | 0 | 16,391 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Water Infrastructure -Tank Site Remediation

BCL Name: Infrastructure BCL Code C110B

Type:Rehabilitation or RestorationStart Date:4th Quarter 1995Project ID:C1114End Date:4th Quarter 2008

Location: CitywideNeighborhood District: In more than one DistrictNeighborhood Plan: Not in a Neighborhood PlanUrban Village: In more than one Urban Village

This program cleans up soil and other contamination on adjacent private properties around some of Seattle Public Utilities' steel water tank sites. The contamination is typically due to lead-based paint and arsenic used in prior sand blasting operations. The contamination of the soil around the SPU tank sites is cleaned up during either the seismic upgrades or tank painting program unless those project timelines warrant earlier action by the utility.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,326 | 312 | 320 | 251 | 256 | 263 | 0 | 0 | 2,728 |
| Project Total: | 1,326 | 312 | 320 | 251 | 256 | 263 | 0 | 0 | 2,728 |
| Fund Appropriations/Allocations SPU Water Fund | 1,326 | 312 | 320 | 251 | 256 | 263 | 0 | 0 | 2,728 |
| Appropriations Total* | 1,326 | 312 | 320 | 251 | 256 | 263 | 0 | 0 | 2,728 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Water Resources Project Development

BCL Name: Water Supply

BCL Code C150B

Type: Improved Facility Start Date: 1st Quarter 2005

Project ID: C1NW501-009 End Date: Ongoing

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

This project supports the development of improvements in SPU's Water Resources Business Area through the preparation of Project Development Plans. Project proposals, including supporting cost-benefit analyses, are reviewed and approved by SPU's Capital Planning Committee. Staff then develop a Project Development Plan for approval by SPU's Asset Management Committee. Documentation is prepared and budget implications are identified. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|--|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Project Total: | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| Appropriations Total* | 0 | 0 | 100 | 100 | 103 | 105 | 108 | 110 | 626 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Water System Dewatering

BCL Name:InfrastructureBCL CodeC110BType:Rehabilitation or RestorationStart Date:OngoingProject ID:C1105End Date:Ongoing

Location:RegionalNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This program improves the configuration and operation of approximately 200 blowoffs. Blowoffs are valves and piping located at low points in water pipelines and are used to drain or flush the line for emergency or maintenance operations. The program's goals include: minimizing flooding damage to downstream private development due to blowoff operations; addressing the discharge of water into sensitive streams; requiring monitoring and treatment for impacts due to chlorine, pH, and turbidity; eliminating possible cross-connections; and addressing improvements to water courses to reduce erosion or other damage caused by blowoff operations. The project was titled "System Dewatering Program" in the 2004-2009 Adopted CIP. The programmatic approach and criteria have been approved by the SPU's Asset Management Committee (AMC). Each individual location will have its own AMC approval; a few sites have been already approved. This project is in a preliminary phase of development and cost estimates will be revised over time.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,305 | 633 | 1,056 | 350 | 359 | 368 | 377 | 386 | 4,834 |
| Project Total: | 1,305 | 633 | 1,056 | 350 | 359 | 368 | 377 | 386 | 4,834 |
| Fund Appropriations/Allocations SPU Water Fund | 1,305 | 633 | 1,056 | 350 | 359 | 368 | 377 | 386 | 4,834 |
| Appropriations Total* | 1,305 | 633 | 1,056 | 350 | 359 | 368 | 377 | 386 | 4,834 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Water System Plan - 2007

BCL Name: Water Supply

BCL Code C150B

Type:New InvestmentStart Date:2nd Quarter 2004Project ID:C103058End Date:1st Quarter 2007

Location: N/A **Neighborhood District:** Not in a Neighborhood District

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

State regulations require water utilities to submit a new comprehensive water system plan every six years as a condition of state utility operating permit renewal. This project funds work on an environmental review and updated Comprehensive Water System Plan, to commence in 2005 and finish 2007. This project is in a preliminary phase of development and cost estimates will be revised over time as the scope of the plan is clarified. This project has not been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 147 | 430 | 387 | 27 | 0 | 0 | 0 | 991 |
| Project Total: | 0 | 147 | 430 | 387 | 27 | 0 | 0 | 0 | 991 |
| Fund Appropriations/Allocations SPU Water Fund | 0 | 147 | 430 | 387 | 27 | 0 | 0 | 0 | 991 |
| Appropriations Total* | 0 | 147 | 430 | 387 | 27 | 0 | 0 | 0 | 991 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

Water System Plan - 2013

BCL Name: Water Supply

BCL Code C150B

Type:New InvestmentStart Date:3rd Quarter 2009Project ID:C1NW501-006End Date:3rd Quarter 2013

Location: N/A Neighborhood District: Not in a Neighborhood District

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

State regulations require water utilities to submit a new comprehensive water system plan every six years as a condition of state utility operating permit renewal. This project funds work on an environmental review and updated Comprehensive Water System Plan, to commence in 2009 and finish 2013. This project is in a preliminary phase of development and cost estimates will be revised over time, as the scope of the plan is clarified This project has not been reviewed or approved by SPU's Asset Management Committee.

| | _ | | | | | | | | |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 150 | 200 |
| Project Total: | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 150 | 200 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 150 | 200 |
| Appropriations Total* | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 150 | 200 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Water System Security Improvement

BCL Name: Water Quality

BCL Code C140B

Type:Improved FacilityStart Date:1st Quarter 2002Project ID:C1405End Date:4th Quarter 2006

Location: Citywide Neighborhood District: In more than one District

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

This project responds to a demand for increased security and water quality protection at SPU facilities. The project includes key card installation at pump stations, improved signage, key and fence upgrades, physical hardening of critical infrastructure at water treatment facilities and facility gates, and improving communications systems at various facilities.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-------|-------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,076 | 2,200 | 5,263 | 978 | 0 | 0 | 0 | 0 | 9,517 |
| Project Total: | 1,076 | 2,200 | 5,263 | 978 | 0 | 0 | 0 | 0 | 9,517 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 1,076 | 2,200 | 5,263 | 978 | 0 | 0 | 0 | 0 | 9,517 |
| Appropriations Total* | 1,076 | 2,200 | 5,263 | 978 | 0 | 0 | 0 | 0 | 9,517 |
| O & M Costs (Savings) | | | 150 | 200 | 250 | 300 | 350 | 350 | 1600 |

Watermain Rehabilitation

BCL Name: Infrastructure BCL Code C110B

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

Project ID: C1129 End Date: Ongoing

Location:RegionalNeighborhood District:In more than one DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:In more than one Urban Village

This program takes over the renewal aspect of the scope of the Water Infrastructure - Watermain Replacement Program (C1104), under which older water distribution pipes are replaced to reduce leakage and breaks and improve water quality. This new Watermain Rehabilitation Program considers methods other than straight replacement for improving watermains cost effectively, as well as replacement where other methods would not work. Alternative methods include cleaning and re-lining pipes, and inserting a new smaller pipe in the old one. Where applicable, these methods not only cost less than replacement, but also reduce the demand to dig up city streets and thereby cause less disruption to surrounding neighborhoods. The confidence in the cost estimate is low, and only parts of the program have been approved by SPU's Asset Management Committee.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|-------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 1,372 | 1,366 | 2,301 | 4,772 | 4,892 | 5,014 | 5,139 | 24,856 |
| Project Total: | 0 | 1,372 | 1,366 | 2,301 | 4,772 | 4,892 | 5,014 | 5,139 | 24,856 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 1,372 | 1,366 | 2,301 | 4,772 | 4,892 | 5,014 | 5,139 | 24,856 |
| Appropriations Total* | 0 | 1,372 | 1,366 | 2,301 | 4,772 | 4,892 | 5,014 | 5,139 | 24,856 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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

Watershed Road Improvement/Decommissioning

BCL Name: Habitat Conservation Program

BCL Code C160B

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

Project ID: C1601 End Date: Ongoing

Location: Cedar River Neighborhood District: Not in a Neighborhood District

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

Road improvements and decommissioning are components of the Cedar River Habitat Conservation Plan (HCP). The goal of these projects is to protect stream and riparian habitats and forest ecosystems. These projects are based on analyses and designs for the control of water flowing on, under, or adjacent to forest roads, and the removal of unstable soils within the road prism. Control of water and unstable soils minimizes sediment delivery to streams from roads, and improves drainage patterns. The HCP requires the decommissioning of an average of 10 miles of road per year. The project was titled "Road Improvements/Decommissioning" in the 2004-2009 Adopted CIP. The HCP was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is high.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---|-------|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 2,393 | 871 | 864 | 830 | 856 | 884 | 907 | 934 | 8,539 |
| Project Total: | 2,393 | 871 | 864 | 830 | 856 | 884 | 907 | 934 | 8,539 |
| Fund Appropriations/Allocations SPU Water Fund | 2,393 | 871 | 864 | 830 | 856 | 884 | 907 | 934 | 8,539 |
| Appropriations Total* | 2,393 | 871 | 864 | 830 | 856 | 884 | 907 | 934 | 8,539 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

WSDOT Sound Walls

BCL Name: Other Agencies BCL Code C120B

Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104019End Date:2nd Quarter 2005

Location:I-5/E RoanokeNeighborhood District:East DistrictNeighborhood Plan:Not in a Neighborhood PlanUrban Village:Not in an Urban Village

This project support the Washington State Department of Transportation's project to install sound walls along the I-5 corridor near E Roanoke St. The project is still undefined with respect to watermain impacts, but may require monitoring of construction activities.

| | LTD | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Total |
|---------------------------------|-----|------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 30 | 20 | 0 | 0 | 0 | 0 | 0 | 50 |
| Project Total: | 0 | 30 | 20 | 0 | 0 | 0 | 0 | 0 | 50 |
| Fund Appropriations/Allocations | | | | | | | | | |
| SPU Water Fund | 0 | 30 | 20 | 0 | 0 | 0 | 0 | 0 | 50 |
| Appropriations Total* | 0 | 30 | 20 | 0 | 0 | 0 | 0 | 0 | 50 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 0 | |

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