

# SPU - Drainage & Wastewater

## 10718 35th NE Sediment Pond

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** Improved Facility

**Start Date:** 3rd Quarter 2002

**Project ID:** C302305

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 336 | 250  | 250  | 770  | 615  | 5    | 5    | 0    | 2,231 |
| <b>Project Total:</b>                  | 336 | 250  | 250  | 770  | 615  | 5    | 5    | 0    | 2,231 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 336 | 250  | 250  | 770  | 615  | 5    | 5    | 0    | 2,231 |
| <b>Appropriations Total*</b>           | 336 | 250  | 250  | 770  | 615  | 5    | 5    | 0    | 2,231 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## 1500 - 2600 Aurora N Landslide

**BCL Name:** Public Asset Protection

**BCL Code:** C334B

**Type:** New Facility

**Start Date:** 3rd Quarter 2006

**Project ID:** C3NW034-002

**End 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 |
|--|-----|------|------|------|------|------|-------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |       |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 0    | 31   | 62   | 221  | 1,077 | 6    | 1,397 |
| <b>Project Total:</b>                  | 0   | 0    | 0    | 31   | 62   | 221  | 1,077 | 6    | 1,397 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |       |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 0    | 31   | 62   | 221  | 1,077 | 6    | 1,397 |
| <b>Appropriations Total*</b>           | 0   | 0    | 0    | 31   | 62   | 221  | 1,077 | 6    | 1,397 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0     | 0    |       |

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# SPU - Drainage & Wastewater

## 20th Ave. NE Local Drainage

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** Improved Facility

**Start Date:** 3rd Quarter 2001

**Project ID:** C301317

**End Date:** 4th Quarter 2007

**Location:** 20th Ave. NE

**Neighborhood District:** North

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

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

This project develops a plan and makes improvements to resolve safety concerns related to a ditch along 20th Ave. NE. The ditch is deep and has steep side slopes. 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 130 | 125  | 5    | 5    | 5    | 0    | 0    | 0    | 270   |
| <b>Project Total:</b>                  | 130 | 125  | 5    | 5    | 5    | 0    | 0    | 0    | 270   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 130 | 125  | 5    | 5    | 5    | 0    | 0    | 0    | 270   |
| <b>Appropriations Total*</b>           | 130 | 125  | 5    | 5    | 5    | 0    | 0    | 0    | 270   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 3    | 3    | 3    | 9     |

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# SPU - Drainage & Wastewater

## 2500 Fairview Drainage Improvements

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW032-006

**End Date:** 4th Quarter 2006

**Location:** 2500 Fairview Ave. N

**Neighborhood District:** Lake Union

**Neighborhood Plan:** In more than one Plan

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 105  | 320  | 0    | 0    | 0    | 0    | 425   |
| <b>Project Total:</b>                  | 0   | 0    | 105  | 320  | 0    | 0    | 0    | 0    | 425   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 105  | 320  | 0    | 0    | 0    | 0    | 425   |
| <b>Appropriations Total*</b>           | 0   | 0    | 105  | 320  | 0    | 0    | 0    | 0    | 425   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 1    | 1    | 1    | 1    | 4     |

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# SPU - Drainage & Wastewater

## 30th Av NE/NE 107 St. Drainage Improvements

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C343203

**End Date:** 4th Quarter 2009

**Location:** 10703 30th Ave. NE

**Neighborhood District:** North

**Neighborhood Plan:** Northgate

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 200  | 370  | 50   | 1    | 1    | 1    | 0    | 623   |
| <b>Project Total:</b>                  | 0   | 200  | 370  | 50   | 1    | 1    | 1    | 0    | 623   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 200  | 370  | 50   | 1    | 1    | 1    | 0    | 623   |
| <b>Appropriations Total*</b>           | 0   | 200  | 370  | 50   | 1    | 1    | 1    | 0    | 623   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

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

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** Improved Facility

**Start Date:** 4th Quarter 2000

**Project ID:** C300329

**End 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 |
|--|-------|-------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |       |       |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 2,203 | 1,500 | 77   | 68   | 56   | 0    | 0    | 0    | 3,904 |
| <b>Project Total:</b>                  | 2,203 | 1,500 | 77   | 68   | 56   | 0    | 0    | 0    | 3,904 |
| <b>Fund Appropriations/Allocations</b> |       |       |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 2,203 | 1,500 | 77   | 68   | 56   | 0    | 0    | 0    | 3,904 |
| <b>Appropriations Total*</b>           | 2,203 | 1,500 | 77   | 68   | 56   | 0    | 0    | 0    | 3,904 |
| <b>O &amp; M Costs (Savings)</b>       |       |       | 0    | 0    | 0    | 4    | 4    | 0    | 8     |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## 47 SW & SW Maplewood Pl. Landslide

**BCL Name:** Public Asset Protection

**BCL Code:** C334B

**Type:** New Facility

**Start Date:** 3rd Quarter 2006

**Project ID:** C3NW034-004

**End Date:** 4th Quarter 2009

**Location:** 47th Ave. SW

**Neighborhood District:** Southwest

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

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

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

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

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## 4th Av S/S Trenton Storm Drain

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW032-001

**End 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 |
|--|-----|------|------|------|-------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |       |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 185  | 265  | 1,271 | 137  | 2    | 2    | 1,862 |
| <b>Project Total:</b>                  | 0   | 0    | 185  | 265  | 1,271 | 137  | 2    | 2    | 1,862 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |       |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 185  | 265  | 1,271 | 137  | 2    | 2    | 1,862 |
| <b>Appropriations Total*</b>           | 0   | 0    | 185  | 265  | 1,271 | 137  | 2    | 2    | 1,862 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 5    | 5     | 5    | 10   | 10   | 35    |

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# SPU - Drainage & Wastewater

## 7 Av S & Duwamish River Drainage

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 3rd Quarter 2002

**Project ID:** C302318

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 134 | 300  | 37   | 249  | 0    | 0    | 0    | 0    | 720   |
| <b>Project Total:</b>                  | 134 | 300  | 37   | 249  | 0    | 0    | 0    | 0    | 720   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 134 | 300  | 37   | 249  | 0    | 0    | 0    | 0    | 720   |
| <b>Appropriations Total*</b>           | 134 | 300  | 37   | 249  | 0    | 0    | 0    | 0    | 720   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## 8th Av S/S Cambridge St. Drainage

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2006

**Project ID:** C3NW032-002

**End 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 |
|--|-----|------|------|------|------|-------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |       |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 0    | 220  | 333  | 1,576 | 167  | 2    | 2,298 |
| <b>Project Total:</b>                  | 0   | 0    | 0    | 220  | 333  | 1,576 | 167  | 2    | 2,298 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |       |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 0    | 220  | 333  | 1,576 | 167  | 2    | 2,298 |
| <b>Appropriations Total*</b>           | 0   | 0    | 0    | 220  | 333  | 1,576 | 167  | 2    | 2,298 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0     | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Alaskan Way Viaduct & Seawall

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** New Facility

**Start Date:** 4th Quarter 2001

**Project ID:** C404201-DWF

**End 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. WSDOT, in conjunction with the Seattle Department of Transportation (SDOT), is conducting a plan and study for demolition and replacement of the existing facility. At this early stage, a number of options are being evaluated. 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 51  | 218  | 335  | 335  | 88   | 0    | 0    | 0    | 1,027 |
| <b>Project Total:</b>                  | 51  | 218  | 335  | 335  | 88   | 0    | 0    | 0    | 1,027 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 51  | 218  | 335  | 335  | 88   | 0    | 0    | 0    | 1,027 |
| <b>Appropriations Total*</b>           | 51  | 218  | 335  | 335  | 88   | 0    | 0    | 0    | 1,027 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Aquatic Habitat Matching Grant Project

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C353301

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 300  | 300  | 0    | 0    | 0    | 0    | 600   |
| <b>Project Total:</b>                  | 0   | 0    | 300  | 300  | 0    | 0    | 0    | 0    | 600   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 300  | 300  | 0    | 0    | 0    | 0    | 600   |
| <b>Appropriations Total*</b>           | 0   | 0    | 300  | 300  | 0    | 0    | 0    | 0    | 600   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Atlas Pl. SW & SW Juneau Landslide

**BCL Name:** Public Asset Protection

**BCL Code:** C334B

**Type:** New Facility

**Start Date:** 3rd Quarter 2001

**Project ID:** C300344

**End Date:** 1st Quarter 2005

**Location:** Atlas Pl. SW

**Neighborhood District:** Southwest

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 548 | 150  | 25   | 0    | 0    | 0    | 0    | 0    | 723   |
| <b>Project Total:</b>                  | 548 | 150  | 25   | 0    | 0    | 0    | 0    | 0    | 723   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 548 | 150  | 25   | 0    | 0    | 0    | 0    | 0    | 723   |
| <b>Appropriations Total*</b>           | 548 | 150  | 25   | 0    | 0    | 0    | 0    | 0    | 723   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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.*

# SPU - Drainage & Wastewater

## Ballard Combined Sewer Overflow

**BCL Name:** Combined Sewer Overflow

**BCL Code:** C310B

**Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C303101

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 50   | 0    | 0    | 0    | 270  | 220  | 552  | 1,092 |
| <b>Project Total:</b>                  | 0   | 50   | 0    | 0    | 0    | 270  | 220  | 552  | 1,092 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 50   | 0    | 0    | 0    | 270  | 220  | 552  | 1,092 |
| <b>Appropriations Total*</b>           | 0   | 50   | 0    | 0    | 0    | 270  | 220  | 552  | 1,092 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Ballard/Fremont Drainage Improvements

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW032-007

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 60   | 90   | 328  | 32   | 0    | 0    | 510   |
| <b>Project Total:</b>                  | 0   | 0    | 60   | 90   | 328  | 32   | 0    | 0    | 510   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 60   | 90   | 328  | 32   | 0    | 0    | 510   |
| <b>Appropriations Total*</b>           | 0   | 0    | 60   | 90   | 328  | 32   | 0    | 0    | 510   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## Beer Sheva Habitat Improvement

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 4th Quarter 2001

**Project ID:** C301319

**End Date:** 4th Quarter 2011

**Location:** Seward Park Ave. S

**Neighborhood District:** Southeast

**Neighborhood Plan:** Rainier Beach

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

This project makes several improvements to create a high-quality fish refuge and rearing habitat at the mouth of Mapes Creek and a natural creek channel in the lower portion of the creek. The project includes creating a natural creek mouth by placing the creek in an open, meandering creek channel in Beer Sheva Park, and relocating its discharge point into Lake Washington at the edge of the shoreline rather than offshore in deeper water. The middle portion of the creek is re-piped to separate its flow from stormwater and Combined Sewer Overflow (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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 125 | 20   | 65   | 50   | 36   | 68   | 13   | 13   | 390   |
| <b>Project Total:</b>                  | 125 | 20   | 65   | 50   | 36   | 68   | 13   | 13   | 390   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 125 | 20   | 65   | 50   | 36   | 68   | 13   | 13   | 390   |
| <b>Appropriations Total*</b>           | 125 | 20   | 65   | 50   | 36   | 68   | 13   | 13   | 390   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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## 2005-2010 Adopted Capital Improvement Program

# SPU - Drainage & Wastewater

## Bitter Lake Dredging

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2007

**Project ID:** C3NW033-002

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 0    | 0    | 410  | 0    | 0    | 0    | 410   |
| <b>Project Total:</b>                  | 0   | 0    | 0    | 0    | 410  | 0    | 0    | 0    | 410   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 0    | 0    | 410  | 0    | 0    | 0    | 410   |
| <b>Appropriations Total*</b>           | 0   | 0    | 0    | 0    | 410  | 0    | 0    | 0    | 410   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Bitter Lake/N 137th Stormwater

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 2nd Quarter 2001

**Project ID:** C301322

**End Date:** 3rd Quarter 2010

**Location:** Bitter Lake Drainage Basin

**Neighborhood District:** Northwest

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

**Urban Village:** Bitter Lake Village

This project funds the design and construction of a stormwater treatment project to improve the quality of stormwater discharging to Bitter Lake and to reduce the frequency of required dredging offshore of the Greenwood Ave. N storm drain outfall in the lake. A preliminary engineering report, completed by a Seattle University civil engineering senior design team in 2000, evaluated options for treating runoff from the Greenwood Ave. N storm drain. Treatment options included wet vaults and media filters with swirl concentrators for pretreatment. Additional work 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 |
|--|-----|------|------|------|-------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |       |      |      |      |       |
| Drainage and Wastewater Rates          | 10  | 0    | 200  | 400  | 1,743 | 210  | 54   | 55   | 2,672 |
| <b>Project Total:</b>                  | 10  | 0    | 200  | 400  | 1,743 | 210  | 54   | 55   | 2,672 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |       |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 10  | 0    | 200  | 400  | 1,743 | 210  | 54   | 55   | 2,672 |
| <b>Appropriations Total*</b>           | 10  | 0    | 200  | 400  | 1,743 | 210  | 54   | 55   | 2,672 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 2     | 2    | 2    | 2    | 8     |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## BMP Program Implementation

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 2nd Quarter 2000

**Project ID:** C300316

**End Date:** 4th Quarter 2010

**Location:** Citywide

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

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

**Urban 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 |
|--|-----|------|------|------|-------|-------|-------|-------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |       |       |       |       |       |
| Drainage and Wastewater Rates          | 206 | 0    | 75   | 457  | 1,025 | 1,366 | 1,238 | 1,214 | 5,581 |
| <b>Project Total:</b>                  | 206 | 0    | 75   | 457  | 1,025 | 1,366 | 1,238 | 1,214 | 5,581 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |       |       |       |       |       |
| SPU Drainage and Wastewater Fund       | 206 | 0    | 75   | 457  | 1,025 | 1,366 | 1,238 | 1,214 | 5,581 |
| <b>Appropriations Total*</b>           | 206 | 0    | 75   | 457  | 1,025 | 1,366 | 1,238 | 1,214 | 5,581 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0     | 0     | 0     | 0     |       |

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# SPU - Drainage & Wastewater

## Burke Gilman/NE 144th Landslide

**BCL Name:** Public Asset Protection

**BCL Code:** C334B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2001

**Project ID:** C301355

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 177 | 250  | 577  | 662  | 715  | 570  | 208  | 0    | 3,159 |
| <b>Project Total:</b>                  | 177 | 250  | 577  | 662  | 715  | 570  | 208  | 0    | 3,159 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 177 | 250  | 577  | 662  | 715  | 570  | 208  | 0    | 3,159 |
| <b>Appropriations Total*</b>           | 177 | 250  | 577  | 662  | 715  | 570  | 208  | 0    | 3,159 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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 Quarter 2005

**Project ID:** C3NW001-002

**End Date:** Ongoing

**Location:** Citywide

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

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

**Urban 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 |
|--|-----|------|------|------|------|------|-------|-------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |       |       |       |
| Drainage and Wastewater Rates          | 0   | 0    | 500  | 500  | 666  | 683  | 1,002 | 1,888 | 5,239 |
| <b>Project Total:</b>                  | 0   | 0    | 500  | 500  | 666  | 683  | 1,002 | 1,888 | 5,239 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |       |       |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 500  | 500  | 666  | 683  | 1,002 | 1,888 | 5,239 |
| <b>Appropriations Total*</b>           | 0   | 0    | 500  | 500  | 666  | 683  | 1,002 | 1,888 | 5,239 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0     | 0     |       |

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# SPU - Drainage & Wastewater

## Capital Planning - Flood Control & Local Drainage

**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:** Various

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

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 510  | 370  | 375  | 308  | 394  | 323  | 414  | 2,694 |
| <b>Project Total:</b>                  | 0   | 510  | 370  | 375  | 308  | 394  | 323  | 414  | 2,694 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 510  | 370  | 375  | 308  | 394  | 323  | 414  | 2,694 |
| <b>Appropriations Total*</b>           | 0   | 510  | 370  | 375  | 308  | 394  | 323  | 414  | 2,694 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Capital Planning - Protection of Beneficial Uses

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C343301

**End Date:** Ongoing

**Location:** Various

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

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 171  | 116  | 121  | 154  | 158  | 162  | 166  | 1,048 |
| <b>Project Total:</b>                  | 0   | 171  | 116  | 121  | 154  | 158  | 162  | 166  | 1,048 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 171  | 116  | 121  | 154  | 158  | 162  | 166  | 1,048 |
| <b>Appropriations Total*</b>           | 0   | 171  | 116  | 121  | 154  | 158  | 162  | 166  | 1,048 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Capital Planning - 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:** Citywide

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

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 175  | 175  | 175  | 179  | 184  | 377  | 552  | 1,817 |
| <b>Project Total:</b>                  | 0   | 175  | 175  | 175  | 179  | 184  | 377  | 552  | 1,817 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 175  | 175  | 175  | 179  | 184  | 377  | 552  | 1,817 |
| <b>Appropriations Total*</b>           | 0   | 175  | 175  | 175  | 179  | 184  | 377  | 552  | 1,817 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Channel Widening Project

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2008

**Project ID:** C3NW033-013

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 0    | 0    | 0    | 100  | 100  | 100  | 300   |
| <b>Project Total:</b>                  | 0   | 0    | 0    | 0    | 0    | 100  | 100  | 100  | 300   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 0    | 0    | 0    | 100  | 100  | 100  | 300   |
| <b>Appropriations Total*</b>           | 0   | 0    | 0    | 0    | 0    | 100  | 100  | 100  | 300   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 5    | 5    | 10    |

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# SPU - Drainage & Wastewater

## 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:** Various

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

**Neighborhood Plan:** In more than one Plan

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

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

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

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

# SPU - Drainage & Wastewater

## Comprehensive Wastewater Plan

**BCL Name:** General Wastewater

**BCL Code:** C320B

**Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C3NW002-001

**End Date:** 4th Quarter 2005

**Location:** Citywide

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

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

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

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

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

**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Creek Flow Control Implementation

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2008

**Project ID:** C3NW033-014

**End 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 |
|--|-----|------|------|------|------|-------|-------|-------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |       |       |       |       |
| Drainage and Wastewater Rates          | 0   | 0    | 0    | 0    | 0    | 1,000 | 4,000 | 3,000 | 8,000 |
| <b>Project Total:</b>                  | 0   | 0    | 0    | 0    | 0    | 1,000 | 4,000 | 3,000 | 8,000 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |       |       |       |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 0    | 0    | 0    | 1,000 | 4,000 | 3,000 | 8,000 |
| <b>Appropriations Total*</b>           | 0   | 0    | 0    | 0    | 0    | 1,000 | 4,000 | 3,000 | 8,000 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0     | 15    | 15    | 30    |

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# SPU - Drainage & Wastewater

## Creek Sediment Control Program

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW033-008

**End Date:** 4th Quarter 2010

**Location:** Citywide

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

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

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

This program identifies and implements minor capital projects that address sediment control in urban creeks. The initial program focus is on roadway runoff that is inadequately managed from the roadway edge to the receiving creek, and small, discrete sections of creek located on public land with raw, eroded banks. In the medium term, SPU staff 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 23   | 27   | 103  | 105  | 135  | 138  | 531   |
| <b>Project Total:</b>                  | 0   | 0    | 23   | 27   | 103  | 105  | 135  | 138  | 531   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 23   | 27   | 103  | 105  | 135  | 138  | 531   |
| <b>Appropriations Total*</b>           | 0   | 0    | 23   | 27   | 103  | 105  | 135  | 138  | 531   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## 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:** Citywide

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

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 75   | 75   | 77   | 79   | 81   | 83   | 470   |
| <b>Project Total:</b>                  | 0   | 0    | 75   | 75   | 77   | 79   | 81   | 83   | 470   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 75   | 75   | 77   | 79   | 81   | 83   | 470   |
| <b>Appropriations Total*</b>           | 0   | 0    | 75   | 75   | 77   | 79   | 81   | 83   | 470   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 5    | 5    | 5    | 5    | 5    | 25    |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Creeks Hydrology Program

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2007

**Project ID:** C3NW033-005

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 0    | 0    | 63   | 38   | 194  | 237  | 532   |
| <b>Project Total:</b>                  | 0   | 0    | 0    | 0    | 63   | 38   | 194  | 237  | 532   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 0    | 0    | 63   | 38   | 194  | 237  | 532   |
| <b>Appropriations Total*</b>           | 0   | 0    | 0    | 0    | 63   | 38   | 194  | 237  | 532   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 3    | 3    | 3    | 3    | 3    | 15    |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 150  | 150  | 154  | 158  | 162  | 166  | 940   |
| <b>Project Total:</b>                  | 0   | 0    | 150  | 150  | 154  | 158  | 162  | 166  | 940   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 150  | 150  | 154  | 158  | 162  | 166  | 940   |
| <b>Appropriations Total*</b>           | 0   | 0    | 150  | 150  | 154  | 158  | 162  | 166  | 940   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Creekside Erosion Control

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2001

**Project ID:** C300311

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 99  | 48   | 1    | 0    | 0    | 0    | 0    | 0    | 148   |
| <b>Project Total:</b>                  | 99  | 48   | 1    | 0    | 0    | 0    | 0    | 0    | 148   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 99  | 48   | 1    | 0    | 0    | 0    | 0    | 0    | 148   |
| <b>Appropriations Total*</b>           | 99  | 48   | 1    | 0    | 0    | 0    | 0    | 0    | 148   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 1    | 1    | 1    | 1    | 1    | 5     |

## CSO Facility Retrofit

**BCL Name:** Combined Sewer Overflow

**BCL Code:** C310B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2002

**Project ID:** C302102

**End 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 |
|--|-------|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |       |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 1,272 | 691  | 550  | 500  | 513  | 525  | 538  | 0    | 4,589 |
| <b>Project Total:</b>                  | 1,272 | 691  | 550  | 500  | 513  | 525  | 538  | 0    | 4,589 |
| <b>Fund Appropriations/Allocations</b> |       |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 1,272 | 691  | 550  | 500  | 513  | 525  | 538  | 0    | 4,589 |
| <b>Appropriations Total*</b>           | 1,272 | 691  | 550  | 500  | 513  | 525  | 538  | 0    | 4,589 |
| <b>O &amp; M Costs (Savings)</b>       |       |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## CSO Modeling and Assessment

**BCL Name:** Combined Sewer Overflow  
**Type:** Rehabilitation or Restoration  
**Project ID:** C399101

**BCL Code:** C310B  
**Start Date:** 1st Quarter 1999  
**End Date:** Ongoing

**Location:** Citywide

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

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

**Urban 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 |
|--|-------|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |       |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 1,626 | 340  | 120  | 120  | 123  | 126  | 129  | 132  | 2,716 |
| <b>Project Total:</b>                  | 1,626 | 340  | 120  | 120  | 123  | 126  | 129  | 132  | 2,716 |
| <b>Fund Appropriations/Allocations</b> |       |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 1,626 | 340  | 120  | 120  | 123  | 126  | 129  | 132  | 2,716 |
| <b>Appropriations Total*</b>           | 1,626 | 340  | 120  | 120  | 123  | 126  | 129  | 132  | 2,716 |
| <b>O &amp; M Costs (Savings)</b>       |       |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## CSO Monitoring Installation

**BCL Name:** Combined Sewer Overflow  
**Type:** Improved Facility  
**Project ID:** C3AA108

**BCL Code:** C310B  
**Start Date:** 1st Quarter 1999  
**End Date:** Ongoing

**Location:** Citywide

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

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

**Urban 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 |
|--|-------|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |       |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 1,821 | 33   | 40   | 40   | 41   | 42   | 43   | 44   | 2,104 |
| <b>Project Total:</b>                  | 1,821 | 33   | 40   | 40   | 41   | 42   | 43   | 44   | 2,104 |
| <b>Fund Appropriations/Allocations</b> |       |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 1,821 | 33   | 40   | 40   | 41   | 42   | 43   | 44   | 2,104 |
| <b>Appropriations Total*</b>           | 1,821 | 33   | 40   | 40   | 41   | 42   | 43   | 44   | 2,104 |
| <b>O &amp; M Costs (Savings)</b>       |       |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## 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:** Various

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

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

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

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

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

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

# SPU - Drainage & Wastewater

## 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:** Citywide

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

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

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

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

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

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

# SPU - Drainage & Wastewater

## Delridge Way SW/SW Myrtle - Drainage

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW032-009

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 45   | 60   | 205  | 21   | 0    | 0    | 331   |
| <b>Project Total:</b>                  | 0   | 0    | 45   | 60   | 205  | 21   | 0    | 0    | 331   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 45   | 60   | 205  | 21   | 0    | 0    | 331   |
| <b>Appropriations Total*</b>           | 0   | 0    | 45   | 60   | 205  | 21   | 0    | 0    | 331   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 1    | 1    | 2     |

## Densmore Basin Water Quality

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C333302

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 182 | 40   | 50   | 0    | 0    | 0    | 0    | 0    | 272   |
| <b>Project Total:</b>                  | 182 | 40   | 50   | 0    | 0    | 0    | 0    | 0    | 272   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 182 | 40   | 50   | 0    | 0    | 0    | 0    | 0    | 272   |
| <b>Appropriations Total*</b>           | 182 | 40   | 50   | 0    | 0    | 0    | 0    | 0    | 272   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Design Commission Fees – Drainage

**BCL Name:** Other Drainage **BCL Code** C335B  
**Type:** Improved Facility **Start Date:** Ongoing  
**Project ID:** C301704 **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 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 32  | 5    | 15   | 10   | 8    | 11   | 11   | 11   | 103   |
| <b>Project Total:</b>                  | 32  | 5    | 15   | 10   | 8    | 11   | 11   | 11   | 103   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 32  | 5    | 15   | 10   | 8    | 11   | 11   | 11   | 103   |
| <b>Appropriations Total*</b>           | 32  | 5    | 15   | 10   | 8    | 11   | 11   | 11   | 103   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## Design Commission Fees - WW

**BCL Name:** General Wastewater **BCL Code** C320B  
**Type:** Improved Facility **Start Date:** Ongoing  
**Project ID:** C301706 **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 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 9   | 5    | 5    | 5    | 5    | 5    | 5    | 6    | 45    |
| <b>Project Total:</b>                  | 9   | 5    | 5    | 5    | 5    | 5    | 5    | 6    | 45    |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 9   | 5    | 5    | 5    | 5    | 5    | 5    | 6    | 45    |
| <b>Appropriations Total*</b>           | 9   | 5    | 5    | 5    | 5    | 5    | 5    | 6    | 45    |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Design Standards & Guidelines - DRN

**BCL Name:** Other Drainage  
**Type:** New Investment  
**Project ID:** C3NW035-009

**BCL Code:** C335B  
**Start Date:** 1st Quarter 2005  
**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 263  | 90   | 0    | 0    | 0    | 0    | 353   |
| <b>Project Total:</b>                  | 0   | 0    | 263  | 90   | 0    | 0    | 0    | 0    | 353   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 263  | 90   | 0    | 0    | 0    | 0    | 353   |
| <b>Appropriations Total*</b>           | 0   | 0    | 263  | 90   | 0    | 0    | 0    | 0    | 353   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 100  | 100  | 100  | 100  | 400   |

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# SPU - Drainage & Wastewater

## Design Standards & Guidelines - WW

**BCL Name:** General Wastewater

**BCL Code:** C320B

**Type:** New Investment

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW002-009

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 51   | 316  | 0    | 0    | 0    | 0    | 367   |
| <b>Project Total:</b>                  | 0   | 0    | 51   | 316  | 0    | 0    | 0    | 0    | 367   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 51   | 316  | 0    | 0    | 0    | 0    | 367   |
| <b>Appropriations Total*</b>           | 0   | 0    | 51   | 316  | 0    | 0    | 0    | 0    | 367   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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:** Citywide

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

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

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

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

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

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# SPU - Drainage & Wastewater

## Eastlake Av/Galer-Drainage Imp

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2009

**Project ID:** C3NW032-010

**End Date:** 4th Quarter 2010

**Location:** Eastlake Ave. E

**Neighborhood District:** Lake Union

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 0    | 0    | 0    | 0    | 162  | 110  | 272   |
| <b>Project Total:</b>                  | 0   | 0    | 0    | 0    | 0    | 0    | 162  | 110  | 272   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 0    | 0    | 0    | 0    | 162  | 110  | 272   |
| <b>Appropriations Total*</b>           | 0   | 0    | 0    | 0    | 0    | 0    | 162  | 110  | 272   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## Facility Improvements

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C404602-DWF

**End Date:** 4th Quarter 2005

**Location:** 700 5th Ave.

**Neighborhood District:** Downtown

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

**Urban 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 |
|--|-----|------|-------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |       |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 635 | 380  | 1,855 | 0    | 0    | 0    | 0    | 0    | 2,870 |
| <b>Project Total:</b>                  | 635 | 380  | 1,855 | 0    | 0    | 0    | 0    | 0    | 2,870 |
| <b>Fund Appropriations/Allocations</b> |     |      |       |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 635 | 380  | 1,855 | 0    | 0    | 0    | 0    | 0    | 2,870 |
| <b>Appropriations Total*</b>           | 635 | 380  | 1,855 | 0    | 0    | 0    | 0    | 0    | 2,870 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0     | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Facility Security Upgrades - Drainage

|   |   |
|---|---|
| <b>BCL Name:</b> Other Drainage                       | <b>BCL Code:</b> C335B                                  |
| <b>Type:</b> New Facility                             | <b>Start Date:</b> 1st Quarter 2004                     |
| <b>Project ID:</b> C3NW035-004                        | <b>End Date:</b> 4th Quarter 2005                       |
| <b>Location:</b> Haller Lake & Charles St. Facilities | <b>Neighborhood District:</b> In more than one District |
| <b>Neighborhood Plan:</b> Not in a Neighborhood Plan  | <b>Urban Village:</b> 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 20   | 16   | 0    | 0    | 0    | 0    | 0    | 36    |
| <b>Project Total:</b>                  | 0   | 20   | 16   | 0    | 0    | 0    | 0    | 0    | 36    |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 20   | 16   | 0    | 0    | 0    | 0    | 0    | 36    |
| <b>Appropriations Total*</b>           | 0   | 20   | 16   | 0    | 0    | 0    | 0    | 0    | 36    |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## Facility Security Upgrades - WW

|   |   |
|---|---|
| <b>BCL Name:</b> General Wastewater                   | <b>BCL Code:</b> C320B                                  |
| <b>Type:</b> New Facility                             | <b>Start Date:</b> 1st Quarter 2004                     |
| <b>Project ID:</b> C3NW002-008                        | <b>End Date:</b> 4th Quarter 2005                       |
| <b>Location:</b> Haller Lake & Charles St. Facilities | <b>Neighborhood District:</b> In more than one District |
| <b>Neighborhood Plan:</b> Not in a Neighborhood Plan  | <b>Urban Village:</b> 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 20   | 16   | 0    | 0    | 0    | 0    | 0    | 36    |
| <b>Project Total:</b>                  | 0   | 20   | 16   | 0    | 0    | 0    | 0    | 0    | 36    |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 20   | 16   | 0    | 0    | 0    | 0    | 0    | 36    |
| <b>Appropriations Total*</b>           | 0   | 20   | 16   | 0    | 0    | 0    | 0    | 0    | 36    |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Fauntleroy Creek Sediment Control

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** Rehabilitation or Restoration

**Start Date:** 2nd Quarter 2003

**Project ID:** C333301

**End Date:** 1st Quarter 2005

**Location:** California Ave. SW

**Neighborhood District:** Southwest

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 57  | 30   | 3    | 0    | 0    | 0    | 0    | 0    | 90    |
| <b>Project Total:</b>                  | 57  | 30   | 3    | 0    | 0    | 0    | 0    | 0    | 90    |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 57  | 30   | 3    | 0    | 0    | 0    | 0    | 0    | 90    |
| <b>Appropriations Total*</b>           | 57  | 30   | 3    | 0    | 0    | 0    | 0    | 0    | 90    |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## Fecal TMDL Feasibility

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C343302

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 100  | 113  | 99   | 256  | 53   | 0    | 0    | 621   |
| <b>Project Total:</b>                  | 0   | 100  | 113  | 99   | 256  | 53   | 0    | 0    | 621   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 100  | 113  | 99   | 256  | 53   | 0    | 0    | 621   |
| <b>Appropriations Total*</b>           | 0   | 100  | 113  | 99   | 256  | 53   | 0    | 0    | 621   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## 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:** Citywide

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

**Neighborhood Plan:** In more than one Plan

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

This program removes top priority fish passage barriers in the city that meet requirements for the use of drainage funds. Within the five fish-bearing creeks in Seattle, there are nearly 90 documented barriers to fish passage. The prioritized list of barriers that this project addresses changes as fish move into new areas, fish populations increase or decrease, and downstream barriers are modified or removed by SPU or others. The project's short-term focus is on removing minor barriers located in downstream Pipers Creek and Taylor Creek near 68th Ave. SE. Currently, returning adult salmon can access approximately five miles of stream. If all the barriers were removed, salmon could potentially use up to 22 miles of stream. 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 27   | 28   | 128  | 425  | 140  | 121  | 869   |
| <b>Project Total:</b>                  | 0   | 0    | 27   | 28   | 128  | 425  | 140  | 121  | 869   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 27   | 28   | 128  | 425  | 140  | 121  | 869   |
| <b>Appropriations Total*</b>           | 0   | 0    | 27   | 28   | 128  | 425  | 140  | 121  | 869   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Fleet Management Study

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2005

**Project ID:** C4NW106-006-DWF

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 54   | 0    | 0    | 0    | 0    | 0    | 54    |
| <b>Project Total:</b>                  | 0   | 0    | 54   | 0    | 0    | 0    | 0    | 0    | 54    |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 54   | 0    | 0    | 0    | 0    | 0    | 54    |
| <b>Appropriations Total*</b>           | 0   | 0    | 54   | 0    | 0    | 0    | 0    | 0    | 54    |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 149 | 380  | 288  | 290  | 513  | 525  | 538  | 552  | 3,235 |
| <b>Project Total:</b>                  | 149 | 380  | 288  | 290  | 513  | 525  | 538  | 552  | 3,235 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 149 | 380  | 288  | 290  | 513  | 525  | 538  | 552  | 3,235 |
| <b>Appropriations Total*</b>           | 149 | 380  | 288  | 290  | 513  | 525  | 538  | 552  | 3,235 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Fremont-Wallingford CSO

**BCL Name:** Combined Sewer Overflow

**BCL Code:** C310B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C303102

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 50   | 0    | 800  | 513  | 525  | 0    | 0    | 1,888 |
| <b>Project Total:</b>                  | 0   | 50   | 0    | 800  | 513  | 525  | 0    | 0    | 1,888 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 50   | 0    | 800  | 513  | 525  | 0    | 0    | 1,888 |
| <b>Appropriations Total*</b>           | 0   | 50   | 0    | 800  | 513  | 525  | 0    | 0    | 1,888 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Georgetown Drainage Basin Study

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** Improved Facility

**Start Date:** 2nd Quarter 2002

**Project ID:** C302311

**End Date:** 4th Quarter 2009

**Location:** Georgetown

**Neighborhood District:** Greater Duwamish

**Neighborhood Plan:** Georgetown

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 135 | 0    | 0    | 50   | 205  | 158  | 27   | 0    | 575   |
| <b>Project Total:</b>                  | 135 | 0    | 0    | 50   | 205  | 158  | 27   | 0    | 575   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 135 | 0    | 0    | 50   | 205  | 158  | 27   | 0    | 575   |
| <b>Appropriations Total*</b>           | 135 | 0    | 0    | 50   | 205  | 158  | 27   | 0    | 575   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## GIS System Enhancements

**BCL Name:** Other Drainage

**BCL Code:** C335B

**Type:** New Investment

**Start Date:** 1st Quarter 2004

**Project ID:** C343502

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 114  | 45   | 45   | 0    | 0    | 0    | 0    | 204   |
| <b>Project Total:</b>                  | 0   | 114  | 45   | 45   | 0    | 0    | 0    | 0    | 204   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 114  | 45   | 45   | 0    | 0    | 0    | 0    | 204   |
| <b>Appropriations Total*</b>           | 0   | 114  | 45   | 45   | 0    | 0    | 0    | 0    | 204   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Golden Gardens/View Ave. Landslide

**BCL Name:** Public Asset Protection

**BCL Code:** C334B

**Type:** New Facility

**Start Date:** 2nd Quarter 2004

**Project ID:** C343403

**End Date:** 4th Quarter 2008

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

**Neighborhood District:** Northwest

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 144  | 50   | 100  | 513  | 677  | 0    | 0    | 1,484 |
| <b>Project Total:</b>                  | 0   | 144  | 50   | 100  | 513  | 677  | 0    | 0    | 1,484 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 144  | 50   | 100  | 513  | 677  | 0    | 0    | 1,484 |
| <b>Appropriations Total*</b>           | 0   | 144  | 50   | 100  | 513  | 677  | 0    | 0    | 1,484 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 75  | 7    | 65   | 20   | 21   | 21   | 108  | 22   | 339   |
| <b>Project Total:</b>                  | 75  | 7    | 65   | 20   | 21   | 21   | 108  | 22   | 339   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 75  | 7    | 65   | 20   | 21   | 21   | 108  | 22   | 339   |
| <b>Appropriations Total*</b>           | 75  | 7    | 65   | 20   | 21   | 21   | 108  | 22   | 339   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Greenwood Water Quality BMP

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW033-003

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 40   | 70   | 349  | 0    | 0    | 0    | 459   |
| <b>Project Total:</b>                  | 0   | 0    | 40   | 70   | 349  | 0    | 0    | 0    | 459   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 40   | 70   | 349  | 0    | 0    | 0    | 459   |
| <b>Appropriations Total*</b>           | 0   | 0    | 40   | 70   | 349  | 0    | 0    | 0    | 459   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## Heavy Equipment Purchases - Drainage

**BCL Name:** Other Drainage

**BCL Code:** C335B

**Type:** New Investment

**Start Date:** Ongoing

**Project ID:** C300399

**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 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 |
|--|-------|------|------|------|------|-------|------|------|-------|
| <b>Revenue Sources</b>                 |       |      |      |      |      |       |      |      |       |
| Drainage and Wastewater Rates          | 1,659 | 990  | 270  | 320  | 825  | 1,073 | 485  | 706  | 6,328 |
| <b>Project Total:</b>                  | 1,659 | 990  | 270  | 320  | 825  | 1,073 | 485  | 706  | 6,328 |
| <b>Fund Appropriations/Allocations</b> |       |      |      |      |      |       |      |      |       |
| SPU Drainage and Wastewater Fund       | 1,659 | 990  | 270  | 320  | 825  | 1,073 | 485  | 706  | 6,328 |
| <b>Appropriations Total*</b>           | 1,659 | 990  | 270  | 320  | 825  | 1,073 | 485  | 706  | 6,328 |
| <b>O &amp; M Costs (Savings)</b>       |       |      | 0    | 0    | 0    | 0     | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Heavy Equipment Purchases - WW

**BCL Name:** General Wastewater

**BCL Code:** C320B

**Type:** New Investment

**Start Date:** Ongoing

**Project ID:** C300499

**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 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 |
|--|-------|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |       |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 2,170 | 743  | 987  | 195  | 440  | 684  | 345  | 784  | 6,348 |
| <b>Project Total:</b>                  | 2,170 | 743  | 987  | 195  | 440  | 684  | 345  | 784  | 6,348 |
| <b>Fund Appropriations/Allocations</b> |       |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 2,170 | 743  | 987  | 195  | 440  | 684  | 345  | 784  | 6,348 |
| <b>Appropriations Total*</b>           | 2,170 | 743  | 987  | 195  | 440  | 684  | 345  | 784  | 6,348 |
| <b>O &amp; M Costs (Savings)</b>       |       |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## High Point Drainage System

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2002

**Project ID:** C301303

**End Date:** 4th Quarter 2009

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

**Neighborhood District:** Southwest

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

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

This project funds SPU's share of a partnership with the Seattle Housing Authority (SHA) to construct 34 blocks of natural drainage system in SHA's High Point 120-acre redevelopment. The natural drainage system project retrofits 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 |
|--|-----|------|-------|-------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |       |       |      |      |      |      |       |
| Drainage and Wastewater Rates          | 227 | 875  | 1,300 | 1,100 | 513  | 53   | 54   | 0    | 4,122 |
| <b>Project Total:</b>                  | 227 | 875  | 1,300 | 1,100 | 513  | 53   | 54   | 0    | 4,122 |
| <b>Fund Appropriations/Allocations</b> |     |      |       |       |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 227 | 875  | 1,300 | 1,100 | 513  | 53   | 54   | 0    | 4,122 |
| <b>Appropriations Total*</b>           | 227 | 875  | 1,300 | 1,100 | 513  | 53   | 54   | 0    | 4,122 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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.

# SPU - Drainage & Wastewater

## 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  |
|--|-----|------|-------|-------|-------|-------|-------|-------|--------|
| <b>Revenue Sources</b>                 |     |      |       |       |       |       |       |       |        |
| Drainage and Wastewater Rates          | 0   | 0    | 2,000 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 12,513 |
| <b>Project Total:</b>                  | 0   | 0    | 2,000 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 12,513 |
| <b>Fund Appropriations/Allocations</b> |     |      |       |       |       |       |       |       |        |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 2,000 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 12,513 |
| <b>Appropriations Total*</b>           | 0   | 0    | 2,000 | 2,000 | 2,050 | 2,101 | 2,154 | 2,208 | 12,513 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0     | 0     | 0     | 0     | 0     | 0     |        |

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# SPU - Drainage & Wastewater

## Intergovernmental Shares - WW

**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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 250  | 250  | 256  | 263  | 269  | 276  | 1,564 |
| <b>Project Total:</b>                  | 0   | 0    | 250  | 250  | 256  | 263  | 269  | 276  | 1,564 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 250  | 250  | 256  | 263  | 269  | 276  | 1,564 |
| <b>Appropriations Total*</b>           | 0   | 0    | 250  | 250  | 256  | 263  | 269  | 276  | 1,564 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Jackson Park Detention Phase 2

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 2nd Quarter 1999

**Project ID:** C399305

**End Date:** 4th Quarter 2009

**Location:** Jackson Park Golf Course

**Neighborhood District:** North

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

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

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  |
|--|--------|------|------|------|------|------|------|------|--------|
| <b>Revenue Sources</b>                 |        |      |      |      |      |      |      |      |        |
| Drainage and Wastewater Rates          | 10,303 | 251  | 88   | 84   | 85   | 87   | 89   | 0    | 10,987 |
| <b>Project Total:</b>                  | 10,303 | 251  | 88   | 84   | 85   | 87   | 89   | 0    | 10,987 |
| <b>Fund Appropriations/Allocations</b> |        |      |      |      |      |      |      |      |        |
| SPU Drainage and Wastewater Fund       | 10,303 | 251  | 88   | 84   | 85   | 87   | 89   | 0    | 10,987 |
| <b>Appropriations Total*</b>           | 10,303 | 251  | 88   | 84   | 85   | 87   | 89   | 0    | 10,987 |
| <b>O &amp; M Costs (Savings)</b>       |        |      | 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.*

**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Joint Training Facility

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** New Facility

**Start Date:** 3rd Quarter 2004

**Project ID:** C4NW106-002-DWF

**End 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 |
|--|-----|------|-------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |       |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 1,360 | 0    | 0    | 0    | 0    | 0    | 1,360 |
| <b>Project Total:</b>                  | 0   | 0    | 1,360 | 0    | 0    | 0    | 0    | 0    | 1,360 |
| <b>Fund Appropriations/Allocations</b> |     |      |       |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 1,360 | 0    | 0    | 0    | 0    | 0    | 1,360 |
| <b>Appropriations Total*</b>           | 0   | 0    | 1,360 | 0    | 0    | 0    | 0    | 0    | 1,360 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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.*

**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Lake City/NE 92nd Storm Drain

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** Rehabilitation or Restoration

**Start Date:** 3rd Quarter 2002

**Project ID:** C302312

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 26  | 0    | 0    | 0    | 201  | 0    | 0    | 0    | 227   |
| <b>Project Total:</b>                  | 26  | 0    | 0    | 0    | 201  | 0    | 0    | 0    | 227   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 26  | 0    | 0    | 0    | 201  | 0    | 0    | 0    | 227   |
| <b>Appropriations Total*</b>           | 26  | 0    | 0    | 0    | 201  | 0    | 0    | 0    | 227   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## Linden Ave N&N 143rd Drainage

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 3rd Quarter 2001

**Project ID:** C301321

**End Date:** 2nd Quarter 2005

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

**Neighborhood District:** Northwest

**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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 179 | 300  | 50   | 0    | 0    | 0    | 0    | 0    | 529   |
| <b>Project Total:</b>                  | 179 | 300  | 50   | 0    | 0    | 0    | 0    | 0    | 529   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 179 | 300  | 50   | 0    | 0    | 0    | 0    | 0    | 529   |
| <b>Appropriations Total*</b>           | 179 | 300  | 50   | 0    | 0    | 0    | 0    | 0    | 529   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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.*

# SPU - Drainage & Wastewater

## Longfellow Creek-Yancy St Ph3

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C302332

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 148 | 175  | 64   | 12   | 10   | 0    | 0    | 0    | 409   |
| <b>Project Total:</b>                  | 148 | 175  | 64   | 12   | 10   | 0    | 0    | 0    | 409   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 148 | 175  | 64   | 12   | 10   | 0    | 0    | 0    | 409   |
| <b>Appropriations Total*</b>           | 148 | 175  | 64   | 12   | 10   | 0    | 0    | 0    | 409   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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.*

# SPU - Drainage & Wastewater

## Lower Densmore Drainage Improvement

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW032-004

**End Date:** 4th Quarter 2006

**Location:** Aurora Ave. N

**Neighborhood District:** Northwest

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 225  | 225  | 0    | 0    | 0    | 0    | 450   |
| <b>Project Total:</b>                  | 0   | 0    | 225  | 225  | 0    | 0    | 0    | 0    | 450   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 225  | 225  | 0    | 0    | 0    | 0    | 450   |
| <b>Appropriations Total*</b>           | 0   | 0    | 225  | 225  | 0    | 0    | 0    | 0    | 450   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Marine View - 47th SW Landslide

**BCL Name:** Public Asset Protection

**BCL Code:** C334B

**Type:** Improved Facility

**Start Date:** 2nd Quarter 2002

**Project ID:** C302352

**End Date:** 1st Quarter 2005

**Location:** 47th Ave. SW

**Neighborhood District:** Southwest

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 216 | 878  | 21   | 0    | 0    | 0    | 0    | 0    | 1,115 |
| <b>Project Total:</b>                  | 216 | 878  | 21   | 0    | 0    | 0    | 0    | 0    | 1,115 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 216 | 878  | 21   | 0    | 0    | 0    | 0    | 0    | 1,115 |
| <b>Appropriations Total*</b>           | 216 | 878  | 21   | 0    | 0    | 0    | 0    | 0    | 1,115 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 6    | 6    | 6    | 6    | 6    | 30    |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Meadowbrook Outfall Rehabilitation

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW032-003

**End 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 |
|--|-----|------|------|------|-------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |       |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 200  | 378  | 1,333 | 53   | 0    | 0    | 1,964 |
| <b>Project Total:</b>                  | 0   | 0    | 200  | 378  | 1,333 | 53   | 0    | 0    | 1,964 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |       |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 200  | 378  | 1,333 | 53   | 0    | 0    | 1,964 |
| <b>Appropriations Total*</b>           | 0   | 0    | 200  | 378  | 1,333 | 53   | 0    | 0    | 1,964 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0     | 0    | 12   | 12   | 24    |

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# SPU - Drainage & Wastewater

## Meter Replacement - Large (DWF)

**BCL Name:** Shared Cost Projects  
**Type:** Rehabilitation or Restoration  
**Project ID:** C404102-DWF

**BCL Code:** C410B  
**Start Date:** Ongoing  
**End Date:** Ongoing

**Location:** Citywide  
**Neighborhood Plan:** Not in a Neighborhood Plan

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

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

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

## Minor Facility Upgrades - Rehab

**BCL Name:** Sewer Rehabilitation  
**Type:** Rehabilitation or Restoration  
**Project ID:** C3AA402

**BCL Code:** C340B  
**Start Date:** 1st Quarter 1998  
**End Date:** Ongoing

**Location:** Various  
**Neighborhood Plan:** Not in a Neighborhood Plan

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

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

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

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# SPU - Drainage & Wastewater

## MLK Way/Norfolk St Storm Improvement

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C333205

**End Date:** 4th Quarter 2010

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

**Neighborhood District:** Greater Duwamish

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

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

This project reduces flooding problems along Martin Luther King, Jr. Way S and adjacent streets by rehabilitating the existing system, eliminating bypasses to the sanitary sewer system and providing a functioning conveyance system for future roadway and drainage improvements proposed for construction in 2007 along Martin Luther King, Jr. Way by Sound Transit. The project removes petroleum-contaminated sediments from the existing system, provides improved maintenance access for future cleaning, increases the carrying capacity of the system to meet a 25-year performance level, improves storm water quality treatment 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 |
|--|-----|------|------|-------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |       |      |      |      |      |       |
| Drainage and Wastewater Rates          | 82  | 250  | 440  | 1,790 | 113  | 2    | 2    | 2    | 2,681 |
| <b>Project Total:</b>                  | 82  | 250  | 440  | 1,790 | 113  | 2    | 2    | 2    | 2,681 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |       |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 82  | 250  | 440  | 1,790 | 113  | 2    | 2    | 2    | 2,681 |
| <b>Appropriations Total*</b>           | 82  | 250  | 440  | 1,790 | 113  | 2    | 2    | 2    | 2,681 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0     | 0    | 2    | 2    | 2    | 6     |

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# SPU - Drainage & Wastewater

## Mobility Improvement

**BCL Name:** Other Drainage  
**Type:** Improved Facility  
**Project ID:** C333514

**BCL Code:** C335B  
**Start Date:** 1st Quarter 2004  
**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 300  | 300  | 300  | 308  | 315  | 323  | 331  | 2,177 |
| <b>Project Total:</b>                  | 0   | 300  | 300  | 300  | 308  | 315  | 323  | 331  | 2,177 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 300  | 300  | 300  | 308  | 315  | 323  | 331  | 2,177 |
| <b>Appropriations Total*</b>           | 0   | 300  | 300  | 300  | 308  | 315  | 323  | 331  | 2,177 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## Monitoring System Upgrades

**BCL Name:** Protection of Beneficial Uses  
**Type:** Improved Facility  
**Project ID:** C343303

**BCL Code:** C333B  
**Start Date:** 1st Quarter 2004  
**End Date:** 4th Quarter 2006

**Location:** Various

**Neighborhood District:** Southwest

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 230  | 459  | 103  | 0    | 0    | 0    | 0    | 792   |
| <b>Project Total:</b>                  | 0   | 230  | 459  | 103  | 0    | 0    | 0    | 0    | 792   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 230  | 459  | 103  | 0    | 0    | 0    | 0    | 792   |
| <b>Appropriations Total*</b>           | 0   | 230  | 459  | 103  | 0    | 0    | 0    | 0    | 792   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## N 105th St/Aurora Av N - Drainage Improvement

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 2nd Quarter 2006

**Project ID:** C3NW032-012

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 0    | 150  | 103  | 0    | 0    | 0    | 253   |
| <b>Project Total:</b>                  | 0   | 0    | 0    | 150  | 103  | 0    | 0    | 0    | 253   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 0    | 150  | 103  | 0    | 0    | 0    | 253   |
| <b>Appropriations Total*</b>           | 0   | 0    | 0    | 150  | 103  | 0    | 0    | 0    | 253   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## N 125th & Aurora N Storm Drain

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 3rd Quarter 2002

**Project ID:** C302313

**End Date:** 4th Quarter 2011

**Location:** N 125th St.

**Neighborhood District:** Northwest

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

**Urban Village:** Bitter Lake Village

This project funds a preliminary study for the construction of approximately 2,550 linear feet of new pipe combined with catch-basins and connecting pipes along N 125th St. and Aurora Ave. N, as well as the upgrade of approximately 2,400 linear feet of existing pipe along Aurora Ave. N, to reduce street and property flooding. The project is consistent with SPU's Densmore Drainage Basin Study, and has been accelerated to coordinate with the Seattle Department of Transportation (SDOT), 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 |
|--|-----|------|------|------|-------|-------|-------|-------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |       |       |       |       |       |
| Drainage and Wastewater Rates          | 300 | 852  | 800  | 800  | 1,538 | 1,576 | 1,615 | 1,656 | 9,137 |
| <b>Project Total:</b>                  | 300 | 852  | 800  | 800  | 1,538 | 1,576 | 1,615 | 1,656 | 9,137 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |       |       |       |       |       |
| SPU Drainage and Wastewater Fund       | 300 | 852  | 800  | 800  | 1,538 | 1,576 | 1,615 | 1,656 | 9,137 |
| <b>Appropriations Total*</b>           | 300 | 852  | 800  | 800  | 1,538 | 1,576 | 1,615 | 1,656 | 9,137 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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.*

**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## N 85th St/Greenwood Ave - Drainage Improvement

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 2nd Quarter 2006

**Project ID:** C3NW032-013

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 0    | 150  | 103  | 0    | 0    | 0    | 253   |
| <b>Project Total:</b>                  | 0   | 0    | 0    | 150  | 103  | 0    | 0    | 0    | 253   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 0    | 150  | 103  | 0    | 0    | 0    | 253   |
| <b>Appropriations Total*</b>           | 0   | 0    | 0    | 150  | 103  | 0    | 0    | 0    | 253   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## 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:** Various

**Neighborhood District:** Northwest

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

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

This project assesses unimproved right-of-way within the city and identifies areas suitable for enhancing existing ditch drainage systems. In addition to identifying "natural system" drainage areas based on surface water management goals, the project assesses neighborhood, land use, and transportation objectives for unimproved right-of-way. 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 |
|--|-----|------|------|------|------|-------|-------|-------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |       |       |       |       |
| Drainage and Wastewater Rates          | 0   | 0    | 250  | 326  | 217  | 1,773 | 1,092 | 1,130 | 4,788 |
| <b>Project Total:</b>                  | 0   | 0    | 250  | 326  | 217  | 1,773 | 1,092 | 1,130 | 4,788 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |       |       |       |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 250  | 326  | 217  | 1,773 | 1,092 | 1,130 | 4,788 |
| <b>Appropriations Total*</b>           | 0   | 0    | 250  | 326  | 217  | 1,773 | 1,092 | 1,130 | 4,788 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0     | 0     | 0     |       |

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

# SPU - Drainage & Wastewater

## No Dig Pipe & Maintenance Rehabilitation

**BCL Name:** Sewer Rehabilitation  
**Type:** Rehabilitation or Restoration  
**Project ID:** C3AA403

**BCL Code:** C340B  
**Start Date:** Ongoing  
**End Date:** Ongoing

**Location:** Citywide

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

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

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

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

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

## Norfolk Basin Water Quality

**BCL Name:** Protection of Beneficial Uses  
**Type:** New Investment  
**Project ID:** C302302

**BCL Code:** C333B  
**Start Date:** 3rd Quarter 2002  
**End Date:** 2nd Quarter 2005

**Location:** Norfolk Drainage Basin

**Neighborhood District:** Greater Duwamish

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 37  | 45   | 25   | 0    | 0    | 0    | 0    | 0    | 107   |
| <b>Project Total:</b>                  | 37  | 45   | 25   | 0    | 0    | 0    | 0    | 0    | 107   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 37  | 45   | 25   | 0    | 0    | 0    | 0    | 0    | 107   |
| <b>Appropriations Total*</b>           | 37  | 45   | 25   | 0    | 0    | 0    | 0    | 0    | 107   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Northlake Way Drainage

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C343202

**End Date:** 4th Quarter 2006

**Location:** N Northlake Wy

**Neighborhood District:** Lake Union

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

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

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

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

## Northpark Ave N Drainage Improvement

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 2nd Quarter 2007

**Project ID:** C3NW032-011

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 0    | 0    | 51   | 735  | 377  | 28   | 1,191 |
| <b>Project Total:</b>                  | 0   | 0    | 0    | 0    | 51   | 735  | 377  | 28   | 1,191 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 0    | 0    | 51   | 735  | 377  | 28   | 1,191 |
| <b>Appropriations Total*</b>           | 0   | 0    | 0    | 0    | 51   | 735  | 377  | 28   | 1,191 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Operations Control Center Upgrade

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C404501-DWF

**End Date:** 4th Quarter 2006

**Location:** 2700 Airport Wy. S

**Neighborhood District:** Greater Duwamish

**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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 251 | 498  | 970  | 280  | 0    | 0    | 0    | 0    | 1,999 |
| <b>Project Total:</b>                  | 251 | 498  | 970  | 280  | 0    | 0    | 0    | 0    | 1,999 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 251 | 498  | 970  | 280  | 0    | 0    | 0    | 0    | 1,999 |
| <b>Appropriations Total*</b>           | 251 | 498  | 970  | 280  | 0    | 0    | 0    | 0    | 1,999 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## 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:** Citywide

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

**Neighborhood Plan:** In more than one Plan

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

This project designs and constructs improvements to the drainage system as opportunities arise to partner with projects being constructed by other agencies. In order to reduce disruption of neighborhoods by future street openings, SPU considers replacing or repairing facilities in conjunction with construction on other projects such as Sound Transit Link Light Rail, the 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 |
|--|-----|------|-------|-------|-------|-------|-------|-------|-------|
| <b>Revenue Sources</b>                 |     |      |       |       |       |       |       |       |       |
| Drainage and Wastewater Rates          | 0   | 0    | 1,308 | 1,271 | 1,025 | 1,414 | 1,077 | 1,104 | 7,199 |
| <b>Project Total:</b>                  | 0   | 0    | 1,308 | 1,271 | 1,025 | 1,414 | 1,077 | 1,104 | 7,199 |
| <b>Fund Appropriations/Allocations</b> |     |      |       |       |       |       |       |       |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 1,308 | 1,271 | 1,025 | 1,414 | 1,077 | 1,104 | 7,199 |
| <b>Appropriations Total*</b>           | 0   | 0    | 1,308 | 1,271 | 1,025 | 1,414 | 1,077 | 1,104 | 7,199 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0     | 0     | 0     | 0     | 0     | 0     |       |

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# SPU - Drainage & Wastewater

## 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 349  | 400  | 410  | 420  | 431  | 442  | 2,452 |
| <b>Project Total:</b>                  | 0   | 0    | 349  | 400  | 410  | 420  | 431  | 442  | 2,452 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 349  | 400  | 410  | 420  | 431  | 442  | 2,452 |
| <b>Appropriations Total*</b>           | 0   | 0    | 349  | 400  | 410  | 420  | 431  | 442  | 2,452 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Outfall Inspection - Drainage

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2002

**Project ID:** C302304

**End Date:** 4th Quarter 2005

**Location:** Citywide

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

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 260 | 210  | 50   | 0    | 0    | 0    | 0    | 0    | 520   |
| <b>Project Total:</b>                  | 260 | 210  | 50   | 0    | 0    | 0    | 0    | 0    | 520   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 260 | 210  | 50   | 0    | 0    | 0    | 0    | 0    | 520   |
| <b>Appropriations Total*</b>           | 260 | 210  | 50   | 0    | 0    | 0    | 0    | 0    | 520   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Outfall Inspection - Wastewater

**BCL Name:** General Wastewater

**BCL Code:** C320B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2002

**Project ID:** C302202

**End Date:** 4th Quarter 2005

**Location:** Citywide

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

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 201 | 140  | 3    | 0    | 0    | 0    | 0    | 0    | 344   |
| <b>Project Total:</b>                  | 201 | 140  | 3    | 0    | 0    | 0    | 0    | 0    | 344   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 201 | 140  | 3    | 0    | 0    | 0    | 0    | 0    | 344   |
| <b>Appropriations Total*</b>           | 201 | 140  | 3    | 0    | 0    | 0    | 0    | 0    | 344   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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:** Citywide

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

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

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

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

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

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## 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:** Citywide

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

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

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

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

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

## Perkins Lane W/W Ruffner Drainage

**BCL Name:** Public Asset Protection

**BCL Code:** C334B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2001

**Project ID:** C301354

**End Date:** 1st Quarter 2005

**Location:** Perkins Ln. W

**Neighborhood District:** Magnolia/Queen Anne

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 240 | 350  | 25   | 0    | 0    | 0    | 0    | 0    | 615   |
| <b>Project Total:</b>                  | 240 | 350  | 25   | 0    | 0    | 0    | 0    | 0    | 615   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 240 | 350  | 25   | 0    | 0    | 0    | 0    | 0    | 615   |
| <b>Appropriations Total*</b>           | 240 | 350  | 25   | 0    | 0    | 0    | 0    | 0    | 615   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Pinehurst Natural Drainage System

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 4th Quarter 2002

**Project ID:** C333202

**End 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 |
|--|-----|------|-------|-------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |       |       |      |      |      |      |       |
| Drainage and Wastewater Rates          | 278 | 860  | 1,698 | 1,697 | 91   | 12   | 0    | 0    | 4,636 |
| <b>Project Total:</b>                  | 278 | 860  | 1,698 | 1,697 | 91   | 12   | 0    | 0    | 4,636 |
| <b>Fund Appropriations/Allocations</b> |     |      |       |       |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 278 | 860  | 1,698 | 1,697 | 91   | 12   | 0    | 0    | 4,636 |
| <b>Appropriations Total*</b>           | 278 | 860  | 1,698 | 1,697 | 91   | 12   | 0    | 0    | 4,636 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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.*

**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## 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

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

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

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

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

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

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

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

This program repairs and replaces failing and misaligned sewer pipes throughout the city. An ongoing closed circuit television (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  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| <b>Revenue Sources</b>                 |       |       |       |       |       |       |       |       |        |
| Drainage and Wastewater Rates          | 2,094 | 2,678 | 3,825 | 3,696 | 4,271 | 4,596 | 4,947 | 5,325 | 31,432 |
| <b>Project Total:</b>                  | 2,094 | 2,678 | 3,825 | 3,696 | 4,271 | 4,596 | 4,947 | 5,325 | 31,432 |
| <b>Fund Appropriations/Allocations</b> |       |       |       |       |       |       |       |       |        |
| SPU Drainage and Wastewater Fund       | 2,094 | 2,678 | 3,825 | 3,696 | 4,271 | 4,596 | 4,947 | 5,325 | 31,432 |
| <b>Appropriations Total*</b>           | 2,094 | 2,678 | 3,825 | 3,696 | 4,271 | 4,596 | 4,947 | 5,325 | 31,432 |
| <b>O &amp; M Costs (Savings)</b>       |       |       | 0     | 0     | 0     | 0     | 0     | 0     |        |

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

# SPU - Drainage & Wastewater

## Point Sewer Pipe Rehabilitation -Contract

**BCL Name:** Sewer Rehabilitation  
**Type:** Rehabilitation or Restoration  
**Project ID:** C303401

**BCL Code:** C340B  
**Start Date:** 1st Quarter 2003  
**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  |
|--|-----|-------|------|-------|-------|-------|-------|-------|--------|
| <b>Revenue Sources</b>                 |     |       |      |       |       |       |       |       |        |
| Drainage and Wastewater Rates          | 33  | 1,406 | 810  | 1,514 | 1,421 | 3,071 | 1,616 | 1,651 | 11,522 |
| <b>Project Total:</b>                  | 33  | 1,406 | 810  | 1,514 | 1,421 | 3,071 | 1,616 | 1,651 | 11,522 |
| <b>Fund Appropriations/Allocations</b> |     |       |      |       |       |       |       |       |        |
| SPU Drainage and Wastewater Fund       | 33  | 1,406 | 810  | 1,514 | 1,421 | 3,071 | 1,616 | 1,651 | 11,522 |
| <b>Appropriations Total*</b>           | 33  | 1,406 | 810  | 1,514 | 1,421 | 3,071 | 1,616 | 1,651 | 11,522 |
| <b>O &amp; M Costs (Savings)</b>       |     |       | 0    | 0     | 0     | 0     | 0     | 0     |        |

## Pump Station Improvements

**BCL Name:** General Wastewater  
**Type:** New Facility  
**Project ID:** C3NW002-005

**BCL Code:** C320B  
**Start Date:** 1st Quarter 2005  
**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  |
|--|-----|------|------|------|-------|-------|-------|-------|--------|
| <b>Revenue Sources</b>                 |     |      |      |      |       |       |       |       |        |
| Drainage and Wastewater Rates          | 0   | 0    | 936  | 784  | 1,853 | 2,095 | 2,154 | 2,208 | 10,030 |
| <b>Project Total:</b>                  | 0   | 0    | 936  | 784  | 1,853 | 2,095 | 2,154 | 2,208 | 10,030 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |       |       |       |       |        |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 936  | 784  | 1,853 | 2,095 | 2,154 | 2,208 | 10,030 |
| <b>Appropriations Total*</b>           | 0   | 0    | 936  | 784  | 1,853 | 2,095 | 2,154 | 2,208 | 10,030 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0     | 0     | 0     | 0     |        |

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# SPU - Drainage & Wastewater

## Rainier Av S/S Carver - Landslide

**BCL Name:** Public Asset Protection

**BCL Code:** C334B

**Type:** New Facility

**Start Date:** 3rd Quarter 2005

**Project ID:** C3NW034-001

**End Date:** 1st Quarter 2009

**Location:** Rainier Ave. S/S Carver Ave.

**Neighborhood District:** Southeast

**Neighborhood Plan:** Rainier Beach

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 74   | 86   | 57   | 672  | 11   | 0    | 900   |
| <b>Project Total:</b>                  | 0   | 0    | 74   | 86   | 57   | 672  | 11   | 0    | 900   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 74   | 86   | 57   | 672  | 11   | 0    | 900   |
| <b>Appropriations Total*</b>           | 0   | 0    | 74   | 86   | 57   | 672  | 11   | 0    | 900   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 6    | 6     |

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# SPU - Drainage & Wastewater

## S Genesee Combined Sewer Overflow

**BCL Name:** Combined Sewer Overflow

**BCL Code:** C310B

**Type:** New Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C303103

**End 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 |
|--|-----|------|------|------|------|------|-------|-------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |       |       |       |
| Drainage and Wastewater Rates          | 8   | 200  | 369  | 324  | 423  | 434  | 1,093 | 1,104 | 3,955 |
| <b>Project Total:</b>                  | 8   | 200  | 369  | 324  | 423  | 434  | 1,093 | 1,104 | 3,955 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |       |       |       |
| SPU Drainage and Wastewater Fund       | 8   | 200  | 369  | 324  | 423  | 434  | 1,093 | 1,104 | 3,955 |
| <b>Appropriations Total*</b>           | 8   | 200  | 369  | 324  | 423  | 434  | 1,093 | 1,104 | 3,955 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0     | 0     |       |

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# SPU - Drainage & Wastewater

## S Henderson CSO Storage

**BCL Name:** Combined Sewer Overflow

**BCL Code:** C310B

**Type:** New Facility

**Start Date:** 3rd Quarter 2004

**Project ID:** C304102

**End 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 |
|--|-----|------|------|------|------|------|------|-------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |       |       |
| Drainage and Wastewater Rates          | 0   | 200  | 263  | 324  | 377  | 556  | 641  | 2,208 | 4,569 |
| <b>Project Total:</b>                  | 0   | 200  | 263  | 324  | 377  | 556  | 641  | 2,208 | 4,569 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |       |       |
| SPU Drainage and Wastewater Fund       | 0   | 200  | 263  | 324  | 377  | 556  | 641  | 2,208 | 4,569 |
| <b>Appropriations Total*</b>           | 0   | 200  | 263  | 324  | 377  | 556  | 641  | 2,208 | 4,569 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0     |       |

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# SPU - Drainage & Wastewater

## S Lake Washington Sewer Maintenance Assessment

**BCL Name:** General Wastewater  
**Type:** Rehabilitation or Restoration  
**Project ID:** C303201

**BCL Code:** C320B  
**Start Date:** 1st Quarter 2003  
**End Date:** 4th Quarter 2005

**Location:** Various  
**Neighborhood Plan:** Not in a Neighborhood Plan

**Neighborhood District:** Southeast  
**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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 27  | 500  | 300  | 0    | 0    | 0    | 0    | 0    | 827   |
| <b>Project Total:</b>                  | 27  | 500  | 300  | 0    | 0    | 0    | 0    | 0    | 827   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 27  | 500  | 300  | 0    | 0    | 0    | 0    | 0    | 827   |
| <b>Appropriations Total*</b>           | 27  | 500  | 300  | 0    | 0    | 0    | 0    | 0    | 827   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## Salmon Bay Ph 2 Acquisition & Restoration

**BCL Name:** Protection of Beneficial Uses  
**Type:** Improved Facility  
**Project ID:** C333307

**BCL Code:** C333B  
**Start Date:** 2nd Quarter 2003  
**End Date:** 4th Quarter 2005

**Location:** Salmon Bay  
**Neighborhood Plan:** Crown Hill/Ballard

**Neighborhood District:** Northwest  
**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 336 | 159  | 20   | 0    | 0    | 0    | 0    | 0    | 515   |
| <b>Project Total:</b>                  | 336 | 159  | 20   | 0    | 0    | 0    | 0    | 0    | 515   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 336 | 159  | 20   | 0    | 0    | 0    | 0    | 0    | 515   |
| <b>Appropriations Total*</b>           | 336 | 159  | 20   | 0    | 0    | 0    | 0    | 0    | 515   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## 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 |
|--|-----|------|------|------|-------|-------|-------|-------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |       |       |       |       |       |
| Drainage and Wastewater Rates          | 207 | 400  | 350  | 550  | 1,025 | 1,051 | 1,077 | 1,104 | 5,764 |
| <b>Project Total:</b>                  | 207 | 400  | 350  | 550  | 1,025 | 1,051 | 1,077 | 1,104 | 5,764 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |       |       |       |       |       |
| SPU Drainage and Wastewater Fund       | 207 | 400  | 350  | 550  | 1,025 | 1,051 | 1,077 | 1,104 | 5,764 |
| <b>Appropriations Total*</b>           | 207 | 400  | 350  | 550  | 1,025 | 1,051 | 1,077 | 1,104 | 5,764 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0     | 0     | 0     | 0     |       |

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

# SPU - Drainage & Wastewater

## Seattle Monorail Project

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C404301-DWF

**End Date:** 4th Quarter 2009

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

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

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

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

The Seattle Monorail Project (SMP) is planning an initial 14-mile monorail route between Ballard and West Seattle that travels through downtown Seattle. 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 89  | 230  | 400  | 400  | 303  | 105  | 108  | 110  | 1,745 |
| <b>Project Total:</b>                  | 89  | 230  | 400  | 400  | 303  | 105  | 108  | 110  | 1,745 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 89  | 230  | 400  | 400  | 303  | 105  | 108  | 110  | 1,745 |
| <b>Appropriations Total*</b>           | 89  | 230  | 400  | 400  | 303  | 105  | 108  | 110  | 1,745 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## 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 |
|--|-----|------|-------|-------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |       |       |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 1,196 | 1,232 | 611  | 287  | 221  | 162  | 3,709 |
| <b>Project Total:</b>                  | 0   | 0    | 1,196 | 1,232 | 611  | 287  | 221  | 162  | 3,709 |
| <b>Fund Appropriations/Allocations</b> |     |      |       |       |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 1,196 | 1,232 | 611  | 287  | 221  | 162  | 3,709 |
| <b>Appropriations Total*</b>           | 0   | 0    | 1,196 | 1,232 | 611  | 287  | 221  | 162  | 3,709 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0     | 0     | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## 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 |
|--|-----|-------|-------|-------|-------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |       |       |       |       |      |      |      |       |
| Drainage and Wastewater Rates          | 923 | 1,340 | 1,392 | 1,475 | 1,085 | 320  | 242  | 201  | 6,978 |
| <b>Project Total:</b>                  | 923 | 1,340 | 1,392 | 1,475 | 1,085 | 320  | 242  | 201  | 6,978 |
| <b>Fund Appropriations/Allocations</b> |     |       |       |       |       |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 923 | 1,340 | 1,392 | 1,475 | 1,085 | 320  | 242  | 201  | 6,978 |
| <b>Appropriations Total*</b>           | 923 | 1,340 | 1,392 | 1,475 | 1,085 | 320  | 242  | 201  | 6,978 |
| <b>O &amp; M Costs (Savings)</b>       |     |       | 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 603 | 110  | 163  | 116  | 103  | 105  | 108  | 110  | 1,418 |
| <b>Project Total:</b>                  | 603 | 110  | 163  | 116  | 103  | 105  | 108  | 110  | 1,418 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 603 | 110  | 163  | 116  | 103  | 105  | 108  | 110  | 1,418 |
| <b>Appropriations Total*</b>           | 603 | 110  | 163  | 116  | 103  | 105  | 108  | 110  | 1,418 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Sewer Emergency Repairs

**BCL Name:** Sewer Rehabilitation  
**Type:** Rehabilitation or Restoration  
**Project ID:** C3AA404

**BCL Code:** C340B  
**Start Date:** 1st Quarter 1998  
**End Date:** Ongoing

**Location:** Citywide  
**Neighborhood Plan:** Not in a Neighborhood Plan

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

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

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

## Sewer Full Line Replacements

**BCL Name:** Sewer Rehabilitation  
**Type:** Rehabilitation or Restoration  
**Project ID:** C300488

**BCL Code:** C340B  
**Start Date:** Ongoing  
**End Date:** Ongoing

**Location:** Citywide  
**Neighborhood Plan:** Not in a Neighborhood Plan

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

This program replaces and repairs sewer lines citywide. Closed circuit television (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 |
|--|-----|-------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |       |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 1,887 | 900  | 228  | 309  | 252  | 254  | 251  | 4,081 |
| <b>Project Total:</b>                  | 0   | 1,887 | 900  | 228  | 309  | 252  | 254  | 251  | 4,081 |
| <b>Fund Appropriations/Allocations</b> |     |       |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 1,887 | 900  | 228  | 309  | 252  | 254  | 251  | 4,081 |
| <b>Appropriations Total*</b>           | 0   | 1,887 | 900  | 228  | 309  | 252  | 254  | 251  | 4,081 |
| <b>O &amp; M Costs (Savings)</b>       |     |       | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## 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:** Citywide

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

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 100  | 100  | 103  | 105  | 108  | 110  | 626   |
| <b>Project Total:</b>                  | 0   | 0    | 100  | 100  | 103  | 105  | 108  | 110  | 626   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 100  | 100  | 103  | 105  | 108  | 110  | 626   |
| <b>Appropriations Total*</b>           | 0   | 0    | 100  | 100  | 103  | 105  | 108  | 110  | 626   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## SLU Combined Sewer Overflow Ph2

**BCL Name:** Combined Sewer Overflow

**BCL Code:** C310B

**Type:** New Facility

**Start Date:** 1st Quarter 1995

**Project ID:** C3AA106

**End Date:** 4th Quarter 2006

**Location:** Valley St.

**Neighborhood District:** Lake Union

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

**Urban 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 |
|--|-------|-------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |       |       |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 3,996 | 1,789 | 260  | 46   | 0    | 0    | 0    | 0    | 6,091 |
| <b>Project Total:</b>                  | 3,996 | 1,789 | 260  | 46   | 0    | 0    | 0    | 0    | 6,091 |
| <b>Fund Appropriations/Allocations</b> |       |       |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 3,996 | 1,789 | 260  | 46   | 0    | 0    | 0    | 0    | 6,091 |
| <b>Appropriations Total*</b>           | 3,996 | 1,789 | 260  | 46   | 0    | 0    | 0    | 0    | 6,091 |
| <b>O &amp; M Costs (Savings)</b>       |       |       | 0    | 0    | 0    | 0    | 0    | 0    |       |

## SLU Combined Sewer Overflow-KC

**BCL Name:** Combined Sewer Overflow

**BCL Code:** C310B

**Type:** New Facility

**Start Date:** 4th Quarter 1996

**Project ID:** C3AA104

**End Date:** 4th Quarter 2006

**Location:** Denny Wy.

**Neighborhood District:** Lake Union

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

**Urban 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  |
|--|--------|-------|------|------|------|------|------|------|--------|
| <b>Revenue Sources</b>                 |        |       |      |      |      |      |      |      |        |
| Drainage and Wastewater Rates          | 14,736 | 3,150 | 830  | 50   | 0    | 0    | 0    | 0    | 18,766 |
| <b>Project Total:</b>                  | 14,736 | 3,150 | 830  | 50   | 0    | 0    | 0    | 0    | 18,766 |
| <b>Fund Appropriations/Allocations</b> |        |       |      |      |      |      |      |      |        |
| SPU Drainage and Wastewater Fund       | 14,736 | 3,150 | 830  | 50   | 0    | 0    | 0    | 0    | 18,766 |
| <b>Appropriations Total*</b>           | 14,736 | 3,150 | 830  | 50   | 0    | 0    | 0    | 0    | 18,766 |
| <b>O &amp; M Costs (Savings)</b>       |        |       | 0    | 0    | 0    | 0    | 0    | 0    |        |

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# SPU - Drainage & Wastewater

## 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:** Citywide

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

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

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

This project provides for spot improvements in landslide-prone areas throughout Seattle. Typical improvements include installing berms, swales, catch-basins, storm drains, subsurface drains and small slope stability improvement projects. Individual spot improvement projects do not exceed \$150,000. 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 |
|--|-----|------|------|------|------|------|------|-------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |       |       |
| Drainage and Wastewater Rates          | 0   | 585  | 385  | 409  | 718  | 630  | 646  | 1,656 | 5,029 |
| <b>Project Total:</b>                  | 0   | 585  | 385  | 409  | 718  | 630  | 646  | 1,656 | 5,029 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |       |       |
| SPU Drainage and Wastewater Fund       | 0   | 585  | 385  | 409  | 718  | 630  | 646  | 1,656 | 5,029 |
| <b>Appropriations Total*</b>           | 0   | 585  | 385  | 409  | 718  | 630  | 646  | 1,656 | 5,029 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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:** Citywide

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

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

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

This project provides spot improvements and project development support for small-capacity sewer systems throughout Seattle, as well as other small projects related to wastewater. Typical improvements include rerouting of a sewer line or relocation of a maintenance hole. 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 171  | 170  | 170  | 174  | 179  | 183  | 188  | 1,235 |
| <b>Project Total:</b>                  | 0   | 171  | 170  | 170  | 174  | 179  | 183  | 188  | 1,235 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 171  | 170  | 170  | 174  | 179  | 183  | 188  | 1,235 |
| <b>Appropriations Total*</b>           | 0   | 171  | 170  | 170  | 174  | 179  | 183  | 188  | 1,235 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## So Lake Union Feasibility Study

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 3rd Quarter 2004

**Project ID:** C3NW032-015

**End Date:** 1st Quarter 2005

**Location:** Westlake Ave. North

**Neighborhood District:** Lake Union

**Neighborhood Plan:** South Lake Union

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 175  | 5    | 0    | 0    | 0    | 0    | 0    | 180   |
| <b>Project Total:</b>                  | 0   | 175  | 5    | 0    | 0    | 0    | 0    | 0    | 180   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 175  | 5    | 0    | 0    | 0    | 0    | 0    | 180   |
| <b>Appropriations Total*</b>           | 0   | 175  | 5    | 0    | 0    | 0    | 0    | 0    | 180   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Sound Transit Integrated Drainage Plan

**BCL Name:** Other Drainage

**BCL Code:** C335B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW035-008

**End Date:** 4th Quarter 2008

**Location:** Various

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

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

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

This project funds SPU's work to implement drainage improvements under an agreement with Sound Transit. Sound Transit has agreed in principle to enter into an Integrated Drainage Plan (IDP) agreement with the City of Seattle to provide funds to the City in lieu of constructing storm water treatment facilities for the Link Light Rail project constructed in the city south of the Downtown Seattle Transit Tunnel. The value established for Sound Transit's payment to the City under terms of the IDP is \$2.3 million, including the at-grade segments of light rail within the city south of the Transit Tunnel. Under the terms of the agreement, SPU develops a project to address drainage and water quality within the Martin Luther King/Norfolk drainage basin area. 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 |
|--|-----|------|------|------|-------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |       |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 300  | 300  | 1,538 | 162  | 0    | 0    | 2,300 |
| <b>Project Total:</b>                  | 0   | 0    | 300  | 300  | 1,538 | 162  | 0    | 0    | 2,300 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |       |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 300  | 300  | 1,538 | 162  | 0    | 0    | 2,300 |
| <b>Appropriations Total*</b>           | 0   | 0    | 300  | 300  | 1,538 | 162  | 0    | 0    | 2,300 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0     | 0    | 0    | 0    |       |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Sound Transit Light Rail - Drainage

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** New Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C404401-DWF

**End 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 |
|--|-----|-------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |       |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 4   | 1,140 | 733  | 650  | 308  | 84   | 0    | 0    | 2,919 |
| <b>Project Total:</b>                  | 4   | 1,140 | 733  | 650  | 308  | 84   | 0    | 0    | 2,919 |
| <b>Fund Appropriations/Allocations</b> |     |       |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 4   | 1,140 | 733  | 650  | 308  | 84   | 0    | 0    | 2,919 |
| <b>Appropriations Total*</b>           | 4   | 1,140 | 733  | 650  | 308  | 84   | 0    | 0    | 2,919 |
| <b>O &amp; M Costs (Savings)</b>       |     |       | 0    | 0    | 0    | 0    | 0    | 0    |       |

## South Henderson Street Raincatchers

**BCL Name:** General Wastewater

**BCL Code:** C320B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW002-007

**End Date:** 4th Quarter 2006

**Location:** S Henderson St.

**Neighborhood District:** Southeast

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

**Urban 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 |
|--|-----|------|------|-------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |       |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 789  | 1,000 | 0    | 0    | 0    | 0    | 1,789 |
| <b>Project Total:</b>                  | 0   | 0    | 789  | 1,000 | 0    | 0    | 0    | 0    | 1,789 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |       |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 789  | 1,000 | 0    | 0    | 0    | 0    | 1,789 |
| <b>Appropriations Total*</b>           | 0   | 0    | 789  | 1,000 | 0    | 0    | 0    | 0    | 1,789 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0     | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## South Park Water Quality Study

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C343304

**End Date:** 3rd Quarter 2005

**Location:** South Park Drainage Basin

**Neighborhood District:** Southwest

**Neighborhood Plan:** South Park

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 150  | 25   | 0    | 0    | 0    | 0    | 0    | 175   |
| <b>Project Total:</b>                  | 0   | 150  | 25   | 0    | 0    | 0    | 0    | 0    | 175   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 150  | 25   | 0    | 0    | 0    | 0    | 0    | 175   |
| <b>Appropriations Total*</b>           | 0   | 150  | 25   | 0    | 0    | 0    | 0    | 0    | 175   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Spoils Yard & Decant Facility (DWF)

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** New Facility

**Start Date:** 3rd Quarter 2004

**Project ID:** C4NW106-007-DWF

**End Date:** 4th Quarter 2005

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

**Neighborhood District:** Greater Duwamish

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 40   | 10   | 0    | 0    | 0    | 0    | 0    | 50    |
| <b>Project Total:</b>                  | 0   | 40   | 10   | 0    | 0    | 0    | 0    | 0    | 50    |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 40   | 10   | 0    | 0    | 0    | 0    | 0    | 50    |
| <b>Appropriations Total*</b>           | 0   | 40   | 10   | 0    | 0    | 0    | 0    | 0    | 50    |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Spokane St Bridge Salmon Habitat

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C333305

**End Date:** 4th Quarter 2005

**Location:** W Marginal Wy. S/S Spokane St.

**Neighborhood District:** Southwest

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 5    | 0    | 0    | 0    | 0    | 0    | 5     |
| <b>Project Total:</b>                  | 0   | 0    | 5    | 0    | 0    | 0    | 0    | 0    | 5     |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 5    | 0    | 0    | 0    | 0    | 0    | 5     |
| <b>Appropriations Total*</b>           | 0   | 0    | 5    | 0    | 0    | 0    | 0    | 0    | 5     |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Stormwater Mitigation Partnership Program

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW033-016

**End Date:** 4th Quarter 2010

**Location:** Citywide

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

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 50   | 50   | 50   | 50   | 50   | 50   | 300   |
| <b>Project Total:</b>                  | 0   | 0    | 50   | 50   | 50   | 50   | 50   | 50   | 300   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 50   | 50   | 50   | 50   | 50   | 50   | 300   |
| <b>Appropriations Total*</b>           | 0   | 0    | 50   | 50   | 50   | 50   | 50   | 50   | 300   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## Strategic Asset Management Plan - Drainage

**BCL Name:** Other Drainage

**BCL Code:** C335B

**Type:** New Investment

**Start Date:** 1st Quarter 2004

**Project ID:** C333507

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 4   | 48   | 40   | 40   | 0    | 0    | 0    | 0    | 132   |
| <b>Project Total:</b>                  | 4   | 48   | 40   | 40   | 0    | 0    | 0    | 0    | 132   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 4   | 48   | 40   | 40   | 0    | 0    | 0    | 0    | 132   |
| <b>Appropriations Total*</b>           | 4   | 48   | 40   | 40   | 0    | 0    | 0    | 0    | 132   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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.

## 2005-2010 Adopted Capital Improvement Program

# SPU - Drainage & Wastewater

## Strategic Asset Management Plan - WW

**BCL Name:** General Wastewater

**BCL Code:** C320B

**Type:** New Investment

**Start Date:** 1st Quarter 2003

**Project ID:** C303204

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 11  | 50   | 100  | 100  | 0    | 0    | 0    | 0    | 261   |
| <b>Project Total:</b>                  | 11  | 50   | 100  | 100  | 0    | 0    | 0    | 0    | 261   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 11  | 50   | 100  | 100  | 0    | 0    | 0    | 0    | 261   |
| <b>Appropriations Total*</b>           | 11  | 50   | 100  | 100  | 0    | 0    | 0    | 0    | 261   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

## SW Jacobsen & Alaska SW Landslide

**BCL Name:** Public Asset Protection

**BCL Code:** C334B

**Type:** New Facility

**Start Date:** 3rd Quarter 2001

**Project ID:** C301353

**End Date:** 1st Quarter 2005

**Location:** SW Jacobsen Rd.

**Neighborhood District:** Southwest

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

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 186 | 439  | 24   | 0    | 0    | 0    | 0    | 0    | 649   |
| <b>Project Total:</b>                  | 186 | 439  | 24   | 0    | 0    | 0    | 0    | 0    | 649   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 186 | 439  | 24   | 0    | 0    | 0    | 0    | 0    | 649   |
| <b>Appropriations Total*</b>           | 186 | 439  | 24   | 0    | 0    | 0    | 0    | 0    | 649   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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.*

# SPU - Drainage & Wastewater

## SW Prescott/Admiral Landslide

**BCL Name:** Public Asset Protection

**BCL Code:** C334B

**Type:** New Facility

**Start Date:** 3rd Quarter 2002

**Project ID:** C302353

**End Date:** 4th Quarter 2008

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

**Neighborhood District:** Southwest

**Neighborhood Plan:** Admiral

**Urban 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 160 | 361  | 765  | 485  | 623  | 541  | 0    | 0    | 2,935 |
| <b>Project Total:</b>                  | 160 | 361  | 765  | 485  | 623  | 541  | 0    | 0    | 2,935 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 160 | 361  | 765  | 485  | 623  | 541  | 0    | 0    | 2,935 |
| <b>Appropriations Total*</b>           | 160 | 361  | 765  | 485  | 623  | 541  | 0    | 0    | 2,935 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 1    | 1    | 2     |

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**2005-2010 Adopted Capital Improvement Program**

# SPU - Drainage & Wastewater

## Taylor Creek Culverts Phase 2

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 4th Quarter 1999

**Project ID:** C399315

**End Date:** 3rd Quarter 2009

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

**Neighborhood District:** Greater Duwamish

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

**Urban 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 running under an 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 503 | 200  | 80   | 320  | 15   | 5    | 5    | 0    | 1,128 |
| <b>Project Total:</b>                  | 503 | 200  | 80   | 320  | 15   | 5    | 5    | 0    | 1,128 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 503 | 200  | 80   | 320  | 15   | 5    | 5    | 0    | 1,128 |
| <b>Appropriations Total*</b>           | 503 | 200  | 80   | 320  | 15   | 5    | 5    | 0    | 1,128 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 6    | 6    | 6    | 6    | 24    |

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# SPU - Drainage & Wastewater

## 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 129 | 50   | 50   | 3    | 0    | 0    | 0    | 0    | 232   |
| <b>Project Total:</b>                  | 129 | 50   | 50   | 3    | 0    | 0    | 0    | 0    | 232   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 129 | 50   | 50   | 3    | 0    | 0    | 0    | 0    | 232   |
| <b>Appropriations Total*</b>           | 129 | 50   | 50   | 3    | 0    | 0    | 0    | 0    | 232   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 1    | 1    | 1    | 1    | 4     |

## Thornton Creek - Ravenna Ave NE Habitat

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** Improved Facility

**Start Date:** 3rd Quarter 2002

**Project ID:** C333306

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 105  | 15   | 13   | 0    | 0    | 0    | 0    | 133   |
| <b>Project Total:</b>                  | 0   | 105  | 15   | 13   | 0    | 0    | 0    | 0    | 133   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 105  | 15   | 13   | 0    | 0    | 0    | 0    | 133   |
| <b>Appropriations Total*</b>           | 0   | 105  | 15   | 13   | 0    | 0    | 0    | 0    | 133   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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.

# SPU - Drainage & Wastewater

## Thornton Creek Water Quality Channel Project

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW033-004

**End Date:** 4th Quarter 2009

**Location:** 5th Ave. NE

**Neighborhood District:** North

**Neighborhood Plan:** Northgate

**Urban Village:** Northgate

This project includes preliminary engineering, design and construction of a water quality facility on the south lot of Northgate Mall. The facility is located between 3rd and 5th Ave. NE and between NE 100th and NE 103rd St., and provides water quality treatment for public drainage. The project includes excavation of fill material and creation of a creek-like channel for dry weather and small storm flow from the existing public drainage system under NE 100th St. at 3rd Ave. NE. The project facility also includes improvements to pedestrian access and landscaping. Ordinance 121548 created the project in 2004 and provided \$400,000 for property acquisition and closing costs; Ordinance 121547 appropriated \$6.8 million for project design and construction. 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 |
|--|-----|-------|------|------|-------|-------|------|------|-------|
| <b>Revenue Sources</b>                 |     |       |      |      |       |       |      |      |       |
| Drainage and Wastewater Rates          | 0   | 7,248 | 0    | 0    | 0     | 0     | 0    | 0    | 7,248 |
| <b>Project Total:</b>                  | 0   | 7,248 | 0    | 0    | 0     | 0     | 0    | 0    | 7,248 |
| <b>Fund Appropriations/Allocations</b> |     |       |      |      |       |       |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 7,248 | 0    | 0    | 0     | 0     | 0    | 0    | 7,248 |
| <b>Appropriations Total*</b>           | 0   | 7,248 | 0    | 0    | 0     | 0     | 0    | 0    | 7,248 |
| <b>O &amp; M Costs (Savings)</b>       |     |       | 0    | 0    | 0     | 0     | 0    | 71   | 71    |
| <b>Spending Plan</b>                   |     | 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.*

# SPU - Drainage & Wastewater

## Venema Creek Natural Drainage System

**BCL Name:** Flood Control and Local Drainage

**BCL Code:** C332B

**Type:** New Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C302317

**End Date:** 4th Quarter 2008

**Location:** 4th Ave. NW

**Neighborhood District:** Northwest

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

**Urban 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 |
|--|-----|------|------|------|-------|-------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |       |       |      |      |       |
| Drainage and Wastewater Rates          | 109 | 5    | 250  | 250  | 2,300 | 1,500 | 0    | 0    | 4,414 |
| <b>Project Total:</b>                  | 109 | 5    | 250  | 250  | 2,300 | 1,500 | 0    | 0    | 4,414 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |       |       |      |      |       |
| SPU Drainage and Wastewater Fund       | 109 | 5    | 250  | 250  | 2,300 | 1,500 | 0    | 0    | 4,414 |
| <b>Appropriations Total*</b>           | 109 | 5    | 250  | 250  | 2,300 | 1,500 | 0    | 0    | 4,414 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 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.*

# SPU - Drainage & Wastewater

## Wastewater Rehab Evaluation

**BCL Name:** Sewer Rehabilitation  
**Type:** Rehabilitation or Restoration  
**Project ID:** C3AA401

**BCL Code:** C340B  
**Start Date:** Ongoing  
**End Date:** Ongoing

**Location:** Citywide

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

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

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

This program evaluates future wastewater rehabilitation projects by investigating existing records, reports, and plans, obtaining field data from closed circuit television (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 |
|--|-------|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |       |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 1,122 | 88   | 88   | 94   | 96   | 102  | 108  | 114  | 1,812 |
| <b>Project Total:</b>                  | 1,122 | 88   | 88   | 94   | 96   | 102  | 108  | 114  | 1,812 |
| <b>Fund Appropriations/Allocations</b> |       |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 1,122 | 88   | 88   | 94   | 96   | 102  | 108  | 114  | 1,812 |
| <b>Appropriations Total*</b>           | 1,122 | 88   | 88   | 94   | 96   | 102  | 108  | 114  | 1,812 |
| <b>O &amp; M Costs (Savings)</b>       |       |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Water Reuse - Stormwater

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 4th Quarter 2001

**Project ID:** C3NW033-012

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 161 | 20   | 50   | 50   | 0    | 0    | 0    | 0    | 281   |
| <b>Project Total:</b>                  | 161 | 20   | 50   | 50   | 0    | 0    | 0    | 0    | 281   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 161 | 20   | 50   | 50   | 0    | 0    | 0    | 0    | 281   |
| <b>Appropriations Total*</b>           | 161 | 20   | 50   | 50   | 0    | 0    | 0    | 0    | 281   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Water Reuse - Wastewater

**BCL Name:** General Wastewater

**BCL Code:** C320B

**Type:** New Facility

**Start Date:** 4th Quarter 2001

**Project ID:** C301203

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 114 | 20   | 20   | 0    | 0    | 0    | 0    | 0    | 154   |
| <b>Project Total:</b>                  | 114 | 20   | 20   | 0    | 0    | 0    | 0    | 0    | 154   |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 114 | 20   | 20   | 0    | 0    | 0    | 0    | 0    | 154   |
| <b>Appropriations Total*</b>           | 114 | 20   | 20   | 0    | 0    | 0    | 0    | 0    | 154   |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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

# SPU - Drainage & Wastewater

## Watershed Base Creek Flow Control

**BCL Name:** Protection of Beneficial Uses

**BCL Code:** C333B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C3NW033-017

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 0   | 0    | 50   | 188  | 425  | 200  | 200  | 200  | 1,263 |
| <b>Project Total:</b>                  | 0   | 0    | 50   | 188  | 425  | 200  | 200  | 200  | 1,263 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 0   | 0    | 50   | 188  | 425  | 200  | 200  | 200  | 1,263 |
| <b>Appropriations Total*</b>           | 0   | 0    | 50   | 188  | 425  | 200  | 200  | 200  | 1,263 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## Windermere CSO Storage

**BCL Name:** Combined Sewer Overflow

**BCL Code:** C310B

**Type:** New Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C302103

**End 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 |
|--|-----|------|------|------|------|------|------|------|-------|
| <b>Revenue Sources</b>                 |     |      |      |      |      |      |      |      |       |
| Drainage and Wastewater Rates          | 236 | 58   | 249  | 391  | 395  | 521  | 434  | 552  | 2,836 |
| <b>Project Total:</b>                  | 236 | 58   | 249  | 391  | 395  | 521  | 434  | 552  | 2,836 |
| <b>Fund Appropriations/Allocations</b> |     |      |      |      |      |      |      |      |       |
| SPU Drainage and Wastewater Fund       | 236 | 58   | 249  | 391  | 395  | 521  | 434  | 552  | 2,836 |
| <b>Appropriations Total*</b>           | 236 | 58   | 249  | 391  | 395  | 521  | 434  | 552  | 2,836 |
| <b>O &amp; M Costs (Savings)</b>       |     |      | 0    | 0    | 0    | 0    | 0    | 0    |       |

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# SPU - Drainage & Wastewater

## WPA Drains Study & Repair

**BCL Name:** Public Asset Protection  
**Type:** Rehabilitation or Restoration  
**Project ID:** C300338

**BCL Code:** C334B  
**Start Date:** 3rd Quarter 2000  
**End Date:** Ongoing

**Location:** Various  
**Neighborhood Plan:** Not in a Neighborhood Plan

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

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

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

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