

**Alaskan Way Viaduct & Seawall**

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** New Facility

**Start Date:** 4th Quarter 2001

**Project ID:** C404201-WF

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

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	15	65	125	160	30	0	0	0	395
<b>Project Total:</b>	15	65	125	160	30	0	0	0	395
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	15	65	125	160	30	0	0	0	395
<b>Appropriations Total*</b>	15	65	125	160	30	0	0	0	395
<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 - Water

## Asset Management

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 4th Quarter 2002

**Project ID:** C1126

**End Date:** Ongoing

**Location:** Citywide

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

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

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

This program provides funding for managing the City's water system assets as optimally as possible by using sound asset management principles and practices. Project elements include the following: developing, monitoring, and reporting on measurable customer and environmental service levels; preparing Strategic Asset Management Plans; developing and implementing asset decision models; developing information technology applications; replacing and rehabilitating water infrastructure; collecting data and assessing the condition of SPU's assets; and evaluating SPU's current operating and maintenance practices and processes. Funding is allocated from the Asset Management Program to these various programs once they are clearly defined. The confidence in the cost estimate is medium for 2005 and 2006; cost estimates for future years will be revised over time. Some elements of this program have been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	462	1,304	3,944	2,416	11,322	11,289	11,256	11,868	53,861
<b>Project Total:</b>	462	1,304	3,944	2,416	11,322	11,289	11,256	11,868	53,861
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	462	1,304	3,944	2,416	11,322	11,289	11,256	11,868	53,861
<b>Appropriations Total*</b>	462	1,304	3,944	2,416	11,322	11,289	11,256	11,868	53,861
<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 - Water

## Aurora Ave N (110th - 145th)

**BCL Name:** Other Agencies  
**Type:** Improved Facility  
**Project ID:** C103033

**BCL Code:** C120B  
**Start Date:** 4th Quarter 2003  
**End Date:** 4th Quarter 2006

**Location:** N 110th St./Aurora Ave. N

**Neighborhood District:** North

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

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

The Seattle Department of Transportation is developing a scope of work for rehabilitating or improving Aurora Ave. N between N 110th St. and N 145th St. This project funds the necessary preliminary engineering to determine the water system impacts of that transportation project. If the transportation project goes forward, then additional funds will be requested at that time to address these impacts. The confidence level of the cost estimate is low.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	2	12	8	16	0	0	0	0	38
<b>Project Total:</b>	2	12	8	16	0	0	0	0	38
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	2	12	8	16	0	0	0	0	38
<b>Appropriations Total*</b>	2	12	8	16	0	0	0	0	38
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Aurora N Multi-modal Corridor

**BCL Name:** Other Agencies  
**Type:** Improved Facility  
**Project ID:** C103027

**BCL Code:** C120B  
**Start Date:** 4th Quarter 2003  
**End Date:** 2nd Quarter 2007

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

**Neighborhood District:** North

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

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

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

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	4	49	985	151	51	0	0	0	1,240
<b>Project Total:</b>	4	49	985	151	51	0	0	0	1,240
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	4	49	985	151	51	0	0	0	1,240
<b>Appropriations Total*</b>	4	49	985	151	51	0	0	0	1,240
<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 - Water

## Ballard Locks Improvements

**BCL Name:** Habitat Conservation Program

**BCL Code:** C160B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2000

**Project ID:** C1606

**End Date:** 4th Quarter 2008

**Location:** 3015 NW 54th St.

**Neighborhood District:** Ballard

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

**Urban Village:** Ballard

This project is a sub-element of the Cedar River Habitat Conservation Plan (HCP) and associated Cedar River Instream Flow Agreement. Improvements include the planning, design, and construction of freshwater conservation and smolt passage facilities at the Ballard Locks to improve fish passage and survival. The project is part of a comprehensive instream flow management program for the Cedar River that protects the City's continued ability to divert adequate amounts of high quality water for regional use while protecting instream resources and the U.S. Army Corps of Engineers' ability to provide adequate flows for operating the Locks. SPU's Asset Management Committee has approved the HCP at the program level. The confidence level for this cost estimate is high.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	865	66	150	150	154	998	0	0	2,383
<b>Project Total:</b>	865	66	150	150	154	998	0	0	2,383
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	865	66	150	150	154	998	0	0	2,383
<b>Appropriations Total*</b>	865	66	150	150	154	998	0	0	2,383
<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 Proposed Capital Improvement Program**

# SPU - Water

## BPA - Aquatic & Riparian Restoration

**BCL Name:** Bonneville Agreement

**BCL Code:** C170B

**Type:** Improved Facility

**Start Date:** 2nd Quarter 2004

**Project ID:** C1702

**End Date:** 4th Quarter 2007

**Location:** Cedar River Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

This project group within the Bonneville Agreement program provides funds to plan and implement aquatic and riparian restoration projects within the Cedar River Municipal Watershed. These projects enhance and accelerate the City's existing efforts to restore riparian, aquatic, and wetland habitat in the watershed, and compensate for the impacts of the Bonneville Power Administration's (BPA's) power line project on that habitat. SPU's Asset Management Committee has approved this set of projects. The confidence in the cost estimate is medium due to the early stage of project development.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	109	844	539	27	0	0	0	1,519
<b>Project Total:</b>	0	109	844	539	27	0	0	0	1,519
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	109	844	539	27	0	0	0	1,519
<b>Appropriations Total*</b>	0	109	844	539	27	0	0	0	1,519
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## BPA - Road Decommissioning/Improvements

**BCL Name:** Bonneville Agreement

**BCL Code:** C170B

**Type:** Improved Facility

**Start Date:** 2nd Quarter 2004

**Project ID:** C1703

**End Date:** 4th Quarter 2010

**Location:** Cedar River Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

This project group within the Bonneville Agreement program provides funds to plan and implement road decommissioning and road improvement projects within the Cedar River Municipal Watershed. These projects enhance and accelerate the City's existing programs to improve or abandon watershed roads, and compensate for the effects of the additional road length added to the watershed as a result of the Bonneville Power Administration's power line project. SPU's Asset Management Committee has approved this set of projects. The confidence in the cost estimate is medium due to the early stage of project development.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	546	728	174	51	52	162	110	1,823
<b>Project Total:</b>	0	546	728	174	51	52	162	110	1,823
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	546	728	174	51	52	162	110	1,823
<b>Appropriations Total*</b>	0	546	728	174	51	52	162	110	1,823
<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 - Water

## BPA - Security Measures

**BCL Name:** Bonneville Agreement

**BCL Code:** C170B

**Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C1704

**End Date:** 4th Quarter 2006

**Location:** Cedar River Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

This project group within the Bonneville Agreement program provides funds to plan, purchase and install watershed security improvements within the Cedar River Municipal Watershed to protect watershed resources and restrict watershed access. These projects compensate for the impacts of the Bonneville Power Administration's power line project on security within the watershed. SPU's Asset Management Committee has reviewed and approved this set of projects. The confidence in current cost estimates is medium due to the early stage of project development.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	347	312	215	0	0	0	0	874
<b>Project Total:</b>	0	347	312	215	0	0	0	0	874
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	347	312	215	0	0	0	0	874
<b>Appropriations Total*</b>	0	347	312	215	0	0	0	0	874
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## BPA - Upland Forest Restoration

**BCL Name:** Bonneville Agreement

**BCL Code:** C170B

**Type:** Improved Facility

**Start Date:** 2nd Quarter 2004

**Project ID:** C1705

**End Date:** 4th Quarter 2008

**Location:** Cedar River Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

This project group within the Bonneville Agreement program provides funds to plan and implement forest restoration projects within the Cedar River Municipal Watershed to enhance and accelerate the City's existing Upland Forest Restoration Program and to compensate for the impacts of the Bonneville Power Administration's power line project on older second-growth forest and other upland habitats in the watershed. SPU's Asset Management Committee has reviewed and approved this set of projects. The confidence in current cost estimates is medium due to the early stage of project development.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	169	608	384	56	53	0	0	1,270
<b>Project Total:</b>	0	169	608	384	56	53	0	0	1,270
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	169	608	384	56	53	0	0	1,270
<b>Appropriations Total*</b>	0	169	608	384	56	53	0	0	1,270
<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 - Water

## Burien Feeder Upgrade

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2009

**Project ID:** C1NW101-002

**End Date:** 4th Quarter 2011

**Location:** S 146 St., Between 24 Ave. S And 8 Av. S

**Neighborhood District:** Not in a Neighborhood District

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

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

This project rehabilitates the Burien Feeder by replacing or slip-lining the existing 24-inch concrete cylinder pipe. The feeder pipeline provides water for drinking, sanitation, and fighting fires in the Burien area. The demand for the project is highly uncertain as the existing pipe may have a much longer useful life. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not yet been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	0	0	0	0	291	1,982	2,273
<b>Project Total:</b>	0	0	0	0	0	0	291	1,982	2,273
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	0	0	0	0	291	1,982	2,273
<b>Appropriations Total*</b>	0	0	0	0	0	0	291	1,982	2,273
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Cathodic Phase V

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 1999

**Project ID:** C100063

**End Date:** 4th Quarter 2005

**Location:** Between Tolt Treatment Facility And Kelly Rd.

**Neighborhood District:** Not in a Neighborhood District

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

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

This project installs an impressed current cathodic protection system on approximately 3.5 miles of the original Tolt Pipeline No. 1 between the new Tolt Treatment Facility and Kelly Road to extend the pipeline's useful life. The pipeline west of the project location has already been replaced. The project includes electrically connecting the 20-foot long individual pipe sections that the pipeline is made of, and installing deep wells to create an electrical circuit and apply voltage onto the pipe. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	195	947	248	0	0	0	0	0	1,390
<b>Project Total:</b>	195	947	248	0	0	0	0	0	1,390
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	195	947	248	0	0	0	0	0	1,390
<b>Appropriations Total*</b>	195	947	248	0	0	0	0	0	1,390
<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.*

**Cathodic Protection Program**

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2004

**Project ID:** C1NW116

**End Date:** Ongoing

**Location:** 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 implements SPU’s Cathodic Protection Master Plan, by installing pipe exterior corrosion protection systems along the major water transmission pipelines. Cathodic protection systems are a relatively low cost method of extending the life of buried pipelines and submerged surfaces of water storage tanks. They can be used to protect ductile iron, steel, and concrete cylinder pipe. Unprotected, these types of pipe corrode through an electrochemical process; cathodic protection attempts to slow down or even stop this electrochemical process by providing electrical current to the pipe. Projects are accomplished over two years; one year for design and one year for construction. Each project installs new or replacement rectifiers and anodes along a section of pipeline between one and four miles in length. The project replaces the Cathodic Protection – Phase V, Phase VI, and Phase VII projects that were displayed in the 2004-2009 Adopted CIP.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	0	5	500	1,000	1,025	1,051	1,077	1,104	5,762
<b>Project Total:</b>	0	5	500	1,000	1,025	1,051	1,077	1,104	5,762
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	5	500	1,000	1,025	1,051	1,077	1,104	5,762
<b>Appropriations Total*</b>	0	5	500	1,000	1,025	1,051	1,077	1,104	5,762
<b>O &amp; M Costs (Savings)</b>			0	0	2	3	3	3	11

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

# SPU - Water

## Cedar Bridges

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** Ongoing

**Project ID:** C1119

**End Date:** 4th Quarter 2020

**Location:** Cedar Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

This project replaces bridges in the Cedar River Watershed at which SPU requires access and the existing bridges are no longer able to carry required loading, resulting in safety and environmental risks. This project combines several Cedar Bridge Replacement projects that were displayed separately in the 2004-2009 Adopted CIP, and includes replacing the bridges at Cedar River 600 Road, Middle Fork Taylor Creek 60 Road, Barneston Bridge, North Fork Taylor 60 Road, Rex 300 Road, Rock 41 Road, Taylor 9 Road, Tinkham 560 Road, North Fork Taylor 62 Road, Cedar 9 Road, and Cedar 560 Road.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	19,395	350	1,014	665	256	210	97	171	22,158
<b>Project Total:</b>	19,395	350	1,014	665	256	210	97	171	22,158
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	19,395	350	1,014	665	256	210	97	171	22,158
<b>Appropriations Total*</b>	19,395	350	1,014	665	256	210	97	171	22,158
<b>O &amp; M Costs (Savings)</b>			0	16	16	16	16	16	80

## Cedar Eastside Supply Improvement - East Creek

**BCL Name:** Other Agencies

**BCL Code:** C120B

**Type:** Improved Facility

**Start Date:** 2nd Quarter 2001

**Project ID:** C145007

**End Date:** 3rd Quarter 2005

**Location:** East Creek & Camber Rd.

**Neighborhood District:** Not in a Neighborhood District

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

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

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

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	242	9	590	0	0	0	0	0	841
<b>Project Total:</b>	242	9	590	0	0	0	0	0	841
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	242	9	590	0	0	0	0	0	841
<b>Appropriations Total*</b>	242	9	590	0	0	0	0	0	841
<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.*

**Cedar Falls - Railroad Hazardous Material Remediation**

**BCL Name:** Water Quality

**BCL Code:** C140B

**Type:** Rehabilitation or Restoration

**Start Date:** 2nd Quarter 2001

**Project ID:** C100078

**End Date:** 4th Quarter 2005

**Location:** Cedar Falls

**Neighborhood District:** Not in a Neighborhood District

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

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

This project addresses contamination left by historical railroad operations in the Cedar River Municipal Watershed. It has three components: 1) assess the nature and risks posed by the contamination; 2) determine the scope and cost of an appropriate cleanup; and 3) support negotiations with Burlington Northern Santa Fe (BNSF) that lead to remedial action. The first two of these components have been completed. A small portion of the contaminated material is located on lands where BNSF and its predecessor operated under an easement granted by the City, while the majority of the contaminated material is located on land that BNSF owns. The project funds staff time to negotiate an agreement to share a portion of the cleanup costs, and is consistent with SPU's long-term effort to consolidate ownership of watershed lands, after proper cleanup by the responsible parties of any contamination. The confidence level of the cost estimate is medium. The project has not been approved by SPU's Asset Management Committee.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	137	99	120	0	0	0	0	0	356
<b>Project Total:</b>	137	99	120	0	0	0	0	0	356
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	137	99	120	0	0	0	0	0	356
<b>Appropriations Total*</b>	137	99	120	0	0	0	0	0	356
<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 - Water

## Cedar Falls Facility Master Plan

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C1NW101-005

**End Date:** 4th Quarter 2006

**Location:** Cedar Falls Rd. SE

**Neighborhood District:** Northeast

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

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

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

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	60	56	0	0	0	0	116
<b>Project Total:</b>	0	0	60	56	0	0	0	0	116
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	60	56	0	0	0	0	116
<b>Appropriations Total*</b>	0	0	60	56	0	0	0	0	116
<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 Proposed Capital Improvement Program**

**Cedar Moraine Improvements**

**BCL Name:** Infrastructure  
**Type:** Improved Facility  
**Project ID:** C197009

**BCL Code:** C110B  
**Start Date:** 1st Quarter 1997  
**End Date:** 4th Quarter 2008

**Location:** Cedar Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

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

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	966	357	200	250	51	53	0	0	1,877
<b>Project Total:</b>	966	357	200	250	51	53	0	0	1,877
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	966	357	200	250	51	53	0	0	1,877
<b>Appropriations Total*</b>	966	357	200	250	51	53	0	0	1,877
<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 - Water

## Cedar River - Boundary Land Acquisition

**BCL Name:** Water Quality

**BCL Code:** C140B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 1998

**Project ID:** C198008

**End Date:** Ongoing

**Location:** Cedar River Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

Although the City owns virtually all lands draining to the municipal water supply intake on the Cedar River, some exceptions remain along the boundary. The past decade has seen significant changes in ownership and land use of properties immediately adjoining the City's property. This project enables SPU to evaluate risks to watershed protection and security posed by these changes, and to respond as opportunities arise by acquiring property. All property acquisitions require specific legislative authority. Although funding is not yet allocated for 2010, the project is expected to be on-going. The confidence level of the cost estimate is medium. This project has not been formally approved by the Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	2,192	95	325	101	103	105	108	0	3,029
<b>Project Total:</b>	2,192	95	325	101	103	105	108	0	3,029
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	2,192	95	325	101	103	105	108	0	3,029
<b>Appropriations Total*</b>	2,192	95	325	101	103	105	108	0	3,029
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Cedar River - Education Center Exhibits

**BCL Name:** Environmental Stewardship

**BCL Code:** C130B

**Type:** Improved Facility

**Start Date:** 2nd Quarter 2003

**Project ID:** C103001

**End Date:** 2nd Quarter 2006

**Location:** Crw Education Center North Bend

**Neighborhood District:** North

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

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

This project funds fabrication and installation of interpretive exhibits (already designed) in the empty Interpretive Hall, to complete the Cedar River Watershed Education Center. These exhibits enhance the experience and understanding gained by the facility's 30,000-40,000 visitors per year. Regular maintenance of exhibits is done by existing staff.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	321	320	0	150	0	0	0	0	791
<b>Project Total:</b>	321	320	0	150	0	0	0	0	791
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	321	320	0	150	0	0	0	0	791
<b>Appropriations Total*</b>	321	320	0	150	0	0	0	0	791
<b>O &amp; M Costs (Savings)</b>			2	2	2	2	2	0	10

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

# SPU - Water

## Cedar River Non-HCP Road Improvements

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 1991

**Project ID:** C191001

**End Date:** Ongoing

**Location:** Cedar Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

The Cedar River Watershed contains over 615 miles of forest roads. This project funds major improvements (beyond routine maintenance) on roads designated as having long-term purpose for watershed management including forest fire suppression, fish and wildlife management, forest management, security, and public education. Roads not deemed to be of long-term necessity are "deconstructed" by removing potentially unstable sidecast and fill material, constructing frequent waterbars, and re-establishing stream crossings. This work is designed to provide long-term stability, to approximate the drainage flows that existed prior to management activities, and to be complementary to road improvement and decommissioning projects included in the Cedar River Watershed Habitat Conservation Plan (HCP). The City's commitment to the HCP assumes that these projects are completed.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	5,028	886	786	804	800	819	840	861	10,824
<b>Project Total:</b>	5,028	886	786	804	800	819	840	861	10,824
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	5,028	886	786	804	800	819	840	861	10,824
<b>Appropriations Total*</b>	5,028	886	786	804	800	819	840	861	10,824
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Cedar River Northridge Trail

**BCL Name:** Environmental Stewardship

**BCL Code:** C130B

**Type:** New Facility

**Start Date:** 1st Quarter 2002

**Project ID:** C102022

**End Date:** 3rd Quarter 2005

**Location:** Cedar River Watershed, Northern Boundary

**Neighborhood District:** Not in a Neighborhood District

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

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

This project involves planning and implementation of an alternative trail connection along the northern ridge boundary of Cedar River Watershed. Planning, public process, construction, and management are done in cooperation with the Washington State Parks Department, the US Forest Service, other agencies, and adjacent landowners.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	19	13	51	0	0	0	0	0	83
<b>Project Total:</b>	19	13	51	0	0	0	0	0	83
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	19	13	51	0	0	0	0	0	83
<b>Appropriations Total*</b>	19	13	51	0	0	0	0	0	83
<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 - Water

## Cedar River Watershed - Headquarters Major Maintenance

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 2nd Quarter 2000

**Project ID:** C100051

**End Date:** Ongoing

**Location:** Cedar River Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

This project replaces leaky roofs, repairs plumbing, paints existing facilities, and conducts other major maintenance at the Cedar Falls Headquarters.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	1,508	88	88	86	90	54	56	57	2,027
<b>Project Total:</b>	1,508	88	88	86	90	54	56	57	2,027
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	1,508	88	88	86	90	54	56	57	2,027
<b>Appropriations Total*</b>	1,508	88	88	86	90	54	56	57	2,027
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Cedar Sockeye Hatchery

**BCL Name:** Habitat Conservation Program

**BCL Code:** C160B

**Type:** New Facility

**Start Date:** 1st Quarter 2000

**Project ID:** C1605

**End Date:** 4th Quarter 2007

**Location:** Cedar River

**Neighborhood District:** Not in a Neighborhood District

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

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

This project, a component of the Cedar River Habitat Conservation Plan (HCP), implements measures to mitigate impacts on sockeye salmon caused by the migration barrier formed by the Landsburg Diversion Dam. The hatchery's purpose is to produce fry in lieu of the production that could occur if sockeye were allowed to spawn above Landsburg Dam. The project consists of spring-fed water supply improvements, a broodstock holding facility, an incubation and short-term holding facility capable of producing 34 million fry, housing for two employees, and a broodstock collection trap. The HCP was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is medium.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	1,848	606	564	6,419	2,600	0	0	0	12,037
<b>Project Total:</b>	1,848	606	564	6,419	2,600	0	0	0	12,037
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	1,848	606	564	6,419	2,600	0	0	0	12,037
<b>Appropriations Total*</b>	1,848	606	564	6,419	2,600	0	0	0	12,037
<b>O &amp; M Costs (Savings)</b>			0	99	130	334	458	458	1479

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

# SPU - Water

## Cedar Treatment Facility

**BCL Name:** Water Quality

**BCL Code:** C140B

**Type:** New Facility

**Start Date:** 1st Quarter 1996

**Project ID:** C196015

**End Date:** 2nd Quarter 2005

**Location:** Lake Youngs Reservoir

**Neighborhood District:** Not in a Neighborhood District

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

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

This project develops and implements water treatment improvements to the Cedar River water supply to improve water quality, ensure compliance with drinking water regulations, and mitigate the periodic taste and odor problems that occur on the Cedar source. Under this project, new ozone disinfecting facilities (compatible with filtration) are planned, designed, and constructed near the Lake Youngs Reservoir. SPU is utilizing a design-build-operate contracting method for this project, similar to that used for the recently commissioned Tolt Treatment Facility. Starting in 2004, funding to operate and maintain the new facilities is included in SPU's operating budget. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	92,240	5,145	19	0	0	0	0	0	97,404
<b>Project Total:</b>	92,240	5,145	19	0	0	0	0	0	97,404
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	92,240	5,145	19	0	0	0	0	0	97,404
<b>Appropriations Total*</b>	92,240	5,145	19	0	0	0	0	0	97,404
<b>O &amp; M Costs (Savings)</b>			3,110	3,980	5,100	6,520	6,520	0	25230

## Chamber Upgrades - Distribution

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2003

**Project ID:** C103002

**End Date:** Ongoing

**Location:** Citywide

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

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

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

This program allows SPU to meet current Occupational Safety and Health Administration (OSHA) and Washington State Health Administration (WSHA) standards for confined space entry by replacing undersized underground chamber access openings (rings and covers) throughout the City's water system. The program was titled "Chamber Ring and Cover Replacements" in the 2004-2009 Adopted CIP.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	203	160	180	150	154	158	162	166	1,333
<b>Project Total:</b>	203	160	180	150	154	158	162	166	1,333
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	203	160	180	150	154	158	162	166	1,333
<b>Appropriations Total*</b>	203	160	180	150	154	158	162	166	1,333
<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.*

**Control & Data Acquisition Upgrade**

**BCL Name:** Water Quality

**BCL Code:** C140B

**Type:** New Investment

**Start Date:** 1st Quarter 2002

**Project ID:** C195008

**End Date:** 4th Quarter 2007

**Location:** Various

**Neighborhood District:** Not in a Neighborhood District

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

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

This project upgrades the Supervisory Control and Data Acquisition (SCADA) system. Water system operators use SCADA equipment to acquire and monitor data, such as flow or pressure from remote sensors and from water supply dams, and to remotely operate pumps and valves. This project is broken down into four concurrent stages. Stage 1 of the project is complete. Stage 2 converts SPU’s Operations Control Center control room to a PC workstation-based software system, upgrades approximately 110 pieces of field site data collection equipment, and improves the communications system to allow for a redundant control room at SPU’s North Operation Center. The confidence level in the cost estimate for this project stage is high, and the stage has been approved by SPU’s Asset Management Committee (AMC). Stage 3 focuses on improving the capacity of the Water System Control Center to optimize system operations. The confidence level of the cost estimate for this stage is medium, and the stage has not been approved by the AMC. Stage 4 integrates SCADA with various other SPU business information systems such as SPU’s work order system. The confidence in the cost estimate for this stage is high, but the stage has not been approved by the AMC. This project was titled “Supervisory Control And Data Acquisition Upgrades (Water)” in the 2004-2009 Adopted CIP.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	6,160	4,430	3,625	1,905	1,951	0	0	0	18,071
<b>Project Total:</b>	6,160	4,430	3,625	1,905	1,951	0	0	0	18,071
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	6,160	4,430	3,625	1,905	1,951	0	0	0	18,071
<b>Appropriations Total*</b>	6,160	4,430	3,625	1,905	1,951	0	0	0	18,071
<b>O &amp; M Costs (Savings)</b>			227	354	405	455	455	0	1896

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

# SPU - Water

## Control Works Upgrade

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2009

**Project ID:** C1NW101-003

**End Date:** 1st Quarter 2015

**Location:** Lake Youngs Reservoir

**Neighborhood District:** Not in a Neighborhood District

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

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

This project improves the seismic reliability of the Lake Youngs Control Works Facility, a large diameter piping interchange, by constructing duplicate connections at another location nearby. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	0	0	0	0	604	620	1,224
<b>Project Total:</b>	0	0	0	0	0	0	604	620	1,224
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	0	0	0	0	604	620	1,224
<b>Appropriations Total*</b>	0	0	0	0	0	0	604	620	1,224
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## CRPL #2 Replace Portion

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2004

**Project ID:** C104013

**End Date:** 4th Quarter 2007

**Location:** Crpl #2 Between Volunteer Park And Maple Leaf Gatehouse

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

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

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

This project rehabilitates an 88-year-old 42-inch riveted steel feeder main that is corroded in some locations. The pipeline extends from Volunteer Park to the Maple Leaf neighborhood and crosses the Ship Canal in a tunnel. It is part of the planned seismically-hardened backbone of the Seattle distribution system; timely rehabilitation results in less disruption to water service after a major earthquake, and eliminates the risk of property damage associated with a major leak or pipeline failure. The parameters of the replacement are determined during the planning phase of the project. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	39	60	211	5,125	0	0	0	5,435
<b>Project Total:</b>	0	39	60	211	5,125	0	0	0	5,435
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	39	60	211	5,125	0	0	0	5,435
<b>Appropriations Total*</b>	0	39	60	211	5,125	0	0	0	5,435
<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 - Water

## CRPL #4 Upgrade

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2009

**Project ID:** C1NW501-003

**End Date:** TBD

**Location:** Cedar River Pipeline

**Neighborhood District:** Not in a Neighborhood District

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

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

This project rehabilitates about 2,300 feet of Cedar River Pipeline No. 4 across the Duwamish River where the original concrete cylinder pipe may have some deterioration. The need for the project is highly uncertain as the existing pipe may have a much longer useful life. The confidence in the cost estimate is low, and the project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	0	0	0	0	145	192	337
<b>Project Total:</b>	0	0	0	0	0	0	145	192	337
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	0	0	0	0	145	192	337
<b>Appropriations Total*</b>	0	0	0	0	0	0	145	192	337
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Decision Tree Model

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** New Investment

**Start Date:** 2nd Quarter 2004

**Project ID:** C104040

**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

Long range water supply planning is now done in an environment of great uncertainty, both in terms of what sources are available and what demand will be imposed on the City's water system. In the face of this uncertainty, decisions must be made about when and how much to invest in supply development, based on various levels of risk. This project develops a Decision Tree Model to conduct technical analysis to help with those decisions. The model weighs the uncertainties and probabilities of risk to reach analytical conclusions about when and what would be the most cost-effective water supply investments. The model is developed by a consultant with input by SPU staff, and is used and updated by SPU staff. There is high confidence in the cost estimate. The project is approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	90	112	0	0	0	0	0	202
<b>Project Total:</b>	0	90	112	0	0	0	0	0	202
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	90	112	0	0	0	0	0	202
<b>Appropriations Total*</b>	0	90	112	0	0	0	0	0	202
<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 - Water

## Demand Forecast Model

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** New Investment

**Start Date:** 2nd Quarter 2004

**Project ID:** C104041

**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 project provides an overhaul of SPU's current water demand forecast model, which has been in use for the past 10 years and which SPU uses for long range water supply planning purposes. The project includes a review of current state-of-the-art demand forecast models, and development of a new model that meets SPU's forecasting requirements and provides SPU with the ability to assess different future scenarios. There is high confidence in the cost estimate. The project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	155	40	0	0	0	0	0	195
<b>Project Total:</b>	0	155	40	0	0	0	0	0	195
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	155	40	0	0	0	0	0	195
<b>Appropriations Total*</b>	0	155	40	0	0	0	0	0	195
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Denny Combined Sewer Overflow

**BCL Name:** Other Agencies

**BCL Code:** C120B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 1998

**Project ID:** C145002

**End Date:** 2nd Quarter 2005

**Location:** 8th Ave. N

**Neighborhood District:** Downtown

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

**Urban Village:** Queen Anne

This project relocates watermains in conjunction with construction of Combined Sewer Overflow (CSO) facilities near Myrtle Edwards Park. The City and King County are constructing CSO improvements in order to meet federal and state requirements for control of the combined sewer discharges into Lake Union and Elliott Bay. Watermains are being relocated due to location and construction conflicts. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	202	124	10	0	0	0	0	0	336
<b>Project Total:</b>	202	124	10	0	0	0	0	0	336
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	202	124	10	0	0	0	0	0	336
<b>Appropriations Total*</b>	202	124	10	0	0	0	0	0	336
<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 - Water

## Design Commission Fees - Water

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** Ongoing

**Project ID:** C101050

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

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	34	20	20	20	21	21	22	22	180
<b>Project Total:</b>	34	20	20	20	21	21	22	22	180
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	34	20	20	20	21	21	22	22	180
<b>Appropriations Total*</b>	34	20	20	20	21	21	22	22	180
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Distribution Projects Development

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C1NW101-001

**End Date:** 4th Quarter 2011

**Location:** Citywide

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

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

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

This project provides funds for planning level work in the Water Distribution System business area prior to the identification of specific capital projects. This work includes policy analysis and program development to address emerging and unanticipated issues at the time of CIP budget development.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water 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 Water 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	

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

# SPU - Water

## Distribution System In-Line Gate Valves

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 1999

**Project ID:** C199012

**End Date:** Ongoing

**Location:** 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 replaces aging in-line gate valves throughout the water distribution system. Many of these valves are more than 50 years old and are obsolete. Spare parts are difficult, and in some cases impossible, to obtain. The confidence in the cost estimates is medium, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	311	45	60	60	62	63	65	66	732
<b>Project Total:</b>	311	45	60	60	62	63	65	66	732
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	311	45	60	60	62	63	65	66	732
<b>Appropriations Total*</b>	311	45	60	60	62	63	65	66	732
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Downstream Fish Habitat

**BCL Name:** Habitat Conservation Program

**BCL Code:** C160B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2001

**Project ID:** C1607

**End Date:** 4th Quarter 2008

**Location:** Cedar River

**Neighborhood District:** Not in a Neighborhood District

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

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

This project is a component of the Cedar River Habitat Conservation Plan (HCP). The project implements downstream habitat protection and restoration measures in the lower 22 miles of the mainstem Cedar River for the benefit of anadromous salmonid species, especially Chinook salmon, and to enhance natural ecological processes that shape and maintain riparian and aquatic habitat. Activities include habitat land acquisition in collaboration with King County and restoration work at Walsh Lake. This project is part of the HCP, which was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is high.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	242	4,267	1,447	214	327	11	0	0	6,508
<b>Project Total:</b>	242	4,267	1,447	214	327	11	0	0	6,508
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	242	4,267	1,447	214	327	11	0	0	6,508
<b>Appropriations Total*</b>	242	4,267	1,447	214	327	11	0	0	6,508
<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.*

**Environmental Steward Project Development**

**BCL Name:** Environmental Stewardship

**BCL Code:** C130B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C1NW301-003

**End Date:** 4th Quarter 2010

**Location:** Cedar & Tolt River Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

This project provides funds for performing planning level work on Environmental Stewardship activities prior to the formation of specific capital projects. This work includes development of Strategic Asset Management Plans for the Watershed and Environmental Program Area, policy analysis and program development to deal with issues related to the management of the Tolt & Cedar River Municipal Watersheds, and other work that assists in the identification of capital needs and development of concept level scopes and estimates for new capital projects.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water 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 Water 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	

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

**ESA - Tolt Levee Modifications**

**BCL Name:** Environmental Stewardship

**BCL Code:** C130B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C1NW301-004

**End Date:** 4th Quarter 2010

**Location:** City Of Carnation

**Neighborhood District:** Not in a Neighborhood District

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

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

This is a collaborative project between Seattle Public Utilities, Seattle City Light, and the King County Department of Natural Resources and Parks. The project removes approximately 1,000 feet of riverbank levee along the lower right bank of the Tolt River adjacent to the Tolt-Macdonald Park. It constructs a new setback levee at the edge of the floodplain to provide reconnection to off-channel salmon habitat, and to allow for the creation of new spawning and rearing habitat for Chinook salmon. There is high confidence in the estimated cost of \$650,000 to complete design, which is primarily funded by King County and grant funds. Construction costs are under development. The preliminary estimate of the total project cost is approximately \$3 million, of which SPU expects to provide between \$1.5 and \$1.8 million. In the 2004-2009 Adopted CIP, funding for this project was displayed under "Endangered Species Act – Snohomish River Basin" (C1011003). The project has not yet been approved by SPU's Asset Management Committee.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	0	0	347	276	290	306	314	322	1,855
<b>Project Total:</b>	0	0	347	276	290	306	314	322	1,855
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	347	276	290	306	314	322	1,855
<b>Appropriations Total*</b>	0	0	347	276	290	306	314	322	1,855
<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 - Water

## ESA Chinook Research & Monitoring

**BCL Name:** Environmental Stewardship  
**Type:** Rehabilitation or Restoration  
**Project ID:** C101048

**BCL Code:** C130B  
**Start Date:** 1st Quarter 2001  
**End Date:** 4th Quarter 2008

**Location:** Lake Washington Watershed  
**Neighborhood Plan:** Not in a Neighborhood Plan

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

This program provides funding for research and monitoring of Seattle's salmon populations, with emphasis on their habitat use in Lake Washington, the Ship Canal/Lake Union, and Ballard Locks. This program is part of the City's response to the listing of Chinook salmon as a threatened species under the federal Endangered Species Act. The results of these research and monitoring activities are used to minimize adverse impacts to endangered species from capital facilities and facility operations, as well as design salmon habitat restoration projects within the City of Seattle.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	429	210	217	223	236	248	0	0	1,563
<b>Project Total:</b>	429	210	217	223	236	248	0	0	1,563
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	429	210	217	223	236	248	0	0	1,563
<b>Appropriations Total*</b>	429	210	217	223	236	248	0	0	1,563
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## ESA Snohomish River Basin

**BCL Name:** Environmental Stewardship  
**Type:** Rehabilitation or Restoration  
**Project ID:** C101003

**BCL Code:** C130B  
**Start Date:** 2nd Quarter 2000  
**End Date:** Ongoing

**Location:** Snohomish River Basin  
**Neighborhood Plan:** Not in a Neighborhood Plan

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

This program acquires and develops critical habitat for salmon in the Tolt River Watershed. The program is coordinated with similar efforts undertaken by City Light, and projects may occur in cooperation with King County, affected tribes, or other local, state, and federal agencies. In the 2005-2010 Proposed CIP, funding for "ESA Tolt Levee Modifications" (C1NW301-004), which had been included in this project previously, is displayed in a separate CIP project.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	103	396	52	130	145	153	157	161	1,297
<b>Project Total:</b>	103	396	52	130	145	153	157	161	1,297
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	103	396	52	130	145	153	157	161	1,297
<b>Appropriations Total*</b>	103	396	52	130	145	153	157	161	1,297
<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 - Water

## Facility Improvements

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C404602-WF

**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 Water Fund's share of the project's cost.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	752	450	2,491	0	0	0	0	0	3,693
<b>Project Total:</b>	752	450	2,491	0	0	0	0	0	3,693
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	752	450	2,491	0	0	0	0	0	3,693
<b>Appropriations Total*</b>	752	450	2,491	0	0	0	0	0	3,693
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Fireflow & Pressure Improvement

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C1128

**End Date:** Ongoing

**Location:** 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 improves the water distribution system by adding new water lines; replacing, relining, or slip-lining existing lines; adjusting pressure zone boundaries; and installing pressure reducing and pressure boosting installations to meet evolving customer service levels for continuity of service, pressure, water quality, and fire protection. The project was titled "Distribution System Fireflow & Pressure Improvements" in the 2004-2009 Adopted CIP.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	30	528	700	700	2,723	5,111	5,751	5,894	21,437
<b>Project Total:</b>	30	528	700	700	2,723	5,111	5,751	5,894	21,437
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	30	528	700	700	2,723	5,111	5,751	5,894	21,437
<b>Appropriations Total*</b>	30	528	700	700	2,723	5,111	5,751	5,894	21,437
<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.*

**Fleet Management Study**

**BCL Name:** Shared Cost Projects  
**Type:** Rehabilitation or Restoration  
**Project ID:** C4NW106-006-WF

**BCL Code:** C410B  
**Start Date:** 1st Quarter 2005  
**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>									
Water Rates	0	0	123	0	0	0	0	0	123
<b>Project Total:</b>	0	0	123	0	0	0	0	0	123
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	123	0	0	0	0	0	123
<b>Appropriations Total*</b>	0	0	123	0	0	0	0	0	123
<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 - Water

## Fremont Bridge

**BCL Name:** Other Agencies  
**Type:** Improved Facility  
**Project ID:** C1NW201-003

**BCL Code:** C120B  
**Start Date:** 3rd Quarter 2004  
**End Date:** 1st Quarter 2006

**Location:** South End Of Fremont Bridge  
**Neighborhood Plan:** Not in a Neighborhood Plan

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

This project is in support of the Seattle Department of Transportation's project to replace the approach the Fremont Bridge. The plans are preliminary and the scope is not yet defined with regard to watermain impacts. An aging two-inch galvanized iron watermain below the south approach will most likely be replaced with an eight-inch ductile iron main to provide improved service and fire flow. This project is in a preliminary phase of development and cost estimates will be revised over time. The project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	10	50	13	0	0	0	0	73
<b>Project Total:</b>	0	10	50	13	0	0	0	0	73
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	10	50	13	0	0	0	0	73
<b>Appropriations Total*</b>	0	10	50	13	0	0	0	0	73
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Heavy Equipment Purchases - Water

**BCL Name:** Infrastructure  
**Type:** New Investment  
**Project ID:** C199068

**BCL Code:** C110B  
**Start Date:** 1st Quarter 1999  
**End Date:** Ongoing

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

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

This program replaces existing heavy equipment (such as loaders and bulldozers) used at Water Utility facilities. These pieces of equipment have reached the end of their useful lives. The project also funds retrofitting of existing equipment to meet these environmental standards. The confidence in the cost estimate is medium, and the 2005 acquisitions have been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	6,922	3,200	1,240	2,000	2,050	2,101	2,154	2,208	21,875
<b>Project Total:</b>	6,922	3,200	1,240	2,000	2,050	2,101	2,154	2,208	21,875
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	6,922	3,200	1,240	2,000	2,050	2,101	2,154	2,208	21,875
<b>Appropriations Total*</b>	6,922	3,200	1,240	2,000	2,050	2,101	2,154	2,208	21,875
<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.*

**Holgate/Amtrak Water Relocation**

**BCL Name:** Other Agencies  
**Type:** Rehabilitation or Restoration  
**Project ID:** C101009

**BCL Code:** C120B  
**Start Date:** 4th Quarter 1998  
**End Date:** 1st Quarter 2006

**Location:** S Holgate St.

**Neighborhood District:** Greater Duwamish

**Neighborhood Plan:** Duwamish

**Urban Village:** Duwamish

This project responds to Amtrak's redevelopment of rail yard facilities at S Holgate St. between 3rd Ave. S and 4th Ave. S. As part of this redevelopment, the grade of S Holgate St. is lowered, reducing the cover over the existing 20-inch feeder main in S Holgate St. This project replaces the main at a lower depth (at Amtrak's expense) under the new track and extends the water main replacement under existing tracks in Holgate in the vicinity of 3rd Ave S (at SPU's expense). Additionally, SPU supports Amtrak's project by performing shutdowns, water service relocations and installation of new services. The project is in construction, and the confidence in the cost estimate is high. No further review by SPU's Asset Management Committee is expected.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	12	238	10	2	0	0	0	0	262
<b>Project Total:</b>	12	238	10	2	0	0	0	0	262
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	12	238	10	2	0	0	0	0	262
<b>Appropriations Total*</b>	12	238	10	2	0	0	0	0	262
<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.*

**Instream Flow Management Studies**

**BCL Name:** Habitat Conservation Program

**BCL Code:** C160B

**Type:** Improved Facility

**Start Date:** 4th Quarter 2003

**Project ID:** C1608

**End Date:** 4th Quarter 2009

**Location:** Citywide

**Neighborhood District:** Ballard

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

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

This set of projects is part of the Cedar River Habitat Conservation Plan (HCP), which has received approval by SPU's Asset Management Committee. Studies conducted under this project generate information on relationships between stream flow and habitat conditions, with an emphasis on Chinook; support effective allocation of water above guaranteed levels; and address technical issues that emerged in the later stages of developing the HCP. The project includes studies of Chester Morse Dead Storage, to evaluate the feasibility of using dead storage in Chester Morse Lake to augment future water supply and flows, taking into account engineering, environmental, and economic issues. The project also includes a Accretion Flow Study, which studies Cedar River hydrology to confirm assumptions embodied in the HCP. The confidence in cost estimates for this project is high.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	31	203	533	613	708	319	204	0	2,611
<b>Project Total:</b>	31	203	533	613	708	319	204	0	2,611
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	31	203	533	613	708	319	204	0	2,611
<b>Appropriations Total*</b>	31	203	533	613	708	319	204	0	2,611
<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 - Water

## Joint Training Facility

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** New Facility

**Start Date:** 3rd Quarter 2004

**Project ID:** C4NW106-002-WF

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

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	1,700	0	0	0	0	0	1,700
<b>Project Total:</b>	0	0	1,700	0	0	0	0	0	1,700
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	1,700	0	0	0	0	0	1,700
<b>Appropriations Total*</b>	0	0	1,700	0	0	0	0	0	1,700
<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 Proposed Capital Improvement Program**

# SPU - Water

## Lake Youngs Outlet Dam Rehabilitation

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 2nd Quarter 2003

**Project ID:** C102013

**End Date:** 1st Quarter 2006

**Location:** Lake Youngs Reservoir

**Neighborhood District:** Not in a Neighborhood District

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

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

This project makes improvements at the dams at Lake Youngs to comply with Washington State dam safety requirements. Work identified or completed to date includes installation of survey monuments on all three dams; raising the west portion of the south dam of Lake Youngs, which is constructed of semi-structural fill that may fail in an earthquake and release water within the top six feet of the lake into the Kent valley; and replacement of the deteriorated siphon pipes at Lake Youngs that are used to provide water to Little Soos Creek. The cost estimates have a high confidence level, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	16	309	125	4	0	0	0	0	454
<b>Project Total:</b>	16	309	125	4	0	0	0	0	454
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	16	309	125	4	0	0	0	0	454
<b>Appropriations Total*</b>	16	309	125	4	0	0	0	0	454
<b>O &amp; M Costs (Savings)</b>			0	6	6	6	6	6	30

## Lake Youngs Outlet Dam Warning System

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2001

**Project ID:** C101006

**End Date:** 1st Quarter 2007

**Location:** South Of Lake Youngs Reservoir

**Neighborhood District:** Not in a Neighborhood District

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

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

This project installs a warning system for detecting dam failure at the Lake Youngs Outlet Dam, per regulatory requirement. Operations and maintenance costs listed below are included in the Department's operating budget. The cost estimate confidence level is high. This project is approved for construction by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	231	779	34	30	10	0	0	0	1,084
<b>Project Total:</b>	231	779	34	30	10	0	0	0	1,084
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	231	779	34	30	10	0	0	0	1,084
<b>Appropriations Total*</b>	231	779	34	30	10	0	0	0	1,084
<b>O &amp; M Costs (Savings)</b>			11	15	19	24	24	24	117

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

**Landsburg Fish Passage Improvements**

**BCL Name:** Habitat Conservation Program

**BCL Code:** C160B

**Type:** Improved Facility

**Start Date:** 2nd Quarter 1999

**Project ID:** C1604

**End Date:** 4th Quarter 2010

**Location:** Cedar River

**Neighborhood District:** Not in a Neighborhood District

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

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

This project mitigates the effects of the fish migration blockage on the Cedar River created by the Landsburg Dam, and is a key element of the Cedar River Watershed Habitat Conservation Plan (HCP). The project includes the planning, design, and construction of four major fish passage facilities; interim studies; and the implementation of monitoring and other mitigation measures to help restore Chinook, Coho and steelhead populations. Landsburg is the site of the City of Seattle's municipal water diversion and treatment facilities on the Cedar River, and the Landsburg Dam has blocked all anadromous fish migration since 1900. The HCP was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is high.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	11,760	872	202	203	226	210	4	11	13,488
<b>Project Total:</b>	11,760	872	202	203	226	210	4	11	13,488
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	11,760	872	202	203	226	210	4	11	13,488
<b>Appropriations Total*</b>	11,760	872	202	203	226	210	4	11	13,488
<b>O &amp; M Costs (Savings)</b>			169	169	169	169	169	169	1014

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

# SPU - Water

## Landsburg Flood Passage Improvement

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C104016

**End Date:** 4th Quarter 2007

**Location:** Landsburg Dam

**Neighborhood District:** Not in a Neighborhood District

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

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

This project addresses flood passage deficiencies at the City's Landsburg Dam on the Cedar River, making necessary improvements to reduce the risk of significant damage or loss of the dam in the event of a major flood. Preliminary engineering is proceeding per SPU's Asset Management Committee approval to identify the preferred option. Cost estimates are based on construction of a new 40-foot wide emergency spillway. Other options being considered are debris control and modification of the spillway to install an inflatable rubber dam. The rubber dam portion would be deflated in a major flood to provide increased spillway capacity and to allow better passage of debris. The cost estimate has a medium confidence level. Design and construction phases require SPU's Asset Management Committee approval.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	125	450	500	4,408	0	0	0	5,483
<b>Project Total:</b>	0	125	450	500	4,408	0	0	0	5,483
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	125	450	500	4,408	0	0	0	5,483
<b>Appropriations Total*</b>	0	125	450	500	4,408	0	0	0	5,483
<b>O &amp; M Costs (Savings)</b>			0	0	8	10	10	10	38

## Maple Leaf Gatehouse Pipe Refurbishing

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 2nd Quarter 1995

**Project ID:** C195001

**End Date:** 2nd Quarter 2007

**Location:** NE 83rd St.

**Neighborhood District:** Northeast

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

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

This project refurbishes valves and piping to allow more water from the Tolt source to be delivered to areas south of the Lake Washington Ship Canal normally served by the Cedar. The project makes it possible to supply the indoor water use of the City's entire water system from the Tolt. The project improves circulation in the Maple Leaf Reservoir. The project also addresses seismic issues with the gatehouse structure. The confidence in the cost estimate is medium.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	20	40	390	500	12	0	0	0	962
<b>Project Total:</b>	20	40	390	500	12	0	0	0	962
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	20	40	390	500	12	0	0	0	962
<b>Appropriations Total*</b>	20	40	390	500	12	0	0	0	962
<b>O &amp; M Costs (Savings)</b>			0	0	5	5	5	5	20

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

# SPU - Water

## Marine View/Des Moines Creek

**BCL Name:** Other Agencies

**BCL Code:** C120B

**Type:** Rehabilitation or Restoration

**Start Date:** 3rd Quarter 1997

**Project ID:** C197021

**End Date:** 1st Quarter 2006

**Location:** Marine View Dr.

**Neighborhood District:** Not in a Neighborhood District

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

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

This project responds to a project by the City of Des Moines that replaces an existing embankment and box culvert over the Des Moines Creek with a bridge. As a result of the City of Des Moines' project, SPU's Des Moines Way Pipeline over the embankment is decommissioned. The project includes the installation of thrust restraint system and blowoffs, and the decommissioning of existing facilities. The certainty of the cost estimate is medium-high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	184	496	400	2	0	0	0	0	1,082
<b>Project Total:</b>	184	496	400	2	0	0	0	0	1,082
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	184	496	400	2	0	0	0	0	1,082
<b>Appropriations Total*</b>	184	496	400	2	0	0	0	0	1,082
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Meter Replacement - Large (WF)

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** Rehabilitation or Restoration

**Start Date:** Ongoing

**Project ID:** C404102-WF

**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 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>									
Water Rates	6,348	724	728	574	588	603	618	0	10,183
<b>Project Total:</b>	6,348	724	728	574	588	603	618	0	10,183
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	6,348	724	728	574	588	603	618	0	10,183
<b>Appropriations Total*</b>	6,348	724	728	574	588	603	618	0	10,183
<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 - Water

## Morse Lake Dead Storage Facilities

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C103032

**End Date:** 4th Quarter 2008

**Location:** Cedar River Watershed, Northern Boundary

**Neighborhood District:** Not in a Neighborhood District

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

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

This project implements a cost-effective system for reliably delivering water from Cedar Dead Storage during drought conditions for water supply and instream flows. Depending on the outcome of a preliminary engineering study and approval by SPU's Asset Management Committee (AMC), either the existing facilities are improved or new facilities are constructed. Deficiencies in the existing Morse Lake Emergency Pumping Plants found during this project are also corrected while the longer-term improvements are being implemented. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	48	138	900	900	9,225	5,673	0	0	16,884
<b>Project Total:</b>	48	138	900	900	9,225	5,673	0	0	16,884
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	48	138	900	900	9,225	5,673	0	0	16,884
<b>Appropriations Total*</b>	48	138	900	900	9,225	5,673	0	0	16,884
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Multiple Utility Relocation

**BCL Name:** Other Agencies

**BCL Code:** C120B

**Type:** Rehabilitation or Restoration

**Start Date:** Ongoing

**Project ID:** C1NW201-001

**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 program enables SPU to respond to large projects that are conducted by other agencies and that impact Seattle's water system. Impacts include utility conflicts that require relocations, construction impacts, and coordination to minimize impacts to SPU's customers and supply. Often, these agencies reimburse SPU for some or all of the costs incurred. In the 2004-2009 Adopted CIP, this program was called the Other Agency - Multiple Utility Relocation Program.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	115	966	980	1,000	1,025	1,051	1,077	1,104	7,318
<b>Project Total:</b>	115	966	980	1,000	1,025	1,051	1,077	1,104	7,318
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	115	966	980	1,000	1,025	1,051	1,077	1,104	7,318
<b>Appropriations Total*</b>	115	966	980	1,000	1,025	1,051	1,077	1,104	7,318
<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 - Water

## Operations Control Center Upgrade

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C404501-WF

**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>									
Water Rates	0	325	2,195	631	0	0	0	0	3,151
<b>Project Total:</b>	0	325	2,195	631	0	0	0	0	3,151
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	325	2,195	631	0	0	0	0	3,151
<b>Appropriations Total*</b>	0	325	2,195	631	0	0	0	0	3,151
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Painting Program - Myrtle Tank

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 2nd Quarter 2004

**Project ID:** C104031

**End Date:** 2nd Quarter 2006

**Location:** 3600 SW Myrtle St.

**Neighborhood District:** Southwest

**Neighborhood Plan:** Morgan Junction (MOCA)

**Urban Village:** Morgan Junction

The Tank Painting program involves interior and exterior surface preparation and painting, minor structural repairs, and safety modifications on a regular maintenance cycle at the City's various tank sites. This project cleans and overcoats the tank exterior of the Myrtle Tanks. The interior lining on one of the tanks is also removed and replaced. Minor safety and operational modifications are made. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	74	653	8	0	0	0	0	735
<b>Project Total:</b>	0	74	653	8	0	0	0	0	735
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	74	653	8	0	0	0	0	735
<b>Appropriations Total*</b>	0	74	653	8	0	0	0	0	735
<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 - Water

## Painting Program - Richmond Highland

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 2nd Quarter 2004

**Project ID:** C104032

**End Date:** 2nd Quarter 2006

**Location:** N 195th St.

**Neighborhood District:** Not in a Neighborhood District

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

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

The Tank Painting program involves interior and exterior surface preparation and painting, minor structural repairs, and safety modifications on a regular maintenance cycle at the City's various tank sites. This project cleans and overcoats the tank exterior of the Richmond Highland Tanks (located north of Seattle city limits). The interior lining is completely removed and replaced. Minor safety and operational modifications are made. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	152	1,295	110	0	0	0	0	1,557
<b>Project Total:</b>	0	152	1,295	110	0	0	0	0	1,557
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	152	1,295	110	0	0	0	0	1,557
<b>Appropriations Total*</b>	0	152	1,295	110	0	0	0	0	1,557
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Painting Program - Steel Structures

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2005

**Project ID:** C1NW130

**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

The Steel Structures Painting program involves rehabilitation of the coating, lining, and paint systems on exposed steel pipelines, elevated tanks, standpipes, and other steel structures in the water system. The work involves minor structural repairs and safety modifications, surface preparation, and the application of a new coating system. This program is in a preliminary phase of development and cost estimates will be revised over time. The program has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	20	100	513	525	538	552	2,248
<b>Project Total:</b>	0	0	20	100	513	525	538	552	2,248
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	20	100	513	525	538	552	2,248
<b>Appropriations Total*</b>	0	0	20	100	513	525	538	552	2,248
<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 - Water

## Pump Station - Install Station Motors

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 4th Quarter 1999

**Project ID:** C199052

**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 replaces aging pump station motors throughout the water distribution system with new, more efficient motors. Some of the existing motors were installed 30 or more years ago and are now obsolete, with no replacement parts available. The project cost estimate has a medium confidence level. This project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	310	60	61	60	67	74	75	77	784
<b>Project Total:</b>	310	60	61	60	67	74	75	77	784
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	310	60	61	60	67	74	75	77	784
<b>Appropriations Total*</b>	310	60	61	60	67	74	75	77	784
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Pump Station - Queen Anne

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 1996

**Project ID:** C1AA005

**End Date:** 4th Quarter 2007

**Location:** 110 Lee St.

**Neighborhood District:** Magnolia/Queen Anne

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

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

This project constructs a concrete underground booster pump station by the Queen Anne Tanks and modifies the distribution system on Queen Anne Hill to isolate two areas of low water pressure so that the pressure can be boosted using the pump station. The project also improves fire flows along Queen Anne Avenue, and other areas on Queen Anne Hill where redevelopment has increased nominal fire flows above the single family residential limit for which the water system was originally designed. Design is complete, however, the project cannot proceed until the Queen Anne Tanks are replaced. The confidence in the cost estimate is high. Life to date costs were incurred before SPU began its Asset Management Committee (AMC) review process. Future spending on the project has not yet been approved by the AMC.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	1,045	5	50	3,000	523	0	0	0	4,623
<b>Project Total:</b>	1,045	5	50	3,000	523	0	0	0	4,623
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	1,045	5	50	3,000	523	0	0	0	4,623
<b>Appropriations Total*</b>	1,045	5	50	3,000	523	0	0	0	4,623
<b>O &amp; M Costs (Savings)</b>			0	10	13	16	16	16	71

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

# SPU - Water

## Purveyor Meters Replace - SPU

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2000

**Project ID:** C1107

**End Date:** 1st Quarter 2006

**Location:** Citywide

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

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

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

This project replaces SPU wholesale customer meters that are not performing within industry standards of accuracy. The project also funds customer-requested wholesale meter changes and upgrades. For the most part, SPU costs are directly reimbursed by the wholesale customers. The confidence in the cost estimate is medium, and the 2005 sites have not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	3,199	450	176	6	0	0	0	0	3,831
<b>Project Total:</b>	3,199	450	176	6	0	0	0	0	3,831
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	3,199	450	176	6	0	0	0	0	3,831
<b>Appropriations Total*</b>	3,199	450	176	6	0	0	0	0	3,831
<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 - Water

## Regional Water Conservation Program

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** Improved Facility

**Start Date:** 1st Quarter 1999

**Project ID:** C199032

**End Date:** Ongoing

**Location:** 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 is a cooperative regional project between SPU and 18 of Seattle's wholesale customers. Not all of Seattle's wholesale customers are participating. In cases, wholesale customers choose to find others ways to manage supply and demand, while in other cases, those wholesale customers do not purchase significant amounts of water from SPU. Fifty percent of the project is paid for from wholesale rates as part of current wholesale contract requirements. The project has the goal of reducing personal and commercial water consumption by 1% per year, which is approximately equal to the projected level of growth in regional water demand over the period 2000 to 2010 (14.5 million gallons per day peak demand savings). The project is required by Seattle's Water System Plan, wholesale contracts, and by City Council adopted legislation, including Resolutions 30091 and 30259 and Ordinance 120532. The confidence level of the cost estimate is high. This project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	12,649	3,358	3,300	3,550	3,998	4,360	4,900	5,519	41,634
<b>Project Total:</b>	12,649	3,358	3,300	3,550	3,998	4,360	4,900	5,519	41,634
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	12,649	3,358	3,300	3,550	3,998	4,360	4,900	5,519	41,634
<b>Appropriations Total*</b>	12,649	3,358	3,300	3,550	3,998	4,360	4,900	5,519	41,634
<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 - Water

## Renton Franchise/Line Valve CR

**BCL Name:** Other Agencies

**BCL Code:** C120B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2002

**Project ID:** C102023

**End Date:** 4th Quarter 2005

**Location:** Cedar River Pipeline

**Neighborhood District:** Not in a Neighborhood District

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

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

In 1998, the Cities of Seattle and Renton signed an agreement which addresses Renton's request that SPU add line valves east of downtown Renton to reduce flooding in the event of a pipeline failure. This project responds to that agreement. Project components include improvement or relocation of pipeline blowoffs, replacement of Cedar River Pipeline 1 & 2 Valves at Leo Street, automation of the I- 405 ball valves, modifications to Augusta Gatehouse, and other miscellaneous work. This project cost estimate has a high confidence level, and the project has been approved by SPU's Asset Management Committee

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	542	1,254	970	0	0	0	0	0	2,766
<b>Project Total:</b>	542	1,254	970	0	0	0	0	0	2,766
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	542	1,254	970	0	0	0	0	0	2,766
<b>Appropriations Total*</b>	542	1,254	970	0	0	0	0	0	2,766
<b>O &amp; M Costs (Savings)</b>			17	21	27	35	35	0	135

## Replace Air Valve Chambers

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** Ongoing

**Project ID:** C199060

**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 replaces existing valve chamber tops and access chimneys with larger diameter tops and chimneys, and makes minor air valve improvements as needed. The project provides SPU staff safer access to valves, and complies with industry safety standards. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	312	60	61	62	62	63	65	66	751
<b>Project Total:</b>	312	60	61	62	62	63	65	66	751
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	312	60	61	62	62	63	65	66	751
<b>Appropriations Total*</b>	312	60	61	62	62	63	65	66	751
<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 - Water

## Reservoir Covering - Beacon

**BCL Name:** Water Quality

**BCL Code:** C140B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2001

**Project ID:** C101060

**End Date:** 2nd Quarter 2008

**Location:** S Spokane St./Beacon Ave. S

**Neighborhood District:** Greater Duwamish

**Neighborhood Plan:** North Beacon Hill

**Urban Village:** Beacon Hill

Per Ordinance 121447, this project replaces the existing 49-million gallon open South Beacon Reservoir with a new underground reservoir of approximately the same size, and rehabilitates the pipes and valves connecting the reservoir to the water system. Additionally, the project retires the existing North Beacon Reservoir. The project helps to protect Seattle's water supply from vandalism and contamination, and improves the quality of life in the surrounding neighborhood by creating approximately 29 acres of open space and avoiding the unsightly appearance of other reservoir covering options. The confidence in the cost estimate is high. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	684	222	1,000	6,816	18,706	3,152	0	0	30,580
<b>Project Total:</b>	684	222	1,000	6,816	18,706	3,152	0	0	30,580
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	684	222	1,000	6,816	18,706	3,152	0	0	30,580
<b>Appropriations Total*</b>	684	222	1,000	6,816	18,706	3,152	0	0	30,580
<b>O &amp; M Costs (Savings)</b>			0	0	0	76	76	0	152

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

# SPU - Water

## Reservoir Covering - Lincoln

**BCL Name:** Water Quality

**BCL Code:** C140B

**Type:** Improved Facility

**Start Date:** 4th Quarter 1996

**Project ID:** C196012

**End Date:** 1st Quarter 2008

**Location:** Nagle Pl.

**Neighborhood District:** East District

**Neighborhood Plan:** Capitol Hill

**Urban Village:** Capitol Hill

Per Ordinance 121447, this project replaces the existing 21-million gallon Lincoln reservoir with a new concrete cast-in-place 12.5-million gallon reservoir. It also changes out the existing gas chlorinating system to a sodium hypochlorite (bleach) system, replaces pipe and valves connecting the new reservoir to the water system, and restores elements of the park site. The project helps to protect drinking water quality, and creates approximately four acres of open space. The Seattle Parks Department is conducting related work under the Cal Anderson (Lincoln) Park - Development - 2000 Parks Levy project (K733132). This project was the subject of a budget proviso in 2004, which was lifted by Ordinance 121447. The confidence in the cost estimate is high as the project is close to completion. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	13,599	5,460	404	20	5	5	0	0	19,493
<b>Project Total:</b>	13,599	5,460	404	20	5	5	0	0	19,493
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	13,599	5,460	404	20	5	5	0	0	19,493
<b>Appropriations Total*</b>	13,599	5,460	404	20	5	5	0	0	19,493
<b>O &amp; M Costs (Savings)</b>			0	43	55	71	91	91	351

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

# SPU - Water

## Reservoir Covering - Maple Leaf

**BCL Name:** Water Quality

**BCL Code:** C140B

**Type:** Improved Facility

**Start Date:** 4th Quarter 2001

**Project ID:** C101078

**End Date:** 3rd Quarter 2013

**Location:** NE 86th St.

**Neighborhood District:** Northeast

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

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

Per Ordinance 121447, this project replaces the existing Maple Leaf Reservoir with a new underground reservoir, and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination, and improves the quality of life in the surrounding neighborhood by creating open space and avoiding the unsightly appearance of other reservoir covering options. Funds spent to date have been for design. The total estimated cost of undergrounding the reservoir through 2013 is \$32 million. The confidence in the cost estimate is medium since construction is not scheduled to occur until 2011. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	159	251	513	2	0	0	277	442	1,644
<b>Project Total:</b>	159	251	513	2	0	0	277	442	1,644
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	159	251	513	2	0	0	277	442	1,644
<b>Appropriations Total*</b>	159	251	513	2	0	0	277	442	1,644
<b>O &amp; M Costs (Savings)</b>			26	33	54	69	69	0	251

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

**2005-2010 Proposed Capital Improvement Program**

**Reservoir Covering - Myrtle**

**BCL Name:** Water Quality  
**Type:** Improved Facility  
**Project ID:** C101076

**BCL Code:** C140B  
**Start Date:** 4th Quarter 2001  
**End Date:** 4th Quarter 2007

**Location:** 35th Ave. SW

**Neighborhood District:** Southwest

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

**Urban Village:** Morgan Junction

Per Ordinance 121447, this project replaces the existing open Myrtle Reservoir with a new underground reservoir of approximately the same size, rehabilitates the pipes and valves connecting the reservoir to the water system, and converts the disinfection system at the reservoir to sodium hypochlorite (bleach). The project helps to protect Seattle's water supply from vandalism and contamination, and improves the quality of life in the surrounding neighborhood by creating approximately three acres of open space and avoiding the unsightly appearance of other reservoir covering options. The confidence in the cost estimate is high. This project was the subject of a budget proviso in 2004, which was lifted by Ordinance 121447. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	198	226	955	2,108	2,563	0	0	0	6,050
<b>Project Total:</b>	198	226	955	2,108	2,563	0	0	0	6,050
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	198	226	955	2,108	2,563	0	0	0	6,050
<b>Appropriations Total*</b>	198	226	955	2,108	2,563	0	0	0	6,050
<b>O &amp; M Costs (Savings)</b>			0	0	0	8	9	0	17

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

# SPU - Water

## Reservoir Covering - Volunteer

**BCL Name:** Water Quality

**BCL Code:** C140B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2001

**Project ID:** C101059

**End Date:** 2nd Quarter 2015

**Location:** 12th Ave. E/E Prospect St.

**Neighborhood District:** East District

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

**Urban Village:** Capitol Hill

Per Ordinance 121447, this project replaces the existing Volunteer Reservoir with a new underground reservoir, and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination. SPU is also evaluating the possibility of decommissioning this reservoir instead of undergrounding it. This project was the subject of a budget proviso in 2004, which was lifted by Ordinance 121447. Funding provided in 2010 is to begin design work to underground the reservoir, if a decision is made to keep the reservoir in service. Deferring this project until 2010 helps to reduce near-term pressure on water rates, and allows the costs of the overall reservoir burying program to be slowly phased into commercial and residential water rates. The confidence in the cost estimate is medium since implementation is several years out. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	94	0	0	0	0	0	0	255	349
<b>Project Total:</b>	94	0	0	0	0	0	0	255	349
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	94	0	0	0	0	0	0	255	349
<b>Appropriations Total*</b>	94	0	0	0	0	0	0	255	349
<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 - Water

## Reservoir Covering - West Seattle

**BCL Name:** Water Quality

**BCL Code:** C140B

**Type:** Improved Facility

**Start Date:** 4th Quarter 2001

**Project ID:** C101075

**End Date:** 3rd Quarter 2010

**Location:** 8th Ave SW/SW Henderson

**Neighborhood District:** Southwest

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

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

Per Ordinance 121447, this project replaces the existing West Seattle Reservoir with a new underground reservoir, and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination, and improves the quality of life in the surrounding neighborhood by creating open space and avoiding the unsightly appearance of other reservoir covering options. This project was the subject of a budget proviso in 2004, which was lifted by Ordinance 121447. The confidence in the cost estimate is medium since the project's implementation is several years in the future. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	164	251	523	272	308	5,568	10,769	4,222	22,077
<b>Project Total:</b>	164	251	523	272	308	5,568	10,769	4,222	22,077
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	164	251	523	272	308	5,568	10,769	4,222	22,077
<b>Appropriations Total*</b>	164	251	523	272	308	5,568	10,769	4,222	22,077
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	17	0	17

## Rock Creek Fishway

**BCL Name:** Environmental Stewardship

**BCL Code:** C130B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2002

**Project ID:** C101008

**End Date:** 3rd Quarter 2006

**Location:** Lake Youngs

**Neighborhood District:** Not in a Neighborhood District

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

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

In 2000, SPU received notification from the Washington Department of Fish and Wildlife that the culvert crossing under the Lake Youngs Aqueduct on Rock Creek, approximately 3.5 miles north of Landsburg, does not comply with existing fish passage requirements. This project provides the following: an independent consultant assessment of the nature and magnitude of fish passage impairment at the current structure; conceptual development of a range of improvement options for the facility; and design, permitting, and construction of the selected improvement option.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	64	19	22	112	0	0	0	0	217
<b>Project Total:</b>	64	19	22	112	0	0	0	0	217
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	64	19	22	112	0	0	0	0	217
<b>Appropriations Total*</b>	64	19	22	112	0	0	0	0	217
<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.*

**SeaTac 3 Runway Pipeline Relocat**

**BCL Name:** Other Agencies

**BCL Code:** C120B

**Type:** Rehabilitation or Restoration

**Start Date:** 4th Quarter 1999

**Project ID:** C199075

**End Date:** 2nd Quarter 2006

**Location:** S 156th Wy.

**Neighborhood District:** Not in a Neighborhood District

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

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

This project relocates the Bow Lake Pipeline away from SeaTac Airport onto a new road along the north perimeter of the airport property. The original pipeline crossed both runways, and was not compatible with the third runway. As a result it was determined that the pipeline should be relocated away from the runways. The Port of Seattle is bearing the majority of the costs, and the amounts shown below are SPU's contribution to the project. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	251	57	545	20	0	0	0	0	873
<b>Project Total:</b>	251	57	545	20	0	0	0	0	873
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	251	57	545	20	0	0	0	0	873
<b>Appropriations Total*</b>	251	57	545	20	0	0	0	0	873
<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.*

**Seattle Direct Service Additional Conservation**

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2001

**Project ID:** C102010

**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 additional funding for measures to reduce personal and commercial water consumption in SPU's Direct Service Area for water supply. The program implements Ordinance 120532, adopted in 2001, and supplements funding provided under SPU's Regional Water Conservation Program (C199032). The project is designed in three phases. Phase One works with low-income housing providers; Phase Two works with subsidized and non-subsidized low-income households; and Phase Three work on clothes washers and irrigation system upgrades. Commercial and Industrial facility and equipment upgrades are done in all three phases, and may include reclaimed water projects if cost-effective. The confidence level of the cost estimate is low. The project has not been reviewed by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	999	939	988	3,198	3,280	3,677	3,877	4,305	21,263
<b>Project Total:</b>	999	939	988	3,198	3,280	3,677	3,877	4,305	21,263
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	999	939	988	3,198	3,280	3,677	3,877	4,305	21,263
<b>Appropriations Total*</b>	999	939	988	3,198	3,280	3,677	3,877	4,305	21,263
<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.*

**Seattle Monorail Project**

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** New Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C404301-WF

**End Date:** 4th Quarter 2008

**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.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	89	230	400	400	410	420	188	0	2,137
<b>Project Total:</b>	89	230	400	400	410	420	188	0	2,137
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	89	230	400	400	410	420	188	0	2,137
<b>Appropriations Total*</b>	89	230	400	400	410	420	188	0	2,137
<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.*

# SPU - Water

## Seattle Monorail Proj-WM Rplc (WF)

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** New Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C4NW103-001-WF

**End Date:** 4th Quarter 2008

**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 Seattle Monorail Project (SMP) is planning an initial 14-mile monorail route between Ballard and West Seattle that travels through downtown Seattle. The Monorail conceptual plan was approved by Seattle voters in November, 2002. This project funds construction of water utility relocations where appropriate, in association with implementation of a new monorail. The costs will be reimbursed by the SMP. Cost estimates shown here are preliminary and will be revised over time. The project has not been approved by the Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	1,200	2,550	1,819	1,340	0	0	6,909
<b>Project Total:</b>	0	0	1,200	2,550	1,819	1,340	0	0	6,909
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	1,200	2,550	1,819	1,340	0	0	6,909
<b>Appropriations Total*</b>	0	0	1,200	2,550	1,819	1,340	0	0	6,909
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Seismic Upgrade - Buildings

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 4th Quarter 1994

**Project ID:** C1118

**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

Under this project, the Broadway, Spokane Street, and Volunteer pump stations, Lincoln, Roosevelt, and Landsburg Tunnel gatehouses, and Tolt Screenhouse, Lake Youngs Office and Lake Forest Reservoir Chlorination buildings are seismically upgraded. SPU is evaluating the most economical way of addressing seismic vulnerabilities that have been identified in these facilities, which may consist in some cases of connecting the roofs to the walls. Cost estimates shown here are preliminary and will be revised over time. This project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	1,289	15	141	578	748	657	350	110	3,888
<b>Project Total:</b>	1,289	15	141	578	748	657	350	110	3,888
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	1,289	15	141	578	748	657	350	110	3,888
<b>Appropriations Total*</b>	1,289	15	141	578	748	657	350	110	3,888
<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 - Water

## Seismic Upgrade - CRPLs at Ginger Creek

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 1999

**Project ID:** C197032

**End Date:** 4th Quarter 2007

**Location:** Lake Youngs Wy. SE & Kirkland Wy. SE  
(Renton)

**Neighborhood District:** Not in a Neighborhood District

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

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

This project upgrades support systems for Cedar River Pipelined 1, 2, and 3 where they cross a boggy area at Ginger Creek so they can better withstand and remain operational after a medium to large earthquake. The confidence in the cost estimates is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	293	208	2,105	3	3	0	0	0	2,612
<b>Project Total:</b>	293	208	2,105	3	3	0	0	0	2,612
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	293	208	2,105	3	3	0	0	0	2,612
<b>Appropriations Total*</b>	293	208	2,105	3	3	0	0	0	2,612
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Seismic Upgrade - Pipeline Backbone

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2001

**Project ID:** C101038

**End Date:** 4th Quarter 2007

**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 seismic improvements to keep the essential components of the backbone pipeline system operational during and after a major earthquake. The program includes seismic vulnerability and hydraulic modeling of the system to determine pipeline vulnerabilities, earthquake failure effects on the system, and cost effective mitigation approaches. For budgeting purposes, it is anticipated that approximately 12 isolation valves will be installed at various locations to prevent vulnerable pipelines from draining the system. Types of valves being considered include seismic-actuated, remote controlled, and excess flow. The confidence in the cost estimate is medium. The project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	194	205	205	1,700	154	0	0	0	2,458
<b>Project Total:</b>	194	205	205	1,700	154	0	0	0	2,458
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	194	205	205	1,700	154	0	0	0	2,458
<b>Appropriations Total*</b>	194	205	205	1,700	154	0	0	0	2,458
<b>O &amp; M Costs (Savings)</b>			0	0	5	5	5	5	20

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

# SPU - Water

## Seismic Upgrade - Tanks

**BCL Name:** Infrastructure  
**Type:** Improved Facility  
**Project ID:** C1120

**BCL Code:** C110B  
**Start Date:** 4th Quarter 1994  
**End Date:** 4th Quarter 2011

**Location:** Citywide

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

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

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

This project makes seismic upgrades to Barton Standpipe 2, Woodland Park Standpipe 1, 2, Foy Standpipe 2, Landsburg Elevated Tanks 1 and 2, Maple Leaf Elevated Tank 1, Beverly Park Elevated Tank 1 and the Volunteer Park Standpipe1. Typical upgrades include improving standpipe anchorage and foundations and adding a seismic isolators and strengthening braces of elevated tanks. Under this program to date, SPU has replaced the Charlestown Standpipe, and seismically upgraded the Richmond Highlands Tanks and the Magnolia Tank. Most of the funding allocated for 2005 and 2006 is for construction of Queen Anne Standpipes replacement, which has already been approved by SPU's Asset Management Committee (AMC). Seismic upgrades to the remaining tank and standpipes have not yet been approved by the AMC. It is anticipated that some of the facilities listed may not be upgraded as the cost of the upgrades may outweigh the benefit from the facility to the water system. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	5,988	139	1,445	4,011	723	1,534	2,719	4,548	21,107
<b>Project Total:</b>	5,988	139	1,445	4,011	723	1,534	2,719	4,548	21,107
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	5,988	139	1,445	4,011	723	1,534	2,719	4,548	21,107
<b>Appropriations Total*</b>	5,988	139	1,445	4,011	723	1,534	2,719	4,548	21,107
<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 - Water

## Shared Opportunity Projects

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2005

**Project ID:** C4NW106-005-WF

**End Date:** Ongoing

**Location:** 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 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>									
Water 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 Water 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	

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

# SPU - Water

## SLU - Water Main Replacement/South Lake Union Park

**BCL Name:** Other Agencies **BCL Code:** C120B  
**Type:** Improved Facility **Start Date:** 4th Quarter 2004  
**Project ID:** C104035 **End Date:** 4th Quarter 2006  
**Location:** South Lake Union **Neighborhood District:** Lake Union  
**Neighborhood Plan:** Not in a Neighborhood Plan **Urban Village:** South Lake Union

This project replaces an existing and aging watermain during the South Lake Union Park Redevelopment. This work includes the design and construction of a 750-foot eight-inch watermain along Terry Avenue N, from the intersection of Valley St. N. This watermain has a high incidence of leaks and, when combined with the park construction, the leak or failure rate of the water could increase. See also the South Lake Union Park - Development project (K733134) in the Parks CIP. The planning phase cost estimate has medium confidence.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	15	155	30	0	0	0	0	200
<b>Project Total:</b>	0	15	155	30	0	0	0	0	200
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	15	155	30	0	0	0	0	200
<b>Appropriations Total*</b>	0	15	155	30	0	0	0	0	200
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Snoqualmie River Bank Stabilization

**BCL Name:** Other Agencies **BCL Code:** C120B  
**Type:** Rehabilitation or Restoration **Start Date:** 1st Quarter 2006  
**Project ID:** C1NW201-007 **End Date:** 4th Quarter 2007  
**Location:** Snoqualmie River Near Tolt Pipeline Crossing **Neighborhood District:** Not in a Neighborhood District  
**Neighborhood Plan:** Not in a Neighborhood Plan **Urban Village:** Not in an Urban Village

This project stabilizes the north bank of the Snoqualmie River, near river-mile 13.5, to minimize further erosion and thereby protect the Tolt Pipelines. Work takes place on private property. The Water and Land Resource Division of the King County Department of Natural Resources and Parks plans to design and construct the project with funding support from SPU. There is some uncertainty about the schedule and timing of this project, which is driven by King County. The confidence in the cost estimate is low, and the project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	0	47	513	0	0	0	560
<b>Project Total:</b>	0	0	0	47	513	0	0	0	560
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	0	47	513	0	0	0	560
<b>Appropriations Total*</b>	0	0	0	47	513	0	0	0	560
<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 - Water

## Sound Transit Light Rail - Water

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** New Facility

**Start Date:** 1st Quarter 2003

**Project ID:** C404401-WF

**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 S 154th St. near Seattle/Tacoma Airport. An agreement authorizing all City services related to Sound Transit light rail construction ("Sound Transit Construction Services Agreement") was adopted via Ordinance 121312 in July 2003. Sound Transit intends to issue task orders authorizing multiple years of City service for each contract segment. See also Sound Transit projects in the City Light and SDOT CIPs.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	1,260	1,476	1,445	964	0	0	0	5,145
<b>Project Total:</b>	0	1,260	1,476	1,445	964	0	0	0	5,145
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	1,260	1,476	1,445	964	0	0	0	5,145
<b>Appropriations Total*</b>	0	1,260	1,476	1,445	964	0	0	0	5,145
<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 - Water

## Sound Transit Light Rail - Wtr Btmnt (WF)

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C4NW104-WF

**End Date:** 4th Quarter 2007

**Location:** Regional

**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 the relocation/replacement of water mains, hydrants, water services, transmission lines and other water system facilities affected by Sound Transit's Link Light Rail construction where the costs are funded by SPU (Water Fund) or shared by SPU (Water Fund) and Sound Transit for the following reasons: relocation/replacement is not a total direct impact by Sound Transit's Light Rail Project; agreements to share in the cost of replacements because of a mutual benefit to SPU and Sound Transit; to address water system relocations caused by other improvements made for the City's benefit (e.g., undergrounding of Seattle City Light power lines); or opportunities to replace aging water system infrastructure in or adjacent to the Light Rail Project that are not affected by the Light Rail Project. The area affected is along the present 14-mile light rail alignment in the City of Seattle and King County. The cost certainty is medium-high. An agreement authorizing all City services related to Sound Transit light rail construction ("Sound Transit Construction Services Agreement") was adopted via Ordinance 121312 in July 2003. Sound Transit intends to issue task orders authorizing multiple years of City service for each contract segment. See also Sound Transit projects in the City Light and SDOT CIPs.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	1,400	2,000	718	0	0	0	4,118
<b>Project Total:</b>	0	0	1,400	2,000	718	0	0	0	4,118
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	1,400	2,000	718	0	0	0	4,118
<b>Appropriations Total*</b>	0	0	1,400	2,000	718	0	0	0	4,118
<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 Proposed Capital Improvement Program**

**South Lake Union Water Main/Utility Coordination**

**BCL Name:** Other Agencies **BCL Code:** C120B  
**Type:** Improved Facility **Start Date:** 1st Quarter 2004  
**Project ID:** C104036 **End Date:** 1st Quarter 2006

**Location:** South Lake Union **Neighborhood District:** Lake Union  
**Neighborhood Plan:** Not in a Neighborhood Plan **Urban Village:** South Lake Union

This project funds design and construction to relocate or replace one or more water mains that are located along the route of the South Lake Union Streetcar. The project also provides for related water system reconfigurations. SPU anticipates being able to complete this work in conjunction with the construction of the South Lake Union Streetcar project (see Project TC366260 in the Seattle Department of Transportation CIP), to avoid multiple street disruptions. It is anticipated that watermain replacement and relocation work will be performed by the streetcar contractor whereas water service and temporary water mains work will be done by SPU crews. Funding provided includes \$2 million for construction to occur in 2006. Some funding is also included in this project to address the impacts to SPU water infrastructure from the possible undergrounding of Seattle City Light power facilities and the development of other possible transportation improvements in the South Lake Union area. This effort identifies SPU water system direct impacts, opportunities for system improvements, and cost responsibilities. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	36	71	2,000	0	0	0	0	2,107
<b>Project Total:</b>	0	36	71	2,000	0	0	0	0	2,107
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	36	71	2,000	0	0	0	0	2,107
<b>Appropriations Total*</b>	0	36	71	2,000	0	0	0	0	2,107
<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 - Water

## Spoils Yard & Decant Facility (WF)

**BCL Name:** Shared Cost Projects

**BCL Code:** C410B

**Type:** New Facility

**Start Date:** 3rd Quarter 2004

**Project ID:** C4NW106-007-WF

**End Date:** 4th Quarter 2005

**Location:** SW Michigan St./W Marginal St. S

**Neighborhood District:** Greater Duwamish

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

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

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

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water 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 Water 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	

## Stream & Riparian Restoration

**BCL Name:** Habitat Conservation Program

**BCL Code:** C160B

**Type:** Rehabilitation or Restoration

**Start Date:** 2nd Quarter 2000

**Project ID:** C1602

**End Date:** Ongoing

**Location:** Cedar River

**Neighborhood District:** Not in a Neighborhood District

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

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

Stream and Riparian Restoration is a category of projects within the Cedar River Watershed Habitat Conservation Plan (HCP) that involves mitigation related to streams, and forests adjacent to streams and other aquatic habitats. Projects include streambank stabilization, streamside revegetation, large woody debris placement, conifer under-planting, restoration thinning, ecological thinning, stream-crossing projects to improve flow patterns, stream-crossing improvements to re-establish fish passage, and bull trout habitat studies. The HCP was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is high.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	1,776	726	837	827	799	826	832	852	7,475
<b>Project Total:</b>	1,776	726	837	827	799	826	832	852	7,475
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	1,776	726	837	827	799	826	832	852	7,475
<b>Appropriations Total*</b>	1,776	726	837	827	799	826	832	852	7,475
<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 - Water

## Tolt Bridges

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2004

**Project ID:** C1131

**End Date:** 4th Quarter 2007

**Location:** Tolt River Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

This project replaces three deteriorated bridges in the Tolt River Watershed. A 2003 cost/benefit analysis determined that access is needed and the existing bridges are no longer able to carry the required loading, resulting in safety and environmental risks. This project combines the following projects, which were displayed as separate projects in the 2004-2009 Adopted CIP: Tolt Bridge Replacement - Dorothy Creek (C103018), Tolt Bridge Replacement - Siwash Creek (C197029), and Tolt Bridge Replacement - Chuck Judd Creek (C1NW119-010). Confidence in the cost estimate is medium. This project has not yet been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	202	6	210	359	0	0	0	777
<b>Project Total:</b>	0	202	6	210	359	0	0	0	777
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	202	6	210	359	0	0	0	777
<b>Appropriations Total*</b>	0	202	6	210	359	0	0	0	777
<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.*

**Tolt Eastside Supply Line Upgrade**

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2009

**Project ID:** C1NW101-004

**End Date:** 4th Quarter 2016

**Location:** Tolt Pipeline

**Neighborhood District:** Not in a Neighborhood District

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

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

This project rehabilitates part of the Tolt Eastside Supply Line by replacing approximately 19,495 linear feet of old 48-inch pipe with new 48-inch steel pipe, and approximately 699 linear feet of existing 42-inch pipe with new 48-inch steel pipe. The demand for the project is uncertain as the existing pipe may have a much longer useful life. Factors that guide SPU in determining when and to what extent to implement the project include performance of the existing pipe, as measured by leak and break history, as well the possible availability of innovative non-destructive and no-dig pipe inspection methods. This project is in a preliminary phase of development and cost estimates will be revised over time, if the project proceeds. The project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	0	0	0	0	1,059	1,858	2,917
<b>Project Total:</b>	0	0	0	0	0	0	1,059	1,858	2,917
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	0	0	0	0	1,059	1,858	2,917
<b>Appropriations Total*</b>	0	0	0	0	0	0	1,059	1,858	2,917
<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.*

**Tolt Fisheries Mitigation**

**BCL Name:** Environmental Stewardship

**BCL Code:** C130B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C104057

**End Date:** 2nd Quarter 2006

**Location:** South Fork Tolt River

**Neighborhood District:** Not in a Neighborhood District

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

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

This project funds fish habitat conservation efforts on the South Fork Tolt River based on an agreement between the Tolt Fisheries Advisory Groups and the City of Seattle. This project funds SPU's spending obligation pursuant to the 1989 Tolt Settlement Agreement for the federal relicensing of the South Fork Tolt Dam. The allocation of this funding is under the management of the interagency Tolt Fish Advisory Committee (TFAC). In 2004, a project to place large woody debris in the South Fork Tolt River was approved by TFAC and is now in the planning stages. This project improves habitat conditions for salmon and steelhead in the river and is scheduled for completion in 2005. A portion of the mitigation fund is allocated for this project. The project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	138	185	9	0	0	0	0	332
<b>Project Total:</b>	0	138	185	9	0	0	0	0	332
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	138	185	9	0	0	0	0	332
<b>Appropriations Total*</b>	0	138	185	9	0	0	0	0	332
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

**Tolt Instrument and Warning Upgrade**

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 1999

**Project ID:** C1AA012

**End Date:** Ongoing

**Location:** Tolt Dam

**Neighborhood District:** Not in a Neighborhood District

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

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

This project replaces outmoded equipment and improves the reliability of the required Tolt Instrument and Warning System for detecting dam failure. The project cost estimate has a high confidence level. Because this project is in construction, no approval by SPU's Asset Management Committee is required.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	1,857	25	47	46	26	26	27	28	2,082
<b>Project Total:</b>	1,857	25	47	46	26	26	27	28	2,082
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	1,857	25	47	46	26	26	27	28	2,082
<b>Appropriations Total*</b>	1,857	25	47	46	26	26	27	28	2,082
<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 - Water

## Tolt Pipeline I - Phase III-B

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 1999

**Project ID:** C199003

**End Date:** 2nd Quarter 2006

**Location:** Tolt Pipeline

**Neighborhood District:** Not in a Neighborhood District

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

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

This project is part of a long-term plan to rehabilitate or replace the Tolt Pipeline I. To date, four sections of the pipeline (totaling approximately 12 miles) have been re-lined with a smaller pipe or replaced. This project rehabilitates the last remaining higher-risk section of the original pipeline where it crosses the Snoqualmie River Valley for a length of about one mile. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	417	319	3,430	61	0	0	0	0	4,227
<b>Project Total:</b>	417	319	3,430	61	0	0	0	0	4,227
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	417	319	3,430	61	0	0	0	0	4,227
<b>Appropriations Total*</b>	417	319	3,430	61	0	0	0	0	4,227
<b>O &amp; M Costs (Savings)</b>			5	6	8	10	10	0	39

## Tolt Pipeline II - Phase IV

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** Improved Facility

**Start Date:** 1st Quarter 1995

**Project ID:** C194029

**End Date:** 4th Quarter 2006

**Location:** Tolt Pipeline Right of Way

**Neighborhood District:** Not in a Neighborhood District

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

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

Tolt Pipeline II is a 25-mile second regional supply pipeline for the Tolt System, ranging in diameter from 54 to 87 inches. This new pipeline improves the reliability of the Tolt system, allows rehabilitation of remaining portions of Tolt Pipeline I, enhances operational flexibility, increases reliability of the system during a major flood, landslide, or earthquake, and provides increased capacity. Phase IV included the installation of six miles of 54-inch and 60-inch diameter welded steel pipeline. The project is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	31,377	126	55	12	0	0	0	0	31,570
<b>Project Total:</b>	31,377	126	55	12	0	0	0	0	31,570
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	31,377	126	55	12	0	0	0	0	31,570
<b>Appropriations Total*</b>	31,377	126	55	12	0	0	0	0	31,570
<b>O &amp; M Costs (Savings)</b>			11	15	19	24	24	0	93

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

# SPU - Water

## Tolt River Watershed Road Improvements

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Improved Facility

**Start Date:** 1st Quarter 1996

**Project ID:** C196007

**End Date:** 4th Quarter 2008

**Location:** Tolt Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

This project provides drainage and other road improvements on portions of the 70 miles of forest roads in the South Fork Tolt River Watershed. The confidence level of the cost estimate is medium. The project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	1,774	170	170	170	174	179	0	0	2,637
<b>Project Total:</b>	1,774	170	170	170	174	179	0	0	2,637
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	1,774	170	170	170	174	179	0	0	2,637
<b>Appropriations Total*</b>	1,774	170	170	170	174	179	0	0	2,637
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Tolt Watershed Management Plan

**BCL Name:** Environmental Stewardship

**BCL Code:** C130B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C1NW301-002

**End Date:** 4th Quarter 2009

**Location:** Tolt River Watershed

**Neighborhood District:** Not in a Neighborhood District

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

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

This project develops a Tolt Watershed Management Plan to bring operations in the Tolt municipal watershed area into alignment with the operation of other major watershed facilities, and to provide guidance for a wide array of management activities into the future. Major elements addressed in the plan include forestland management, facility security and protection, road maintenance and operations, and fish and wildlife management. Historically, water supply and watershed management operations have been undertaken in the Tolt Watershed area with little formal written protocol or management guidance.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	300	200	205	210	108	0	1,023
<b>Project Total:</b>	0	0	300	200	205	210	108	0	1,023
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	300	200	205	210	108	0	1,023
<b>Appropriations Total*</b>	0	0	300	200	205	210	108	0	1,023
<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 - Water

## TPL2 II&III East of Tieline

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** Improved Facility

**Start Date:** 3rd Quarter 1987

**Project ID:** C100084

**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

Tolt Pipeline No. 2 has been planned as a 25-mile second regional supply pipeline for the Tolt System, ranging in diameter from 54 to 87 inches, and to be constructed in several phases over a period of decades. Phases II and III include installation of eight miles of 60-, 75- and 81-inch diameter welded steel pipeline between Duvall and Redmond along a different route than the original and still in use Tolt Pipeline No. 1. The project is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	27,638	572	73	32	23	13	0	0	28,351
<b>Project Total:</b>	27,638	572	73	32	23	13	0	0	28,351
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	27,638	572	73	32	23	13	0	0	28,351
<b>Appropriations Total*</b>	27,638	572	73	32	23	13	0	0	28,351
<b>O &amp; M Costs (Savings)</b>			10	10	10	10	10	0	50

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

**2005-2010 Proposed Capital Improvement Program**

# SPU - Water

## TPL2 II&III West of Tieline

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** Improved Facility

**Start Date:** 3rd Quarter 1987

**Project ID:** C100083

**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

Tolt Pipeline II is a 25-mile second regional supply pipeline for the Tolt System, ranging in diameter from 54 to 87 inches. This new pipeline improves the reliability of the Tolt system, allows rehabilitation of remaining portions of Tolt Pipeline I, enhances operational flexibility, increases reliability of the system during a major flood, landslide, or earthquake, and provides increased capacity. Phases II and III include installation of eight miles of 60-, 75- and 81-inch diameter steel-welded joint pipeline. The project is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	26,338	70	30	5	5	5	0	0	26,453
<b>Project Total:</b>	26,338	70	30	5	5	5	0	0	26,453
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	26,338	70	30	5	5	5	0	0	26,453
<b>Appropriations Total*</b>	26,338	70	30	5	5	5	0	0	26,453
<b>O &amp; M Costs (Savings)</b>			20	20	20	20	20	0	100

## Transmission Pipeline Analysis

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2001

**Project ID:** C101043

**End Date:** Ongoing

**Location:** 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 assesses the condition of water transmission pipelines, the physical environment surrounding them, and the total cost of repair, rehabilitation, and maintenance. This project enables pipeline replacement and rehabilitation decisions to be based on improved estimates of the condition and service life of pipelines. Condition data along with other parameters are modeled to allow for longer-term prioritization of pipeline replacements. The confidence in the cost estimate is low, and the project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	213	115	200	150	154	158	162	166	1,318
<b>Project Total:</b>	213	115	200	150	154	158	162	166	1,318
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	213	115	200	150	154	158	162	166	1,318
<b>Appropriations Total*</b>	213	115	200	150	154	158	162	166	1,318
<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 - Water

## Transmission Pipelines Rehabilitation

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2005

**Project ID:** C1127

**End Date:** Ongoing

**Location:** Citywide

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

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

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

This program repairs and upgrades water transmission pipes as deficiencies are identified. The confidence in the cost estimate is low, and the project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	500	500	1,025	1,051	1,077	1,104	5,257
<b>Project Total:</b>	0	0	500	500	1,025	1,051	1,077	1,104	5,257
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	500	500	1,025	1,051	1,077	1,104	5,257
<b>Appropriations Total*</b>	0	0	500	500	1,025	1,051	1,077	1,104	5,257
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Treatment & Transmission Project Development

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C1NW501-008

**End Date:** Ongoing

**Location:** Various

**Neighborhood District:** Not in a Neighborhood District

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

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

This project provides funds for performing planning level work in SPU's Treatment and Transmission System business area prior to the formation of specific capital projects. This work includes policy analysis and program development to deal with issues related to the management of the distribution system.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water 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 Water 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	

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

**Upland Reserve Forest Restoration**

**BCL Name:** Habitat Conservation Program

**BCL Code:** C160B

**Type:** Rehabilitation or Restoration

**Start Date:** 2nd Quarter 2000

**Project ID:** C1603

**End Date:** Ongoing

**Location:** Cedar River

**Neighborhood District:** Not in a Neighborhood District

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

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

This program within the Cedar River Habitat Conservation Plan (HCP) includes restoration planting, and restoration and ecological thinning within previously harvested upland forests. Planting occurs in selected areas of forest to promote the development of more natural and diverse ecological communities of vegetation. Restoration thinning reduces the density of trees to encourage tree growth. Ecological thinning accelerates the development of characteristics of mature forests. Work also includes marbled murrelet surveys and forest inventory and modeling. The inventory is used to plan restoration work, and the modeling is used to project effects of restoration treatments in development of the forest over time. This project was titled "Upland Forest Restoration" in the 2004-2009 Adopted CIP. The HCP was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is high.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	1,861	689	854	825	825	767	715	733	7,269
<b>Project Total:</b>	1,861	689	854	825	825	767	715	733	7,269
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	1,861	689	854	825	825	767	715	733	7,269
<b>Appropriations Total*</b>	1,861	689	854	825	825	767	715	733	7,269
<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 - Water

## Valley St. Connector Water Utility

**BCL Name:** Other Agencies  
**Type:** Improved Facility  
**Project ID:** C145009

**BCL Code:** C120B  
**Start Date:** 1st Quarter 1998  
**End Date:** 2nd Quarter 2005

**Location:** Various

**Neighborhood District:** Lake Union

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

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

The project relocates watermains in conjunction with construction of Combined Sewer Overflow (CSO) facilities near South Lake Union. The City and King County are constructing CSO improvements at E. Denny Way and Lake Union in order to meet federal and state requirements for control of combined sewer discharges into Lake Union and Elliott Bay. Watermains are being relocated due to location and construction conflicts. The confidence in the cost estimate is high, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	24	60	5	0	0	0	0	0	89
<b>Project Total:</b>	24	60	5	0	0	0	0	0	89
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	24	60	5	0	0	0	0	0	89
<b>Appropriations Total*</b>	24	60	5	0	0	0	0	0	89
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## W Duwamish Waterway Tunnel/Rails

**BCL Name:** Other Agencies  
**Type:** Rehabilitation or Restoration  
**Project ID:** C194034

**BCL Code:** C120B  
**Start Date:** 2nd Quarter 2003  
**End Date:** 1st Quarter 2006

**Location:** SW Spokane St.

**Neighborhood District:** Greater Duwamish

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

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

This work is implemented as part of an agreement between SPU and the King County Department of Natural Resources and Parks for the W Duwamish Waterway Tunnel Crossing. The project relocates a watermain.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	153	0	50	2	0	0	0	0	205
<b>Project Total:</b>	153	0	50	2	0	0	0	0	205
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	153	0	50	2	0	0	0	0	205
<b>Appropriations Total*</b>	153	0	50	2	0	0	0	0	205
<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 - Water

## Water Design Standards & Guideline Program

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 2nd Quarter 2002

**Project ID:** C102028

**End Date:** 4th Quarter 2008

**Location:** N/A

**Neighborhood District:** Not in a Neighborhood District

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

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

This project creates detailed design standards for various types of water facilities, to streamline future design efforts, reduce costs, and increase the quality of future new facilities. The confidence in the cost estimate is high, and the first phase of the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	23	186	200	200	256	263	0	0	1,128
<b>Project Total:</b>	23	186	200	200	256	263	0	0	1,128
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	23	186	200	200	256	263	0	0	1,128
<b>Appropriations Total*</b>	23	186	200	200	256	263	0	0	1,128
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Water Infrastruc - Service Renewal

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** Ongoing

**Project ID:** C1109

**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 replaces water service lines that are substandard, leaking, or have outlived their useful life, and disconnects service lines that are no longer required. This estimate is at a medium confidence level. This project has been approved by the Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	38,654	5,122	5,123	4,146	4,278	4,385	4,495	4,607	70,810
<b>Project Total:</b>	38,654	5,122	5,123	4,146	4,278	4,385	4,495	4,607	70,810
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	38,654	5,122	5,123	4,146	4,278	4,385	4,495	4,607	70,810
<b>Appropriations Total*</b>	38,654	5,122	5,123	4,146	4,278	4,385	4,495	4,607	70,810
<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 - Water

## Water Infrastructure - Hydrant Replacement/Relocation

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** Ongoing

**Project ID:** C1110

**End Date:** 4th Quarter 2009

**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 replaces older and damaged hydrants to ensure a reliable and adequate supply of water for fire protection. The Seattle Fire Department provides SPU with information on hydrants that are found to be malfunctioning. Other repairs or replacements occur when hydrants are damaged by vehicles. On average, the Department repairs or replaces between 7 and 25 hydrants per year. The project was titled "Hydrant Program – Replacement & Relocation" in the 2004-2009 Adopted CIP. This project is in a preliminary phase of development and cost estimates will be revised over time, reflecting uncertainty about how many hydrants will be found to be malfunctioning in a given year. The project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	2,076	208	222	226	232	237	243	0	3,444
<b>Project Total:</b>	2,076	208	222	226	232	237	243	0	3,444
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	2,076	208	222	226	232	237	243	0	3,444
<b>Appropriations Total*</b>	2,076	208	222	226	232	237	243	0	3,444
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Water Infrastructure - New Hydrants

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** New Facility

**Start Date:** Ongoing

**Project ID:** C1112

**End Date:** 4th Quarter 2009

**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 new fire hydrants citywide. The number of new hydrants installed each year varies with demand. The confidence in the cost estimates is medium, and the project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	94	65	64	12	12	13	13	0	273
<b>Project Total:</b>	94	65	64	12	12	13	13	0	273
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	94	65	64	12	12	13	13	0	273
<b>Appropriations Total*</b>	94	65	64	12	12	13	13	0	273
<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 - Water

## Water Infrastructure - New Taps

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** New Facility

**Start Date:** Ongoing

**Project ID:** C1113

**End Date:** 4th Quarter 2009

**Location:** 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 installs new water service lines (taps) from the City watermain to customers' property lines. Taps are usually installed within an average of six weeks following a customer's request. These cost estimates are at a medium confidence level. This project has been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	29,372	3,354	3,601	3,600	3,690	3,782	3,877	0	51,276
<b>Project Total:</b>	29,372	3,354	3,601	3,600	3,690	3,782	3,877	0	51,276
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	29,372	3,354	3,601	3,600	3,690	3,782	3,877	0	51,276
<b>Appropriations Total*</b>	29,372	3,354	3,601	3,600	3,690	3,782	3,877	0	51,276
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Water Infrastructure - Watermain Extensions

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** New Facility

**Start Date:** Ongoing

**Project ID:** C1111

**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 Watermain Extension Program assists private developers to install new standard watermains and fire hydrants to serve properties that are being developed or re-developed. Once constructed and commissioned, the new watermains are turned over to SPU to own, operate, and maintain. Costs incurred by SPU under this program are almost fully reimbursed by the parties triggering the need for the new watermains. The confidence in the cost estimates is medium, and the program has been approved by the Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	6,644	1,019	1,191	1,108	1,025	1,051	1,077	1,104	14,219
<b>Project Total:</b>	6,644	1,019	1,191	1,108	1,025	1,051	1,077	1,104	14,219
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	6,644	1,019	1,191	1,108	1,025	1,051	1,077	1,104	14,219
<b>Appropriations Total*</b>	6,644	1,019	1,191	1,108	1,025	1,051	1,077	1,104	14,219
<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.*

**Water Infrastructure - Watermain Replacement**

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2001

**Project ID:** C1104

**End Date:** 2nd Quarter 2006

**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 systematically replaces older water distribution pipes to reduce leakage and watermain breaks and improve water quality and fire protection. Targeted watermains are prioritized and scheduled for replacement in groups to maintain a steady volume of work and to facilitate quality design and construction management. This program typically only considers replacement of the pipes as the way to improve their performance, and ends in its current form in 2003. Several other targeted programs, including the Watermain Rehabilitation Program (WFNEW455), which began in 2004, take over the scope of the Watermain Replacement Program. These other programs implement a broader range of cost effective methods for improving pipe performance, including cleaning and re-lining pipes, retiring pipes and replacing them with longer service lines, and options. This project was titled "Water Main Replacement Program" in the 2004-2009 Adopted CIP. The confidence in the cost estimates is high, and the program has been approved by the SPU's Asset Management Committee.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	15,189	860	339	3	0	0	0	0	16,391
<b>Project Total:</b>	15,189	860	339	3	0	0	0	0	16,391
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	15,189	860	339	3	0	0	0	0	16,391
<b>Appropriations Total*</b>	15,189	860	339	3	0	0	0	0	16,391
<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 - Water

## Water Infrastructure -Tank Site Remediation

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 4th Quarter 1995

**Project ID:** C1114

**End Date:** 4th Quarter 2008

**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 cleans up soil and other contamination on adjacent private properties around some of Seattle Public Utilities' steel water tank sites. The contamination is typically due to lead-based paint and arsenic used in prior sand blasting operations. The contamination of the soil around the SPU tank sites is cleaned up during either the seismic upgrades or tank painting program unless those project timelines warrant earlier action by the utility.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	1,326	312	320	251	256	263	0	0	2,728
<b>Project Total:</b>	1,326	312	320	251	256	263	0	0	2,728
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	1,326	312	320	251	256	263	0	0	2,728
<b>Appropriations Total*</b>	1,326	312	320	251	256	263	0	0	2,728
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Water Resources Project Development

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2005

**Project ID:** C1NW501-009

**End Date:** Ongoing

**Location:** N/A

**Neighborhood District:** Not in a Neighborhood District

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

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

This project supports the development of improvements in SPU's Water Resources Business Area through the preparation of Project Development Plans. Project proposals, including supporting cost-benefit analyses, are reviewed and approved by SPU's Capital Planning Committee. Staff then develop a Project Development Plan for approval by SPU's Asset Management Committee. Documentation is prepared and budget implications are identified. This project is in a preliminary phase of development and cost estimates will be revised over time.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water 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 Water 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	

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

**Water System Dewatering**

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** Ongoing

**Project ID:** C1105

**End Date:** Ongoing

**Location:** Regional

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

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

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

This program improves the configuration and operation of approximately 200 blowoffs. Blowoffs are valves and piping located at low points in water pipelines and are used to drain or flush the line for emergency or maintenance operations. The program’s goals include: minimizing flooding damage to downstream private development due to blowoff operations; addressing the discharge of water into sensitive streams; requiring monitoring and treatment for impacts due to chlorine, pH, and turbidity; eliminating possible cross-connections; and addressing improvements to water courses to reduce erosion or other damage caused by blowoff operations. The project was titled “System Dewatering Program” in the 2004-2009 Adopted CIP. The programmatic approach and criteria have been approved by the SPU’s Asset Management Committee (AMC). Each individual location will have its own AMC approval; a few sites have been already approved. This project is in a preliminary phase of development and cost estimates will be revised over time.

	<b>LTD</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Revenue Sources</b>									
Water Rates	1,305	633	1,056	350	359	368	377	386	4,834
<b>Project Total:</b>	1,305	633	1,056	350	359	368	377	386	4,834
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	1,305	633	1,056	350	359	368	377	386	4,834
<b>Appropriations Total*</b>	1,305	633	1,056	350	359	368	377	386	4,834
<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 - Water

## Water System Plan - 2007

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** New Investment

**Start Date:** 2nd Quarter 2004

**Project ID:** C103058

**End Date:** 1st Quarter 2007

**Location:** N/A

**Neighborhood District:** Not in a Neighborhood District

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

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

State regulations require water utilities to submit a new comprehensive water system plan every six years as a condition of state utility operating permit renewal. This project funds work on an environmental review and updated Comprehensive Water System Plan, to commence in 2005 and finish 2007. This project is in a preliminary phase of development and cost estimates will be revised over time as the scope of the plan is clarified. This project has not been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	147	430	387	27	0	0	0	991
<b>Project Total:</b>	0	147	430	387	27	0	0	0	991
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	147	430	387	27	0	0	0	991
<b>Appropriations Total*</b>	0	147	430	387	27	0	0	0	991
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## Water System Plan - 2013

**BCL Name:** Water Supply

**BCL Code:** C150B

**Type:** New Investment

**Start Date:** 3rd Quarter 2009

**Project ID:** C1NW501-006

**End Date:** 3rd Quarter 2013

**Location:** N/A

**Neighborhood District:** Not in a Neighborhood District

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

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

State regulations require water utilities to submit a new comprehensive water system plan every six years as a condition of state utility operating permit renewal. This project funds work on an environmental review and updated Comprehensive Water System Plan, to commence in 2009 and finish 2013. This project is in a preliminary phase of development and cost estimates will be revised over time, as the scope of the plan is clarified. This project has not been reviewed or approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	0	0	0	0	0	50	150	200
<b>Project Total:</b>	0	0	0	0	0	0	50	150	200
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	0	0	0	0	0	50	150	200
<b>Appropriations Total*</b>	0	0	0	0	0	0	50	150	200
<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 Proposed Capital Improvement Program**

# SPU - Water

## Water System Security Improvement

**BCL Name:** Water Quality

**BCL Code:** C140B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2002

**Project ID:** C1405

**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 responds to a demand for increased security and water quality protection at SPU facilities. The project includes key card installation at pump stations, improved signage, key and fence upgrades, physical hardening of critical infrastructure at water treatment facilities and facility gates, and improving communications systems at various facilities.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	1,076	2,200	5,263	978	0	0	0	0	9,517
<b>Project Total:</b>	1,076	2,200	5,263	978	0	0	0	0	9,517
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	1,076	2,200	5,263	978	0	0	0	0	9,517
<b>Appropriations Total*</b>	1,076	2,200	5,263	978	0	0	0	0	9,517
<b>O &amp; M Costs (Savings)</b>			150	200	250	300	350	350	1600

## Watermain Rehabilitation

**BCL Name:** Infrastructure

**BCL Code:** C110B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2004

**Project ID:** C1129

**End Date:** Ongoing

**Location:** Regional

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

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

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

This program takes over the renewal aspect of the scope of the Water Infrastructure - Watermain Replacement Program (C1104), under which older water distribution pipes are replaced to reduce leakage and breaks and improve water quality. This new Watermain Rehabilitation Program considers methods other than straight replacement for improving watermain cost effectively, as well as replacement where other methods would not work. Alternative methods include cleaning and re-lining pipes, and inserting a new smaller pipe in the old one. Where applicable, these methods not only cost less than replacement, but also reduce the demand to dig up city streets and thereby cause less disruption to surrounding neighborhoods. The confidence in the cost estimate is low, and only parts of the program have been approved by SPU's Asset Management Committee.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	1,372	1,366	2,301	4,772	4,892	5,014	5,139	24,856
<b>Project Total:</b>	0	1,372	1,366	2,301	4,772	4,892	5,014	5,139	24,856
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	1,372	1,366	2,301	4,772	4,892	5,014	5,139	24,856
<b>Appropriations Total*</b>	0	1,372	1,366	2,301	4,772	4,892	5,014	5,139	24,856
<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 - Water

## Watershed Road Improvement/Decommissioning

**BCL Name:** Habitat Conservation Program

**BCL Code:** C160B

**Type:** Rehabilitation or Restoration

**Start Date:** 1st Quarter 2001

**Project ID:** C1601

**End Date:** Ongoing

**Location:** Cedar River

**Neighborhood District:** Not in a Neighborhood District

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

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

Road improvements and decommissioning are components of the Cedar River Habitat Conservation Plan (HCP). The goal of these projects is to protect stream and riparian habitats and forest ecosystems. These projects are based on analyses and designs for the control of water flowing on, under, or adjacent to forest roads, and the removal of unstable soils within the road prism. Control of water and unstable soils minimizes sediment delivery to streams from roads, and improves drainage patterns. The HCP requires the decommissioning of an average of 10 miles of road per year. The project was titled "Road Improvements/Decommissioning" in the 2004-2009 Adopted CIP. The HCP was approved by SPU's Asset Management Committee at the program level. The confidence level for this cost estimate is high.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	2,393	871	864	830	856	884	907	934	8,539
<b>Project Total:</b>	2,393	871	864	830	856	884	907	934	8,539
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	2,393	871	864	830	856	884	907	934	8,539
<b>Appropriations Total*</b>	2,393	871	864	830	856	884	907	934	8,539
<b>O &amp; M Costs (Savings)</b>			0	0	0	0	0	0	

## WSDOT Sound Walls

**BCL Name:** Other Agencies

**BCL Code:** C120B

**Type:** Improved Facility

**Start Date:** 1st Quarter 2004

**Project ID:** C104019

**End Date:** 2nd Quarter 2005

**Location:** I-5/E Roanoke

**Neighborhood District:** East District

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

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

This project support the Washington State Department of Transportation's project to install sound walls along the I-5 corridor near E Roanoke St. The project is still undefined with respect to watermain impacts, but may require monitoring of construction activities.

	LTD	2004	2005	2006	2007	2008	2009	2010	Total
<b>Revenue Sources</b>									
Water Rates	0	30	20	0	0	0	0	0	50
<b>Project Total:</b>	0	30	20	0	0	0	0	0	50
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	0	30	20	0	0	0	0	0	50
<b>Appropriations Total*</b>	0	30	20	0	0	0	0	0	50
<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.*

