#### **Asset Management**

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type: Rehabilitation or Restoration Start Date: 4th Quarter 2002

Project ID: C1126 End Date: Ongoing

Location: Citywide

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

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

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	2,790	1,317	259	251	263	272	324	278	5,754
Project Total:	2,790	1,317	259	251	263	272	324	278	5,754
Fund Appropriations/Allocations SPU Water Fund	2,790	1,317	259	251	263	272	324	278	5,754
Appropriations Total*	2,790	1,317	259	251	263	272	324	278	5,754
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		1,040	259	251	263	272	324	278	2,687

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

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

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:4th Quarter 2003Project ID:C103033End Date:4th Quarter 2007

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

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

The Seattle Department of Transportation is developing a scope of work for rehabilitating or improving Aurora Ave. N. This project funds the necessary preliminary engineering to determine the water system impacts of that transportation project. If the transportation project progresses further, additional funds will be requested at that time to address the impacts. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	16	8	0	0	0	0	0	24
Project Total:	0	16	8	0	0	0	0	0	24
Fund Appropriations/Allocations SPU Water Fund	0	16	8	0	0	0	0	0	24
Appropriations Total*	0	16	8	0	0	0	0	0	24
O & M Costs (Savings)			0	0	0	0	0	0	0

#### **Aurora N Multi-modal Corridor**

BCL/Program Name: Distribution BCL/Program Code: C110B

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

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

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

The City of Shoreline is redeveloping Aurora Ave. N. 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 relocation of water service meters. Construction is underway, and the confidence level of the cost estimate is high.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	544	156	27	0	0	0	0	0	727
Project Total:	544	156	27	0	0	0	0	0	727
Fund Appropriations/Allocations									
SPU Water Fund	544	156	27	0	0	0	0	0	727
Appropriations Total*	544	156	27	0	0	0	0	0	727
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		81	27	0	0	0	0	0	108

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

#### **Ballard Locks Improvements**

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type:Improved FacilityStart Date:1st Quarter 2000Project ID:C1606End Date:4th Quarter 2010

**Location:** NW 54th St.

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

Neighborhood District: Ballard Urban Village: Ballard

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

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	940	155	76	74	54	435	0	0	1,734
Project Total:	940	155	76	74	54	435	0	0	1,734
Fund Appropriations/Allocations									
SPU Water Fund	940	155	76	74	54	435	0	0	1,734
Appropriations Total*	940	155	76	74	54	435	0	0	1,734
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		75	76	74	54	435	0	0	714

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

#### **BPA - Aquatic & Riparian Restoration**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:2nd Quarter 2004Project ID:C1303End Date:4th Quarter 2008

**Location:** Cedar River Watershed

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

The Bonneville Agreement program plans and implements 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 power line project on that habitat. SPU's Asset Management Committee has approved this program. The confidence level in the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	686	600	305	3	0	0	0	0	1,595
Project Total:	686	600	305	3	0	0	0	0	1,595
Fund Appropriations/Allocations									
SPU Water Fund	686	600	305	3	0	0	0	0	1,595
Appropriations Total*	686	600	305	3	0	0	0	0	1,595
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		729	305	3	0	0	0	0	1,037

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

#### **BPA - Road Decommissioning/Improvements**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:2nd Quarter 2004Project ID:C1304End Date:4th Quarter 2009

Location: Cedar River Watershed

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

This program plans and implements 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 program. The confidence level in the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	783	282	137	167	58	0	0	0	1,427
Project Total:	783	282	137	167	58	0	0	0	1,427
Fund Appropriations/Allocations									
SPU Water Fund	783	282	137	167	58	0	0	0	1,427
Appropriations Total*	783	282	137	167	58	0	0	0	1,427
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		426	137	167	58	0	0	0	788

#### **BPA - Security Measures**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C1305End Date:4th Quarter 2010

Location: Cedar River Watershed

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

This program plans, purchases, and installs watershed security improvements within the Cedar River Municipal Watershed to protect watershed resources and restrict watershed access. These projects compensate for the impacts of the Bonneville Power Administration's power line project on security within the watershed. SPU's Asset Management Committee has reviewed and approved this set of projects. The confidence level in cost estimates is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	550	255	35	45	11	11	0	0	906
Project Total:	550	255	35	45	11	11	0	0	906
Fund Appropriations/Allocations									
SPU Water Fund	550	255	35	45	11	11	0	0	906
Appropriations Total*	550	255	35	45	11	11	0	0	906
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		204	35	45	11	11	0	0	305

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

#### **BPA - Upland Forest Restoration**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:2nd Quarter 2004Project ID:C1306End Date:4th Quarter 2011

**Location:** Cedar River Watershed

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

This program plans and implements forest restoration projects within the Cedar River Municipal Watershed. This program will enhance and accelerate the City's existing Upland Forest Restoration Program and help 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 program. The confidence level in cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	222	390	395	242	26	27	32	0	1,334
Project Total:	222	390	395	242	26	27	32	0	1,334
Fund Appropriations/Allocations									
SPU Water Fund	222	390	395	242	26	27	32	0	1,334
Appropriations Total*	222	390	395	242	26	27	32	0	1,334
O & M Costs (Savings)			0	0	0	0	0	0	0

<sup>\*</sup>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/Program Name: Distribution BCL/Program Code: C110B

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

Project ID: C1116 End Date: Ongoing

Location: Citywide

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

This program 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. They can be used to protect ductile iron, steel, and concrete cylinder pipe. Unprotected, these types of pipelines corrode through an electrochemical process; cathodic protection strives to slow down or even stop this electrochemical process by providing electrical current to the pipe. Each project installs new or replacement rectifiers and anodes along a section of pipeline between one and four miles in length. In the 2006-2011 Adopted CIP, the project ID for the project was C1NW116.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	1,489	731	843	407	342	326	519	178	4,835
Project Total:	1,489	731	843	407	342	326	519	178	4,835
<b>Fund Appropriations/Allocations</b> SPU Water Fund	1,489	731	843	407	342	326	519	178	4,835
Appropriations Total*	1,489	731	843	407	342	326	519	178	4,835
O & M Costs (Savings)			2	3	3	3	3	3	17
Spending Plan		75	843	407	342	326	519	178	2,690

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

#### **Cedar Bridges**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type: Improved Facility Start Date: Ongoing

Project ID: C1307 End Date: 4th Quarter 2011

**Location:** Cedar Watershed

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

This project replaces bridges in the Cedar River Watershed on watershed roads where existing bridges are no longer able to carry required loading, resulting in safety and environmental risks. SPU's Asset Management Committee has approved the program. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	7,351	422	1,176	186	105	179	226	0	9,646
Project Total:	7,351	422	1,176	186	105	179	226	0	9,646
Fund Appropriations/Allocations									
SPU Water Fund	7,351	422	1,176	186	105	179	226	0	9,646
Appropriations Total*	7,351	422	1,176	186	105	179	226	0	9,646
O & M Costs (Savings)			16	16	16	16	16	16	96
Spending Plan		423	1,176	186	105	179	226	0	2,296

#### Cedar Falls - Railroad Hazardous Material Remediation

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2006Project ID:C100078End Date:2nd Quarter 2009

Location: Cedar River Watershed

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

This project 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.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	166	0	62	50	5	0	0	0	284
Project Total:	166	0	62	50	5	0	0	0	284
Fund Appropriations/Allocations									
SPU Water Fund	166	0	62	50	5	0	0	0	284
Appropriations Total*	166	0	62	50	5	0	0	0	284
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		62	62	50	5	0	0	0	180

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

#### **Cedar Moraine Improvements**

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 1997Project ID:C197009End Date:4th Quarter 2010

Location: Cedar River Watershed

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

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. This project evaluates the conditions of the network, provides rehabilitation, and recommends further improvements. The most recently completed studies indicate that the risk of slope failure due to an earthquake warrants infrastructure improvements. This project may improve monitoring capabilities along the northwest slopes of Cedar Moraine and may install up to three drainage tunnels to relieve groundwater pressures in the moraine. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	1,026	474	1,396	1,044	5	5	0	0	3,951
Project Total:	1,026	474	1,396	1,044	5	5	0	0	3,951
Fund Appropriations/Allocations									
SPU Water Fund	1,026	474	1,396	1,044	5	5	0	0	3,951
Appropriations Total*	1,026	474	1,396	1,044	5	5	0	0	3,951
O & M Costs (Savings)			0	0	30	30	30	30	120
Spending Plan		400	1,396	1,044	5	5	0	0	2,851

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

#### **Cedar River - Boundary Land Acquisition**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

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

Project ID: C198008 End Date: Ongoing

Location: Cedar River Watershed

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

Although the City owns virtually all lands draining to the municipal water supply intake on the Cedar River, some exceptions remain along the boundary. The past decade has seen significant changes in ownership and land use of properties immediately adjoining the City's property. This project enables SPU to evaluate risks to watershed protection and security posed by these changes, and to respond as opportunities arise by acquiring property. All property acquisitions require specific legislative authority. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	2,310	104	102	91	106	110	131	112	3,066
Project Total:	2,310	104	102	91	106	110	131	112	3,066
Fund Appropriations/Allocations									
SPU Water Fund	2,310	104	102	91	106	110	131	112	3,066
<b>Appropriations Total*</b>	2,310	104	102	91	106	110	131	112	3,066
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		421	102	91	106	110	131	112	1,073

#### **Cedar River - Education Center Exhibits**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:2nd Quarter 2003Project ID:C103001End Date:4th Quarter 2007

Location: CREW Education Center North Bend

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

This project funds fabrication and installation of interpretive exhibits to complete the Cedar River Watershed Education Center. A final exhibit required further evaluation which delayed the project completion. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	641	155	53	0	0	0	0	0	849
Project Total:	641	155	53	0	0	0	0	0	849
Fund Appropriations/Allocations									
SPU Water Fund	641	155	53	0	0	0	0	0	849
Appropriations Total*	641	155	53	0	0	0	0	0	849
O & M Costs (Savings)			2	2	2	2	2	2	12
Spending Plan		150	53	0	0	0	0	0	203

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

#### **Cedar River Non-HCP Road Improvements**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type: Improved Facility Start Date: 1st Ouarter 1991

Project ID: C191001 End Date: Ongoing

**Location:** Cedar River Watershed

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

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

y	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	4,382	828	830	764	716	739	1,012	866	10,137
Project Total:	4,382	828	830	764	716	739	1,012	866	10,137
Fund Appropriations/Allocations SPU Water Fund	4,382	828	830	764	716	739	1,012	866	10,137
Appropriations Total*	4,382	828	830	764	716	739	1,012	866	10,137
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		804	830	764	716	739	1,012	866	5,731

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

#### **Cedar River Pipeline 2 Replace Portion**

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2004Project ID:C104013End Date:4th Quarter 2007

Location: Carpel #2 Between Volunteer Park And Maple Leaf Gatehouse

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

This project investigates the condition and the current maximum working pressure of a 42-inch lockbar steel feeder main that is suspected to be corroded in some locations. The Cedar River Pipeline No. 2 extends from Volunteer Park to the Maple Leaf neighborhood and crosses the Ship Canal in a tunnel. It is currently expected that improvements will be limited to pressure testing the pipeline and installing an impressed current cathodic protection system. SPU's Asset Management Committee reviewed and approved the preliminary engineering phase of the project. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	68	217	316	0	0	0	0	0	601
Project Total:	68	217	316	0	0	0	0	0	601
Fund Appropriations/Allocations									
SPU Water Fund	68	217	316	0	0	0	0	0	601
Appropriations Total*	68	217	316	0	0	0	0	0	601
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		64	316	0	0	0	0	0	380

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

#### Cedar River Watershed & Wildlife Information Management System

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107001End Date:4th Quarter 2008

Location: Cedar River Watershed

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

This project develops and implements a data management system for fish and wildlife assets and resources in the Cedar River Municipal Watershed (CRW), which covers over 90,000 acres. Development and use of the information management system (IMS) will be compatible with and linked to, as appropriate, other SPU information management systems and their architecture. The outcome will be a significant decrease in staff labor over decades, better management of the City land, enhanced regulatory compliance, and knowledge and documentation of Cedar River fish and wildlife assets. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	42	193	0	0	0	0	235
Project Total:	0	0	42	193	0	0	0	0	235
Fund Appropriations/Allocations									
SPU Water Fund	0	0	42	193	0	0	0	0	235
Appropriations Total*	0	0	42	193	0	0	0	0	235
O & M Costs (Savings)			0	0	5	5	5	5	20

#### Cedar River Watershed Limited Use Area Management Plan

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107002End Date:4th Quarter 2008

Location: Cedar River Watershed

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

This project analyzes Limited Uses Areas (LUAs) within the Cedar River Municipal Watershed. The analysis will include a review of current management plans, operational activities, and public usage patterns, identification of problems and issues, and development of recommendations for changes in SPU's policies and operational activities. SPU owns several hundred acres of land near or adjacent to the Cedar River Municipal Watershed that lies outside of the hydrographic boundary of the drinking water supply. SPU provides and maintains recreational facilities (trails, sanitation, parking, boat ramps, etc.) and maintenance operations on these lands, such as the Rattlesnake Lake Recreation Area, Landsburg Park, and Taylor Mountain Forest. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	104	40	0	0	0	0	144
Project Total:	0	0	104	40	0	0	0	0	144
Fund Appropriations/Allocations									
SPU Water Fund	0	0	104	40	0	0	0	0	144
Appropriations Total*	0	0	104	40	0	0	0	0	144
O & M Costs (Savings)			0	0	0	0	0	0	0

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

#### **Cedar River Watershed Management System**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107006End Date:1st Quarter 2008

Location: Cedar River Watershed

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

This project implements an inventory management system (including bar codes and bar code readers) to help identify inventory requirements, set targets, and report actual and projected inventory status. Proper inventory control will improve efficiency, reduce waste on capital and operations and maintenance expenditures, and optimize inventory levels. The inventory system will link to Maximo and provide SPU staff with information useful in determining true project and activity costs. It will also assist in setting and meeting service level targets. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	199	87	0	0	0	0	286
Project Total:	0	0	199	87	0	0	0	0	286
Fund Appropriations/Allocations									
SPU Water Fund	0	0	199	87	0	0	0	0	286
Appropriations Total*	0	0	199	87	0	0	0	0	286
O & M Costs (Savings)			0	0	5	5	5	5	20

#### **Cedar River Watershed Northridge Trail**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:2nd Quarter 2002Project ID:C102022End Date:4th Quarter 2007

**Location:** Cedar River Watershed

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

This project implements the Northridge Trail, authorized under the Secondary Use Policy, to explore opportunities to create linkages with recreational hiking trails across the North ridge of the municipal Cedar River Watershed (the boundary with the South Fork Snoqualmie River Watershed). Planning efforts by the Interagency Trails Committee, Washington State Parks, the United States Department of Agriculture Forest Service, and Mountains to Sound Greenway have established several opportunities to support trails that allow access to the boundary of the Watershed, yet maintain the integrity of the hydrographic boundary. This project requires coordination and support from several other government and non-profit agencies. The project constructs a trail segment to the summit of Mt. Washington, providing a connection with Washington State Parks' Ollalie project. It will commence once the Forest Service allows the trail to be built on federal land. Preliminary design and siting are complete.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	33	11	23	0	0	0	0	0	67
Project Total:	33	11	23	0	0	0	0	0	67
Fund Appropriations/Allocations									
SPU Water Fund	33	11	23	0	0	0	0	0	67
Appropriations Total*	33	11	23	0	0	0	0	0	67
O & M Costs (Savings)			2	2	2	2	2	2	12
Spending Plan		45	23	0	0	0	0	0	68

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

#### **Cedar River Watershed Resource Information Management**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107005End Date:4th Quarter 2008

Location: Cedar River Watershed

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

This project develops a comprehensive information management system for archaeological artifacts from the Cedar River and S. Fork Tolt River Municipal Watersheds. It will create a searchable database while simultaneously accessioning and preserving the collection, which currently is not being archivally preserved. The database will also make the information easily accessible to researchers and the public. SPU manages a collection of thousands of artifacts, documents and photos documenting over 9,400 years of human activity in watersheds. These collections are located in the Gale Archives at the Cedar River Watershed Education Center. Information about these artifacts and documents is neither cohesive, nor accessible to researchers, staff or Native American tribes currently. Capturing the archaeological information about these collections is critical to the proper management and preservation of these irreplaceable items.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	207	104	0	0	0	0	311
Project Total:	0	0	207	104	0	0	0	0	311
Fund Appropriations/Allocations SPU Water Fund	0	0	207	104	0	0	0	0	311
Appropriations Total*	0	0	207	104	0	0	0	0	311
O & M Costs (Savings)			0	5	5	5	5	5	25

#### **Cedar Sockeye Hatchery**

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type:New FacilityStart Date:1st Quarter 2000Project ID:C1605End Date:4th Quarter 2008

Location: Cedar River Watershed

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

This project, a component of the Cedar River Habitat Conservation Plan (HCP) and Landsburg Mitigation Agreement, 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 facility. SPU's Asset Management Committee approved the HCP at the program level. The confidence level for this cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	2,418	242	5,407	3,042	0	0	0	0	11,109
Project Total:	2,418	242	5,407	3,042	0	0	0	0	11,109
Fund Appropriations/Allocations									
SPU Water Fund	2,418	242	5,407	3,042	0	0	0	0	11,109
Appropriations Total*	2,418	242	5,407	3,042	0	0	0	0	11,109
O & M Costs (Savings)			130	334	458	458	458	458	2,296
Spending Plan		585	5,407	3,042	0	0	0	0	9,034

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

#### **Cedar Treatment Facility**

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:New FacilityStart Date:1st Quarter 1996Project ID:C196015End Date:4th Quarter 2007

**Location:** N/A

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

This project develops 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. The confidence level of the cost estimate is high, and SPU's Asset Management Committee has approved the project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	93,501	10	454	0	0	0	0	0	93,965
Project Total:	93,501	10	454	0	0	0	0	0	93,965
Fund Appropriations/Allocations									
SPU Water Fund	93,501	10	454	0	0	0	0	0	93,965
Appropriations Total*	93,501	10	454	0	0	0	0	0	93,965
O & M Costs (Savings)			5	7	7	7	7	8	41
Spending Plan		450	454	0	0	0	0	0	904

#### **Chamber Upgrades - Distribution**

BCL/Program Name: Distribution BCL/Program Code: C110B

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

Project ID: C103002 End Date: Ongoing

Location: Citywide

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

This program allows SPU to meet current Occupational Safety and Health Administration (OSHA) and Washington State Health Administration (WSHA) standards for confined space entry by replacing undersized underground chamber access openings (rings and covers) throughout the City's water system. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	442	124	121	115	158	163	195	167	1,485
Project Total:	442	124	121	115	158	163	195	167	1,485
Fund Appropriations/Allocations									
SPU Water Fund	442	124	121	115	158	163	195	167	1,485
Appropriations Total*	442	124	121	115	158	163	195	167	1,485
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		120	121	115	158	163	195	167	1,039

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

#### **Climate Protection - WF**

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

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C407S01-WFEnd Date:4th Quarter 2008

**Location:** N/A

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

This project researches the impact of climate change on the water system, and identifies adaptations or additional system resiliency that may be required. The effort is part of the Mayor's Environmental Action Agenda, which includes a City commitment to meet or beat Kyoto greenhouse gas emission targets. The Office of Sustainability & Environment leads the Citywide effort.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	154	164	0	0	0	0	318
Project Total:	0	0	154	164	0	0	0	0	318
Fund Appropriations/Allocations									• • •
SPU Water Fund	0	0	154	164	0	0	0	0	318
Appropriations Total*	0	0	154	164	0	0	0	0	318
O & M Costs (Savings)			40	0	0	0	0	0	40

#### **Distribution System In-Line Gate Valves**

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 1999

Project ID: C199012 End Date: Ongoing

Location: Citywide

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

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

This project replaces aging in-line gate valves throughout the water distribution system, many of which are more than 50 years old, and for which spare parts are difficult to obtain. The confidence level of the cost estimate is medium as it is dependent on the condition of the gate valves and the availability of parts. The project has been approved by SPU's Asset Management Committee.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	440	62	60	58	63	65	78	67	894
Project Total:	440	62	60	58	63	65	78	67	894
Fund Appropriations/Allocations									
SPU Water Fund	440	62	60	58	63	65	78	67	894
Appropriations Total*	440	62	60	58	63	65	78	67	894
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		60	60	58	63	65	78	67	452

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

#### **Downstream Fish Habitat**

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2001Project ID:C1607End Date:4th Quarter 2010

Location: Cedar River Watershed

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

This project 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 main stem Cedar River for the benefit of anadromous salmonid species, especially Chinook salmon, and to enhance natural ecological processes that shape and maintain riparian and aquatic habitat. Activities include habitat land acquisition in collaboration with Cascade Land Conservancy, restoration work at Walsh Lake, and restoration work in the lower Cedar River. This project is part of the HCP, which was approved by SPU's Asset Management Committee at the program level. The confidence level of the current cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	349	1,527	2,517	2,798	336	16	0	0	7,543
Project Total:	349	1,527	2,517	2,798	336	16	0	0	7,543
Fund Appropriations/Allocations									
SPU Water Fund	349	1,527	2,517	2,798	336	16	0	0	7,543
Appropriations Total*	349	1,527	2,517	2,798	336	16	0	0	7,543
O & M Costs (Savings)			30	50	50	50	50	50	280
Spending Plan		1,000	2,517	2,798	336	16	0	0	6,667

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

#### **Endangered Species Act Chinook Research & Monitoring**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2001Project ID:C101048End Date:4th Quarter 2007

**Location:** Lake Washington Watershed

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

This program researches and monitors Seattle's salmon population, with emphasis on their habitat use in Lake Washington, the Ship Canal/Lake Union, and Ballard Locks. This program is part of the City's response to the listing of Chinook salmon as a threatened species under the federal Endangered Species Act. The results of these research and monitoring activities may 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. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	826	230	259	0	0	0	0	0	1,315
Project Total:	826	230	259	0	0	0	0	0	1,315
Fund Appropriations/Allocations									
SPU Water Fund	826	230	259	0	0	0	0	0	1,315
Appropriations Total*	826	230	259	0	0	0	0	0	1,315
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		275	259	0	0	0	0	0	534

#### **Endangered Species Act Snohomish River Basin**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2000Project ID:C101003End Date:4th Quarter 2010

Location: Snohomish River Basin

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

This program acquires and develops critical habitat for salmon in the Tolt River Watershed. The program is coordinated with similar efforts undertaken by City Light, and projects may occur in cooperation with King County, affected tribes, or other local, state, and federal agencies. The confidence level of the cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	267	21	45	43	53	65	0	0	494
Project Total:	267	21	45	43	53	65	0	0	494
Fund Appropriations/Allocations									
SPU Water Fund	267	21	45	43	53	65	0	0	494
Appropriations Total*	267	21	45	43	53	65	0	0	494
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		20	45	43	53	65	0	0	226

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

#### **Endangered Species Act Tolt Levee Modifications**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C105095End Date:4th Quarter 2010

**Location:** City Of Carnation

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

This is a collaborative project between Seattle Public Utilities, Seattle City Light, and the King County Department of Natural Resources and Parks. The project removes approximately 1,000 feet of riverbank levee along the lower right bank of the Tolt River adjacent to the Tolt MacDonald Park. It constructs a new setback levee at the edge of the floodplain to provide reconnection to off-channel salmon habitat, and to allow for the creation of new spawning and rearing habitat for Chinook salmon. The SPU Asset Management Committee has approved this project. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	181	258	1,247	734	21	22	0	0	2,463
Project Total:	181	258	1,247	734	21	22	0	0	2,463
Fund Appropriations/Allocations	101	2.50	1 2 1 5	<b>5</b> 24	2.1	22	0	0	2.452
SPU Water Fund	181	258	1,247	734	21	22	0	0	2,463
Appropriations Total*	181	258	1,247	734	21	22	0	0	2,463
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		350	1,247	734	21	22	0	0	2,374

<sup>\*</sup>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/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C105084End Date:4th Quarter 2012

Location: Cedar & Tolt River Watershed

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

This project plans evironmental stewardship activities prior to the formation of specific capital projects. This work includes development of Strategic Asset Management Plans and Project Development Plans for the Watershed and Environmental Program Area, policy analysis and program development to deal with issues related to the management of the Tolt and Cedar River Municipal Watersheds, and other work that assists in the identification of potential capital projects and development of concept-level scopes and estimates for new capital projects.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	17	103	97	107	105	109	130	111	778
Project Total:	17	103	97	107	105	109	130	111	778
Fund Appropriations/Allocations									
SPU Water Fund	17	103	97	107	105	109	130	111	778
Appropriations Total*	17	103	97	107	105	109	130	111	778
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		100	97	107	105	109	130	111	759

#### **Fireflow & Pressure Improvements**

BCL/Program Name: Distribution BCL/Program Code: C110B

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

Project ID: C1128 End Date: Ongoing

**Location:** Citywide

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

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

This project improves the water distribution system by adding new water lines; replacing, relining, or slip-lining existing lines; adjusting pressure zone boundaries; and installing pressure reducing and pressure boosting installations to meet evolving customer service levels for continuity of service, pressure, water quality, and fire protection. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									_
Water Rates	181	580	561	142	1,053	1,087	1,297	1,111	6,012
Project Total:	181	580	561	142	1,053	1,087	1,297	1,111	6,012
Fund Appropriations/Allocations SPU Water Fund	181	580	561	142	1,053	1,087	1,297	1,111	6,012
Appropriations Total*	181	580	561	142	1,053	1,087	1,297	1,111	6,012
O & M Costs (Savings)			0	5	5	5	5	5	25
Spending Plan		182	561	142	1,053	1,087	1,297	1,111	5,433

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

## **Heavy Equipment Purchases - WF**

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

Project Type: New Investment Start Date: 1st Quarter 1999

Project ID: C4116-WF End Date: Ongoing

**Location:** N/A

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

This program replaces existing heavy equipment (such as loaders and bulldozers) used at Water Utility facilities as well as funding the purchase of new equipment adds. The project also funds retrofitting of existing equipment to meet SPU operational needs and initiatives.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	10,661	2,934	3,848	1,542	1,438	4,349	4,469	901	30,142
Project Total:	10,661	2,934	3,848	1,542	1,438	4,349	4,469	901	30,142
Fund Appropriations/Allocations									
SPU Water Fund	10,661	2,934	3,848	1,542	1,438	4,349	4,469	901	30,142
Appropriations Total*	10,661	2,934	3,848	1,542	1,438	4,349	4,469	901	30,142
O & M Costs (Savings)			0	0	0	0	0	0	0

#### **Hidden Lake CSO Betterments**

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 2004Project ID:C104066End Date:4th Quarter 2007

**Location:** N/A

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

This project improves fire flows and hydrants in conjunction with a King County combined sewer rehabilitation project, which is impacting SPU Water services in Shoreline. The County project creates an opportunity for SPU to perform its work while the width of the street is exposed, reducing future disruption by additional street openings. The four-inch water line under Springdale Ct. NW does not provide minimum fireflow requirements to the area and replacing approximately 1,100 linear feet of pipe will bring to the area at least 20 % more than the minimum requirement. In addition, all hydrants in the area will be replaced with six-inch standard hydrants. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	13	188	446	0	0	0	0	0	647
Project Total:	13	188	446	0	0	0	0	0	647
Fund Appropriations/Allocations									
SPU Water Fund	13	188	446	0	0	0	0	0	647
Appropriations Total*	13	188	446	0	0	0	0	0	647
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		200	446	0	0	0	0	0	646

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

#### **Hidden Lake CSO Impact Work**

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 2004Project ID:C104067End Date:4th Quarter 2008

**Location:** N/A

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

This project is an inter-agency project with King County to address impacts to the City's water system in Shoreline by a King County sewer rehabilitation and improvement project. The County project includes the installation of a large underground storage pipe in the Boeing Creek Park, replacing the Hidden Lake pump station and approximately 11,000 feet of sewer pipe between the Hidden Lake pump station and the Richmond Beach pump station. The SPU work involves cutting, capping, and reconnecting pipes to allow implementation of the County project through SPU's water service area. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	23	271	293	217	0	0	0	0	804
Project Total:	23	271	293	217	0	0	0	0	804
Fund Appropriations/Allocations									
SPU Water Fund	23	271	293	217	0	0	0	0	804
Appropriations Total*	23	271	293	217	0	0	0	0	804
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		451	293	217	0	0	0	0	961

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

#### <u>I-405 Widening Cedar River Pipelines Impacts</u>

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2005Project ID:C105096End Date:4th Quarter 2008

**Location:** N/A

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

This project is in response to the Washington State Department of Transportation's (WSDOT) planned widening of I-405 in the vicinity of South Center mall, and SR-167 near S 212 Street. At both locations SPU owns the pipeline right-of way. At South Center, it is expected that SPU will provide an easement to WSDOT. Construction is expected to be performed by, and at the expense of, WSDOT. The confidence level of the current cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	8	46	39	61	0	0	0	0	155
Project Total:	8	46	39	61	0	0	0	0	155
Fund Appropriations/Allocations									
SPU Water Fund	8	46	39	61	0	0	0	0	155
Appropriations Total*	8	46	39	61	0	0	0	0	155
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		47	39	61	0	0	0	0	147

#### I-5 Pavement Reconstruction - WF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C407022-WFEnd Date:4th Quarter 2020

Location: I-5

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

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

This program relocates or replaces water-related facilities affected by the Washington State Department of Transportation's (WSDOT) I-5 Pavement Reconstruction Project. WSDOT is planning on reconstructing 16 miles of I-5 pavement from Tukwila/Seattle city limits north to NE 145th. The confidence level of the cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	132	135	135	138	141	145	825
Project Total:	0	0	132	135	135	138	141	145	825
Fund Appropriations/Allocations									
SPU Water Fund	0	0	132	135	135	138	141	145	825
Appropriations Total*	0	0	132	135	135	138	141	145	825
O & M Costs (Savings)			0	0	0	0	0	0	0

<sup>\*</sup>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/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type:Improved FacilityStart Date:4th Quarter 2003Project ID:C1608End Date:4th Quarter 2010

Location: Citywide

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

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

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

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	232	623	571	423	290	123	0	0	2,261
Project Total:	232	623	571	423	290	123	0	0	2,261
Fund Appropriations/Allocations SPU Water Fund	232	623	571	423	290	123	0	0	2,261
Appropriations Total*	232	623	571	423	290	123	0	0	2,261
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		800	571	423	290	123	0	0	2,206

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

#### **Integrated Control Monitoring Program - WF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New InvestmentStart Date:1st Quarter 2002Project ID:C4108-WFEnd Date:4th Quarter 2012

**Location:** Various

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

This program expands upon the Supervisory Control and Data Acquisition (SCADA) system installed as part of CIP project C195008. This program is broken down into three concurrent projects. Project one will enable System Operators to gather more system information and control water infrastructure. The equipment includes 120 new SCADA devices, such as flow or pressure from remote sensors and from supply dams, to remotely control pumps and valves. Project two is Operations Optimization, a set of organizational process and technology applications to improve water system operations and SCADA data usefulness. Applications include a web-based Water System Operating Plan, a Water Quality Analyzer, and a Data Quality Monitor. Project three integrates SCADA with SPU asset and maintenance information management systems. SCADA measurement data will be used to assist in capacity planning, validating repairs, identifying blockages, assessing DPD permit requests, correlating/calibrating models, and prioritizing planned maintenance.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	13,681	2,383	3,876	2,705	877	679	57	29	24,286
Project Total:	13,681	2,383	3,876	2,705	877	679	57	29	24,286
Fund Appropriations/Allocations SPU Water Fund	13,681	2,383	3,876	2,705	877	679	57	29	24,286
Appropriations Total*	13,681	2,383	3,876	2,705	877	679	57	29	24,286
O & M Costs (Savings)			31	31	123	372	372	372	1,301
Spending Plan		0	3,876	2,705	877	679	57	29	8,222

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

#### **Kerriston Road Mitigation**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107017End Date:4th Quarter 2012

Location: Cedar River Watershed

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

Kerriston Road is a King County right-of-way that bisects the lower Cedar River watershed within the municipal watershed boundary. The presence of this road poses a number of security and operational challenges in watershed management. The Washington Department of Health, which administers the Safe Drinking Water Act, has pointed out these risks to Seattle Public Utilities and requested an approach to address them. This project funds a comprehensive analysis of the risks presented by public access on the Kerriston Road. It includes feasibility studies and cost estimates for all of the risk management options that are developed, as well as funds for acquisition of property, based on the assumption that acquisition will be the preferred option. King County has shown an interest in cooperating in the acquisition of privately-owned land at the end of Kerriston Road, thereby allowing the County to close the road. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	75	201	211	217	259	222	1,185
Project Total:	0	0	75	201	211	217	259	222	1,185
Fund Appropriations/Allocations SPU Water Fund	0	0	75	201	211	217	259	222	1,185
Appropriations Total*	0	0	75	201	211	217	259	222	1,185
O & M Costs (Savings)			0	0	0	0	0	0	0

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

#### **Lake Youngs Management Plan**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107003End Date:4th Quarter 2012

**Location:** Lake Youngs Reserve

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

This project develops and implements a plan for land-management activities on lands surrounding the water supply at Lake Youngs Reserve. The Lake Youngs Management plan will include a long-term assessment of the principles, goals and objectives for managing and protecting this publicly-owned watershed; a review and update of current policies, plans, and regulations that pertain to the Lake Youngs Reservation; a description and assessment of reservation resources; assessment of current land-management activities and capital improvement needs; development of new policies and service levels that may be identified; and development of methods and priorities for protecting and restoring both land and natural/cultural resources. Efforts may include research, monitoring, and public education programs.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	156	0	53	54	65	56	383
Project Total:	0	0	156	0	53	54	65	56	383
Fund Appropriations/Allocations									
SPU Water Fund	0	0	156	0	53	54	65	56	383
Appropriations Total*	0	0	156	0	53	54	65	56	383
O & M Costs (Savings)			0	0	5	5	5	5	20

### **Lake Youngs Outlet Dam Warning System**

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101006End Date:1st Quarter 2007

**Location:** South Of Lake Youngs Reservoir

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

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

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	984	41	10	0	0	0	0	0	1,035
Project Total:	984	41	10	0	0	0	0	0	1,035
Fund Appropriations/Allocations SPU Water Fund	984	41	10	0	0	0	0	0	1,035
Appropriations Total*	984	41	10	0	0	0	0	0	1,035
O & M Costs (Savings)			19	24	24	24	24	24	139
Spending Plan		105	10	0	0	0	0	0	115

#### **Landsburg Fish Passage Monitoring**

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type:Improved FacilityStart Date:2nd Quarter 1999Project ID:C1604End Date:4th Quarter 2009

Location: Cedar River Watershed

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

This program mitigates the effects of the fish migration blockage on the Cedar River created by the Landsburg Dam, and is a key element of the Cedar River Habitat Conservation Plan (HCP). The program includes the planning, design, and construction of four major fish passage facilities; interim studies; and the implementation of monitoring and other mitigation measures to help restore Chinook, Coho, and Steelhead populations. Landsburg is the site of the City of Seattle's municipal water diversion and treatment facilities on the Cedar River. The SPU Asset Management Committee has approved the design and construction phases of the project and the confidence level for this cost estimate is high. In the 2006-2011 Adopted CIP, the project title for the project was Landsburg Fish Passage Improvements.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	193	226	268	252	3	0	0	0	942
Project Total:	193	226	268	252	3	0	0	0	942
Fund Appropriations/Allocations									
SPU Water Fund	193	226	268	252	3	0	0	0	942
Appropriations Total*	193	226	268	252	3	0	0	0	942
O & M Costs (Savings)			169	169	169	169	169	169	1,014
Spending Plan		235	268	252	3	0	0	0	759

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

#### **Landsburg Flood Passage Improvements**

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104016End Date:4th Quarter 2009

**Location:** Landsburg Dam on Cedar River

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

This project addresses flood passage at the City's Landsburg Dam on the Cedar River, making necessary improvements to reduce the risk of significant damage in the event of a major flood. The Asset Management Committee has approved funding for design and construction. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	174	410	758	486	63	0	0	0	1,891
Project Total:	174	410	758	486	63	0	0	0	1,891
Fund Appropriations/Allocations									
SPU Water Fund	174	410	758	486	63	0	0	0	1,891
Appropriations Total*	174	410	758	486	63	0	0	0	1,891
O & M Costs (Savings)			8	10	10	10	10	10	58
Spending Plan		528	758	486	63	0	0	0	1,835

#### Maple Leaf Gatehouse Pipe Refurbishing

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:2nd Quarter 1995Project ID:C195001End Date:2nd Quarter 2007

**Location:** NE 83rd St./12th Ave. NE

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan Matrix: N/A
Neighborhood District: Northeast 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 source. The project also addresses seismic issues with the gatehouse structure. The confidence level in the current cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
_	LID	2000	2007	2000	2007	2010	2011	2012	10141
Revenue Sources									
Water Rates	74	10	254	0	0	0	0	0	338
Project Total:	74	10	254	0	0	0	0	0	338
Fund Appropriations/Allocations									
SPU Water Fund	74	10	254	0	0	0	0	0	338
Appropriations Total*	74	10	254	0	0	0	0	0	338
O & M Costs (Savings)			5	5	5	5	5	5	30
Spending Plan		72	254	0	0	0	0	0	326

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

#### Marine View/Des Moines Creek

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:3rd Quarter 1997Project ID:C197021End Date:4th Quarter 2008

**Location:** Marine View Dr.

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

This project responds to a project by the City of Des Moines that replaces an existing embankment and box culvert over the Des Moines Creek with a bridge. As a result of the City of Des Moines' project, SPU's Des Moines Way pipeline over the embankment is decommissioned. The work is essentially complete, and the section of the pipeline south of the new bridge is no longer in service. Remaining closeout activities include finding a new owner for the decommissioned pipe, or filling it with sand or weak concrete. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	248	31	5	5	0	0	0	0	289
Project Total:	248	31	5	5	0	0	0	0	289
Fund Appropriations/Allocations									
SPU Water Fund	248	31	5	5	0	0	0	0	289
Appropriations Total*	248	31	5	5	0	0	0	0	289
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		5	5	5	0	0	0	0	15

#### Meter Replacement - WF

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C4101-WFEnd Date:Ongoing

Location: Citywide

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

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

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

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	1,455	718	574	579	560	574	588	603	5,651
Project Total:	1,455	718	574	579	560	574	588	603	5,651
Fund Appropriations/Allocations									
SPU Water Fund	1,455	718	574	579	560	574	588	603	5,651
Appropriations Total*	1,455	718	574	579	560	574	588	603	5,651
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		722	574	579	560	574	588	603	4,200

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

#### Morse Lake Dead Storage Facilities

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C103032End Date:2nd Quarter 2011

Location: Cedar River Watershed

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

This project implements a cost-effective system for reliably delivering water from Cedar Dead Storage during drought conditions for water supply and instream flows. This project may either make modifications to the existing Morse Lake Pumping Plants or construct a more reliable and cost-effective alternative system. SPU Asset Management Committee has approved the project. The confidence level of the cost estimate is low.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	634	927	1,847	910	8,423	11,710	1,297	0	25,748
Project Total:	634	927	1,847	910	8,423	11,710	1,297	0	25,748
Fund Appropriations/Allocations SPU Water Fund	634	927	1,847	910	8,423	11,710	1,297	0	25,748
Appropriations Total*	634	927	1,847	910	8,423	11,710	1,297	0	25,748
O & M Costs (Savings)			165	95	32	49	32	32	405
Spending Plan		920	1,847	910	8,423	11,710	1,297	0	25,107

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

## **Muckleshoot Agreement Implementation Plan**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107016End Date:4th Quarter 2009

Location: Cedar River Watershed

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

The Muckleshoot Settlement Agreement, per Ordinance 122131, settles Muckleshoot Indian Tribe (MIT) claims over Seattle's withdrawal of water from the Cedar River and a longstanding tribal claim over declining fish runs in the Cedar River/Lake Washington Basin. The agreement provides certainty for the region's water quality and quantity and a cooperative relationship between the City and the tribe. This project funds efforts that support implementation of the agreement's provisions, including trail improvements, development of the Cooperative Plan, upgrading the computerized access notification system, safety plan development, and improvements (including safety equipment and technology, communication equipment improvements, gates), surplus land transfers, and acquisition of the Yakima Pass parcel (required prior to conveyance to MIT). SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is high.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	626	201	105	0	0	0	932
Project Total:	0	0	626	201	105	0	0	0	932
Fund Appropriations/Allocations SPU Water Fund	0	0	626	201	105	0	0	0	932
Appropriations Total*	0	0	626	201	105	0	0	0	932
O & M Costs (Savings)			5	70	70	70	70	70	355

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

Ongoing

## **Multiple Utility Relocation**

**End Date:** 

BCL/Program Name: Distribution

Project Type: Rehabilitation or Restoration

Start Date: Ongoing

Project ID: C1205

**Location:** Citywide

Neighborhood Plan: Not in a Neighborhood Plan

Neighborhood Plan Matrix: N/A

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

This program enables SPU to respond to large projects that are conducted by other agencies that impact Seattle's water system. Impacts include utility conflicts that require relocations and construction impacts, and the project includes coordination to minimize impacts to SPU's customers and supply. Often these agencies reimburse SPU for some or all of the costs incurred. The life-to-date costs for this project are zero as costs are allocated to the individual projects once they are identified. In the 2006-2011 Adopted CIP, the project ID for the project was C1NW201-001.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	976	612	530	526	544	649	555	4,392
Project Total:	0	976	612	530	526	544	649	555	4,392
Fund Appropriations/Allocations									
SPU Water Fund	0	976	612	530	526	544	649	555	4,392
Appropriations Total*	0	976	612	530	526	544	649	555	4,392
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		814	612	530	526	544	649	555	4,230

#### **Operational Facility - Construction - WF**

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:OngoingProject ID:C4106-WFEnd Date:Ongoing

**Location:** Multiple

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

This program funds facility construction improvements for operational facilities within the city limits that support SPU management, operations and maintenance business functions, workforce, material, and equipment. Sub-projects within this program will go to SPU's Asset Management Committee for approval.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									_
Water Rates	1,956	2,085	1,508	924	2,159	1,551	1,513	1,551	13,247
Project Total:	1,956	2,085	1,508	924	2,159	1,551	1,513	1,551	13,247
Fund Appropriations/Allocations									
SPU Water Fund	1,956	2,085	1,508	924	2,159	1,551	1,513	1,551	13,247
Appropriations Total*	1,956	2,085	1,508	924	2,159	1,551	1,513	1,551	13,247
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		2,232	1,508	924	2,159	1,551	1,513	1,551	11,438

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

#### **Operational Facility - Other - WF**

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:OngoingProject ID:C4115-WFEnd Date:Ongoing

**Location:** Multiple

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

This program funds non-construction improvements such as studies, assessments, planning, design, and purchases for operational facility assets within the city limits. In 2011-2012 SPU is planning to focus improvements on Water-funded projects but that could be changed over time as projects are determined. Sub-projects within this program will go to SPU's Asset Management Committee for approval.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	47	789	676	261	338	589	113	116	2,929
Project Total:	47	789	676	261	338	589	113	116	2,929
Fund Appropriations/Allocations SPU Water Fund	47	789	676	261	338	589	113	116	2,929
Appropriations Total*	47	789	676	261	338	589	113	116	2,929
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		507	676	261	338	539	113	116	2,550

#### **Operations Control Center - WF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:Improved FacilityStart Date:1st Quarter 2003Project ID:C4105-WFEnd Date:4th Quarter 2010

**Location:** 2700 Airport Way South/Forest/Lander

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

This program rehabilitates, replaces, and constructs new improvements at the Operations Control Center complex to support the business needs of SPU's operational work force. Sub-projects within this program will go to the Asset Management Committee for approval.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	542	3,153	1,193	250	996	104	0	0	6,238
Project Total:	542	3,153	1,193	250	996	104	0	0	6,238
Fund Appropriations/Allocations SPU Water Fund	542	3,153	1,193	250	996	104	0	0	6,238
Appropriations Total*	542	3,153	1,193	250	996	104	0	0	6,238
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		3,243	1,193	250	996	104	0	0	5,786

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

## Painting Program - Myrtle Tank

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2004Project ID:C104031End Date:2nd Quarter 2010

**Location:** SW Myrtle St.

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SouthwestUrban Village:Morgan Junction

The Tank Painting program involves interior and exterior surface preparation and painting, minor structural repairs, and safety modifications on a regular maintenance cycle at the city's various tank sites. This project cleans and overcoats the tank exterior of the Myrtle tanks. The interior lining on one of the tanks is also removed and replaced. Minor safety and operational modifications are made. The confidence level of the cost estimate is high, but the project is currently on hold for a minimum of two years due to staff reallocation to higher-priority projects. SPU's Asset Management Committee has approved the project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	54	127	56	5	373	360	0	0	975
Project Total:	54	127	56	5	373	360	0	0	975
Fund Appropriations/Allocations									
SPU Water Fund	54	127	56	5	373	360	0	0	975
Appropriations Total*	54	127	56	5	373	360	0	0	975
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		448	56	5	373	360	0	0	1,242

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

#### Painting Program - Richmond Highland

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2004Project ID:C104032End Date:2nd Quarter 2010

**Location:** N 195th St./Fremont Ave. N

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

The 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. The interior lining is completely removed and replaced. Minor safety and operational modifications are made. The confidence level of the cost estimate is high, but the project is currently on hold, which may continue for a minimum of two years due to staff reallocation to higher priority projects. SPU's Asset Management Committee has approved the project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	64	1,571	5	5	535	535	0	0	2,715
Project Total:	64	1,571	5	5	535	535	0	0	2,715
Fund Appropriations/Allocations									
SPU Water Fund	64	1,571	5	5	535	535	0	0	2,715
Appropriations Total*	64	1,571	5	5	535	535	0	0	2,715
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		1,022	5	5	535	535	0	0	2,102

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

## **Painting Program - Steel Structures**

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2005Project ID:C1NW130End Date:4th Quarter 2012

**Location:** Citywide

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

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.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	103	52	251	474	544	649	555	2,627
Project Total:	0	103	52	251	474	544	649	555	2,627
Fund Appropriations/Allocations									
SPU Water Fund	0	103	52	251	474	544	649	555	2,627
Appropriations Total*	0	103	52	251	474	544	649	555	2,627
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		5	52	251	474	544	649	555	2,529

## **Pump Station - Install Station Motors**

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type: Rehabilitation or Restoration Start Date: 4th Quarter 1999

Project ID: C199052 End Date: Ongoing

Location: Citywide

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

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

This program replaces aging pump station motors throughout the water distribution system with new, more efficient motors. Some of the existing motors were installed 30 or more years ago and are now obsolete, with limited replacement parts available. The confidence for this project cost estimate is medium. SPU's Asset Management Committee has approved this project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	358	90	60	66	74	76	91	78	893
Project Total:	358	90	60	66	74	76	91	78	893
Fund Appropriations/Allocations									
SPU Water Fund	358	90	60	66	74	76	91	78	893
Appropriations Total*	358	90	60	66	74	76	91	78	893
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		60	60	66	74	76	91	78	505

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

#### **Pump Station - Queen Anne**

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 1996Project ID:C1AA005End Date:4th Quarter 2008

**Location:** 110 Lee St.

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:Magnolia/Queen AnneUrban Village:Not in an Urban Village

This project constructs a new booster pump station and pressure zone on the top of Queen Anne Hill to improve pressure at existing low-pressure water services in the higher elevation areas. The project includes more than 14,000 feet of watermain improvements necessary to establish the new pressure zone. The booster pump station will be an underground facility located at the site of the Queen Anne standpipes. The project also has a side benefit of improving fire flow capacity within the new pressure zone created. Project design is proceeding in conjunction with the Queen Anne tanks replacement project. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	355	3,018	5,102	727	0	0	0	0	9,203
Project Total:	355	3,018	5,102	727	0	0	0	0	9,203
Fund Appropriations/Allocations									
SPU Water Fund	355	3,018	5,102	727	0	0	0	0	9,203
Appropriations Total*	355	3,018	5,102	727	0	0	0	0	9,203
O & M Costs (Savings)			0	16	16	16	16	16	80
Spending Plan		110	5,102	727	0	0	0	0	5,940

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

## Purveyor Meters Replace - SPU

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2000

Project ID: C1107 End Date: Ongoing

Location: Citywide

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

This program replaces SPU wholesale customer meters that are not performing within industry standards of accuracy. The project also funds customer-requested wholesale meter changes and upgrades. For the most part, SPU costs are directly reimbursed by the wholesale customers. The confidence in the cost estimate is medium. This program does not require the SPU Asset Management Committee review as it is an ongoing program.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	78	103	147	126	105	109	130	111	909
Project Total:	78	103	147	126	105	109	130	111	909
Fund Appropriations/Allocations									
SPU Water Fund	78	103	147	126	105	109	130	111	909
Appropriations Total*	78	103	147	126	105	109	130	111	909
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		200	147	126	105	109	130	111	928

#### **Regional Facility - WF**

BCL/Program Name:Shared Cost ProjectsBCL/Program Code:C410BProject Type:Improved FacilityStart Date:OngoingProject ID:C4107-WFEnd Date:Ongoing

Location: Multiple

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

This program funds facility improvements for regional facilities that support SPU management, operations and maintenance business functions, work force, material, and equipment. The cost estimates will be revised over time as projects are determined. Sub-projects within this program will go to the Asset Management Committee for approval.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	4	261	1,232	494	3,309	2,470	566	0	8,336
Project Total:	4	261	1,232	494	3,309	2,470	566	0	8,336
Fund Appropriations/Allocations SPU Water Fund	4	261	1,232	494	3,309	2,470	566	0	8,336
Appropriations Total*	4	261	1,232	494	3,309	2,470	566	0	8,336
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		129	1,232	494	3,309	2,470	566	0	8,200

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

## **Regional Water Conservation Program**

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 1999Project ID:C1504End Date:4th Quarter 2012

Location: Citywide

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

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

This program provides rebates to water customers to "buy back" water that is being inefficiently used at a cost that is lower than the cost of developing new supply sources. The rebates are provided to direct and wholesale retail customers for a variety of water-using products and equipment. Examples include upgrades in industrial process water, replacing water-cooled equipment with air-cooled versions, more efficient toilets and urinals, high-efficiency clothes washers, and new irrigation controllers and sensors. This 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 goal is to cumulatively save 11 million gallons per day of average annual savings by 2011.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	2,629	3,657	3,731	3,697	4,211	4,186	2,594	611	25,317
Project Total:	2,629	3,657	3,731	3,697	4,211	4,186	2,594	611	25,317
Fund Appropriations/Allocations SPU Water Fund	2,629	3,657	3,731	3,697	4,211	4,186	2,594	611	25,317
Appropriations Total*	2,629	3,657	3,731	3,697	4,211	4,186	2,594	611	25,317
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		3,550	3,731	3,697	4,211	4,186	2,594	611	22,581

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

#### Renton Franchise/Line Valve Cedar River

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2002Project ID:C102023End Date:4th Quarter 2007

Location: Cedar River Pipeline

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

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

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	1,987	15	45	0	0	0	0	0	2,047
Project Total:	1,987	15	45	0	0	0	0	0	2,047
Fund Appropriations/Allocations									
SPU Water Fund	1,987	15	45	0	0	0	0	0	2,047
Appropriations Total*	1,987	15	45	0	0	0	0	0	2,047
O & M Costs (Savings)			27	35	35	0	0	0	97
Spending Plan		185	45	0	0	0	0	0	230

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

# **Replace Air Valve Chambers**

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C199060End Date:Ongoing

Location: Citywide

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

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

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	395	64	64	70	65	67	80	69	875
Project Total:	395	64	64	70	65	67	80	69	875
Fund Appropriations/Allocations									
SPU Water Fund	395	64	64	70	65	67	80	69	875
Appropriations Total*	395	64	64	70	65	67	80	69	875
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		62	64	70	65	67	80	69	478

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

## Reservoir Covering - Beacon

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101060End Date:4th Quarter 2009

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

Neighborhood Plan: North Beacon Hill Neighborhood Plan Matrix: N/A
Neighborhood District: Greater Duwamish Urban Village: Beacon Hill

Per Ordinance 121447, this project replaces the existing 49 million gallon open South Beacon Reservoir with a new underground reservoir of approximately the same size, and rehabilitates the pipes and valves connecting the reservoir to the water system. Additionally, the project may retire the existing North Beacon Reservoir. This project helps to protect Seattle's water supply from vandalism and contamination. Following this project, the Seattle Department of Parks and Recreation (Parks) may expand Jefferson Park over the reservoir site as a 2000 Parks Levy Project. The confidence level of the cost estimate is high. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	1,957	8,799	18,490	8,700	1,900	0	0	0	39,846
Project Total:	1,957	8,799	18,490	8,700	1,900	0	0	0	39,846
Fund Appropriations/Allocations SPU Water Fund	1,957	8,799	18,490	8,700	1,900	0	0	0	39,846
Appropriations Total*	1,957	8,799	18,490	8,700	1,900	0	0	0	39,846
O & M Costs (Savings)			0	0	(10)	(10)	(10)	(10)	-40
Spending Plan		8,600	18,490	8,700	1,900	0	0	0	37,690

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

## Reservoir Covering - Maple Leaf

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101078End Date:2nd Quarter 2014

Location: NE 86th St./Roosevelt Wy. NE

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

Per Ordinance 121447, this project replaces the existing Maple Leaf Reservoir with a new underground reservoir, and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination. Funds spent to date have been for design. The confidence level of the cost estimate is medium as construction is not scheduled to occur for several years in the future. Project construction completion is planned for the year 2013 consistent with Council Ordinance 121447. Project closeout activities will likely extend into 2014. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	433	2	14	0	300	396	17,347	29,341	47,833
Project Total:	433	2	14	0	300	396	17,347	29,341	47,833
Fund Appropriations/Allocations	122	2	1.4	0	200	20.6	15.045	20.241	47.022
SPU Water Fund	433	2	14	0	300	396	17,347	29,341	47,833
Appropriations Total*	433	2	14	0	300	396	17,347	29,341	47,833
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		730	14	0	300	396	17,347	9,341	48,128

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

## **Reservoir Covering - Myrtle**

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101076End Date:4th Quarter 2008

**Location:** 35th Ave. SW

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:SouthwestUrban Village:Morgan Junction

Per Ordinance 121447, this project replaces the existing open Myrtle Reservoir with a new underground reservoir of approximately the same size, rehabilitates the pipes and valves connecting the reservoir to the water system, and converts the disinfection system at the reservoir to sodium hypochlorite (bleach). The project helps to protect Seattle's water supply from vandalism and contamination. Project construction completion is planned for the year 2007, consistent with Council Ordinance 121447. The confidence level of the cost estimate is high. The SPU Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	1,107	2,695	6,720	300	0	0	0	0	10,822
Project Total:	1,107	2,695	6,720	300	0	0	0	0	10,822
Fund Appropriations/Allocations SPU Water Fund	1,107	2,695	6,720	300	0	0	0	0	10,822
Appropriations Total*	1,107	2,695	6,720	300	0	0	0	0	10,822
O & M Costs (Savings)			0	2	5	5	5	5	22
Spending Plan		3,200	6,720	300	0	0	0	0	10,220

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

## **Reservoir Covering - Volunteer**

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101059End Date:2nd Quarter 2016

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

Neighborhood Plan: Not in a Neighborhood Plan Neighborhood Plan Matrix: N/A
Neighborhood District: East District Urban Village: Capitol Hill

Per Ordinance 121447, this project replaces the existing Volunteer Reservoir with a new underground reservoir and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination. SPU is also evaluating the possibility of decommissioning this reservoir instead of burying it. Funding provided in 2011 is intended for design work to underground the reservoir, if a decision is made to keep the reservoir in service. The confidence level of the cost estimate is medium. The SPU Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	0	0	0	50	100	750	900
Project Total:	0	0	0	0	0	50	100	750	900
Fund Appropriations/Allocations									
SPU Water Fund	0	0	0	0	0	50	100	750	900
Appropriations Total*	0	0	0	0	0	50	100	750	900
O & M Costs (Savings)			0	0	0	0	0	0	0

#### **Reservoir Covering - West Seattle**

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:4th Quarter 2001Project ID:C101075End Date:4th Quarter 2010

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

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

Per Ordinance 121447, this project replaces the existing West Seattle Reservoir with a new underground reservoir, and rehabilitates pipelines leading into and out of the reservoir. The project helps to protect Seattle's water supply from vandalism and contamination. The confidence level of the cost estimate is medium. Project construction completion is planned for the year 2010. SPU's Asset Management Committee has reviewed and approved the reservoir burying program, including this project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	435	284	730	7,143	14,747	5,823	0	0	29,162
Project Total:	435	284	730	7,143	14,747	5,823	0	0	29,162
Fund Appropriations/Allocations									
SPU Water Fund	435	284	730	7,143	14,747	5,823	0	0	29,162
Appropriations Total*	435	284	730	7,143	14,747	5,823	0	0	29,162
O & M Costs (Savings)			0	0	0	0	(10)	(10)	-20
Spending Plan		800	730	7,143	14,747	5,823	0	0	29,243

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

## **Restoration Thinning/Treatment**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2007Project ID:C107019End Date:4th Quarter 2010

Location: Cedar River Watershed

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

This project treats woody debris (slash) that results from thinning small trees under the HCP Upland Forest Restoration Thinning program. This project will improve wildlife habitat as part of the Muckleshoot Settlement Agreement. The Restoration Thinning program requires cutting young trees to reduce tree density and improve long-term habitat value. These cut trees are typically left on the ground to decay, and the thinning has resulted in persistent slash in several watershed locations. This slash presents an obstacle to wildlife movement, impedes understory plant growth, and increases wildfire risk. This project treats the slash using a variety of methods (cut and pile, mulch, and/or remove) in key areas to improve wildlife movement, understory plant growth, and reduce fire risk. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	223	115	91	94	0	0	522
Project Total:	0	0	223	115	91	94	0	0	522
Fund Appropriations/Allocations SPU Water Fund	0	0	223	115	91	94	0	0	522
Appropriations Total*	0	0	223	115	91	94	0	0	522
O & M Costs (Savings)			0	0	0	0	0	0	0

## **Rock Creek Fishway**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2002Project ID:C101008End Date:4th Quarter 2008

**Location:** Lake Youngs

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

In 2000, SPU received notification from the Washington Department of Fish and Wildlife that the culvert crossing under the Lake Youngs Aqueduct on Rock Creek, approximately 3.5 miles north of Landsburg, does not comply with existing fish passage requirements. This project is planned to meet requirements: an independent consultant assessment of the nature and magnitude of fish passage impairment at the current structure; conceptual development of a range of improvement options for the facility; and design, permitting, and construction of the selected improvement option. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	179	115	1,640	66	0	0	0	0	2,000
Project Total:	179	115	1,640	66	0	0	0	0	2,000
Fund Appropriations/Allocations									
SPU Water Fund	179	115	1,640	66	0	0	0	0	2,000
Appropriations Total*	179	115	1,640	66	0	0	0	0	2,000
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		340	1,640	66	0	0	0	0	2,046

## **Seattle Direct Service Additional Conservation**

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C1505End Date:4th Quarter 2011

Location: Citywide

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

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

This program assists low-income households with installing water-efficient fixtures, such as toilets, showerheads, clothes washers, and faucets. The program implements Ordinance 120532, adopted in 2001, and supplements funding provided under SPU's Regional Water Conservation Program (C1504). Council directed SPU to provide additional funding for measures to reduce personal and commercial water consumption in SPU's direct service area. The project is designed in three phases. Phase One targets low-income housing providers; Phase Two targets subsidized and non-subsidized low-income households; and Phase Three targets clothes washers and irrigation system upgrades for all low-income households. Accelerated 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, since it is dependent on customer response.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	930	1,018	1,918	1,816	1,684	1,739	39	0	9,144
Project Total:	930	1,018	1,918	1,816	1,684	1,739	39	0	9,144
Fund Appropriations/Allocations									
SPU Water Fund	930	1,018	1,918	1,816	1,684	1,739	39	0	9,144
Appropriations Total*	930	1,018	1,918	1,816	1,684	1,739	39	0	9,144
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		940	1,918	1,816	1,684	1,739	39	0	8,135

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

#### **Security Improvements - WF**

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

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C4113-WFEnd Date:4th Quarter 2012

Location: Citywide

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

This project improves security and protection of SPU's Water facilities. Phase one is now substantially complete, with improvements at 23 SPU-occupied sites that substantially reduced risks at many of the most critical facilities. This project represents phase two, which extends this work to further sites and may include installation of key cards, an Integrated Security System, signage, electronic monitoring and security-related infrastructure improvements, as well as upgrades to key, fence, and communication systems. Currently, only 2007 is being budgeted, as SPU's Asset Management Committee will consider a detailed proposal in early 2007. WF improvements may total an additional \$9.2 million through 2012.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	6,636	0	2,196	0	0	0	0	0	8,832
Project Total:	6,636	0	2,196	0	0	0	0	0	8,832
Fund Appropriations/Allocations									
SPU Water Fund	6,636	0	2,196	0	0	0	0	0	8,832
Appropriations Total*	6,636	0	2,196	0	0	0	0	0	8,832
O & M Costs (Savings)			200	0	0	0	0	0	200

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

#### Seismic Upgrade - Cedar River Pipelines at Ginger Creek

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:1st Quarter 1999Project ID:C197032End Date:4th Quarter 2007

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

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

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

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	443	1,973	5	0	0	0	0	0	2,421
Project Total:	443	1,973	5	0	0	0	0	0	2,421
Fund Appropriations/Allocations									
SPU Water Fund	443	1,973	5	0	0	0	0	0	2,421
Appropriations Total*	443	1,973	5	0	0	0	0	0	2,421
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		2,100	5	0	0	0	0	0	2,105

#### Seismic Upgrade - Pipeline Backbone

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 2001Project ID:C101038End Date:4th Quarter 2010

**Location:** Citywide

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

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

This program makes seismic improvements to the water distribution system to better ensure water availability following an earthquake. The program includes seismic vulnerability and hydraulic modeling of the system to determine pipeline vulnerabilities, earthquake failure effects on the system, and cost-effective mitigation approaches. For budgeting purposes, it is anticipated that approximately 20 isolation valves will be installed at various locations to prevent vulnerable pipelines from draining the system. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	400	103	51	684	1,369	326	0	0	2,933
Project Total:	400	103	51	684	1,369	326	0	0	2,933
Fund Appropriations/Allocations									
SPU Water Fund	400	103	51	684	1,369	326	0	0	2,933
Appropriations Total*	400	103	51	684	1,369	326	0	0	2,933
O & M Costs (Savings)			0	10	10	10	10	10	50
Spending Plan		50	51	684	1,369	326	0	0	2,480

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

#### Seismic Upgrade - Tanks

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:4th Quarter 1994Project ID:C1120End Date:4th Quarter 2011

Location: Citywide

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

This project makes seismic upgrades or replaces above-ground water tanks to improve their performance under seismic conditions and eliminate the risk of major failures. Typical upgrades include improving anchorage and foundations for standpipes, and adding seismic isolators and strengthening braces for elevated tanks supported on steel pillars. This project has been approved by SPU's Asset Management Committee. This project is in a preliminary phase of development for the years beyond 2008, and cost estimates will be revised over time.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	1,075	1,591	3,510	1,460	0	0	649	0	8,285
Project Total:	1,075	1,591	3,510	1,460	0	0	649	0	8,285
Fund Appropriations/Allocations									
SPU Water Fund	1,075	1,591	3,510	1,460	0	0	649	0	8,285
Appropriations Total*	1,075	1,591	3,510	1,460	0	0	649	0	8,285
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		435	3,510	1,460	0	0	649	0	6,054

#### Sound Transit - Airport Link - WF

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2007Project ID:C4111-WFEnd Date:4th Quarter 2008

**Location:** North Seattle

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

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

This program relocates, replaces, and protects water-related facilities affected by the extension of the Sound Transit Central Link light rail system to SeaTac Airport. This extension is located in Tukwila but will impact one or more water transmission lines.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	63	27	0	0	0	0	90
Project Total:	0	0	63	27	0	0	0	0	90
Fund Appropriations/Allocations SPU Water Fund	0	0	63	27	0	0	0	0	90
Appropriations Total*	0	0	63	27	0	0	0	0	90
O & M Costs (Savings)			0	0	0	0	0	0	0

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

#### Sound Transit - University Link - WF

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

Project Type:New FacilityStart Date:1st Quarter 2007Project ID:C4110-WFEnd Date:4th Quarter 2009

Location: North Seattle

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

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

This program relocates or replaces water-related facilities affected by the extension of the Sound Transit Central Link light rail system to the University District.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	49	59	46	0	0	0	154
Project Total:	0	0	49	59	46	0	0	0	154
Fund Appropriations/Allocations SPU Water Fund	0	0	49	59	46	0	0	0	154
Appropriations Total*	0	0	49	59	46	0	0	0	154
O & M Costs (Savings)			0	0	0	0	0	0	0

#### **Sound Transit - Water Betterment**

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

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C405430End Date:4th Quarter 2012

**Location:** Central & South areas of Seattle

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

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

This project improves water mains and appurtenances (hydrants, valves, coatings, cathodic protection, etc.) related to Sound Transit's light rail projects. These improvements are "opportunity" projects that become available and cost effective as Sound Transit constructs light rail and rebuilds the street right of way. Sound Transit's project will be constructing an electric light rail system which includes an alignment over 14 miles in length from the Convention Place Station to S. 154th Street near Seattle/Tacoma International Airport first. The second length of light rail will progress from the Convention Place Station to Northgate.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	437	2,200	410	420	754	883	1,018	1,044	7,166
Project Total:	437	2,200	410	420	754	883	1,018	1,044	7,166
Fund Appropriations/Allocations SPU Water Fund	437	2.200	410	420	754	883	1.018	1.044	7,166
Appropriations Total*	437	2,200	410	420	754	883	1,018	1,044	7,166
O & M Costs (Savings)			0	0	60	60	60	60	240
Spending Plan		1,000	410	420	754	883	1,018	1,044	5,529

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

## **Sound Transit - WF**

BCL/Program Name: Shared Cost Projects

BCL/Program Code: C410B

Project Type:New FacilityStart Date:1st Quarter 2003Project ID:C4104-WFEnd Date:4th Quarter 2009

**Location:** Central & South areas of Seattle

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

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

This program relocates or replaces water-related facilities affected by Sound Transit's Central Link Project. Sound Transit proposes to construct an electrical light rail transit system that includes more than 14 miles of alignment from the Convention Place Station to South 154th Street near Seattle/Tacoma Airport. The City of Seattle, including SPU, has an agreement for partial reimbursement from Sound Transit. Seattle Public Utilities pays for water betterments that are being done in conjunction with the Sound Transit Central Link Project. Sound Transit Water Betterments are listed as a separate capital project on the page prior to this project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	3,002	2,026	612	206	15	0	0	0	5,861
Project Total:	3,002	2,026	612	206	15	0	0	0	5,861
<b>Fund Appropriations/Allocations</b> SPU Water Fund	3,002	2,026	612	206	15	0	0	0	5,861
Appropriations Total*	3,002	2,026	612	206	15	0	0	0	5,861
O & M Costs (Savings)			0	0	0	0	50	50	100
Spending Plan		1,206	612	206	15	0	0	0	2,039

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

#### South Fork Tolt Large Woody Debris Replacement

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104057End Date:4th Quarter 2011

**Location:** South Fork Tolt River

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

This project 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. In the 2006-2011 Adopted CIP, the project title for the project was Tolt Fisheries Mitigation. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	87	44	3	28	53	48	65	0	327
Project Total:	87	44	3	28	53	48	65	0	327
Fund Appropriations/Allocations									
SPU Water Fund	87	44	3	28	53	48	65	0	327
Appropriations Total*	87	44	3	28	53	48	65	0	327
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		0	3	28	53	48	65	0	196

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

## **South Lake Union - WF**

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

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C4114-WFEnd Date:4th Quarter 2009

**Location:** South Lake Union

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

This project relocates or replaces watermains, hydrants, water services, and transmission lines affected by Citysponsored projects in the South Lake Union Area. This may also implement watermain decommissioning made necessary by the South Lake Union Streetcar project as well as other relocations and replacements. This effort identifies SPU water system direct impacts, opportunities for system improvements, and cost responsibility. This project also funds planning-level coordination with other City departments on projects within the South Lake Union area. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	171	72	150	99	16	0	0	0	508
Project Total:	171	72	150	99	16	0	0	0	508
Fund Appropriations/Allocations									
SPU Water Fund	171	72	150	99	16	0	0	0	508
Appropriations Total*	171	72	150	99	16	0	0	0	508
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		0	150	99	16	0	0	0	265

#### **Spokane Street Viaduct - WF**

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

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2007Project ID:C407023-WFEnd Date:4th Quarter 2011

**Location:** Spokane Street Viaduct

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:West Seattle Junction

This program relocates or replaces water-related facilities affected by improvements to the Spokane Street Viaduct. SDOT is widening the Spokane Street Viaduct and adding new ramps. The initial phase will identify water-related impacts from the project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	132	135	135	138	141	0	681
Project Total:	0	0	132	135	135	138	141	0	681
Fund Appropriations/Allocations									
SPU Water Fund	0	0	132	135	135	138	141	0	681
Appropriations Total*	0	0	132	135	135	138	141	0	681
O & M Costs (Savings)			0	0	50	50	50	50	200

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

#### SR-520 Bridge Replacement - WF

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

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2007Project ID:C407021-WFEnd Date:4th Quarter 2020

**Location:** SR 520

Neighborhood Plan:Not in a Neighborhood PlanNeighborhood Plan Matrix:N/ANeighborhood District:In more than one DistrictUrban Village:University Campus

This program relocates or replaces water-related facilities affected by the Washington State Department of

Transportation's replacement of the SR 520 floating bridge.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	132	135	135	138	141	145	825
Project Total:	0	0	132	135	135	138	141	145	825
Fund Appropriations/Allocations	_	_							
SPU Water Fund	0	0	132	135	135	138	141	145	825
Appropriations Total*	0	0	132	135	135	138	141	145	825
O & M Costs (Savings)			0	0	0	0	0	0	0

#### **Stream & Riparian Restoration**

BCL/Program Name: Habitat Conservation Program BCL/Program Code: C160B

Project Type: Rehabilitation or Restoration Start Date: 2nd Quarter 2000

Project ID: C1602 End Date: Ongoing

Location: Cedar River Watershed

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

Stream and Riparian Restoration is a category of projects within the Cedar River Habitat Conservation Plan (HCP) and includes streambank stabilization, streamside revegetation, large woody debris placement, conifer under-planting, riparian thinning, stream-crossing projects to improve flow, stream-crossing improvements to reestablish fish passage, and bull trout habitat studies. These projects are intended to restore fish and wildlife habitats in the Cedar River Watershed that have been degraded by past activities, such as logging and road construction, and are conditions of the Incidental Take Permit associated with the HCP. SPU's Asset Management Committee has approved the HCP at the program level. The confidence level for this project cost estimate is high.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	2,938	890	955	711	685	531	761	568	8,040
Project Total:	2,938	890	955	711	685	531	761	568	8,040
Fund Appropriations/Allocations									
SPU Water Fund	2,938	890	955	711	685	531	761	568	8,040
Appropriations Total*	2,938	890	955	711	685	531	761	568	8,040
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		1,000	955	711	685	531	761	568	5,212

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

#### **Tolt Bridges**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 2004Project ID:C1308End Date:4th Quarter 2009

**Location:** Tolt River Watershed

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

This project replaces two remaining stream crossings with bridges in the Tolt River Watershed. A cost/benefit analysis determined that access is needed on these roads, and the existing crossings are undersized for stream conditions, posing a risk of road failure with associated safety and environmental risks. The confidence level of the current cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	223	22	6	81	263	0	0	0	595
Project Total:	223	22	6	81	263	0	0	0	595
Fund Appropriations/Allocations									
SPU Water Fund	223	22	6	81	263	0	0	0	595
Appropriations Total*	223	22	6	81	263	0	0	0	595
O & M Costs (Savings)			3	3	3	3	3	3	18
Spending Plan		12	6	81	263	0	0	0	362

## **Tolt Instrument and Warning Upgrade**

BCL/Program Name: Water Resources BCL/Program Code: C150B

**Project Type:** Improved Facility **Start Date:** 1st Quarter 1999

Project ID: C1AA012 End Date: Ongoing

**Location:** Tolt Dam

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

This project replaces outmoded equipment and improves the reliability of the required Tolt Instrument and Warning System for detecting dam failure. The project cost estimate has a high confidence level.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	214	47	179	100	32	30	38	32	672
Project Total:	214	47	179	100	32	30	38	32	672
Fund Appropriations/Allocations									
SPU Water Fund	214	47	179	100	32	30	38	32	672
Appropriations Total*	214	47	179	100	32	30	38	32	672
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		100	179	100	32	30	38	32	511

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

#### **Tolt Pipeline 2 II & III East of Tieline**

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:3rd Quarter 1987Project ID:C100084End Date:4th Quarter 2010

**Location:** Various

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

The project constructed portions of Tolt Pipeline No. 2 between the Trilogy Development and Duvall. It is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence level in the cost estimate is high. SPU's Asset Management Committee has approved the project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	28,224	33	11	6	11	11	0	0	28,296
Project Total:	28,224	33	11	6	11	11	0	0	28,296
Fund Appropriations/Allocations									
SPU Water Fund	28,224	33	11	6	11	11	0	0	28,296
Appropriations Total*	28,224	33	11	6	11	11	0	0	28,296
O & M Costs (Savings)			10	10	10	10	10	10	60
Spending Plan		32	11	6	11	11	0	0	71

#### Tolt Pipeline 2 II & III West of Tieline

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:3rd Quarter 1987Project ID:C100083End Date:4th Quarter 2008

Location: Various

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

The project constructed portions of Tolt Pipeline No. 2 between Redmond's Education Hill neighborhood and the Trilogy Development. It is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence level in the cost estimate is high. SPU's Asset Management Committee has approved the project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	26,413	5	1	4	0	0	0	0	26,423
Project Total:	26,413	5	1	4	0	0	0	0	26,423
Fund Appropriations/Allocations SPU Water Fund	26,413	5	1	4	0	0	0	0	26,423
Appropriations Total*	26,413	5	1	4	0	0	0	0	26,423
O & M Costs (Savings)			20	20	20	20	20	20	120

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

#### Tolt Pipeline I - Phase 3 - B

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:1st Quarter 1999Project ID:C199003End Date:4th Quarter 2011

**Location:** Tolt Pipeline

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

This project replaced one mile of the original Tolt Pipeline No. 1 spanning the Snoqualmie Valley where it was weakened by corrosion. It is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence level in the cost estimate is high. SPU's Asset Management Committee has approved the project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	5,110	9	6	6	2	2	3	0	5,138
Project Total:	5,110	9	6	6	2	2	3	0	5,138
Fund Appropriations/Allocations									
SPU Water Fund	5,110	9	6	6	2	2	3	0	5,138
Appropriations Total*	5,110	9	6	6	2	2	3	0	5,138
O & M Costs (Savings)			8	10	10	0	0	0	28
Spending Plan		63	6	6	2	2	3	0	82

## **Tolt Pipeline II - Phase 4**

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Improved FacilityStart Date:1st Quarter 1995Project ID:C194029End Date:4th Quarter 2007

**Location:** Tolt Pipeline Right of Way

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

The project constructed portions of Tolt Pipeline No. 2 between Woodinville and Lake Forest Park. It is essentially complete and in service, with environmental restoration and monitoring activities required by permits continuing on for several more years. The confidence level in the cost estimate is high. SPU's Asset Management Committee has approved the project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	28,735	43	8	0	0	0	0	0	28,786
Project Total:	28,735	43	8	0	0	0	0	0	28,786
<b>Fund Appropriations/Allocations</b>									
SPU Water Fund	28,735	43	8	0	0	0	0	0	28,786
Appropriations Total*	28,735	43	8	0	0	0	0	0	28,786
O & M Costs (Savings)			19	24	24	25	27	29	148
Spending Plan		6	8	0	0	0	0	0	14

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

#### **Tolt River Watershed Road Improvements**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 1996Project ID:C196007End Date:4th Quarter 2012

Location: Tolt Watershed

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

This project improves the forest roads in the South Fork Tolt River Watershed. The confidence level of the current cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	1,383	175	177	173	126	130	156	133	2,454
Project Total:	1,383	175	177	173	126	130	156	133	2,454
Fund Appropriations/Allocations SPU Water Fund	1,383	175	177	173	126	130	156	133	2,454
Appropriations Total*	1,383	175	177	173	126	130	156	133	2,454
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		170	177	173	126	130	156	133	1,066

#### **Tolt Watershed Management Plan**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2005Project ID:C105083End Date:4th Quarter 2008

Location: Tolt River Watershed

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

This project develops a Tolt Watershed Management Plan to bring operations in the Tolt municipal watershed area into alignment with the operation of other major watershed facilities, and to provide guidance for a wide array of management activities into the future. Major elements addressed in the plan include forestland management, facility security and protection, road maintenance and operations, and fish and wildlife management. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	69	206	219	2	0	0	0	0	497
Project Total:	69	206	219	2	0	0	0	0	497
Fund Appropriations/Allocations									
SPU Water Fund	69	206	219	2	0	0	0	0	497
Appropriations Total*	69	206	219	2	0	0	0	0	497
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		210	219	2	0	0	0	0	432

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

#### **Transmission Pipelines Rehabilitation**

BCL/Program Name: Transmission BCL/Program Code: C120B

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

Project ID: C1127 End Date: Ongoing

Location: Citywide

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

This program rehabilitates and upgrades water transmission pipes as deficiencies are identified. The confidence level of the current cost estimate is low. SPU's Asset Management Committee review is not required as it is an ongoing program.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	31	103	679	523	737	761	1,297	1,111	5,242
Project Total:	31	103	679	523	737	761	1,297	1,111	5,242
Fund Appropriations/Allocations									
SPU Water Fund	31	103	679	523	737	761	1,297	1,111	5,242
Appropriations Total*	31	103	679	523	737	761	1,297	1,111	5,242
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		299	679	523	737	761	1,297	1,111	5,407

#### **Treatment Facility/Water Quality Improvements**

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2007

Project ID: C107018 End Date: Ongoing

Location: Various

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

This project plans treatment facility and water quality improvement activities prior to the formation of specific capital projects. This work includes development of Strategic Asset Management Plans and Project Development Plans for the Water Quality Program Area, policy analysis, program development, and other work that assists in the identification of potential capital projects and development of concept level scopes and estimates for new capital projects. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	106	153	158	163	195	167	942
Project Total:	0	0	106	153	158	163	195	167	942
Fund Appropriations/Allocations									
SPU Water Fund	0	0	106	153	158	163	195	167	942
Appropriations Total*	0	0	106	153	158	163	195	167	942
O & M Costs (Savings)			0	0	0	0	0	0	0

<sup>\*</sup>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/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type: Rehabilitation or Restoration Start Date: 2nd Quarter 2000

Project ID: C1603 End Date: Ongoing

Location: Cedar River Watershed

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

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

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	3,267	887	831	696	594	613	861	671	8,420
Project Total:	3,267	887	831	696	594	613	861	671	8,420
Fund Appropriations/Allocations SPU Water Fund	3,267	887	831	696	594	613	861	671	8,420
Appropriations Total*	3,267	887	831	696	594	613	861	671	8,420
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		850	831	696	594	613	861	671	5,116

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

## <u>Utility Relocation due to Alaskan Way Tunnel and Seawall Project - WF</u>

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

Project Type:New FacilityStart Date:1st Quarter 2004Project ID:C4102-WFEnd Date:4th Quarter 2017

**Location:** SR 99 / Battery St.

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

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

This project relocates, replaces, and protects water system related facilities affected by the replacement of the Alaskan Way Viaduct and Seawall with a new seawall and 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. In December 2004, the Mayor and City Council designated a cut-and-cover tunnel as their preferred alternative for replacing the existing Viaduct. The Washington State Department of Transportation (WSDOT) is the lead for the project. SPU has substantial water system infrastructure along the approximately four-mile project corridor which must be relocated one or more times during the project. This project designs and constructs these relocations according to the transportation project scope and schedule. The estimated costs shown below are for water system relocations and related service work from 2007-2012. Note that the project will likely exend to about 2016 with a total cost estimate for water of over \$28 million. Given the early stage of the project it is anticipated that scope of work and budget estimates will change as the design progresses. The SPU Asset Management Committee approved the project. See also the Alaskan Way Tunnel and Seawall project in the Seattle Department of Transportation and Utility Relocation Due to Alaskan Way Tunnel and Seawall projects in the CIPs for Seattle City Light and SPU Drainage and Wastewater.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	365	765	2,117	7,621	8,122	2,961	2,985	3,264	28,200
Project Total:	365	765	2,117	7,621	8,122	2,961	2,985	3,264	28,200
Fund Appropriations/Allocations SPU Water Fund	365	765	2,117	7,621	8,122	2,961	2,985	3,264	28,200
Appropriations Total*	365	765	2,117	7,621	8,122	2,961	2,985	3,264	28,200
O & M Costs (Savings)			0	0	0	0	0	0	0

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

#### Water Design Standards & Guideline Program

BCL/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:2nd Quarter 2002Project ID:C102028End Date:4th Quarter 2008

**Location:** N/A

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

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

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	185	258	275	251	0	0	0	0	969
Project Total:	185	258	275	251	0	0	0	0	969
Fund Appropriations/Allocations									
SPU Water Fund	185	258	275	251	0	0	0	0	969
Appropriations Total*	185	258	275	251	0	0	0	0	969
O & M Costs (Savings)			0	0	0	0	0	0	0

#### Water Infrastructure - Hydrant Replacement/Relocation

BCL/Program Name:DistributionBCL/Program Code:C110BProject Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C1110End Date:Ongoing

Location: Citywide

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

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

This program replaces older and damaged hydrants to ensure a reliable and adequate supply of water for fire protection. The Seattle Fire Department provides SPU with information on hydrants that are found to be malfunctioning. Other repairs or replacements occur when hydrants are damaged by vehicles. On average, SPU repairs or replaces between seven and 25 hydrants per year. Cost estimates are revised over time, reflecting uncertainty about how many hydrants will be found to be malfunctioning in a given year. The SPU Asset Management Committee has approved the project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	1,311	233	163	158	242	250	298	255	2,912
Project Total:	1,311	233	163	158	242	250	298	255	2,912
Fund Appropriations/Allocations									
SPU Water Fund	1,311	233	163	158	242	250	298	255	2,912
Appropriations Total*	1,311	233	163	158	242	250	298	255	2,912
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		228	163	158	242	250	298	255	1,596

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

#### Water Infrastructure - New Hydrants

BCL/Program Name:DistributionBCL/Program Code:C110BProject Type:New FacilityStart Date:OngoingProject ID:C1112End Date:Ongoing

Location: Citywide

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

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

This program provides new fire hydrants citywide. The number of new hydrants installed each year varies with demand. The confidence level of the cost estimate is medium as the Seattle Fire Department determines the number of hydrants that should be added. The project has been approved by the SPU Asset Management Committee.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	177	12	105	108	13	13	16	13	457
Project Total:	177	12	105	108	13	13	16	13	457
Fund Appropriations/Allocations SPU Water Fund	177	12	105	108	13	13	16	13	457
Appropriations Total*	177	12	105	108	13	13	16	13	457
O & M Costs (Savings)			0	1	1	1	1	1	5

## Water Infrastructure - New Taps

BCL/Program Name:DistributionBCL/Program Code:C110BProject Type:New FacilityStart Date:OngoingProject ID:C1113End Date:Ongoing

Location: Citywide

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

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

This program installs new water service lines (taps) from the City watermain to customers' property lines. The confidence level of the current cost estimate is medium as the number of taps is dependent upon customer requests. The SPU Asset Management Committee has approved this project.

e									
	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	21,607	3,708	5,474	4,276	4,633	4,784	5,708	4,888	55,078
<b>Project Total:</b>	21,607	3,708	5,474	4,276	4,633	4,784	5,708	4,888	55,078
<b>Fund Appropriations/Allocations</b> SPU Water Fund	21,607	3,708	5,474	4,276	4,633	4,784	5,708	4,888	55,078
Appropriations Total*	21,607	3,708	5,474	4,276	4,633	4,784	5,708	4,888	55,078
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		5,400	5,474	4,276	4,633	4,784	5,708	4,888	35,163

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

## Water Infrastructure - Service Renewal

BCL/Program Name:DistributionBCL/Program Code:C110BProject Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C1109End Date:Ongoing

Location: Citywide

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

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

This program replaces water service lines that are substandard, leaking, or have outlived their useful life, and disconnects service lines that are no longer needed. The confidence level of the current cost estimate is high. The Asset Management Committee has approved this project.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	32,727	5,315	6,099	5,345	5,580	5,763	7,265	6,221	74,313
Project Total:	32,727	5,315	6,099	5,345	5,580	5,763	7,265	6,221	74,313
Fund Appropriations/Allocations									
SPU Water Fund	32,727	5,315	6,099	5,345	5,580	5,763	7,265	6,221	74,313
Appropriations Total*	32,727	5,315	6,099	5,345	5,580	5,763	7,265	6,221	74,313
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		5,500	6,099	5,345	5,580	5,763	7,265	6,221	41,771

## Water Infrastructure - Watermain Extensions

BCL/Program Name:DistributionBCL/Program Code:C110BProject Type:New FacilityStart Date:OngoingProject ID:C1111End Date:Ongoing

Location: Citywide

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

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

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

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	1,339	1,030	1,167	1,126	1,053	1,087	1,297	1,111	9,210
Project Total:	1,339	1,030	1,167	1,126	1,053	1,087	1,297	1,111	9,210
Fund Appropriations/Allocations SPU Water Fund	1,339	1.030	1.167	1.126	1.053	1.087	1,297	1.111	9,210
Appropriations Total*	1,339	1,030	1,167	1,126	1,053	1,087	1,297	1,111	9,210
O & M Costs (Savings)			0	5	5	5	5	5	25
Spending Plan		1,000	1,167	1,126	1,053	1,087	1,297	1,111	7,841

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

## **Water Quality Equipment**

BCL/Program Name: Water Quality & Treatment BCL/Program Code: C140B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C107020End Date:4th Quarter 2007

**Location:** Various

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

This project purchases and installs on-line water quality monitoring equipment to increase Seattle's capacity to detect and rapidly respond to drinking water contamination events. SPU is actively investigating methods to improve the drinking water quality security and surveillance system. This project would allow for continued improvements. Collaborative research between SPU and United States Environmental Protection Agency (USEPA) will yield specific recommendations for online monitoring equipment (quantity and suggested locations) in 2007. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	166	0	0	0	0	0	166
Project Total:	0	0	166	0	0	0	0	0	166
Fund Appropriations/Allocations									
SPU Water Fund	0	0	166	0	0	0	0	0	166
Appropriations Total*	0	0	166	0	0	0	0	0	166
O & M Costs (Savings)			62	32	32	33	34	35	228

#### **Water Resources Project Development**

BCL/Program Name: Water Resources BCL/Program Code: C150B

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

Project ID: C105100 End Date: Ongoing

**Location:** N/A

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

This project supports the development of potential new projects in SPU's Water Resources Business Area through the preparation of technical evaluation, cost benefit analysis, and the initial Project Development Plan (PDP1). The scope and costs are refined as the project progresses to the preliminary engineering phase.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	73	103	102	102	105	109	130	111	834
Project Total:	73	103	102	102	105	109	130	111	834
Fund Appropriations/Allocations									
SPU Water Fund	73	103	102	102	105	109	130	111	834
Appropriations Total*	73	103	102	102	105	109	130	111	834
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		280	102	102	105	109	130	111	938

<sup>\*</sup>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/Program Name: Transmission BCL/Program Code: C120B

Project Type:Rehabilitation or RestorationStart Date:OngoingProject ID:C1105End Date:Ongoing

**Location:** Regional

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

This program improves the configuration of approximately 200 blowoffs as the need arises. Blowoffs are valves and piping located at low points in water pipelines used to drain or flush the line for emergency or maintenance operations. The program's goals include: eliminating or minimizing flooding damage to downstream private property due to blowoff operations; addressing the discharge of water into sensitive streams; requiring monitoring and treatment for impacts due to chlorine, pH, and turbidity; eliminating possible cross-connections; and addressing improvements to water courses to reduce erosion or other damage caused by blowoff operations. The programmatic approach and criteria have been approved by SPU's Asset Management Committee. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	110	58	34	14	158	163	195	167	898
Project Total:	110	58	34	14	158	163	195	167	898
Fund Appropriations/Allocations									
SPU Water Fund	110	58	34	14	158	163	195	167	898
Appropriations Total*	110	58	34	14	158	163	195	167	898
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		250	34	14	158	163	195	167	980

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

#### Water System Plan - 2007

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:New InvestmentStart Date:2nd Quarter 2003Project ID:C103058End Date:2nd Quarter 2007

**Location:** N/A

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

This project conducts an environmental review and updates the 2007 Comprehensive Water System Plan. 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. SPU's Asset Management Committee has approved this project. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	487	399	25	0	0	0	0	0	911
Project Total:	487	399	25	0	0	0	0	0	911
Fund Appropriations/Allocations									
SPU Water Fund	487	399	25	0	0	0	0	0	911
Appropriations Total*	487	399	25	0	0	0	0	0	911
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		438	25	0	0	0	0	0	463

## Water System Plan - 2013

BCL/Program Name: Water Resources BCL/Program Code: C150B

Project Type:New InvestmentStart Date:3rd Quarter 2009Project ID:C113001End Date:3rd Quarter 2013

Location: N/A

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

This project conducts an environmental review and updates the 2013 Comprehensive Water System Plan. 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 is in a preliminary phase of development and cost estimates will be revised over time as the scope of the plan is clarified. In the 2006-2011 Adopted CIP, the project ID for the project was C1NW501-006.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	0	0	46	98	389	333	867
Project Total:	0	0	0	0	46	98	389	333	867
Fund Appropriations/Allocations									
SPU Water Fund	0	0	0	0	46	98	389	333	867
Appropriations Total*	0	0	0	0	46	98	389	333	867
O & M Costs (Savings)			0	0	0	0	0	0	0

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

#### **Watermain Rehabilitation**

BCL/Program Name: Distribution BCL/Program Code: C110B

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

Project ID: C1129 End Date: Ongoing

**Location:** Regional

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

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

This program replaces and rehabilitates watermain pipelines. The program utilizes asset management principles to provide sustainability of the watermain distribution system infrastructure at the lowest life-cycle costs. Pipes are replaced when the cost of continued repairs exceeds the replacement cost. Alternative methods of rehabilitation, such as clean and cement mortar lining, are utilized when appropriate to provide a more cost-effective option while reducing the impacts to the surrounding community. Other customer levels of service, such as pressure and fire flow, may drive watermain improvements, either by regulation or where cost effective. SPU's Asset Management Committee has approved the project. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	1,115	2,369	1,118	171	4,211	4,349	5,189	4,443	22,966
Project Total:	1,115	2,369	1,118	171	4,211	4,349	5,189	4,443	22,966
Fund Appropriations/Allocations									
SPU Water Fund	1,115	2,369	1,118	171	4,211	4,349	5,189	4,443	22,966
Appropriations Total*	1,115	2,369	1,118	171	4,211	4,349	5,189	4,443	22,966
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		2,370	1,118	171	4,211	4,349	5,189	4,443	21,852

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

# Watershed Emergency/Opportunity

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:Improved FacilityStart Date:1st Quarter 2007Project ID:C107004End Date:4th Quarter 2010

Location: Cedar & Tolt River Watershed

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

This project provides limited funding for small, unanticipated capital projects to address emergency requirements and take advantage of opportunities in the Cedar River and Tolt River municipal watersheds. History has shown that such situations arise throughout the year with little advance warning. Examples of emergencies include landslides, windstorms, or other severe weather conditions that cause damage to the watershed. Such events would need immediate assessments regarding whether capital expenditures could be required, and possibly immediate, small-scale restoration actions. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	207	201	211	217	0	0	836
Project Total:	0	0	207	201	211	217	0	0	836
Fund Appropriations/Allocations	_						_	_	
SPU Water Fund	0	0	207	201	211	217	0	0	836
Appropriations Total*	0	0	207	201	211	217	0	0	836
O & M Costs (Savings)			0	0	0	0	0	0	0

## Watershed Road Improvement/Decommissioning

BCL/Program Name: Habitat Conservation Program

BCL/Program Code: C160B

Project Type: Rehabilitation or Restoration Start Date: 1st Quarter 2001

Project ID: C1601 End Date: Ongoing

Location: Cedar River Watershed

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

This program improves some roads and decommissions others in conjunction with the Cedar River Habitat Conservation Plan (HCP). The goal 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 SPU Asset Management Committee has approved the HCP at the program level. The confidence level for this cost estimate is high.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	4,411	890	940	824	781	811	824	715	10,196
Project Total:	4,411	890	940	824	781	811	824	715	10,196
Fund Appropriations/Allocations									
SPU Water Fund	4,411	890	940	824	781	811	824	715	10,196
Appropriations Total*	4,411	890	940	824	781	811	824	715	10,196
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		950	940	824	781	811	824	715	5,845

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

#### **Watershed Vegetation Management Plan**

BCL/Program Name: Watershed Stewardship BCL/Program Code: C130B

Project Type:New InvestmentStart Date:1st Quarter 2007Project ID:C107015End Date:4th Quarter 2011

Location: Cedar & Tolt River Watershed

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

This project develops two plans for vegetation management in the Cedar River Watershed. The first plan is for the control of non-native, invasive plants (weeds) throughout the watershed to meet legal requirements and limit ecological damage to wetlands and other habitats. The second plan is for cooperative management of the power transmission line right-of-way with Seattle City Light. The goal is to create stable communities of native plants that will provide for electrical safety but maintain habitat for wildlife and protect sensitive wetlands and other habitats. In both cases, work may include inventory of the vegetation and conditions in areas of concern, development of a plan, and the testing of techniques for vegetation management to find the most cost-effective approaches for long-tern operations and maintenance. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	0	0	103	49	37	38	26	0	252
Project Total:	0	0	103	49	37	38	26	0	252
Fund Appropriations/Allocations SPU Water Fund	0	0	103	49	37	38	26	0	252
Appropriations Total*	0	0	103	49	37	38	26	0	252
O & M Costs (Savings)			0	0	0	0	20	20	40

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

# **WSDOT Sound Walls**

BCL/Program Name: Distribution BCL/Program Code: C110B

Project Type:Improved FacilityStart Date:1st Quarter 2004Project ID:C104019End Date:4th Quarter 2008

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

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

This project responds to impacts to a 20-inch water line by the Washington State Department of Transportation's project to install sound walls along the I-5 corridor. The confidence level of the cost estimate is medium.

	LTD	2006	2007	2008	2009	2010	2011	2012	Total
Revenue Sources									
Water Rates	7	0	149	53	0	0	0	0	209
Project Total:	7	0	149	53	0	0	0	0	209
Fund Appropriations/Allocations SPU Water Fund	7	0	149	53	0	0	0	0	209
Appropriations Total*	7	0	149	53	0	0	0	0	209
O & M Costs (Savings)			0	0	0	0	0	0	0
Spending Plan		215	149	53	0	0	0	0	417

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