

Seattle Public Utilities

Drainage and Wastewater

Overview

Seattle Public Utilities (SPU) is responsible for building, maintaining, and replacing the network of sewer and drainage systems throughout the City of Seattle. These systems include approximately:

- 948 miles of sanitary sewers
- 477 miles of storm drains
- 472 miles of combined sewers
- 68 pump stations
- 90 permitted combined sewer overflow outfalls
- 295 storm drain outfalls
- 189 stormwater quality treatment facilities
- 145 flow control facilities
- 38 combined sewer overflow control detention tanks/pipes

The Drainage and Wastewater Fund (DWF) CIP is the planning tool for rehabilitating, replacing, improving and expanding infrastructure, as well as constructing projects that protect, conserve, and enhance our region's environmental resources. Planned spending in the DWF CIP is approximately \$570.8 million (excluding Technology) over the next six years.

Historically, the DWF CIP has been funded primarily by revenue bonds serviced by ratepayers. However, DWF financial policies adopted in 2003 gradually increase cash contributions from the Utility to fund the CIP. Since 2007, cash contribution of total CIP costs has averaged just over the current financial policy of 25% of total CIP costs, with the remainder funded through debt financing.

Summary of Upcoming Budget Issues and Challenges

The biggest challenge for the Drainage and Wastewater Fund will be managing large priority projects while still accomplishing Mayoral priorities and complying with Environmental Protection Agency (EPA), Department of Ecology (DOE), and the National Pollutant Discharge Elimination System (NPDES) permits.

Stormwater Permit Regulations: The City's NPDES permit for stormwater, granted by the State government in 2007, will be renewed in 2013. This permit introduced more prescriptive requirements to help protect local waterways and Puget Sound from damaging pollutants and excessive runoff. This increasing regulatory emphasis on protecting and improving water quality has resulted in the need for the City of Seattle to make substantial investments in managing stormwater flow, treating runoff, retrofitting combined sewer systems, and building Green Stormwater Infrastructure (GSI).

Combined Sewer Overflows: The Combined Sewer Overflow (CSO) Reduction Program constitutes one of the major investments and challenges for the Drainage and Wastewater Fund in upcoming years. During heavy rains, the combination of stormwater (about 90 percent of the volume) and sewage may exceed the capacity of the combined sewer system and overflow into our waterways – causing a combined sewer overflow. CSOs spill a mixture of raw sewage and stormwater into local waterways at 90 outfalls throughout the City of Seattle. These spills violate water quality standards, create unacceptable risk to public health, contaminate sediment and habitat for endangered species and pollute Puget Sound. CSO spills are illegal and unacceptable under any standard of environmental care.

While annual overflows have been reduced from 20-30 billion gallons per year by both the City and the County in 1970 to 100-200 million gallons per year by the City today, SPU is still not meeting regulatory

SPU – Drainage and Wastewater

mandates which limit overflows to one overflow per outfall location per year. SPU is required by state and federal law to achieve control of CSOs by 2025 through a Long Term Control Plan to be completed by 2015. SPU must also achieve significant permit milestones for the control of CSOs to Lake Washington by December 30, 2015.

Most recently, the DOJ on behalf of the EPA and Washington State DOE finalized a Consent Decree describing measures the DOJ will require of SPU to remedy violations of the Clean Water Act. The Consent Decree includes, among other significant requirements, completion of a Long Term Control Plan by 2015 and control of all CSOs by 2025. Continuing investments in CSO control will enable SPU to meet current permit requirements including preparation of a Long Term Control Plan, accomplish required milestones to control CSOs into Lake Washington and achieve compliance with the 2025 goal.

SPU is expected to spend approximately \$283 million over the next six years (2014-2019) on CSO reduction projects. The projects will include a combination of underground storage tanks, GSI, system retrofits, and the development of a long-range plan for CSO projects to be constructed from 2016-2025. One of the biggest challenges of the program is siting wastewater facilities in a dense urban environment. SPU is addressing that challenge through an early and active community/stakeholder involvement process on each of its projects. Another challenge revolves around SPU's relationship with King County and maintaining an active partnership to operate the wastewater system and plan for potential joint CSO reduction projects.

Balancing Basic Services with Regulatory Requirements: A challenge for the DWF is ensuring basic service level programs, such as flooding and system capacity, are not stripped of funding as our regulatory requirements continue to grow. The separated drainage and wastewater system is at capacity during storm events at various locations across the City. The impacts can range from very serious (basement sewer back-ups) to nuisance (limited street or yard flooding) issues. SPU is moving forward to address the highest priority locations with capital improvements using available funding and staff resources. These highest priority projects include the South Park Pump Station project, the Thornton Confluence Improvement project, and Broadview Sewer and Stormwater Improvements project.

- The South Park Pump Station project will construct a pump station and water quality facility in South Park. The pump station will allow the existing storm drain trunk to meet the level of service adopted in the 2004 Comprehensive Drainage Plan. In turn, this allows for future projects to expand the collection system to address flooding complaints. The water quality facility will treat most stormwater flows from the basin, reducing pollutant loading to the Duwamish River. The project's engineering design is complicated by the tidal flows present in the Duwamish.
- The Thornton Confluence Improvement project will replace the road culvert at 35th Ave NE and restore the floodplain area at the confluence of the north and south forks of Thornton Creek. This will reduce local flooding impacts to roads and private property as well as enhance instream and riparian habitat in a critical segment of the creek.
- The Broadview neighborhood has experienced a long history of capacity-related backups and overflows. The Broadview Sewer and Stormwater Improvements project will test non-traditional solutions to these longstanding issues, with a goal of reducing sewer backups and stormwater flooding in the Broadview basin.

Adapting to Climate Changes: When making investments in capital facilities that will last decades, SPU considers the potential impacts of climate change on local precipitation and sea levels in Puget Sound. There have been four major storms (2006, 2007, 2010, and 2012) in recent years that have resulted in serious drainage and wastewater impacts related to capacity. Scientists indicate that there is potential that

storms will become more intense and more frequent in the near future. This variability requires the utility to have a much more in-depth understanding of how the system functions under different weather conditions. The utility will need to forecast impacts to the stormwater and combined systems on a much more localized level. This type of work will require more fully developed system models than in the past.

Thematic Priorities

The overriding goal of the DWF CIP is to construct facilities that reduce the frequency of flooding and sewer backups for customers and improve water quality and habitat in the environment by reducing sewage overflows and the impacts of stormwater pollution. Projects in the CIP are also guided by federal regulations, City policies, long-term plan documents, and the SPU Asset Management Committee (AMC) benefit criteria. Many Drainage and Wastewater CIP projects are outlined in the Wastewater System Plan, Combined Sewer Overflow Reduction Plan, and the Comprehensive Drainage Plan. The Drainage and Wastewater Fund considers three main criteria when prioritizing work: public health and safety, environmental protection/regulatory requirements, and Mayor/Council priorities. Project timing can be influenced by opportunities or requirements to combine construction activity with other projects.

Public Health and Safety: The overriding priority for the Drainage and Wastewater Fund is maintaining public health and safety. This will be accomplished through capital programs and projects including the 14th and Concord Combined Sewer System (CSS) Improvement project, the Localized Flood Control Program, the Broadview Sanitary Sewer Overflow (SSO) reduction program and the South Park Pump Station project. The primary Capital program is the sewer and drainage rehabilitation program. This program is focused on identifying and correcting defective or deteriorating infrastructure, including drainage and wastewater pipes, before failure which could result in sewer backups, roadway collapses or landslides.

Environmental Protection/Regulatory Requirements: The City of Seattle/SPU must meet state and federal regulatory requirements to comply with the Clean Water Act (CWA) and the Consent Decree that was entered in court on July 3, 2013, between the City, the EPA and DOJ. The two most significant regulatory drivers associated with the CWA are the NPDES Waste Discharge Permit (aka NPDES CSO Permit) and the NPDES Phase I Municipal Stormwater Permit (aka NPDES MS4 Permit).

- As required by the NPDES CSO Permit, Seattle developed a 2010 CSO Reduction Plan Amendment to describe the effort to reduce CSOs to the state standard of one overflow per outfall per year. As part of meeting these requirements, SPU will be constructing CSO reduction facilities at Windermere, South Genesee, and Henderson. DWF is committed to completing this program by 2025 at an estimated cost of \$500 million.
- As part of the NPDES MS4 Permit, Seattle is required to have a Structural Stormwater Control Program to address stormwater impacts that are not adequately controlled through other required permit actions. As part of meeting this requirement, SPU is constructing stormwater quality and flow control facilities including South Park Pump Station, the Capitol Hill Water Quality Facility, and Broadview sewer system improvements.

Green Stormwater: Projects in the 6-year CIP that specifically address environmentally sustainable infrastructure include the Venema Natural Drainage System (NDS) and Capitol Hill Water Quality Facility where green stormwater infrastructure will be used to reduce stormwater impacts while contributing to meeting sustainability goals.

- The Venema NDS project will construct natural drainage elements including large bioretention swales and permeable pavement in alleys. A swale is a specially designed area where stormwater

SPU – Drainage and Wastewater

can infiltrate into or through the ground or vegetation, depending on whether it is designed primarily for water quality treatment or flow control. The result will be improved stormwater flow control and water quality treatment in the Venema basin which will improve hydrology and water quality in Venema Creek, a tributary of Piper's Creek.

- The Capitol Hill Water Quality project will result in an innovative regional scale stormwater facility. The facility will include vegetated bioswales which will provide stormwater treatment for a portion of the largest sub-basin draining to South Lake Union while providing a vibrant pedestrian-friendly streetscape. This project will be constructed in partnership with an adjacent land developed and includes new sidewalks and road surfaces.

Project Selection

SPU identifies candidate capital projects from several sources – planning (e.g. comprehensive plans, program plans), external projects and opportunities, and emergencies or other unexpected events. Under SPU's Asset Management system, projects must be justified through a business case process that establishes that a problem or opportunity is timely and important, and that the proposed solution is superior to alternatives based on a triple bottom line analysis (economic, environmental and social) of life cycle costs and benefits. The process also recognizes that a project may be a “must do” project (e.g. required by regulation).

SPU prioritizes its capital projects into three categories – Priorities 1, 2 and 3, with 1 being the most important and critical. Some projects are identified as part of an externally driven project. Typically, SPU lacks control over the timing of such projects.

Priority rankings are based on the following set of criteria:

- **Regulatory Mandates, Legal Agreements:** The degree to which the project is driven by Federal, State, and Local laws, permit and regulatory requirements, and consent decrees; as well as by legal agreements with public and private parties. Examples of highly ranked projects in this category include the Windermere, South Genesee and Henderson CSO projects.
- **External Drivers:** SPU's responsiveness to, or engagement with, the projects of other Departments or Jurisdictions, and the specific mandates of the City Council and Mayor. Examples of highly ranked projects in this category include the Alaskan Way Viaduct and Mercer Corridor projects.
- **Infrastructure:** How a project addresses infrastructure conditions or vulnerabilities. Examples of highly ranked projects in this category include the Point Sewer Pipe Rehabilitation and Emergency Rehabilitation programs.
- **Level of Service:** The importance of this project in providing or improving services to customers. Examples of highly ranked projects in this category include the South Park Pump Station, Localized Flood Control program, Sanitary Sewer Overflow Capacity program, Point Sewer Pipe Rehabilitation, and Emergency Rehabilitation programs.
- **Other Factors:** Other important factors include high net present value or cost-effectiveness, social or environmental benefits not otherwise captured, a project already in progress or near completion, limited time opportunity, demonstration projects, community visibility, and outside funding. Examples of highly ranked projects in this category include the North 107th and Midvale

SPU – Drainage and Wastewater

Drainage project (part of the Densmore Basin Drainage Improvements program) and the Long Term Control Plan.

Every project is rated against each criterion; criteria ratings are then considered in determining an overall project priority ranking, using expert judgment (rather than a formula). Priority rankings for the CIP are determined by the leads for each Line of Business (LOB), with review by key internal stakeholders. The ranking scheme and criteria are the same for all LOBs and are approved by the SPU Director and Asset Management Committee. Project priority rankings are used to clarify and document which projects are most important (and why), to help determine which projects at the margin will be included or excluded (or deferred) from the CIP, and which projects should receive priority attention if a staff or financial resource constraint should arise.

Aligning Infrastructure with Planned Growth

SPU is working to take better advantage of opportunities to incorporate improvements and repairs to our drainage and wastewater systems with major redevelopment and projects undertaken by others (e.g., private developers, other city departments, regional and state agencies). Currently, SPU is partnering with South Lake Union developers to build a regional GSI-based stormwater treatment facility to treat Capitol Hill stormwater runoff while also increasing green space in the public right of way. For the future, SPU will be ramping up long-range planning efforts to improve understanding of the existing conditions of our drainage and wastewater system, predicted growth areas, and possible impacts to the drainage and wastewater system. This better understanding will lead to more forward thinking decisions on where we need to better plan to for growth and allow us to better leverage both our investments and those made by others.

Future Projects/What is on the Horizon

The DWF CIP will increase programs to meet requirements and commitments outlined in the CSO Reduction Plan. The 2014-2019 Adopted CIP includes significant investments for the Windermere, South Genesee, and Henderson CSO reduction projects. Costs shifted for these projects from 2013 to 2014 and 2015 due to delays.

The six-year CIP also includes funding for the Long Term Control Plan, which will identify all remaining CSO projects throughout the City to achieve the Washington State requirement to reduce CSOs down to an average one untreated CSO per year per outfall. Funding to address those remaining CSO projects will need to be included in future CIP budget submittals. In addition, SPU has been authorized by the EPA to prepare an Integrated Plan, which will propose projects to reduce stormwater pollution into the environment. Integrated Plan projects will need to be funded and constructed between 2016-2025. The Integrated Plan itself is funded under SPU's pre-capital planning operations and maintenance budget. Finally, water quality requirements for stormwater will likely result in increases in capital investment requirements on both new projects and potential retrofits of the existing system.

The programmatic analysis and prioritization currently being done in the Flooding, Sewer Back-up, and Landslides business area will result in a comprehensive list of small to large CIP projects to be constructed over the next 15 to 20 years. Projects will be similar to current projects such as 14th and Concord CSS improvements, Broadview sewer system improvements and the South Park Pump Station.

Additional stormwater and CSO facilities, both structural and green, will require growing levels of operations and maintenance support for inspection and maintenance.

CIP Revenue Sources

2014-2019 Adopted Capital Improvement Plan

SPU – Drainage and Wastewater

SPU’s Drainage and Wastewater CIP is funded largely by Drainage and Sewer ratepayers. SPU issues bonds, serviced by ratepayers that cover approximately 75% of the CIP, with the remainder funded by cash. DWF rates were approved by the Executive and City Council last year for the three-year period of 2013-2015.

SPU also actively seeks grants and low interest loans. For example, SPU will be utilizing a low-interest loan on the Capitol Hill Water Quality project. Loans like this offer a lower interest rate than what SPU can borrow/issue debt and offset the need to draw down extra dollars from the construction fund.

CIP Spending by Major Category

(In ‘000s; total may not sum due to rounding)

| Drainage and Wastewater Fund | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|-------------------------------------|----------------|---------------|----------------|----------------|----------------|---------------|----------------|
| PROTECTION OF BENEFICIAL USES | 3,195 | 3,003 | 6,985 | 4,347 | 4,695 | 4,000 | 26,225 |
| SEDIMENTS | 3,423 | 4,396 | 1,491 | 1,410 | 11,610 | 11,610 | 33,940 |
| COMBINED SEWER OVERFLOWS | 47,697 | 39,584 | 49,239 | 46,988 | 40,627 | 30,400 | 254,534 |
| REHABILITATION | 11,864 | 12,360 | 12,880 | 11,520 | 11,520 | 11,520 | 71,664 |
| FLOODING, SEWER BACKUP & LANDSLIDES | 17,025 | 15,505 | 23,189 | 24,520 | 17,199 | 14,242 | 111,680 |
| SHARED COST PROJECTS | 14,196 | 8,550 | 12,116 | 14,035 | 13,789 | 9,742 | 72,428 |
| TECHNOLOGY | 9,196 | 8,929 | 6,884 | 6,149 | 6,443 | 4,778 | 42,379 |
| Total | 106,596 | 92,326 | 112,784 | 108,970 | 105,883 | 86,292 | 612,851 |

Protection of Beneficial Uses: This program makes improvements to the City’s drainage system to reduce the harmful effects of stormwater runoff on creeks and receiving water bodies by improving water quality and protecting or enhancing creek habitat. The program includes projects to meet regulatory requirements. Funding in 2014 and 2015 will be focused on cost effective stormwater projects such as the Venema Creek Natural Drainage System (NDS) project, the Knickerbocker Floodplain Improvement project, and the Capitol Hill Water Quality (WQ) project. Two of these projects (Venema Creek NDS and Capital Hill WQ) were put on hold in 2009 due to financial constraints, but have since been re-instated.

Decreases in the **Protection of Beneficial Uses BCL** in 2014, compared to amounts adopted in 2013 in the 2013-2018 CIP, are primarily the result of a reduced scope for the Venema Creek NDS project and the Taylor Creek Culvert Replacement project construction being pushed out from 2014 to 2016. The Venema Creek NDS project no longer constructing swales on 2nd Ave NW between NW 122nd and 125th Streets due to community concerns. The Taylor Creek Culvert Replacement project is delayed and

SPU – Drainage and Wastewater

construction planned in 2014 is now pushed out to 2016 because the community engagement process is taking longer than expected.

Sediments: The City of Seattle is named as a Potentially Responsible Party (PRP) for the Duwamish River

Superfund Site because of alleged contamination of sediments in the river from CSO and storm drain discharges. The City continues to work with the Washington State Department of Ecology, King County, and other PRPs on an assessment of contaminants and sources. The Sediments program provides funding for preliminary studies and analysis for cleanup of contaminated sediment sites in which the City is a participant, for actual cleanup of contaminated sites, for preliminary engineering for future cleanup efforts, and for liability allocation negotiations. Funding is used to develop studies and analyses required by regulatory agencies for determining the boundaries and cleanup requirements for specific action sites. The study phase of sediment remediation projects often requires multiple years before specific cleanup actions are defined. As regulatory agency cleanup requirements become clear, additional individual cleanup projects are included in subsequent CIP proposals.

Increases in the **Sediments BCL** for 2014, compared to amounts adopted in 2013 in the 2013-2018 CIP, reflect the latest schedule and estimates based on negotiations and agreements between parties for proposed actions needed. Overall projects were slightly delayed in 2013 which increased costs in 2014 and 2015 due to regulatory agencies (DOE and EPA) disagreement on the cleanup approach at the Gas Works site.

Combined Sewer Overflows: This program consists of projects that are mandated by state and federal regulations to control CSOs into the City's receiving waters. Projects include large infrastructure projects (e.g., storage structures, pipes, tunnels, wet weather treatment plants, stormwater separation, pump stations, etc.), smaller retrofits, construction of green infrastructure for CSO control, and development of regulatory required plans such as the Long-Term Control Plan. Key projects in the 2014 Budget include the Windermere, South Genesee and Henderson CSO projects. When completed, these projects will result in cutting CSO volumes into Lake Washington by about 14 million gallons per year, a reduction of about 60 percent from current overflows.

Compared to amounts adopted in 2013 in the 2013-2018 CIP, the **Combined Sewer Overflows BCL** is decreasing in 2014 reflecting revisions to the cash flow and schedules for the Windermere CSO project, which is now under construction. The Windermere CSO project had permitting delays that constrained finishing design and delayed the signing of construction contracts until late 2012, but now with construction started, costs projections are more refined and certain. The increase in 2015 is driven by the CSO Facility Retrofit program. The phasing of the construction work for the Delridge CSO Retrofit project has been tightened to meet the permit deadline required in the 2011-2015 National Pollutant Discharge Elimination System (NPDES) Permit that improvements be completed at NPDES168 and NPDES169 by November 1, 2015.

Rehabilitation: This program consists of projects to rehabilitate or replace existing drainage and wastewater assets in-kind to maintain the current functionality level of the system. Projects include pump station structures, major mechanical and electrical components, and force mains; drainage and wastewater control structures and appurtenances; and pipes and culverts. Individual projects are defined by the type and method of rehabilitation and/or replacement and include emergency rehabilitation, no-dig pipe and maintenance rehabilitation, point sewer pipe rehabilitation by crews, and point sewer pipe rehabilitation by contract.

Increases in the **Rehabilitation BCL** for 2014, compared to amounts adopted in 2013 in the 2013-2018 CIP, are driven by the strategic plan process which increased baseline funding for the Pump Station

2014-2019 Adopted Capital Improvement Plan

SPU – Drainage and Wastewater

Improvements program as well as the CSO Outfall Rehabilitation program. Over the next two years efforts in these areas will focus on sites with the highest risk as well as those prioritized to fulfill regulatory NPDES permit commitments that will restore original pipe capacity and address issues with discharge points of selected outfalls where these characteristics have been diminished, as well as increasing capacity to Pump Stations to meet Consent Decree requirements.

Flooding, Sewer Back-up, and Landslides: This program is responsible for preventing and alleviating flooding and sewer backups in the City of Seattle, with a primary focus on the protection of public health, safety, and property. The program area is focused on planning, design, and construction of channels, pipes, roadside ditches, culverts, detention ponds, and natural drainage systems that control and/or convey storm runoff to receiving bodies. This program also involves protecting SPU drainage and wastewater infrastructure from landslides and providing drainage improvements where surface water generated from the city right-of way is contributing to landslides. Finally, this program includes the Broadview Long Term Plan, which aims to reduce sewer backups and stormwater flooding in the Broadview basin.

Increased funding for the **Flooding, Sewer Back-up, and Landslides BCL** in 2014 compared with amounts adopted in 2013 in the 2013-2018 CIP are driven primarily by a delay in the start of construction for the Thornton Confluence Improvement project due to last year's CIP prioritization process, which shifted costs into 2014. Additionally, the Broadview Long Term Plan is planning to do more work upfront than initially planned and shift design and construction up from 2016 to 2015. The Broadview infiltration reduction project is a high priority project and the local community is supportive of the project moving more quickly.

Shared Cost Projects: This program includes individual capital improvement projects which typically benefit multiple lines of business (e.g., the Water line of business and the Drainage and Wastewater line of business) where costs are "shared," or paid for, by more than one of SPU's utility funds. In 2014, the Shared Cost program includes funding for a number of interdepartmental projects including the Alaskan Way Viaduct and Seawall Replacement, Yesler Terrace, Mercer Corridor and Sound Transit Link Light Rail. Funding is also included for SPU's Heavy Equipment Purchases, the Integrated Control Monitoring Program and a number of smaller projects.

Increased funding in the **Shared Cost Projects BCL** for 2013, compared to amounts adopted in 2013 in the 2013-2018 CIP, are driven primarily by the Yesler Terrace project that will provide infrastructure improvements and utility relocations. These investments provide sufficient wastewater and drainage capacity in the affected neighborhood. In addition, the increase is driven by the Other Major Transportation Projects program, specifically the SR-520 Bridge Replacement project. Washington State Department of Transportation (WSDOT) is moving ahead with design of the West Approach Bridge North segment in 2014. WSDOT is proceeding with the design of a reroute of a 24" SPU combined sewer.

Technology: The Technology capital portfolio is managed in six program areas, which provide a department-wide view of technology investments to address SPU's strategic, business, and City-wide priorities. These areas are:

- Customer Contact and Billing
- Enterprise Information Management
- IT Infrastructure
- Project Delivery & Performance
- Science & System Performance
- Asset Information Management

SPU – Drainage and Wastewater

Investments in 2014 and 2015 address SPU's key initiatives, which focus on:

- Improving Internal Controls,
- Improving Productivity and Performance
- Improving Customer Service
- Transitioning from Data Rich to Knowledge Rich
- Improving Project Delivery

The 2014-2019 Adopted CIP increases Technology CIP spending for all utility funds by \$2.8 million in 2014 and \$10.4 million in 2015 as compared to the 2013-2018 Adopted CIP. The Drainage and Wastewater Utility's Technology CIP amount increases by \$1.58 million in 2014 and increases by \$3.78 million in 2015. These amounts are based on the Drainage and Wastewater Utility's share of benefit from these projects.

City Council Provisos to the CIP

The City Council adopted the following budget proviso:

- None of the money appropriated in the 2014 budget for the Seattle Public Utilities' Shared Cost Projects BCL may be spent for the Yesler Terrace - DWF project (#C4136-DWF) or the Yesler Terrace – WF project (#C4136-WF) until Seattle Public Utilities (SPU) files a written notice with the City Clerk that SPU has made a presentation to the appropriate Council committee describing the scope of the projects, benefits for the SPU system as a whole, and the schedule for completing the projects in 2014.

SPU-Drainage & Wastewater

Project Summary

| BCL/Program Name/ Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|---|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Protection of Beneficial Uses | | | | | | | | | C333B |
| Best Management Practice Program (C3313) | 3,240 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 3,280 |
| Capitol Hill Water Quality Project (C3373) | 4,446 | 2,887 | 261 | 237 | 2,516 | 239 | 695 | 0 | 11,281 |
| Knickerbocker Floodplain Improvements (C3383) | 256 | 1,540 | 1,368 | 0 | 0 | 0 | 0 | 0 | 3,164 |
| Street Sweeping for Water Quality (C3363) | 183 | 100 | 0 | 0 | 150 | 0 | 0 | 0 | 433 |
| Taylor Creek Culvert Replacement (C3353) | 1,682 | 450 | 450 | 450 | 4,000 | 0 | 0 | 0 | 7,032 |
| Venema Creek Natural Drainage System (C3333) | 2,260 | 650 | 1,116 | 2,316 | 318 | 108 | 0 | 0 | 6,769 |
| Protection of Beneficial Uses | 12,066 | 5,667 | 3,195 | 3,003 | 6,985 | 347 | 695 | 0 | 31,958 |
| Sediments | | | | | | | | | C350B |
| Sediment Remediation - DWF (C3503) | 35,500 | 1,934 | 3,423 | 4,396 | 1,491 | 1,410 | 11,610 | 11,610 | 71,374 |
| Sediments | 35,500 | 1,934 | 3,423 | 4,396 | 1,491 | 1,410 | 11,610 | 11,610 | 71,374 |
| Combined Sewer Overflows | | | | | | | | | C360B |
| Combined Sewer Overflow Facility Retrofit (C3611) | 11,775 | 3,758 | 2,392 | 7,083 | 5,473 | 4,194 | 6,301 | 400 | 41,376 |
| Future CSO Projects (C3612) | 0 | 0 | 0 | 3,619 | 17,400 | 20,400 | 28,000 | 28,000 | 97,419 |
| Green Stormwater Infrastructure Program (C3610) | 3,892 | 5,102 | 5,747 | 6,278 | 6,099 | 4,866 | 4,009 | 0 | 35,992 |
| Long Term Control Plan (C3604) | 27,713 | 6,305 | 4,510 | 2,780 | 2,000 | 2,000 | 2,000 | 2,000 | 49,308 |
| S Genesee Combined Sewer Overflow (C3608) | 10,008 | 8,120 | 14,506 | 284 | 0 | 0 | 0 | 0 | 32,918 |
| S Henderson Combined Sewer Overflow Storage (C3609) | 12,804 | 6,196 | 7,627 | 18,039 | 18,268 | 15,528 | 317 | 0 | 78,779 |
| Windermere Combined Sewer Overflow Storage (C3605) | 18,860 | 22,566 | 12,915 | 1,500 | 0 | 0 | 0 | 0 | 55,841 |
| Combined Sewer Overflows | 85,052 | 52,047 | 47,697 | 39,584 | 49,239 | 46,988 | 40,627 | 30,400 | 391,633 |
| Rehabilitation | | | | | | | | | C370B |
| Emergency Rehabilitation (C3705) | 8,375 | 1,980 | 1,070 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 17,675 |
| No Dig Pipe & Maintenance Rehabilitation (C3707) | 13,108 | 2,977 | 1,500 | 1,742 | 2,500 | 2,500 | 2,500 | 2,500 | 29,327 |
| Outfall Rehabilitation Program (C3708) | 6 | 504 | 1,893 | 1,186 | 1,542 | 500 | 500 | 500 | 6,631 |

*Amounts in thousands of dollars

2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Project Summary

| BCL/Program Name/ Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|---|----------------|--------|--------|--------|--------|--------|--------|--------|--------------------------------|
| Point Sewer Pipe Rehabilitation (C3704) | 41,698 | 3,900 | 4,236 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 | 72,334 |
| Pump Station and Force Main Improvements (C3703) | 8,443 | 1,896 | 3,251 | 3,432 | 2,838 | 2,520 | 2,520 | 2,520 | 27,421 |
| Sewer Full Line Replacements (C3702) | 349 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 2,099 |
| Rehabilitation | 71,980 | 11,508 | 12,200 | 12,360 | 12,880 | 11,520 | 11,520 | 11,520 | 155,487 |
| Flooding, Sewer Back-up, and Landslides | | | | | | | | | BCL/Program Code: C380B |
| Broadview Long Term Plan (C3812) | 905 | 2,500 | 4,000 | 5,600 | 6,000 | 7,000 | 0 | 0 | 26,005 |
| Culvert Replacement Program (C3810) | 1,864 | 595 | 1,405 | 1,382 | 4,450 | 2,050 | 2,000 | 2,000 | 15,746 |
| Densmore Basin Drainage Improvements (C3803) | 7,123 | 350 | 12 | 0 | 0 | 0 | 0 | 0 | 7,485 |
| Localized Flood Control Program (C3802) | 3,955 | 3,845 | 3,602 | 2,550 | 4,823 | 5,839 | 5,956 | 6,075 | 36,646 |
| Madison Valley Long Term Solution (C3805) | 34,036 | 384 | 50 | 0 | 0 | 0 | 0 | 0 | 34,470 |
| Meadowbrook Pond Sediment Management (C3808) | 2,526 | 135 | 31 | 0 | 0 | 0 | 0 | 0 | 2,692 |
| Sanitary Sewer Overflow Capacity (C3804) | 4,975 | 1,935 | 3,340 | 3,943 | 4,916 | 5,631 | 5,743 | 5,858 | 36,341 |
| South Park Pump Station (C3806) | 6,030 | 4,500 | 500 | 1,500 | 3,000 | 4,000 | 3,500 | 308 | 23,339 |
| Thornton Confluence Improvement (C3811) | 1,525 | 4,000 | 4,085 | 530 | 0 | 0 | 0 | 0 | 10,140 |
| Flooding, Sewer Back-up, and Landslides | 62,940 | 18,244 | 17,025 | 15,505 | 23,189 | 24,520 | 17,199 | 14,242 | 192,864 |
| Shared Cost Projects | | | | | | | | | BCL/Program Code: C410B |
| 1% for Art – DWF (C4118-DWF) | 2,303 | 622 | 643 | 374 | 524 | 275 | 290 | 296 | 5,327 |
| Alaskan Way Viaduct & Seawall Replacement Program - DWF (C4102-DWF) | 9,529 | 3,557 | 3,708 | 2,032 | 6,501 | 6,203 | 6,528 | 2,464 | 40,520 |
| Bridging the Gap - DWF (C4119-DWF) | 184 | 500 | 0 | 0 | 0 | 100 | 100 | 100 | 984 |
| Emergency Storms - DWF (C4120-DWF) | 4,506 | 150 | 100 | 100 | 100 | 100 | 100 | 100 | 5,256 |
| First Hill Streetcar - DWF (C4130-DWF) | 0 | 0 | 100 | 600 | 260 | 250 | 250 | 250 | 1,710 |
| Heavy Equipment Purchases - DWF (C4116-DWF) | 8,622 | 2,345 | 2,420 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 24,387 |
| Integrated Control Monitoring Program - DWF (C4108-DWF) | 14,084 | 1,050 | 800 | 500 | 250 | 250 | 250 | 250 | 17,434 |

**Amounts in thousands of dollars*

2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Project Summary

| BCL/Program Name/ Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|---|----------------|----------------|----------------|---------------|----------------|----------------|----------------|---------------|--------------------------------|
| Mercer Corridor Project East Phase - DWF (C4114-DWF) | 6,294 | 795 | 50 | 0 | 0 | 0 | 0 | 0 | 7,139 |
| Mercer Corridor Project West Phase - DWF (C4133-DWF) | 244 | 629 | 649 | 294 | 0 | 0 | 0 | 0 | 1,817 |
| Meter Replacement - DWF (C4101-DWF) | 4,307 | 652 | 585 | 595 | 605 | 615 | 630 | 636 | 8,626 |
| Operational Facility - Construction - DWF (C4106-DWF) | 8,163 | 1,263 | 398 | 703 | 1,120 | 3,534 | 2,200 | 2,040 | 19,421 |
| Operational Facility - Other - DWF (C4115-DWF) | 329 | 75 | 150 | 300 | 100 | 0 | 0 | 0 | 954 |
| Operations Control Center - DWF (C4105-DWF) | 2,420 | 76 | 806 | 43 | 60 | 206 | 310 | 400 | 4,320 |
| Other Major Transportation Projects - DWF (C4123-DWF) | 1 | 0 | 568 | 580 | 198 | 100 | 750 | 750 | 2,947 |
| Security Improvements - DWF (C4113-DWF) | 1,061 | 115 | 178 | 98 | 113 | 128 | 131 | 206 | 2,028 |
| Sound Transit - North Link - DWF (C4135-DWF) | 58 | 87 | 75 | 75 | 75 | 75 | 50 | 50 | 545 |
| Sound Transit – University Link - DWF (C4110-DWF) | 334 | 191 | 127 | 41 | 10 | 0 | 0 | 0 | 702 |
| Sound Transit-East Link (C4122-DWF) | 0 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 55 |
| Yesler Terrace-DWF (C4136-DWF) | 0 | 0 | 2,800 | 0 | 0 | 0 | 0 | 0 | 2,800 |
| Shared Cost Projects | 62,440 | 12,107 | 14,196 | 8,550 | 12,116 | 14,035 | 13,789 | 9,742 | 146,976 |
| Technology | | | | | | | | | BCL/Program Code: C510B |
| Asset Information Management (C5407) | 2,477 | 1,802 | 945 | 847 | 934 | 886 | 905 | 865 | 9,660 |
| Customer Contact & Billing (C5402) | 590 | 5,130 | 3,848 | 3,414 | 1,276 | 1,332 | 1,230 | 513 | 17,333 |
| Enterprise Information Management (C5403) | 54 | 464 | 864 | 965 | 1,044 | 451 | 548 | 1,056 | 5,445 |
| IT Infrastructure (C5404) | 1,444 | 913 | 1,276 | 923 | 1,271 | 800 | 1,517 | 902 | 9,045 |
| Project Delivery & Performance (C5405) | 1,783 | 1,375 | 1,294 | 2,069 | 1,648 | 1,939 | 993 | 943 | 12,043 |
| Science & System Performance (C5406) | 992 | 876 | 970 | 711 | 711 | 742 | 1,250 | 500 | 6,754 |
| Technology | 7,341 | 10,559 | 9,196 | 8,929 | 6,884 | 6,149 | 6,443 | 4,778 | 60,280 |
| Department Total*: | 337,319 | 112,067 | 106,933 | 92,326 | 112,784 | 104,970 | 101,883 | 82,292 | 1,050,573 |

*Amounts in thousands of dollars

2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Fund Summary

| Fund Name & Code | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|---|----------------|---------|---------|--------|---------|---------|---------|--------|-----------|
| Drainage and Wastewater Fund (44010) | 337,319 | 112,067 | 106,933 | 92,326 | 112,784 | 104,970 | 101,883 | 82,292 | 1,050,573 |
| Department Total*: | 337,319 | 112,067 | 106,933 | 92,326 | 112,784 | 104,970 | 101,883 | 82,292 | 1,050,573 |

**Amounts in thousands of dollars*

SPU-Drainage & Wastewater

1% for Art – DWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2001 |
| Project ID: | C4118-DWF | 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 ongoing program provides the Drainage & Wastewater funding for Seattle Public Utilities' 1% for Arts contribution. Eligibility is determined at the individual project level, with payment occurring from this program. Funds contributed to the 1% for Art program allow the commission, purchase, and installation of art in City-owned properties that is accessible to the public. The Municipal Arts Plan, which is prepared annually, describes the status of ongoing art projects and establishes the scope of work and allocations for new art projects.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 2,303 | 622 | 643 | 374 | 524 | 275 | 290 | 296 | 5,327 |
| Total: | 2,303 | 622 | 643 | 374 | 524 | 275 | 290 | 296 | 5,327 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 2,303 | 622 | 643 | 374 | 524 | 275 | 290 | 296 | 5,327 |
| Total*: | 2,303 | 622 | 643 | 374 | 524 | 275 | 290 | 296 | 5,327 |
| O & M Costs (Savings) | | | 53 | 53 | 53 | 53 | 53 | 53 | 320 |

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

SPU-Drainage & Wastewater

Alaskan Way Viaduct & Seawall Replacement Program - DWF

| | | | |
|-------------------------------|---------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Facility | Start Date: | Q1/2004 |
| Project ID: | C4102-DWF | End Date: | Q4/2019 |
| Location: | SR 99 / Battery St | | |
| Neighborhood Plan: | In more than one Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | In more than one District | Urban Village: | In more than one Urban Village |

This program relocates, replaces, and protects drainage and wastewater infrastructure affected by the replacement of the Alaskan Way Viaduct and Seawall. This program encompasses many sub-projects which are collectively known as the "Alaskan Way Viaduct and Seawall Replacement Program" (AWVSR Program.) The Washington State Department of Transportation (WSDOT) is the lead for the SR-99 replacement, while the City of Seattle is the lead on development of the waterfront public space, implementation of the new surface Alaskan Way, and design and construction of the seawall.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 9,529 | 3,557 | 3,708 | 2,032 | 6,501 | 6,203 | 6,528 | 2,464 | 40,520 |
| Total: | 9,529 | 3,557 | 3,708 | 2,032 | 6,501 | 6,203 | 6,528 | 2,464 | 40,520 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 9,529 | 3,557 | 3,708 | 2,032 | 6,501 | 6,203 | 6,528 | 2,464 | 40,520 |
| Total*: | 9,529 | 3,557 | 3,708 | 2,032 | 6,501 | 6,203 | 6,528 | 2,464 | 40,520 |
| O & M Costs (Savings) | | | 405 | 405 | 405 | 405 | 405 | 405 | 2,431 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 3,716 | 3,708 | 2,032 | 6,501 | 6,203 | 6,528 | 2,464 | 31,151 |
| Total: | | 3,716 | 3,708 | 2,032 | 6,501 | 6,203 | 6,528 | 2,464 | 31,151 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Best Management Practice Program

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Protection of Beneficial Uses | BCL/Program Code: | C333B |
| Project Type: | New Facility | Start Date: | Q2/2000 |
| Project ID: | C3313 | 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 ongoing program provides high priority water quality improvement projects in the Norfolk, South Park, and Densmore drainage basins. Incorporating Best Management Practices (BMP), projects are identified, developed, and implemented. The results will be improved quality of stormwater runoff from City-owned storm drains, discharged to nearby receiving water bodies such as streams and lakes.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 3,240 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 3,280 |
| Total: | 3,240 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 3,280 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 3,240 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 3,280 |
| Total*: | 3,240 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 3,280 |
| O & M Costs (Savings) | | | 33 | 33 | 33 | 33 | 33 | 33 | 197 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| Total: | | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |

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

SPU-Drainage & Wastewater

Bridging the Gap - DWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2008 |
| Project ID: | C4119-DWF | 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 multi-year, multi-project program funds assessments, repairs, and improvements to SPU's drainage and wastewater utility infrastructure at sites chosen by the Seattle Department of Transportation (SDOT) for bridge improvements and pedestrian and bicycle safety improvements within its "Bridging the Gap" program. SPU assesses the condition of its utility infrastructure at SDOT's project sites and conducts repairs and improvements as needed.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 184 | 500 | 0 | 0 | 0 | 100 | 100 | 100 | 984 |
| Total: | 184 | 500 | 0 | 0 | 0 | 100 | 100 | 100 | 984 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 184 | 500 | 0 | 0 | 0 | 100 | 100 | 100 | 984 |
| Total*: | 184 | 500 | 0 | 0 | 0 | 100 | 100 | 100 | 984 |
| O & M Costs (Savings) | | | 10 | 10 | 10 | 10 | 10 | 10 | 59 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 300 |
| Total: | | 0 | 0 | 0 | 0 | 100 | 100 | 100 | 300 |

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

SPU-Drainage & Wastewater

Broadview Long Term Plan

| | | | |
|-------------------------------|---|----------------------------------|-------------------------|
| BCL/Program Name: | Flooding, Sewer Back-up, and Landslides | BCL/Program Code: | C380B |
| Project Type: | Rehabilitation or Restoration | Start Date: | ONGOING |
| Project ID: | C3812 | End Date: | ONGOING |
| Location: | Broadview | | |
| Neighborhood Plan: | Broadview-Bitter Lake-Haller Lake | Neighborhood Plan Matrix: | |
| Neighborhood District: | Northwest | Urban Village: | Not in an Urban Village |

Portions of the Broadview neighborhood suffer from significant capacity limitations of the sanitary sewer resulting in numerous sewer backups into residences during wet weather events upon which the City has paid numerous claims dating to at least 1996. It is thought that this results from a combination of infiltration and inflow into the sanitary sewer system during wet weather. Program will develop and implement a plan with the goal of restoring sanitary sewer system capacity.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 905 | 2,500 | 4,000 | 5,600 | 6,000 | 7,000 | 0 | 0 | 26,005 |
| Total: | 905 | 2,500 | 4,000 | 5,600 | 6,000 | 7,000 | 0 | 0 | 26,005 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 905 | 2,500 | 4,000 | 5,600 | 6,000 | 7,000 | 0 | 0 | 26,005 |
| Total*: | 905 | 2,500 | 4,000 | 5,600 | 6,000 | 7,000 | 0 | 0 | 26,005 |
| O & M Costs (Savings) | | | 260 | 260 | 260 | 260 | 260 | 260 | 1,560 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 2,107 | 4,000 | 5,600 | 6,000 | 7,000 | 0 | 0 | 24,707 |
| Total: | | 2,107 | 4,000 | 5,600 | 6,000 | 7,000 | 0 | 0 | 24,707 |

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

SPU-Drainage & Wastewater

Capitol Hill Water Quality Project

| | | | |
|-------------------------------|--|----------------------------------|------------------|
| BCL/Program Name: | Protection of Beneficial Uses | BCL/Program Code: | C333B |
| Project Type: | New Facility | Start Date: | Q1/2006 |
| Project ID: | C3373 | End Date: | Q4/2018 |
| Location: | Yale Ave N/Pontius Ave N/Thomas Street | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Lake Union | Urban Village: | South Lake Union |

This project provides construction of four blocks of biofiltration swales in the South Lake Union neighborhood. As part of a regional storm water treatment facility, this project will be constructed in partnership with an adjacent land developer and includes new sidewalks and road surfaces. The project treats runoff from a portion of approximately 435 acres of Capitol Hill.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|-------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 4,446 | 2,887 | 261 | 237 | 2,516 | 239 | 695 | 0 | 11,281 |
| Total: | 4,446 | 2,887 | 261 | 237 | 2,516 | 239 | 695 | 0 | 11,281 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 4,446 | 2,887 | 261 | 237 | 2,516 | 239 | 695 | 0 | 11,281 |
| Total*: | 4,446 | 2,887 | 261 | 237 | 2,516 | 239 | 695 | 0 | 11,281 |
| O & M Costs (Savings) | | | 113 | 113 | 113 | 113 | 113 | 113 | 677 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 3,340 | 261 | 237 | 2,516 | 239 | 695 | 0 | 7,288 |
| Total: | | 3,340 | 261 | 237 | 2,516 | 239 | 695 | 0 | 7,288 |

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

SPU-Drainage & Wastewater

Combined Sewer Overflow Facility Retrofit

| | | | |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Combined Sewer Overflows | BCL/Program Code: | C360B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2002 |
| Project ID: | C3611 | End Date: | ONGOING |
| Location: | Various | | |
| 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 ongoing program retrofits, upgrades, and modifies existing Combined Sewer Overflows (CSO) reduction facilities in Seattle CSO basins. Retrofit projects cost-effectively optimize system operation and storage, mitigate the extent of CSOs, and postpone and/or downsize large CSO reduction projects. This project assists in achieving State Department of Ecology's requirement of an average of no more than one wet-weather overflow event per outfall per year.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 11,775 | 3,758 | 2,392 | 7,083 | 5,473 | 4,194 | 6,301 | 400 | 41,376 |
| Total: | 11,775 | 3,758 | 2,392 | 7,083 | 5,473 | 4,194 | 6,301 | 400 | 41,376 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 11,775 | 3,758 | 2,392 | 7,083 | 5,473 | 4,194 | 6,301 | 400 | 41,376 |
| Total*: | 11,775 | 3,758 | 2,392 | 7,083 | 5,473 | 4,194 | 6,301 | 400 | 41,376 |
| O & M Costs (Savings) | | | 414 | 414 | 414 | 414 | 414 | 414 | 2,483 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 3,049 | 2,392 | 7,083 | 5,473 | 4,194 | 6,301 | 400 | 28,892 |
| Total: | | 3,049 | 2,392 | 7,083 | 5,473 | 4,194 | 6,301 | 400 | 28,892 |

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

SPU-Drainage & Wastewater

Culvert Replacement Program

| | | | |
|-------------------------------|---|----------------------------------|--------------------------------|
| BCL/Program Name: | Flooding, Sewer Back-up, and Landslides | BCL/Program Code: | C380B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q2/2008 |
| Project ID: | C3810 | End Date: | ONGOING |
| Location: | Various | | |
| 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 ongoing program provides for the repair and replacement of stream culverts that are part of SPU's critical drainage infrastructure. Culverts will be repaired or replaced based on risks and benefits of the project, including flooding and public infrastructure risk and benefits. Replacements will be addressed as part of this capital program, while small repairs and retrofits will be covered within the Operations and Maintenance budget. Funding transfers to from the budget placeholder to culvert replacement projects once they are approved through the AMC process.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1,864 | 595 | 1,405 | 1,382 | 4,450 | 2,050 | 2,000 | 2,000 | 15,746 |
| Total: | 1,864 | 595 | 1,405 | 1,382 | 4,450 | 2,050 | 2,000 | 2,000 | 15,746 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 1,864 | 595 | 1,405 | 1,382 | 4,450 | 2,050 | 2,000 | 2,000 | 15,746 |
| Total*: | 1,864 | 595 | 1,405 | 1,382 | 4,450 | 2,050 | 2,000 | 2,000 | 15,746 |
| O & M Costs (Savings) | | | 157 | 157 | 157 | 157 | 157 | 157 | 945 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 854 | 1,405 | 1,382 | 4,450 | 2,050 | 2,000 | 2,000 | 14,141 |
| Total: | | 854 | 1,405 | 1,382 | 4,450 | 2,050 | 2,000 | 2,000 | 14,141 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Densmore Basin Drainage Improvements

| | | | |
|-------------------------------|---|----------------------------------|---------------------|
| BCL/Program Name: | Flooding, Sewer Back-up, and Landslides | BCL/Program Code: | C380B |
| Project Type: | New Facility | Start Date: | Q1/2009 |
| Project ID: | C3803 | End Date: | Q2/2014 |
| Location: | Densmore Basin | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Northwest | Urban Village: | Bitter Lake Village |

This program reduces surface water flooding and stormwater pollutant loading within the Densmore Basin. Improvements may include increasing the detention volume of the existing Stone Pond facility in order to address stormwater flow, and using traditional storage facilities and/or low impact development techniques to reduce flooding impacts at key locations in the upper Densmore Basin.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 7,123 | 350 | 12 | 0 | 0 | 0 | 0 | 0 | 7,485 |
| Total: | 7,123 | 350 | 12 | 0 | 0 | 0 | 0 | 0 | 7,485 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 7,123 | 350 | 12 | 0 | 0 | 0 | 0 | 0 | 7,485 |
| Total*: | 7,123 | 350 | 12 | 0 | 0 | 0 | 0 | 0 | 7,485 |
| O & M Costs (Savings) | | | 75 | 75 | 75 | 75 | 75 | 75 | 449 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 430 | 12 | 0 | 0 | 0 | 0 | 0 | 442 |
| Total: | | 430 | 12 | 0 | 0 | 0 | 0 | 0 | 442 |

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

SPU-Drainage & Wastewater

Emergency Rehabilitation

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Rehabilitation | BCL/Program Code: | C370B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/1998 |
| Project ID: | C3705 | End Date: | ONGOING |
| Location: | Citywide | Neighborhood Plan Matrix: | N/A |
| Neighborhood Plan: | Not in a Neighborhood Plan | Urban Village: | In more than one Urban Village |
| Neighborhood District: | In more than one District | | |

This ongoing project provides emergency sewer response to collapsed mainlines, surface street subsidence or voids resulting from leaking pipes, and storm-related incidents in Seattle, as well as emergency rehabilitation to drainage pipes that collapse, cause surface problems, or otherwise endanger public health or welfare. Typical improvements may include, but are not limited to, rehabilitation or replacement of structurally damaged pipes that caused the emergency and restoring surrounding areas. Rehabilitation or replacement quickly corrects the situation, avoids repeat incident, and extends the life of the asset.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 8,375 | 1,980 | 1,070 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 17,675 |
| Total: | 8,375 | 1,980 | 1,070 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 17,675 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 8,375 | 1,980 | 1,070 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 17,675 |
| Total*: | 8,375 | 1,980 | 1,070 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 17,675 |
| O & M Costs (Savings) | | | 177 | 177 | 177 | 177 | 177 | 177 | 1,061 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 1,439 | 1,070 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 8,759 |
| Total: | | 1,439 | 1,070 | 1,250 | 1,250 | 1,250 | 1,250 | 1,250 | 8,759 |

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

SPU-Drainage & Wastewater

Emergency Storms - DWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q3/2007 |
| Project ID: | C4120-DWF | 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 ongoing program funds Drainage & Wastewater infrastructure capital improvement projects resulting from previous and possible future storm events. These projects are potentially Federal Emergency Management Agency (FEMA) reimbursable and need to be separated out for tracking and reimbursement purposes. Typical improvements include, but are not limited to, repairing and mitigating landslides, restoring detention ponds, and replacing culverts and detention walls. All projects resulting from previous storms events have been completed. This program will now serve as a placeholder for any future storm events.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|------------------------|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 4,506 | 150 | 100 | 100 | 100 | 100 | 100 | 100 | 5,256 |
| Total: | 4,506 | 150 | 100 | 100 | 100 | 100 | 100 | 100 | 5,256 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 4,506 | 150 | 100 | 100 | 100 | 100 | 100 | 100 | 5,256 |
| Total*: | 4,506 | 150 | 100 | 100 | 100 | 100 | 100 | 100 | 5,256 |
| O & M Costs (Savings) | | | 53 | 53 | 53 | 53 | 53 | 53 | 315 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 0 | 100 | 100 | 100 | 100 | 100 | 100 | 600 |
| Total: | | 0 | 100 | 100 | 100 | 100 | 100 | 100 | 600 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

First Hill Streetcar - DWF

| | | | |
|-------------------------------|----------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2010 |
| Project ID: | C4130-DWF | End Date: | Q4/2020 |
| Location: | First Hill | | |
| 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 plans and relocates drainage and wastewater facilities that will be impacted by the SDOT-led First Hill Streetcar project, which will connect major employment centers on First Hill to the regional light rail system stations on Capitol Hill and in the International District. Currently this project is in the planning phase and no specific capitalizable betterments have been identified for the 2014-2019 timeframe but if they are, necessary funding will be requested.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 100 | 600 | 260 | 250 | 250 | 250 | 1,710 |
| Total: | 0 | 0 | 100 | 600 | 260 | 250 | 250 | 250 | 1,710 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 0 | 0 | 100 | 600 | 260 | 250 | 250 | 250 | 1,710 |
| Total*: | 0 | 0 | 100 | 600 | 260 | 250 | 250 | 250 | 1,710 |
| O & M Costs (Savings) | | | 17 | 17 | 17 | 17 | 17 | 17 | 103 |

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

SPU-Drainage & Wastewater

Future CSO Projects

| | | | |
|-------------------------------|--------------------------|----------------------------------|---------|
| BCL/Program Name: | Combined Sewer Overflows | BCL/Program Code: | C360B |
| Project Type: | Improved Facility | Start Date: | Q1/2015 |
| Project ID: | C3612 | End Date: | Q4/2025 |
| Location: | | | |
| Neighborhood Plan: | Not in Neighborhood Plan | Neighborhood Plan Matrix: | |
| Neighborhood District: | | Urban Village: | |

This program is for future combined sewer overflow (CSO) reduction projects that will be identified through the CSO Long-Term Control Plan (LTCP). Future projects are most likely to include underground storage projects, wastewater lift station improvements, and/or wastewater conveyance system improvements. Planning for the projects will begin around 2015, and the projects should complete their construction by 2025.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|-------|--------|--------|--------|--------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 0 | 3,619 | 17,400 | 20,400 | 28,000 | 28,000 | 97,419 |
| Total: | 0 | 0 | 0 | 3,619 | 17,400 | 20,400 | 28,000 | 28,000 | 97,419 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 0 | 0 | 0 | 3,619 | 17,400 | 20,400 | 28,000 | 28,000 | 97,419 |
| Total*: | 0 | 0 | 0 | 3,619 | 17,400 | 20,400 | 28,000 | 28,000 | 97,419 |
| O & M Costs (Savings) | | | 974 | 974 | 974 | 974 | 974 | 974 | 5,845 |

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

SPU-Drainage & Wastewater

Green Stormwater Infrastructure Program

| | | | |
|-------------------------------|----------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Combined Sewer Overflows | BCL/Program Code: | C360B |
| Project Type: | New Facility | Start Date: | Q1/2011 |
| Project ID: | C3610 | 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 ongoing program provides construction of Green Stormwater Infrastructure (GSI) as a component of combined sewer overflow (CSO) reduction within the uncontrolled CSO basins. Work includes roadside raingardens, permeable pavement alleys, and the RainWise program. RainWise provides financial incentives to private property owners within our uncontrolled CSO basins for construction of properly sized and installed raingardens or cisterns. The program supports the City's current regulatory strategy for compliance with CSO National Pollutant Discharge Elimination System (NPDES) permit.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 3,892 | 5,102 | 5,747 | 6,278 | 6,099 | 4,866 | 4,009 | 0 | 35,992 |
| Total: | 3,892 | 5,102 | 5,747 | 6,278 | 6,099 | 4,866 | 4,009 | 0 | 35,992 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 3,892 | 5,102 | 5,747 | 6,278 | 6,099 | 4,866 | 4,009 | 0 | 35,992 |
| Total*: | 3,892 | 5,102 | 5,747 | 6,278 | 6,099 | 4,866 | 4,009 | 0 | 35,992 |
| O & M Costs (Savings) | | | 360 | 360 | 360 | 360 | 360 | 360 | 2,160 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 4,372 | 5,747 | 6,278 | 6,099 | 4,866 | 4,009 | 0 | 31,371 |
| Total: | | 4,372 | 5,747 | 6,278 | 6,099 | 4,866 | 4,009 | 0 | 31,371 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Heavy Equipment Purchases - DWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Investment | Start Date: | ONGOING |
| Project ID: | C4116-DWF | 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 ongoing program provides SPU's Drainage and Wastewater Utility crews with new and replacement heavy equipment that is used throughout Seattle. Typical purchases include vactors, backhoes, loaders, service trucks, "TV" trucks and dump trucks, as well as retrofitting existing equipment to meet SPU operational needs and initiatives. This equipment transports work crews and tools to jobsites and supports the safe and efficient replacement, repair, and maintenance of Seattle's Drainage and Wastewater system. This program is one of three SPU fund-specific heavy equipment CIP programs.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 8,622 | 2,345 | 2,420 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 24,387 |
| Total: | 8,622 | 2,345 | 2,420 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 24,387 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 8,622 | 2,345 | 2,420 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 24,387 |
| Total*: | 8,622 | 2,345 | 2,420 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 24,387 |
| O & M Costs (Savings) | | | 244 | 244 | 244 | 244 | 244 | 244 | 1,463 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 2,345 | 2,420 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 15,765 |
| Total: | | 2,345 | 2,420 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 15,765 |

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SPU-Drainage & Wastewater

Integrated Control Monitoring Program - DWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Investment | Start Date: | Q1/2002 |
| Project ID: | C4108-DWF | End Date: | Q4/2019 |
| 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 ongoing program funds improvements to the centralized monitoring and control of the drainage and wastewater portion of the overall Supervisory Control and Data Acquisition (SCADA) system infrastructure throughout Seattle. Infrastructure affected may include, but is not limited to, pipes related to potential combined sewer overflows, rain gauges, and wastewater pump stations. This program enhances and protects the quality and condition of lakes and streams, and addresses the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) permit requirements.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 14,084 | 1,050 | 800 | 500 | 250 | 250 | 250 | 250 | 17,434 |
| Total: | 14,084 | 1,050 | 800 | 500 | 250 | 250 | 250 | 250 | 17,434 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 14,084 | 1,050 | 800 | 500 | 250 | 250 | 250 | 250 | 17,434 |
| Total*: | 14,084 | 1,050 | 800 | 500 | 250 | 250 | 250 | 250 | 17,434 |
| O & M Costs (Savings) | | | 174 | 174 | 174 | 174 | 174 | 174 | 1,046 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 1,320 | 800 | 500 | 250 | 250 | 250 | 250 | 3,620 |
| Total: | | 1,320 | 800 | 500 | 250 | 250 | 250 | 250 | 3,620 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Knickerbocker Floodplain Improvements

| | | | |
|-------------------------------|-------------------------------|----------------------------------|---------|
| BCL/Program Name: | Protection of Beneficial Uses | BCL/Program Code: | C333B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q3/2012 |
| Project ID: | C3383 | End Date: | Q4/2014 |
| Location: | | | |
| Neighborhood Plan: | Not in Neighborhood Plan | Neighborhood Plan Matrix: | |
| Neighborhood District: | | Urban Village: | |

This project provides design, permits and construction of a floodplain restoration project on the south branch of Thornton Creek to contribute to reduced system-wide stream-side flooding and improve instream and riparian habitat and water quality. Project elements include stream realignment, floodplain excavation, installation of a hyporheic zone (a subsurface volume of sediment and porous space adjacent to a stream through which stream water readily exchanges), replacement of a pedestrian bridge, and riparian plantings. This project is consistent with a number of long-term plans (including the DWW Urban Watershed Strategy, 2004 Mayor’s Aquatic Ecology Strategy, and 1999 Thornton Creek Watershed Action Plan) and follows the path mapped out by the Thornton Creek Confluence project which also increases floodplain area to provide stream water storage.

| | | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|--|----------------|-------------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | | |
| Drainage and Wastewater Rates | | 256 | 1,540 | 1,368 | 0 | 0 | 0 | 0 | 0 | 3,164 |
| Total: | | 256 | 1,540 | 1,368 | 0 | 0 | 0 | 0 | 0 | 3,164 |
| Fund Appropriations/Allocations | | | | | | | | | | |
| Drainage and Wastewater Fund | | 256 | 1,540 | 1,368 | 0 | 0 | 0 | 0 | 0 | 3,164 |
| Total*: | | 256 | 1,540 | 1,368 | 0 | 0 | 0 | 0 | 0 | 3,164 |
| O & M Costs (Savings) | | | | 32 | 32 | 32 | 32 | 32 | 32 | 190 |

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SPU-Drainage & Wastewater

Localized Flood Control Program

| | | | |
|-------------------------------|---|----------------------------------|---------------------|
| BCL/Program Name: | Flooding, Sewer Back-up, and Landslides | BCL/Program Code: | C380B |
| Project Type: | New Facility | Start Date: | Q1/2007 |
| Project ID: | C3802 | End Date: | ONGOING |
| Location: | Various | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Northwest | Urban Village: | Bitter Lake Village |

This ongoing program provides flood control and local drainage and wastewater projects in under-served parts of Seattle to improve system capacity or increase the existing level of service. Candidate projects are identified through claims, complaints, studies, and field investigations. Drainage and Landslide Spot projects are also included within this program. The Localized Flood Control Program improves Drainage and Wastewater levels of service.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 3,955 | 3,845 | 3,602 | 2,550 | 4,823 | 5,839 | 5,956 | 6,075 | 36,646 |
| Total: | 3,955 | 3,845 | 3,602 | 2,550 | 4,823 | 5,839 | 5,956 | 6,075 | 36,646 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 3,955 | 3,845 | 3,602 | 2,550 | 4,823 | 5,839 | 5,956 | 6,075 | 36,646 |
| Total*: | 3,955 | 3,845 | 3,602 | 2,550 | 4,823 | 5,839 | 5,956 | 6,075 | 36,646 |
| O & M Costs (Savings) | | | 366 | 366 | 366 | 366 | 366 | 366 | 2,199 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 3,396 | 3,602 | 2,550 | 4,823 | 5,839 | 5,956 | 6,075 | 32,241 |
| Total: | | 3,396 | 3,602 | 2,550 | 4,823 | 5,839 | 5,956 | 6,075 | 32,241 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Long Term Control Plan

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Combined Sewer Overflows | BCL/Program Code: | C360B |
| Project Type: | New Facility | Start Date: | Q3/2008 |
| Project ID: | C3604 | End Date: | Q4/2025 |
| 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 program creates a Long Term Control Plan (LTCP) in accordance with SPU's Combined Sewer Overflow (CSO) National Pollutant Discharge Elimination System (NPDES) permit and the Federal CSO Control Policy. On May 1, 2012, the Environmental Protection Agency/Department of Justice issued a draft Consent Decree to the City of Seattle which requires the development and submission of a Long-Term Control Plan for approval by May 30, 2015. It further stipulates that all CSO Control Measures are to be constructed as expeditiously as practicable, and in no event later than December 31, 2025. The Consent Decree also allows the City to propose storm water control project(s) as part of an Integrated Plan, in addition to the CSO Control Measures. If approved, the storm water projects can be constructed first and the CSO Control Measures deferred beyond the December 2025 due date.

The LTCP will reduce the number and volume of its CSO overflows, meet receiving water quality standards, and protect designated beneficial uses. The LTCP includes, flow characterization, monitoring, and hydraulic modeling; development CSO control alternatives; development of control alternatives that takes into consideration costs and performance; operational plan revisions; public participation; implementation schedule; and post-construction monitoring. The Program also includes a Programmatic SEPA EIS (Note: includes the Alaskan Way Viaduct & Seawall Program C4102). The Plan and EIS will be submitted to EPA/ Washington State Department of Ecology for approval in 2015 and will include all City of Seattle CSO basins except existing CSO Projects at Windermere, Genesee, Henderson and Central Waterfront (except as noted).

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 27,713 | 6,305 | 4,510 | 2,780 | 2,000 | 2,000 | 2,000 | 2,000 | 49,308 |
| Total: | 27,713 | 6,305 | 4,510 | 2,780 | 2,000 | 2,000 | 2,000 | 2,000 | 49,308 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 27,713 | 6,305 | 4,510 | 2,780 | 2,000 | 2,000 | 2,000 | 2,000 | 49,308 |
| Total*: | 27,713 | 6,305 | 4,510 | 2,780 | 2,000 | 2,000 | 2,000 | 2,000 | 49,308 |
| O & M Costs (Savings) | | | 493 | 493 | 493 | 493 | 493 | 493 | 2,958 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 4,302 | 4,510 | 2,780 | 2,000 | 2,000 | 2,000 | 2,000 | 19,592 |
| Total: | | 4,302 | 4,510 | 2,780 | 2,000 | 2,000 | 2,000 | 2,000 | 19,592 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Madison Valley Long Term Solution

| | | | |
|-------------------------------|---|----------------------------------|-------------------------|
| BCL/Program Name: | Flooding, Sewer Back-up, and Landslides | BCL/Program Code: | C380B |
| Project Type: | New Facility | Start Date: | Q1/2007 |
| Project ID: | C3805 | End Date: | Q2/2014 |
| Location: | Various | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Central | Urban Village: | Not in an Urban Village |

This project provides stormwater flood control facilities to greatly reduce the potential for flooding in the Madison Valley area, especially in the vicinity of 30th Ave E. and E. John St, and in the area of 29th Ave E. and E. Madison St. Work will include construction of a large stormwater pipe in the NW section of the Madison Valley basin, a new stormwater storage facility in Washington Park, and an expanded stormwater retention area at 30th Ave E. and E. John St.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 34,036 | 384 | 50 | 0 | 0 | 0 | 0 | 0 | 34,470 |
| Total: | 34,036 | 384 | 50 | 0 | 0 | 0 | 0 | 0 | 34,470 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 34,036 | 384 | 50 | 0 | 0 | 0 | 0 | 0 | 34,470 |
| Total*: | 34,036 | 384 | 50 | 0 | 0 | 0 | 0 | 0 | 34,470 |
| O & M Costs (Savings) | | | 345 | 345 | 345 | 345 | 345 | 345 | 2,068 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 662 | 50 | 0 | 0 | 0 | 0 | 0 | 712 |
| Total: | | 662 | 50 | 0 | 0 | 0 | 0 | 0 | 712 |

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SPU-Drainage & Wastewater

Meadowbrook Pond Sediment Management

| | | | |
|-------------------------------|---|----------------------------------|-------------------------|
| BCL/Program Name: | Flooding, Sewer Back-up, and Landslides | BCL/Program Code: | C380B |
| Project Type: | Improved Facility | Start Date: | Q1/2012 |
| Project ID: | C3808 | End Date: | Q4/2014 |
| Location: | 35th AVE NE/NE 105th ST/NE 110th ST | | |
| 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 provides for dredging of sediment in Meadowbrook Pond and modifying existing structures to improve functionality of the facility. These tasks will improve the maintenance operations and the cost efficiency and management of Meadowbrook Pond by reducing flow volume, sediments, and contaminants; capturing sediments more efficiently to improve maintenance and worker safety; improving dredging methods; developing definitive maintenance triggers; modifying structures to manage debris, improving flood control; expanding bypass capacity; and increasing water quality in the pond and downstream.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 2,526 | 135 | 31 | 0 | 0 | 0 | 0 | 0 | 2,692 |
| Total: | 2,526 | 135 | 31 | 0 | 0 | 0 | 0 | 0 | 2,692 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 2,526 | 135 | 31 | 0 | 0 | 0 | 0 | 0 | 2,692 |
| Total*: | 2,526 | 135 | 31 | 0 | 0 | 0 | 0 | 0 | 2,692 |
| O & M Costs (Savings) | | | 27 | 27 | 27 | 27 | 27 | 27 | 162 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 959 | 31 | 0 | 0 | 0 | 0 | 0 | 990 |
| Total: | | 959 | 31 | 0 | 0 | 0 | 0 | 0 | 990 |

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

SPU-Drainage & Wastewater

Mercer Corridor Project East Phase - DWF

| | | | |
|-------------------------------|----------------------|----------------------------------|------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2007 |
| Project ID: | C4114-DWF | End Date: | Q4/2014 |
| Location: | South Lake Union | Neighborhood Plan Matrix: | N/A |
| Neighborhood Plan: | South Lake Union | Urban Village: | South Lake Union |
| Neighborhood District: | Lake Union | | |

This program funds the repair, relocation, protection, and upgrade of drainage and wastewater infrastructure related to the redevelopment of the South Lake Union neighborhood. Program work includes, but is not limited to, flow modeling and development of green roofs. This effort identifies SPU drainage and wastewater system direct impacts, opportunities for system improvements, and cost responsibility. This program also funds planning-level coordination with other city departments on projects within the South Lake Union area.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 6,294 | 795 | 50 | 0 | 0 | 0 | 0 | 0 | 7,139 |
| Total: | 6,294 | 795 | 50 | 0 | 0 | 0 | 0 | 0 | 7,139 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 6,294 | 795 | 50 | 0 | 0 | 0 | 0 | 0 | 7,139 |
| Total*: | 6,294 | 795 | 50 | 0 | 0 | 0 | 0 | 0 | 7,139 |
| O & M Costs (Savings) | | | 71 | 71 | 71 | 71 | 71 | 71 | 428 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 745 | 50 | 0 | 0 | 0 | 0 | 0 | 795 |
| Total: | | 745 | 50 | 0 | 0 | 0 | 0 | 0 | 795 |

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

SPU-Drainage & Wastewater

Mercer Corridor Project West Phase - DWF

| | | | |
|-------------------------------|--------------------------------------|----------------------------------|-----------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2010 |
| Project ID: | C4133-DWF | End Date: | Q4/2015 |
| Location: | Mercer St/Elliott Ave W/Dexter Ave N | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | T01, T02, T03, T11 T15 |
| Neighborhood District: | In more than one District | Urban Village: | In more than one Urban Village |

This project provides drainage and wastewater utility improvements and relocations related to the Mercer Corridor project, West phase. The project will convert Mercer Street to a two-way street between Dexter Ave. and Elliott Ave. West. The Mercer underpass at Aurora Ave will be widened to allow for six travel lanes and a bicycle/pedestrian shared-use path between Dexter Ave and 5th Ave North. Roy Street, between Aurora and Queen Anne Ave., will also be converted to a two-way street with on-road bicycle lanes.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 244 | 629 | 649 | 294 | 0 | 0 | 0 | 0 | 1,817 |
| Total: | 244 | 629 | 649 | 294 | 0 | 0 | 0 | 0 | 1,817 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 244 | 629 | 649 | 294 | 0 | 0 | 0 | 0 | 1,817 |
| Total*: | 244 | 629 | 649 | 294 | 0 | 0 | 0 | 0 | 1,817 |
| O & M Costs (Savings) | | | 18 | 18 | 18 | 18 | 18 | 18 | 109 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 500 | 649 | 294 | 0 | 0 | 0 | 0 | 1,443 |
| Total: | | 500 | 649 | 294 | 0 | 0 | 0 | 0 | 1,443 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Meter Replacement - DWF

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2004 |
| Project ID: | C4101-DWF | 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 ongoing program funds replacement of existing water meters when they fail or become obsolete. Meters measuring up to two inches are replaced when they stop running. Meters measuring three inches or more are repaired when possible, but are replaced when repair costs exceed replacement costs. Accurate water meters ensure that customers are billed fairly for the water they use. Since water meters also are used to bill customers for their wastewater discharges, 48 percent of the funding is allocated to the Drainage and Wastewater line of business.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 4,307 | 652 | 585 | 595 | 605 | 615 | 630 | 636 | 8,626 |
| Total: | 4,307 | 652 | 585 | 595 | 605 | 615 | 630 | 636 | 8,626 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 4,307 | 652 | 585 | 595 | 605 | 615 | 630 | 636 | 8,626 |
| Total*: | 4,307 | 652 | 585 | 595 | 605 | 615 | 630 | 636 | 8,626 |
| O & M Costs (Savings) | | | 86 | 86 | 86 | 86 | 86 | 86 | 518 |

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

SPU-Drainage & Wastewater

No Dig Pipe & Maintenance Rehabilitation

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Rehabilitation | BCL/Program Code: | C370B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/1998 |
| Project ID: | C3707 | 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 ongoing project provides trenchless technology to reline wastewater pipe in Seattle. Generally, prioritized critical sewer pipe that is intact though leaking, and very near the end of its useful life, is relined by a specialized vendor. Installation of the liner extends pipe segment life for more than fifty years.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 13,108 | 2,977 | 1,500 | 1,742 | 2,500 | 2,500 | 2,500 | 2,500 | 29,327 |
| Total: | 13,108 | 2,977 | 1,500 | 1,742 | 2,500 | 2,500 | 2,500 | 2,500 | 29,327 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 13,108 | 2,977 | 1,500 | 1,742 | 2,500 | 2,500 | 2,500 | 2,500 | 29,327 |
| Total*: | 13,108 | 2,977 | 1,500 | 1,742 | 2,500 | 2,500 | 2,500 | 2,500 | 29,327 |
| O & M Costs (Savings) | | | 293 | 293 | 293 | 293 | 293 | 293 | 1,760 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 1,500 | 1,500 | 1,742 | 2,500 | 2,500 | 2,500 | 2,500 | 14,742 |
| Total: | | 1,500 | 1,500 | 1,742 | 2,500 | 2,500 | 2,500 | 2,500 | 14,742 |

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SPU-Drainage & Wastewater

Operational Facility - Construction - DWF

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2004 |
| Project ID: | C4106-DWF | 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 ongoing facilities program renovates, rehabilitates, and replaces existing buildings and constructs new facilities at various locations within the city limits to address deficiencies, failures, and functional changes in the SPU Lines of Business. Typical improvements include, but are not limited to, roof replacements, exterior wall or cladding replacements, and improvements to administrative office space, crew and shop space, lighting, heating and ventilation systems, and facilities structures. These improvements increase the useful life of the facilities, preserve the value of the assets, and provide a safe working environment.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 8,163 | 1,263 | 398 | 703 | 1,120 | 3,534 | 2,200 | 2,040 | 19,421 |
| Total: | 8,163 | 1,263 | 398 | 703 | 1,120 | 3,534 | 2,200 | 2,040 | 19,421 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 8,163 | 1,263 | 398 | 703 | 1,120 | 3,534 | 2,200 | 2,040 | 19,421 |
| Total*: | 8,163 | 1,263 | 398 | 703 | 1,120 | 3,534 | 2,200 | 2,040 | 19,421 |
| O & M Costs (Savings) | | | 194 | 194 | 194 | 194 | 194 | 194 | 1,165 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 1,256 | 398 | 703 | 1,120 | 3,534 | 2,200 | 2,040 | 11,251 |
| Total: | | 1,256 | 398 | 703 | 1,120 | 3,534 | 2,200 | 2,040 | 11,251 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Operational Facility - Other - DWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2006 |
| Project ID: | C4115-DWF | 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 ongoing facilities program provides funding to purchase, replace, or install new building materials or building equipment within the city limits to address deficiencies, failures, and functional changes in the SPU Lines of Business. Typical improvements include, but are not limited to, drainage systems, prefabricated buildings, storage buildings, and fencing.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 329 | 75 | 150 | 300 | 100 | 0 | 0 | 0 | 954 |
| Total: | 329 | 75 | 150 | 300 | 100 | 0 | 0 | 0 | 954 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 329 | 75 | 150 | 300 | 100 | 0 | 0 | 0 | 954 |
| Total*: | 329 | 75 | 150 | 300 | 100 | 0 | 0 | 0 | 954 |
| O & M Costs (Savings) | | | 10 | 10 | 10 | 10 | 10 | 10 | 57 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 0 | 150 | 300 | 100 | 0 | 0 | 0 | 550 |
| Total: | | 0 | 150 | 300 | 100 | 0 | 0 | 0 | 550 |

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

SPU-Drainage & Wastewater

Operations Control Center - DWF

| | | | |
|-------------------------------|----------------------------|----------------------------------|----------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2003 |
| Project ID: | C4105-DWF | End Date: | ONGOING |
| Location: | 2700 Airport Way S | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This ongoing facilities program renovates, rehabilitates, replaces existing buildings, and constructs new facilities at the Operations Control Center located at 2700 Airport Way South to improve the efficiency and effectiveness of the field crews delivering utility services to customers. Typical improvements include, but are not limited to, roof and other exterior replacements, improvements to public spaces, office and crew spaces and lighting, and heating and ventilation systems. These improvements increase the useful life of the facility, preserve the value of the asset, and provide a safe work and public space environment.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 2,420 | 76 | 806 | 43 | 60 | 206 | 310 | 400 | 4,320 |
| Total: | 2,420 | 76 | 806 | 43 | 60 | 206 | 310 | 400 | 4,320 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 2,420 | 76 | 806 | 43 | 60 | 206 | 310 | 400 | 4,320 |
| Total*: | 2,420 | 76 | 806 | 43 | 60 | 206 | 310 | 400 | 4,320 |
| O & M Costs (Savings) | | | 43 | 43 | 43 | 43 | 43 | 43 | 259 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 60 | 806 | 43 | 60 | 206 | 310 | 400 | 1,884 |
| Total: | | 60 | 806 | 43 | 60 | 206 | 310 | 400 | 1,884 |

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

SPU-Drainage & Wastewater

Other Major Transportation Projects - DWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q2/2008 |
| Project ID: | C4123-DWF | 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 ongoing program funds Drainage and Wastewater projects that mitigate undesirable impacts from, and takes advantage of opportunities generated by, capital transportation projects of the Washington State Department of Transportation (WSDOT) and the Seattle Department of Transportation (SDOT) throughout the city. Work may include, but is not limited to, physically protecting the infrastructure during the transportation construction process, repairing and replacing damaged infrastructure, and improving existing infrastructure to meet higher standards. Project sites may include, but are not limited to, State Route 520, Interstate 5, and Interstate 90.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1 | 0 | 568 | 580 | 198 | 100 | 750 | 750 | 2,947 |
| Total: | 1 | 0 | 568 | 580 | 198 | 100 | 750 | 750 | 2,947 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 1 | 0 | 568 | 580 | 198 | 100 | 750 | 750 | 2,947 |
| Total*: | 1 | 0 | 568 | 580 | 198 | 100 | 750 | 750 | 2,947 |
| O & M Costs (Savings) | | | 29 | 29 | 29 | 29 | 29 | 29 | 177 |

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

SPU-Drainage & Wastewater

Outfall Rehabilitation Program

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Rehabilitation | BCL/Program Code: | C370B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2012 |
| Project ID: | C3708 | End Date: | ONGOING |
| Location: | Various | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | |
| Neighborhood District: | In more than one District | Urban Village: | In more than one Urban Village |

This ongoing program provides rehabilitation of outfalls throughout Seattle Public Utilities service area. Typical improvements may include, but are not limited to, repair, rehabilitation or replacement of outfall structures. This program will investigate the condition of each of the outfalls and complete an options analysis, followed by design, construction, and closeout activities.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 6 | 504 | 1,893 | 1,186 | 1,542 | 500 | 500 | 500 | 6,631 |
| Total: | 6 | 504 | 1,893 | 1,186 | 1,542 | 500 | 500 | 500 | 6,631 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 6 | 504 | 1,893 | 1,186 | 1,542 | 500 | 500 | 500 | 6,631 |
| Total*: | 6 | 504 | 1,893 | 1,186 | 1,542 | 500 | 500 | 500 | 6,631 |
| O & M Costs (Savings) | | | 66 | 66 | 66 | 66 | 66 | 66 | 398 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 746 | 1,893 | 1,186 | 1,542 | 500 | 500 | 500 | 6,867 |
| Total: | | 746 | 1,893 | 1,186 | 1,542 | 500 | 500 | 500 | 6,867 |

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

SPU-Drainage & Wastewater

Point Sewer Pipe Rehabilitation

| | | | |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Rehabilitation | BCL/Program Code: | C370B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2003 |
| Project ID: | C3704 | 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 ongoing project provides complex point sewer rehabilitation of sewer mains that are greater than seventeen feet deep in the downtown corridor, landslide prone areas, or difficult access areas. Failed or nonfunctional sections of pipe are assessed and prioritized for rehabilitation through one or two public works contracts. This project also provides point sewer rehabilitation of sewer mains that are less than seventeen feet deep in non-arterial Seattle roadways. In these cases, failed or nonfunctional sections of pipe are assessed and prioritized for rehabilitation by Seattle Public Utilities field operation crews. Sewer trouble spots and voids are addressed while increasing the sewer main asset life and function.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 41,698 | 3,900 | 4,236 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 | 72,334 |
| Total: | 41,698 | 3,900 | 4,236 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 | 72,334 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 41,698 | 3,900 | 4,236 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 | 72,334 |
| Total*: | 41,698 | 3,900 | 4,236 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 | 72,334 |
| O & M Costs (Savings) | | | 723 | 723 | 723 | 723 | 723 | 723 | 4,340 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 3,751 | 4,236 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 | 30,486 |
| Total: | | 3,751 | 4,236 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 | 30,486 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Pump Station and Force Main Improvements

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Rehabilitation | BCL/Program Code: | C370B |
| Project Type: | New Facility | Start Date: | Q1/2008 |
| Project ID: | C3703 | End Date: | ONGOING |
| Location: | Various | | |
| 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 ongoing program provides for improvements and upgrades to the 68 SPU-owned wastewater pump stations and force mains. Typical improvements may include, but are not limited to, replacement of existing pump station assets including pumps, motors, and valves, and installation of new assets such as SCADA systems, generators, and emergency plugs. This program enhances and extends the useful life of the existing pump stations which, in turn, protects water quality.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 8,443 | 1,896 | 3,251 | 3,432 | 2,838 | 2,520 | 2,520 | 2,520 | 27,421 |
| Total: | 8,443 | 1,896 | 3,251 | 3,432 | 2,838 | 2,520 | 2,520 | 2,520 | 27,421 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 8,443 | 1,896 | 3,251 | 3,432 | 2,838 | 2,520 | 2,520 | 2,520 | 27,421 |
| Total*: | 8,443 | 1,896 | 3,251 | 3,432 | 2,838 | 2,520 | 2,520 | 2,520 | 27,421 |
| O & M Costs (Savings) | | | 274 | 274 | 274 | 274 | 274 | 274 | 1,645 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 556 | 3,251 | 3,432 | 2,838 | 2,520 | 2,520 | 2,520 | 17,637 |
| Total: | | 556 | 3,251 | 3,432 | 2,838 | 2,520 | 2,520 | 2,520 | 17,637 |

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SPU-Drainage & Wastewater

S Genesee Combined Sewer Overflow

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Combined Sewer Overflows | BCL/Program Code: | C360B |
| Project Type: | New Facility | Start Date: | Q1/2005 |
| Project ID: | C3608 | End Date: | Q4/2015 |
| Location: | S. Genesee St. | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | |
| Neighborhood District: | Southeast | Urban Village: | Not in an Urban Village |

This project provides construction of combined sewer overflows (CSO) facilities in the Genesee area in the southeast part of Seattle. Facilities will be built to meet level of service requirements for CSOs and comply with state and federal regulations. The project will meet requirements of the City's current National Pollutant Discharge Elimination System (NPDES) Wastewater Discharge Permit.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|--------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 10,008 | 8,120 | 14,506 | 284 | 0 | 0 | 0 | 0 | 32,918 |
| Total: | 10,008 | 8,120 | 14,506 | 284 | 0 | 0 | 0 | 0 | 32,918 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 10,008 | 8,120 | 14,506 | 284 | 0 | 0 | 0 | 0 | 32,918 |
| Total*: | 10,008 | 8,120 | 14,506 | 284 | 0 | 0 | 0 | 0 | 32,918 |
| O & M Costs (Savings) | | | 329 | 329 | 329 | 329 | 329 | 329 | 1,975 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 14,900 | 14,506 | 284 | 0 | 0 | 0 | 0 | 29,690 |
| Total: | | 14,900 | 14,506 | 284 | 0 | 0 | 0 | 0 | 29,690 |

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

SPU-Drainage & Wastewater

S Henderson Combined Sewer Overflow Storage

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Combined Sewer Overflows | BCL/Program Code: | C360B |
| Project Type: | New Facility | Start Date: | Q1/2005 |
| Project ID: | C3609 | End Date: | Q4/2018 |
| Location: | S Henderson St. | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Southeast | Urban Village: | Not in an Urban Village |

This project provides construction of combined sewer overflows (CSO) facilities in the Henderson area in the southeast part of Seattle. Facilities will be built to meet level of service requirements for CSOs and comply with state and federal regulations. The project will meet requirements of the City's current National Pollutant Discharge Elimination System (NPDES) Wastewater Discharge Permit. Maintenance costs will not begin until after 2020, when the project completes construction.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|--------|--------|--------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 12,804 | 6,196 | 7,627 | 18,039 | 18,268 | 15,528 | 317 | 0 | 78,779 |
| Total: | 12,804 | 6,196 | 7,627 | 18,039 | 18,268 | 15,528 | 317 | 0 | 78,779 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 12,804 | 6,196 | 7,627 | 18,039 | 18,268 | 15,528 | 317 | 0 | 78,779 |
| Total*: | 12,804 | 6,196 | 7,627 | 18,039 | 18,268 | 15,528 | 317 | 0 | 78,779 |
| O & M Costs (Savings) | | | 788 | 788 | 788 | 788 | 788 | 788 | 4,727 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 4,557 | 7,627 | 18,039 | 18,268 | 15,528 | 317 | 0 | 64,336 |
| Total: | | 4,557 | 7,627 | 18,039 | 18,268 | 15,528 | 317 | 0 | 64,336 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Sanitary Sewer Overflow Capacity

| | | | |
|-------------------------------|---|----------------------------------|--------------------------------|
| BCL/Program Name: | Flooding, Sewer Back-up, and Landslides | BCL/Program Code: | C380B |
| Project Type: | New Investment | Start Date: | Q2/2002 |
| Project ID: | C3804 | End Date: | ONGOING |
| Location: | Various | | |
| 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 |

The Wastewater Capacity Improvement Program is designed to enhance sanitary sewer service to Seattle customers by addressing current and projected capacity limitations of the wastewater system through structural (CIP) improvements. Such improvements may include demand management measures such as infiltration and inflow (I/I) reduction, increased conveyance capacity, and individual customer measures such as installation of backflow preventers or grinder pumps to reduce the risk that customers will experience backups of sewage into their homes and businesses during storm events.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 4,975 | 1,935 | 3,340 | 3,943 | 4,916 | 5,631 | 5,743 | 5,858 | 36,341 |
| Total: | 4,975 | 1,935 | 3,340 | 3,943 | 4,916 | 5,631 | 5,743 | 5,858 | 36,341 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 4,975 | 1,935 | 3,340 | 3,943 | 4,916 | 5,631 | 5,743 | 5,858 | 36,341 |
| Total*: | 4,975 | 1,935 | 3,340 | 3,943 | 4,916 | 5,631 | 5,743 | 5,858 | 36,341 |
| O & M Costs (Savings) | | | 363 | 363 | 363 | 363 | 363 | 363 | 2,180 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 936 | 3,340 | 3,943 | 4,916 | 5,631 | 5,743 | 5,858 | 30,367 |
| Total: | | 936 | 3,340 | 3,943 | 4,916 | 5,631 | 5,743 | 5,858 | 30,367 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Security Improvements - DWF

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2007 |
| Project ID: | C4113-DWF | 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 ongoing program provides physical integrated security system components throughout the City of Seattle. Typical improvements may include, but are not limited to, fences, gates, access control card readers, intercoms, lighting, door and hatch contacts, CCTV cameras, motion detection devices, and fiber and conduit. This program enhances protection of SPU's critical infrastructure and addresses vulnerabilities identified in U.S. Environmental Protection Agency (EPA) mandated vulnerability assessments.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1,061 | 115 | 178 | 98 | 113 | 128 | 131 | 206 | 2,028 |
| Total: | 1,061 | 115 | 178 | 98 | 113 | 128 | 131 | 206 | 2,028 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 1,061 | 115 | 178 | 98 | 113 | 128 | 131 | 206 | 2,028 |
| Total*: | 1,061 | 115 | 178 | 98 | 113 | 128 | 131 | 206 | 2,028 |
| O & M Costs (Savings) | | | 20 | 20 | 20 | 20 | 20 | 20 | 122 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 224 | 178 | 98 | 113 | 128 | 131 | 206 | 1,076 |
| Total: | | 224 | 178 | 98 | 113 | 128 | 131 | 206 | 1,076 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Sediment Remediation - DWF

| | | | |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Sediments | BCL/Program Code: | C350B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q4/2000 |
| Project ID: | C3503 | End Date: | ONGOING |
| Location: | Various | | |
| 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 ongoing program provides for City of Seattle participation in cleanup of contaminated sediment sites at multiple locations across the city for which the City's drainage and wastewater utilities may have some liability. Typical phases of such projects include preliminary studies and analyses, preliminary engineering for actual cleanup efforts, and liability allocation negotiations. This program enhances the natural environment of Seattle and addresses both state and federal regulatory agency requirements.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|--------|--------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 35,500 | 1,934 | 3,423 | 4,396 | 1,491 | 1,410 | 11,610 | 11,610 | 71,374 |
| Total: | 35,500 | 1,934 | 3,423 | 4,396 | 1,491 | 1,410 | 11,610 | 11,610 | 71,374 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 35,500 | 1,934 | 3,423 | 4,396 | 1,491 | 1,410 | 11,610 | 11,610 | 71,374 |
| Total*: | 35,500 | 1,934 | 3,423 | 4,396 | 1,491 | 1,410 | 11,610 | 11,610 | 71,374 |
| O & M Costs (Savings) | | | 714 | 714 | 714 | 714 | 714 | 714 | 4,282 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 1,665 | 3,423 | 4,396 | 1,491 | 1,410 | 11,610 | 11,610 | 35,605 |
| Total: | | 1,665 | 3,423 | 4,396 | 1,491 | 1,410 | 11,610 | 11,610 | 35,605 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Sewer Full Line Replacements

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Rehabilitation | BCL/Program Code: | C370B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2001 |
| Project ID: | C3702 | End Date: | ONGOING |
| Location: | Citywide | Neighborhood Plan Matrix: | N/A |
| Neighborhood Plan: | Not in a Neighborhood Plan | Urban Village: | In more than one Urban Village |
| Neighborhood District: | In more than one District | | |

This ongoing program provides for replacement of existing sewer lines citywide with pipes of the same diameter and capacity. Closed circuit television inspections identify defects in sewer mainlines, and each mainline defect is catalogued in an SPU database and assigned a priority that reflects the urgency of repair. Replacement is done by pipe-bursting methods that avoid extended pavement cutting.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 349 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 2,099 |
| Total: | 349 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 2,099 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 349 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 2,099 |
| Total*: | 349 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 2,099 |
| O & M Costs (Savings) | | | 21 | 21 | 21 | 21 | 21 | 21 | 126 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 100 | 250 | 250 | 250 | 250 | 250 | 250 | 1,600 |
| Total: | | 100 | 250 | 250 | 250 | 250 | 250 | 250 | 1,600 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Sound Transit - North Link - DWF

| | | | |
|-------------------------------|---------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Facility | Start Date: | Q1/2012 |
| Project ID: | C4135-DWF | End Date: | Q4/2020 |
| Location: | Various | | |
| Neighborhood Plan: | In more than one Plan | Neighborhood Plan Matrix: | |
| Neighborhood District: | In more than one District | Urban Village: | In more than one Urban Village |

This program funds relocation, replacement, and protection of drainage and wastewater infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the third segment of their electrical light rail transit system that includes 4.3 mile light rail extension, three additional stations, and other supporting facilities from the University of Washington to Northgate.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 58 | 87 | 75 | 75 | 75 | 75 | 50 | 50 | 545 |
| Total: | 58 | 87 | 75 | 75 | 75 | 75 | 50 | 50 | 545 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 58 | 87 | 75 | 75 | 75 | 75 | 50 | 50 | 545 |
| Total*: | 58 | 87 | 75 | 75 | 75 | 75 | 50 | 50 | 545 |
| O & M Costs (Savings) | | | 5 | 5 | 5 | 5 | 5 | 5 | 33 |

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SPU-Drainage & Wastewater

Sound Transit – University Link - DWF

| | | | |
|-------------------------------|---------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Facility | Start Date: | Q1/2007 |
| Project ID: | C4110-DWF | End Date: | Q2/2016 |
| Location: | Various | | |
| Neighborhood Plan: | In more than one Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | In more than one District | Urban Village: | In more than one Urban Village |

This program funds relocation, replacement, and protection of drainage and wastewater infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the second segment of their electrical light rail transit system that includes 3.15 miles of tunnel, two additional stations, and other supporting facilities from downtown to the University of Washington.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 334 | 191 | 127 | 41 | 10 | 0 | 0 | 0 | 702 |
| Total: | 334 | 191 | 127 | 41 | 10 | 0 | 0 | 0 | 702 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 334 | 191 | 127 | 41 | 10 | 0 | 0 | 0 | 702 |
| Total*: | 334 | 191 | 127 | 41 | 10 | 0 | 0 | 0 | 702 |
| O & M Costs (Savings) | | | 7 | 7 | 7 | 7 | 7 | 7 | 42 |

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

SPU-Drainage & Wastewater

Sound Transit-East Link

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Facility | Start Date: | Q2/2013 |
| Project ID: | C4122-DWF | End Date: | Q4/2015 |
| 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 program funds relocation, replacement, and protection of drainage and wastewater infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the next segment of their electrical light rail transit system that includes 14 mile light rail extension, 10 additional stations total (one in Seattle) and other supporting facilities from the International District (ID) across I-90 to Bellevue/Redmond.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 55 |
| Total: | 0 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 55 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 0 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 55 |
| Total*: | 0 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 55 |
| O & M Costs (Savings) | | | 1 | 1 | 1 | 1 | 1 | 1 | 3 |

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

SPU-Drainage & Wastewater

South Park Pump Station

| | | | |
|-------------------------------|---|----------------------------------|----------|
| BCL/Program Name: | Flooding, Sewer Back-up, and Landslides | BCL/Program Code: | C380B |
| Project Type: | New Facility | Start Date: | Q3/2008 |
| Project ID: | C3806 | End Date: | Q4/2019 |
| Location: | 698 S Riverside DR/Holden/Austin | | |
| Neighborhood Plan: | South Park | Neighborhood Plan Matrix: | |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This project constructs a pump station (PS) and water quality facility (WQF) in South Park. The PS allows the existing storm drain trunk to meet the 2004 Comprehensive Drainage Plan level of service and allows future projects expanding the collection system to address flooding complaints. The WQF will treat most stormwater flows from the basin, reducing pollutant loading to the Duwamish. Flows over 11 CFS will bypass the WQF and be pumped directly to the river.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|-------|-------|-------|-------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 6,030 | 4,500 | 500 | 1,500 | 3,000 | 4,000 | 3,500 | 308 | 23,339 |
| Total: | 6,030 | 4,500 | 500 | 1,500 | 3,000 | 4,000 | 3,500 | 308 | 23,339 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 6,030 | 4,500 | 500 | 1,500 | 3,000 | 4,000 | 3,500 | 308 | 23,339 |
| Total*: | 6,030 | 4,500 | 500 | 1,500 | 3,000 | 4,000 | 3,500 | 308 | 23,339 |
| O & M Costs (Savings) | | | 233 | 233 | 233 | 233 | 233 | 233 | 1,400 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 662 | 500 | 1,500 | 3,000 | 4,000 | 3,500 | 308 | 13,471 |
| Total: | | 662 | 500 | 1,500 | 3,000 | 4,000 | 3,500 | 308 | 13,471 |

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SPU-Drainage & Wastewater

Street Sweeping for Water Quality

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Protection of Beneficial Uses | BCL/Program Code: | C333B |
| Project Type: | New Investment | Start Date: | Q1/2011 |
| Project ID: | C3363 | End Date: | ONGOING |
| Location: | Various | | |
| 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 for a cost-effective, significant reduction in the potentially toxic pollutant load carried by stormwater runoff discharged by SPU's storm drain system to Puget Sound using new, high efficiency street sweeping technology. The Program is a partnership between Seattle Public Utilities, who sets the program direction, provides water quality expertise, and funding for the portion of routes that drain to the municipal separate storm sewer system (MS4), which discharges directly to our receiving waters and Seattle Department of Transportation, who provides operational expertise, street sweeping services, and funding for the portion of the routes that drain to the combined sewer system (CSS).

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 183 | 100 | 0 | 0 | 150 | 0 | 0 | 0 | 433 |
| Total: | 183 | 100 | 0 | 0 | 150 | 0 | 0 | 0 | 433 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 183 | 100 | 0 | 0 | 150 | 0 | 0 | 0 | 433 |
| Total*: | 183 | 100 | 0 | 0 | 150 | 0 | 0 | 0 | 433 |
| O & M Costs (Savings) | | | 4 | 4 | 4 | 4 | 4 | 4 | 26 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 101 | 0 | 0 | 150 | 0 | 0 | 0 | 251 |
| Total: | | 101 | 0 | 0 | 150 | 0 | 0 | 0 | 251 |

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SPU-Drainage & Wastewater

Taylor Creek Culvert Replacement

| | | | |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Protection of Beneficial Uses | BCL/Program Code: | C333B |
| Project Type: | New Facility | Start Date: | Q4/1999 |
| Project ID: | C3353 | End Date: | Q4/2016 |
| Location: | Taylor Creek at Rainier Ave S | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Southeast | Urban Village: | Not in an Urban Village |

This project provides funding to replace the barrier culvert at Rainier Avenue South for lower Taylor Creek. Design alternatives include rerouting and other habitat improvements. The Taylor Creek culvert at Rainier Avenue South is the number one fish-passage barrier in the city that blocks access to a majority of spawning and rearing habitat in upper Taylor Creek to all species of salmonids.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1,682 | 450 | 450 | 450 | 4,000 | 0 | 0 | 0 | 7,032 |
| Total: | 1,682 | 450 | 450 | 450 | 4,000 | 0 | 0 | 0 | 7,032 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 1,682 | 450 | 450 | 450 | 4,000 | 0 | 0 | 0 | 7,032 |
| Total*: | 1,682 | 450 | 450 | 450 | 4,000 | 0 | 0 | 0 | 7,032 |
| O & M Costs (Savings) | | | 70 | 70 | 70 | 70 | 70 | 70 | 422 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 83 | 450 | 450 | 4,000 | 0 | 0 | 0 | 4,983 |
| Total: | | 83 | 450 | 450 | 4,000 | 0 | 0 | 0 | 4,983 |

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SPU-Drainage & Wastewater

Thornton Confluence Improvement

| | | | |
|-------------------------------|---|----------------------------------|-------------------------|
| BCL/Program Name: | Flooding, Sewer Back-up, and Landslides | BCL/Program Code: | C380B |
| Project Type: | Improved Facility | Start Date: | Q1/2008 |
| Project ID: | C3811 | End Date: | Q4/2015 |
| Location: | Thornton Creek | | |
| 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 creek realignment, floodplain excavation, culvert replacement, and riparian plantings at the confluence of the north and south branches of Thornton Creek. SPU has acquired a number of flood prone properties in this area over the last decade. Using these properties, this project increases culvert capacity, floodplain area and flood storage, and provides stream habitat benefits. The project will help alleviate flooding and reduce maintenance at Meadowbrook Pond.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 1,525 | 4,000 | 4,085 | 530 | 0 | 0 | 0 | 0 | 10,140 |
| Total: | 1,525 | 4,000 | 4,085 | 530 | 0 | 0 | 0 | 0 | 10,140 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 1,525 | 4,000 | 4,085 | 530 | 0 | 0 | 0 | 0 | 10,140 |
| Total*: | 1,525 | 4,000 | 4,085 | 530 | 0 | 0 | 0 | 0 | 10,140 |
| O & M Costs (Savings) | | | 101 | 101 | 101 | 101 | 101 | 101 | 608 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 290 | 4,085 | 530 | 0 | 0 | 0 | 0 | 4,905 |
| Total: | | 290 | 4,085 | 530 | 0 | 0 | 0 | 0 | 4,905 |

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SPU-Drainage & Wastewater

Venema Creek Natural Drainage System

| | | | |
|-------------------------------|---|----------------------------------|-------------------------|
| BCL/Program Name: | Protection of Beneficial Uses | BCL/Program Code: | C333B |
| Project Type: | New Facility | Start Date: | Q1/2003 |
| Project ID: | C3333 | End Date: | Q4/2017 |
| Location: | 1st and 2nd Ave NW/NW 120th St/NW 122nd St | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Northwest | Urban Village: | Not in an Urban Village |

This project provides stormwater flow control and water quality treatment using a Natural Drainage System approach within the Venema Creek sub basin of Pipers Creek. Proposed design uses the concept developed for the Pinehurst Natural Drainage System project (parking on only one side of road, large bioretention swale on the other side of road). Alley improvements using permeable pavements are also being considered. The project focus is retrofitting stormwater runoff from the 105-acre residential and commercial land area in an effort to reduce the effect of stormwater flow on the aquatic biota within Venema Creek.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 2,260 | 650 | 1,116 | 2,316 | 318 | 108 | 0 | 0 | 6,769 |
| Total: | 2,260 | 650 | 1,116 | 2,316 | 318 | 108 | 0 | 0 | 6,769 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 2,260 | 650 | 1,116 | 2,316 | 318 | 108 | 0 | 0 | 6,769 |
| Total*: | 2,260 | 650 | 1,116 | 2,316 | 318 | 108 | 0 | 0 | 6,769 |
| O & M Costs (Savings) | | | 68 | 68 | 68 | 68 | 68 | 68 | 406 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 534 | 1,116 | 2,316 | 318 | 108 | 0 | 0 | 4,393 |
| Total: | | 534 | 1,116 | 2,316 | 318 | 108 | 0 | 0 | 4,393 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Windermere Combined Sewer Overflow Storage

| | | | |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Combined Sewer Overflows | BCL/Program Code: | C360B |
| Project Type: | New Facility | Start Date: | Q2/2002 |
| Project ID: | C3605 | End Date: | Q4/2015 |
| Location: | NE 65th St./Sand Point Way 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 provides construction of off-line storage and best management practice combined sewer overflow (CSO) facilities in the Windermere area in the northeast part of Seattle. Facilities will be built to meet water quality standards for Lake Washington in accordance with state and federal regulations. The project also intends to meet requirements of the City's current CSO National Pollutant Discharge Elimination System (NPDES) permit.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|--------|-------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 18,860 | 22,566 | 12,915 | 1,500 | 0 | 0 | 0 | 0 | 55,841 |
| Total: | 18,860 | 22,566 | 12,915 | 1,500 | 0 | 0 | 0 | 0 | 55,841 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 18,860 | 22,566 | 12,915 | 1,500 | 0 | 0 | 0 | 0 | 55,841 |
| Total*: | 18,860 | 22,566 | 12,915 | 1,500 | 0 | 0 | 0 | 0 | 55,841 |
| O & M Costs (Savings) | | | 558 | 558 | 558 | 558 | 558 | 558 | 3,350 |
| Spending Plan by Fund | | | | | | | | | |
| Drainage and Wastewater Fund | | 18,748 | 12,915 | 1,500 | 0 | 0 | 0 | 0 | 33,163 |
| Total: | | 18,748 | 12,915 | 1,500 | 0 | 0 | 0 | 0 | 33,163 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Drainage & Wastewater

Yesler Terrace-DWF

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Facility | Start Date: | Q1/2014 |
| Project ID: | C4136-DWF | End Date: | Q4/2014 |
| Location: | Yesler and Broadway | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Central | Urban Village: | Not in an Urban Village |

Seattle Housing Authority (SHA) is leading a major project to replace Yesler Terrace's aging public housing buildings with a new mixed-income community. This project provides funding for SPU Drainage and Wastewater infrastructure investments in association with this project.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Drainage and Wastewater Rates | 0 | 0 | 2,800 | 0 | 0 | 0 | 0 | 0 | 2,800 |
| Total: | 0 | 0 | 2,800 | 0 | 0 | 0 | 0 | 0 | 2,800 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Drainage and Wastewater Fund | 0 | 0 | 2,800 | 0 | 0 | 0 | 0 | 0 | 2,800 |
| Total*: | 0 | 0 | 2,800 | 0 | 0 | 0 | 0 | 0 | 2,800 |
| O & M Costs (Savings) | | | 28 | 28 | 28 | 28 | 28 | 28 | 168 |

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Seattle Public Utilities

Solid Waste

Overview

Seattle Public Utilities (SPU) collects and disposes of solid waste generated within the City of Seattle. To fulfill this responsibility the City owns and manages the following infrastructure:

- Two recycling and disposal stations (transfer stations)
- Two household hazardous waste facilities
- A fleet of trucks and heavy equipment
- Two closed landfills previously used by the City

The Solid Waste Fund (SWF) CIP is the planning tool for rehabilitating, replacing, improving and expanding infrastructure, as well as constructing projects that protect, conserve, and enhance our region's environmental resources. Planned spending in the SWF CIP is approximately \$144 million (excluding Technology) for 2014 through 2019.

The largest anticipated projects over this time period are:

- Rebuilding of the North Transfer Station (2013-2016)
- Constructing a recycling/re-use facility at the South Transfer Station (2015-2017)
- Completing the South Park Development Project

These projects comprise roughly 63% of the CIP. Other significant projects include investigation and closure of the South Park Landfill and replacement of the South Household Hazardous Waste facility.

SPU funds about 90% of the SWF CIP through the sale of revenue bonds. The remaining 10% is funded with cash. By using debt financing through bond sales, SPU is able to distribute the cost of large, expensive system improvements over several years to better address equity between current and future ratepayers. SPU plans Solid Waste Bond issues in 2014, 2015 and 2017. Cash and repayment of debt come predominantly from rate-based charges to customers whose garbage, recycling, and organics are handled by the City's solid waste infrastructure and services. Solid Waste rates were last set in 2012 for the period of 2013-2016.

Summary of Upcoming Budget Issues and Challenges

Solid Waste faces logistical and financial issues as it reconstructs its primary facilities and addresses site cleanup efforts.

Logistics: Solid Waste must continue handling solid waste while it reconstructs its transfer stations. With the new South Transfer Station coming on line in March 2013, Solid Waste is now focused on reconstruction of the North Transfer Station (NTS). To adequately manage waste, the old South Transfer Station will be kept in operation until the North Transfer Station is complete. This will require diversion of waste from the northern station to the old STS. In addition, it will require Solid Waste to maintain the aged old STS through 2016.

Financial Challenges: Reconstruction of both transfer stations along with site remediation efforts puts considerable short-term financial strain on the Solid Waste Fund. At the same time that Solid Waste is funding and building these major projects, it is working to address environmental stewardship by encouraging waste reduction, which results in declining demand for services.

To address the funding needed for transfer station reconstructions and site remediation, SPU is planning bond sales in 2014, 2015, and 2017. The cost to repay or service these bonds will be paid through rate-based revenues, which also support the utility's operations, maintenance, administration, and contract costs. To assure that the SWF has adequate revenues to support debt service and core functions while demand declines, SPU anticipates using a combination of moderate rate increases and operational efficiencies.

Thematic Priorities

The SPU Solid Waste Fund places a high priority on managing environmental issues and addressing regulatory requirements related to current and historic Solid Waste facilities while protecting human health and safety. The Mayor's Walk Bike Ride initiative is also supported through design elements of the two transfer station projects

- Managing environmental issues and regulations: SPU is required to improve former landfill sites and take action as necessary when conditions change. For example, underground gas levels at these sites are monitored. When high gas levels are detected, SPU implements improvements to extract the excess gas or otherwise mitigate the environmental impacts of the gas increase. Also, the new transfer stations will greatly reduce the environmental impacts of the existing stations on neighboring communities.
- Protecting human health and safety: The old South and existing North transfer stations are at the end of their useful lives. Safety standards at these older facilities will be greatly enhanced once the rebuilds are complete, resulting in greater safety for the public and SPU employees. Well-functioning and efficient transfer stations are part of a solid waste collection system that protects human health.
- Walk Bike Ride: The new South Transfer Station will include a trail on the east side of the property as a community benefit associated with the street vacation. This trail will create a link in the corridor between South Park and the Alki neighborhoods. The design for the new North Transfer Station includes separated traffic, a separate recycling building and approximately 44,000 square feet of publicly accessible green space. SPU engaged neighbors to help program the green space.

Project Selection Criteria

SPU identifies candidate capital projects from several sources – planning (e.g., comprehensive plans, program plans), external projects and opportunities, and emergencies or other unexpected events. Under SPU's Asset Management System, projects must be justified through a business case process that establishes that a problem or opportunity is timely and important, and that the proposed solution is superior to alternatives based on a triple bottom line analysis (economic, environmental and social) of life cycle costs and benefits. The process also recognizes that a project may be a "must do" project (e.g. required by regulations).

SPU prioritizes its capital projects into three categories – Priorities 1, 2 and 3, with 1 being the most important and critical. Some of these projects are part of an externally driven project. Typically, SPU lacks control over the timing of such projects.

Priority rankings are based on the following set of criteria:

- **Regulatory Mandates, Legal Agreements:** The degree to which the project is driven by Federal, State, and Local laws, permit and regulatory requirements, and consent decrees; as well as by legal agreements with public and private parties. Examples of highly ranked projects in this category include the South Park Development and Kent Highlands and Midway Landfills programs.
- **External Drivers:** SPU's responsiveness to, or engagement with, the projects of other Departments or Jurisdictions, and the specific mandates of the City Council and Mayor. Examples of projects in this category include the 1% for Arts program.
- **Infrastructure:** How a project addresses infrastructure conditions or vulnerabilities. Examples of highly ranked projects in this category include the North and South Transfer Station Rebuild projects.
- **Level of Service:** The importance of this project in providing or improving services to customers. Examples of highly ranked projects in this category include the North and South Transfer Station Rebuild projects as well as the Household Hazardous Waste Relocation project.
- **Other Factors:** Other important factors include high net present value or cost-effectiveness, social or environmental benefits which were not otherwise recognized, a project already in progress or near completion, limited time opportunity, demonstration projects, community visibility, outside funding. An example of a project in this category is the SW Comp Plan Update projects.

Every project is rated against each criterion. Criteria ratings are then considered in determining an overall project priority ranking, using expert judgment (rather than a formula). Priority rankings for the CIP are determined by the leads for each Line of Business (LOB), with reviews by key internal stakeholders. The ranking scheme and criteria are the same for all LOBs, and are approved by the SPU Director and Asset Management Committee. Project priority rankings are used to clarify and document which projects are most important and why, to help determine which projects at the margin will be included, excluded or deferred from the CIP, and which projects should receive priority attention if a staff or financial resource constraint should arise.

Aligning Infrastructure with Planned Growth

The City's Comprehensive Plan incorporates the Solid Waste six-year CIP by reference to provide the infrastructure needed for the solid waste system. In addition, investments in solid waste infrastructure support the Comprehensive Plan's sustainability and zero waste goals.

The City's transfer stations are part of a comprehensive waste management system that aims to accommodate population growth while reducing the overall amount of solid waste sent to landfills. The transfer stations balance the capital cost of station construction with convenience and collection cost minimization. This is reflected in optimizing a north end transfer station and a south end transfer station as opposed to one large central station or multiple small neighborhood based stations.

The South Park Development project will result in an approved cleanup of the historic landfill and put approximately 20 acres of unused property back into productive use and create economic opportunities adjacent to the South Park Urban Village.

Future Projects/What is on the Horizon

In the seven years prior to the initiation of the transfer station rebuild projects, the Solid Waste Fund CIP Budget averaged \$4.7 million annually. In the years when the transfer station rebuild projects are included, the SWF CIP Budget averages \$21 million annually. Once the stations are completed, the core Solid Waste Fund CIP is expected to return closer to the lower, historical levels.

Once the North and South Transfer Stations are rebuilt, continued capital investments at the stations will decrease. The old South and existing North stations are at the end of their useful lives. While the old South station is being replaced, the facility continues to need maintenance while the North station continues to require major improvements each year to keep it operational and safe for both the public and SPU employees who work there. Upon completion of the new stations, annual costs for repairs and upkeep are projected to decrease initially and then increase as equipment replacement/renewal projects are required on the new facilities.

CIP Revenue Sources

SPU’s Solid Waste CIP is funded almost entirely by Solid Waste ratepayers. SPU issues bonds, serviced by ratepayers that in the current rate period cover 89% of projected CIP, with the remainder funded by current operating revenues. SPU also actively seeks grants, low interest loans, and other funding sources whenever possible. The Solid Waste Utility has faced challenges since 2008 as a result of fuel prices and the economic downturn, which have reduced demand while increasing required payments to contractors. Approved 2013-16 rates include average annual increases of 4.5% for residential and commercial customers. This includes a \$2.30 monthly increase in 2013 for typical residential customers.

CIP Spending by Major Category

(In ‘000s; total may not sum due to rounding)

| Solid Waste Fund | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|----------------------------------|---------------|---------------|---------------|---------------|--------------|--------------|----------------|
| New Facilities | 26,574 | 48,569 | 25,621 | 20,608 | 177 | 0 | 121,550 |
| Rehabilitation & Heavy Equipment | 45 | 25 | 425 | 25 | 25 | 425 | 970 |
| Shared Cost Projects | 2,239 | 1,682 | 1,418 | 1,847 | 1,910 | 1,917 | 11,014 |
| Technology | 5,337 | 5,269 | 3,122 | 2,443 | 2,352 | 1,482 | 20,006 |
| Total | 34,195 | 55,546 | 30,587 | 24,924 | 4,463 | 3,823 | 153,539 |

New Facilities: This program plans, designs, and constructs new facilities to enhance solid waste operations. In 2014, SPU will continue the implementation of its Solid Waste Facilities Master Plan, which features a two-station configuration. The key project drivers of the New Facilities budget category are the North and South Transfer Station Rebuild projects.

The proposed budget for this BCL has decreased by \$5.5 million for 2014 and increases by \$13.4 million in 2015 as costs shift into future years. Having a preferred design concept that has been recommended by stakeholders and approved by SPU, a design contract for the North Transfer Station (NTS) has been procured and now more is known about the construction schedule. This has resulted in a slight shift in construction timing from 2014 to 2015. The schedule for the South Park Development Project has shifted out as a result of changes to the NTS.

Rehabilitation and Heavy Equipment: This program designs and constructs projects to repair and/or upgrade solid waste facilities. The key driver of this budget category is the Kent Highlands Landfill program. Landfill improvements include the replacement of existing flares, drainage improvements, groundwater protection and water treatment as required by State environmental policy.

Shared Cost Projects: This program includes individual capital improvement projects which typically benefit multiple Lines of Business (e.g. the Water line of business and the Drainage and Wastewater line of business) and whose costs are "shared," or paid for, by more than one of SPU's utility funds.

The proposed budget for this BCL will decrease by \$117K in 2014 and increase by \$189K in 2015 compared to the adopted budget for the respective years. One of the key drivers for the change in 2014 would be the SWF SCADA program. Other changes in the budget for 2014 and 2015 were related to changes that were made in the calculation for the 1% for Arts – Solid Waste Project.

Technology: The Technology capital portfolio is managed in six program areas, which provide a department-wide view of technology investments to address SPU's strategic, business, and City-wide priorities. These areas are:

- Customer Contact and Billing
- Enterprise Information Management
- IT Infrastructure
- Project Delivery & Performance
- Science & System Performance
- Asset Information Management

Investments in 2014 and 2015 address SPU's key initiatives, which focus on:

- Improving Internal Controls,
- Improving Productivity and Performance
- Improving Customer Service
- Transitioning from Data Rich to Knowledge Rich
- Improving Project Delivery

The 2014-2019 Adopted CIP increases Technology CIP spending for all utility funds by \$2.8 million in 2014 and \$10.4 million in 2015 as compared to the 2013-2018 Adopted CIP. Solid Waste Utility's Technology CIP amount increases by \$0.45 million in 2014 and increases by \$2.95 million in 2015. These amounts are based on the Solid Waste Utility's share of benefit from these projects.

City Council Provisos to the CIP

There are no Council provisos.

SPU-Solid Waste

Project Summary

| BCL/Program Name/ Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|---|----------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|----------------|
| New Facilities | | | | | | | | | C230B |
| Miscellaneous Station Improvements (C2303) | 2,776 | 300 | 600 | 581 | 0 | 0 | 0 | 0 | 4,257 |
| North Transfer Station Rebuild (C2306) | 4,777 | 7,751 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 85,542 |
| South Park Development (C2304) | 2,427 | 670 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 27,025 |
| South Recycling Disposal Station Household Hazardous Waste Relocation (C2305) | 0 | 0 | 0 | 177 | 1,036 | 1,036 | 177 | 0 | 2,425 |
| South Transfer Station Rebuild (C2302) | 74,186 | 1,716 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 96,901 |
| New Facilities | 84,166 | 10,436 | 26,574 | 48,569 | 25,621 | 20,608 | 177 | 0 | 216,151 |
| Rehabilitation and Heavy Equipment | | | | | | | | | C240B |
| Kent Highlands Landfill (C2402) | 727 | 253 | 20 | 25 | 25 | 25 | 25 | 425 | 1,525 |
| Midway Landfill (C2403) | 109 | 25 | 25 | 0 | 400 | 0 | 0 | 0 | 559 |
| Rehabilitation and Heavy Equipment | 835 | 278 | 45 | 25 | 425 | 25 | 25 | 425 | 2,084 |
| Shared Cost Projects | | | | | | | | | C410B |
| 1% for Art – SWF (C4118-SWF) | 852 | 332 | 292 | 276 | 10 | 82 | 80 | 82 | 2,007 |
| Heavy Equipment Purchases - SWF (C4116-SWF) | 5,975 | 1,525 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 14,880 |
| Integrated Control Monitoring Program - SWF (C4108-SWF) | 0 | 50 | 200 | 0 | 0 | 0 | 0 | 0 | 250 |
| Operational Facility - Construction - SWF (C4106-SWF) | 2,499 | 158 | 80 | 140 | 90 | 392 | 450 | 405 | 4,213 |
| Operations Control Center - SWF (C4105-SWF) | 690 | 24 | 152 | 2 | 18 | 63 | 68 | 68 | 1,084 |
| Security Improvements - SWF (C4113-SWF) | 890 | 167 | 135 | 65 | 100 | 110 | 113 | 163 | 1,742 |
| Shared Cost Projects | 10,906 | 2,257 | 2,239 | 1,682 | 1,418 | 1,847 | 1,910 | 1,917 | 24,177 |
| Technology | | | | | | | | | C510B |
| Asset Information Management (C5407) | 1,076 | 630 | 455 | 364 | 363 | 379 | 389 | 225 | 3,880 |
| Customer Contact & Billing (C5402) | 230 | 4,429 | 3,382 | 2,685 | 548 | 572 | 450 | 188 | 12,484 |
| Enterprise Information Management (C5403) | 23 | 182 | 322 | 357 | 383 | 165 | 205 | 394 | 2,031 |
| IT Infrastructure (C5404) | 452 | 379 | 464 | 338 | 465 | 293 | 555 | 330 | 3,275 |

*Amounts in thousands of dollars

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Project Summary

| BCL/Program Name/ Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|---|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Project Delivery & Performance (C5405) | 788 | 559 | 533 | 776 | 613 | 716 | 426 | 345 | 4,757 |
| Science & System Performance (C5406) | 87 | 68 | 181 | 750 | 750 | 319 | 327 | 0 | 2,482 |
| Technology | 2,656 | 6,248 | 5,337 | 5,269 | 3,122 | 2,443 | 2,352 | 1,482 | 28,910 |
| Department Total*: | 98,563 | 19,220 | 34,195 | 55,546 | 30,587 | 24,924 | 4,463 | 3,823 | 271,322 |

**Amounts in thousands of dollars*

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Fund Summary

| Fund Name & Code | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|-----------------------------|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Solid Waste Fund (45010) | 98,563 | 19,220 | 34,195 | 55,546 | 30,587 | 24,924 | 4,463 | 3,823 | 271,322 |
| Department Total*: | 98,563 | 19,220 | 34,195 | 55,546 | 30,587 | 24,924 | 4,463 | 3,823 | 271,322 |

**Amounts in thousands of dollars*

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

1% for Art – SWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2001 |
| Project ID: | C4118-SWF | 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 ongoing program provides the Solid Waste funding for Seattle Public Utilities' 1% for Arts contribution. Eligibility is determined at the individual project level, with payment occurring from this program. Funds contributed to the 1% for Art program allow the commission, purchase, and installation of art in City-owned properties that are accessible to the public. The Municipal Arts Plan, prepared annually, describes the status of ongoing art projects and establishes the scope of work and allocations for new art projects.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 852 | 332 | 292 | 276 | 10 | 82 | 80 | 82 | 2,007 |
| Total: | 852 | 332 | 292 | 276 | 10 | 82 | 80 | 82 | 2,007 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 852 | 332 | 292 | 276 | 10 | 82 | 80 | 82 | 2,007 |
| Total*: | 852 | 332 | 292 | 276 | 10 | 82 | 80 | 82 | 2,007 |
| O & M Costs (Savings) | | | 20 | 20 | 20 | 20 | 20 | 20 | 120 |

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

SPU-Solid Waste

Heavy Equipment Purchases - SWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Investment | Start Date: | ONGOING |
| Project ID: | C4116-SWF | 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 ongoing program provides SPU's Solid Waste Utility crews with new and replacement heavy equipment that is used throughout Seattle and in parts of King County. Typical purchases include loaders, dozers, class 8 trucks, rail container chassis, yard waste and metal trailers, backhoes, and yard "goats" (a type of tractor.) These equipment purchases provide safe and efficient loading, transfer and short haul transportation of garbage, yard waste, metal, and other recyclables to the rail yard for "long haul" to the landfill and to contracted recycling processors. This project is one of four SPU fund-specific heavy equipment CIP projects.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 5,975 | 1,525 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 14,880 |
| Total: | 5,975 | 1,525 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 14,880 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 5,975 | 1,525 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 14,880 |
| Total*: | 5,975 | 1,525 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 14,880 |
| O & M Costs (Savings) | | | 149 | 149 | 149 | 149 | 149 | 149 | 893 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 794 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 8,174 |
| Total: | | 794 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 8,174 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Integrated Control Monitoring Program - SWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Investment | Start Date: | Q1/2013 |
| Project ID: | C4108-SWF | End Date: | Q4/2014 |
| Location: | Kent, WA | | |
| 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 current telemetry used to monitor the environmental control systems at the Kent Highlands Landfill and the Midway Landfill, both Superfund sites, are nearly obsolete and the equipment is no longer supported. In addition, the current system only transmits alarm conditions and does not have any data acquisition functionality. This program funds a replacement system that will allow remote data acquisition as well as alarm functionality.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 50 | 200 | 0 | 0 | 0 | 0 | 0 | 250 |
| Total: | 0 | 50 | 200 | 0 | 0 | 0 | 0 | 0 | 250 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 0 | 50 | 200 | 0 | 0 | 0 | 0 | 0 | 250 |
| Total*: | 0 | 50 | 200 | 0 | 0 | 0 | 0 | 0 | 250 |
| O & M Costs (Savings) | | | 3 | 3 | 3 | 3 | 3 | 3 | 15 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 200 |
| Total: | | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 200 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Kent Highlands Landfill

| | | | |
|-------------------------------|------------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Rehabilitation and Heavy Equipment | BCL/Program Code: | C240B |
| Project Type: | Improved Facility | Start Date: | Q1/2005 |
| Project ID: | C2402 | 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 program funds compliance activities related to the Kent Highlands landfill closure project. These activities include environmental and feasibility studies to demonstrate the effectiveness of the Kent Highlands landfill closure project, as well as various landfill improvements. The environmental and feasibility studies are required under the existing Consent Decree with the State Department of Ecology and validate that current environmental controls are effective and reduce the likelihood of additional capital or O&M expenditures. The landfill improvements include replacement of existing flares, drainage improvements, groundwater protection and water treatment.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 727 | 253 | 20 | 25 | 25 | 25 | 25 | 425 | 1,525 |
| Total: | 727 | 253 | 20 | 25 | 25 | 25 | 25 | 425 | 1,525 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 727 | 253 | 20 | 25 | 25 | 25 | 25 | 425 | 1,525 |
| Total*: | 727 | 253 | 20 | 25 | 25 | 25 | 25 | 425 | 1,525 |
| O & M Costs (Savings) | | | 15 | 15 | 15 | 15 | 15 | 15 | 92 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 349 | 20 | 25 | 25 | 25 | 25 | 425 | 894 |
| Total: | | 349 | 20 | 25 | 25 | 25 | 25 | 425 | 894 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Midway Landfill

| | | | |
|-------------------------------|------------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Rehabilitation and Heavy Equipment | BCL/Program Code: | C240B |
| Project Type: | Improved Facility | Start Date: | Q1/2005 |
| Project ID: | C2403 | End Date: | Q4/2016 |
| 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 program funds compliance activities related to the Midway landfill closure project. These activities include environmental and feasibility studies to demonstrate the effectiveness of the Midway landfill closure project as well as retrofits to the existing Midway flare facility. The studies are required under the existing Consent Decree with the State Department of Ecology and validate that current environmental controls are effective and reduce the likelihood of additional capital or O&M expenditures. The flare improvements are also a regulatory requirement. To ensure that SPU maintains regulatory compliance, a smaller flare or new technology will be required.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 109 | 25 | 25 | 0 | 400 | 0 | 0 | 0 | 559 |
| Total: | 109 | 25 | 25 | 0 | 400 | 0 | 0 | 0 | 559 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 109 | 25 | 25 | 0 | 400 | 0 | 0 | 0 | 559 |
| Total*: | 109 | 25 | 25 | 0 | 400 | 0 | 0 | 0 | 559 |
| O & M Costs (Savings) | | | 6 | 6 | 6 | 6 | 6 | 6 | 34 |

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

SPU-Solid Waste

Miscellaneous Station Improvements

| | | | |
|-------------------------------|----------------------------|----------------------------------|----------|
| BCL/Program Name: | New Facilities | BCL/Program Code: | C230B |
| Project Type: | Improved Facility | Start Date: | Q4/2003 |
| Project ID: | C2303 | End Date: | Q4/2015 |
| Location: | 8101 2nd Ave S | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This project provides repairs to the existing City solid waste transfer stations. The existing City solid waste transfer stations were constructed in the mid-1960s and are nearing the end of their useful lives. This funding allows short term actions to ensure that these facilities operate reliably and safely, pending construction of the new North and South Transfer Stations. The work includes drainage modifications, emergency equipment rehabilitation, and temporary replacement/refurbishment of aging crew facilities.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 2,776 | 300 | 600 | 581 | 0 | 0 | 0 | 0 | 4,257 |
| Total: | 2,776 | 300 | 600 | 581 | 0 | 0 | 0 | 0 | 4,257 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 2,776 | 300 | 600 | 581 | 0 | 0 | 0 | 0 | 4,257 |
| Total*: | 2,776 | 300 | 600 | 581 | 0 | 0 | 0 | 0 | 4,257 |
| O & M Costs (Savings) | | | 43 | 43 | 43 | 43 | 43 | 43 | 255 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

North Transfer Station Rebuild

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | New Facilities | BCL/Program Code: | C230B |
| Project Type: | New Facility | Start Date: | Q1/2006 |
| Project ID: | C2306 | End Date: | Q4/2016 |
| Location: | 1350 N 34th St | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Lake Union | Urban Village: | Not in an Urban Village |

This project provides for the replacement of the existing North Recycling and Disposal Station (NRDS) in Wallingford. The existing station was built in 1967 and is outdated and nearing the end of its useful life. The project includes the demolition of the existing transfer station and warehouse building on the adjacent property to the east. The new transfer station campus includes the tipping floor, recycling facility, educational center, new administrative building and employee facilities.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|--------|--------|-------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 4,777 | 7,751 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 85,542 |
| Total: | 4,777 | 7,751 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 85,542 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 4,777 | 7,751 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 85,542 |
| Total*: | 4,777 | 7,751 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 85,542 |
| O & M Costs (Savings) | | | 958 | 958 | 958 | 958 | 958 | 958 | 5,751 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 7,049 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 80,063 |
| Total: | | 7,049 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 80,063 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Operational Facility - Construction - SWF

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2004 |
| Project ID: | C4106-SWF | 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 ongoing facilities program renovates, rehabilitates, replaces existing buildings, and constructs new facilities at various locations within the city limits to address deficiencies, failures, and functional changes in the SPU Lines of Business. Typical improvements include, but are not limited to, roof replacements, exterior wall or cladding replacements, and improvements to administrative office space, crew and shop space, lighting, heating and ventilation systems, and facilities structures. These improvements increase the useful life of the facilities, preserve the value of the assets, and provide a safe working environment.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 2,499 | 158 | 80 | 140 | 90 | 392 | 450 | 405 | 4,213 |
| Total: | 2,499 | 158 | 80 | 140 | 90 | 392 | 450 | 405 | 4,213 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 2,499 | 158 | 80 | 140 | 90 | 392 | 450 | 405 | 4,213 |
| Total*: | 2,499 | 158 | 80 | 140 | 90 | 392 | 450 | 405 | 4,213 |
| O & M Costs (Savings) | | | 42 | 42 | 42 | 42 | 42 | 42 | 253 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 159 | 80 | 140 | 90 | 392 | 450 | 405 | 1,715 |
| Total: | | 159 | 80 | 140 | 90 | 392 | 450 | 405 | 1,715 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Operations Control Center - SWF

| | | | |
|-------------------------------|----------------------------|----------------------------------|----------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | ONGOING |
| Project ID: | C4105-SWF | End Date: | ONGOING |
| Location: | 2700 Airport Way S | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This ongoing facilities program renovates, rehabilitates, replaces existing buildings, and constructs new facilities at the Operations Control Center located at 2700 Airport Way South to improve the efficiency and effectiveness of the field crews delivering utility services to customers. Typical improvements include, but are not limited to, roof and other exterior replacements, improvements to public spaces, office and crew spaces and lighting, and heating and ventilation systems. These improvements increase the useful life of the facility, preserve the value of the asset, and provide a safe work and public space environment.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 690 | 24 | 152 | 2 | 18 | 63 | 68 | 68 | 1,084 |
| Total: | 690 | 24 | 152 | 2 | 18 | 63 | 68 | 68 | 1,084 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 690 | 24 | 152 | 2 | 18 | 63 | 68 | 68 | 1,084 |
| Total*: | 690 | 24 | 152 | 2 | 18 | 63 | 68 | 68 | 1,084 |
| O & M Costs (Savings) | | | 11 | 11 | 11 | 11 | 11 | 11 | 65 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 19 | 152 | 2 | 18 | 63 | 68 | 68 | 389 |
| Total: | | 19 | 152 | 2 | 18 | 63 | 68 | 68 | 389 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Security Improvements - SWF

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2007 |
| Project ID: | C4113-SWF | 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 ongoing program funds physical, integrated security system components at Solid Waste infrastructure sites throughout the City. Components may include, but are not limited to, fences, gates, access control card readers, intercoms, lighting, door and hatch contacts, CCTV cameras, motion detection devices, and fiber and conduit. In addition, this program enhances protection of SPU's critical infrastructure and addresses vulnerabilities identified in U.S. Environmental Protection Agency (EPA) mandated vulnerability assessments.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 890 | 167 | 135 | 65 | 100 | 110 | 113 | 163 | 1,742 |
| Total: | 890 | 167 | 135 | 65 | 100 | 110 | 113 | 163 | 1,742 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 890 | 167 | 135 | 65 | 100 | 110 | 113 | 163 | 1,742 |
| Total*: | 890 | 167 | 135 | 65 | 100 | 110 | 113 | 163 | 1,742 |
| O & M Costs (Savings) | | | 17 | 17 | 17 | 17 | 17 | 17 | 105 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 266 | 135 | 65 | 100 | 110 | 113 | 163 | 951 |
| Total: | | 266 | 135 | 65 | 100 | 110 | 113 | 163 | 951 |

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

SPU-Solid Waste

South Park Development

| | | | |
|-------------------------------|----------------------------|----------------------------------|----------|
| BCL/Program Name: | New Facilities | BCL/Program Code: | C230B |
| Project Type: | Improved Facility | Start Date: | Q2/2006 |
| Project ID: | C2304 | End Date: | Q4/2017 |
| Location: | 8100 2nd Ave S | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This project complies with a Washington State Department of Ecology Agreed Order to conduct a Remedial Investigation and Feasibility Study of the historic South Park Landfill site and covers investigation and eventual remediation of the landfill site to protect human health and the environment. Final cost allocation among potentially liable parties will occur at a later stage.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|--------|-------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 2,427 | 670 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 27,025 |
| Total: | 2,427 | 670 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 27,025 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 2,427 | 670 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 27,025 |
| Total*: | 2,427 | 670 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 27,025 |
| O & M Costs (Savings) | | | 270 | 270 | 270 | 270 | 270 | 270 | 1,622 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 2,425 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 26,354 |
| Total: | | 2,425 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 26,354 |

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

SPU-Solid Waste

South Recycling Disposal Station Household Hazardous Waste Relocation

| | | | |
|-------------------------------|----------------------------|----------------------------------|----------|
| BCL/Program Name: | New Facilities | BCL/Program Code: | C230B |
| Project Type: | Improved Facility | Start Date: | Q1/2015 |
| Project ID: | C2305 | End Date: | Q4/2018 |
| Location: | 8105 5th Ave S | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This project relocates the South Household Hazardous Waste (SHHW) facility and makes facility improvements required by code and ensures other South Recycling and Disposal Station (SRDS) redevelopment efforts are not constrained. Work on the North Transfer Station and South Transfer Station projects must be completed before this project can start.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|-------|-------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 0 | 177 | 1,036 | 1,036 | 177 | 0 | 2,425 |
| Total: | 0 | 0 | 0 | 177 | 1,036 | 1,036 | 177 | 0 | 2,425 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 0 | 0 | 0 | 177 | 1,036 | 1,036 | 177 | 0 | 2,425 |
| Total*: | 0 | 0 | 0 | 177 | 1,036 | 1,036 | 177 | 0 | 2,425 |
| O & M Costs (Savings) | | | 24 | 24 | 24 | 24 | 24 | 24 | 146 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

South Transfer Station Rebuild

| | | | |
|-------------------------------|------------------|----------------------------------|----------|
| BCL/Program Name: | New Facilities | BCL/Program Code: | C230B |
| Project Type: | New Facility | Start Date: | Q1/2006 |
| Project ID: | C2302 | End Date: | Q4/2017 |
| Location: | 8100 2nd AVE S | | |
| Neighborhood Plan: | Duwamish | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This program provides for the replacement of the existing South Recycling and Disposal Station (SRDS) in South Park. The existing solid waste transfer station was built in 1966 and is outdated and nearing the end of its useful life. The design and construction of replacement facilities is a two phase project. The first phase includes the development of a new transfer station and associated facilities adjacent to the existing facility on a 9.1 acre parcel to the northwest of the existing station. The second phase includes demolition of the existing facilities and development of new recycling and reuse facilities, a household hazardous waste facility, and other utility facilities.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|--------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 74,186 | 1,716 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 96,901 |
| Total: | 74,186 | 1,716 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 96,901 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 74,186 | 1,716 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 96,901 |
| Total*: | 74,186 | 1,716 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 96,901 |
| O & M Costs (Savings) | | | 969 | 969 | 969 | 969 | 969 | 969 | 5,814 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 2,550 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 23,550 |
| Total: | | 2,550 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 23,550 |

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

Seattle Public Utilities

Technology Projects

Project Summary

| BCL/Program Name/ | | | | | | | | | |
|---|------------------------|---------------|---------------|---------------|---------------|---------------|--------------------------|---------------|----------------|
| Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
| Technology | | | | | | | BCL/Program Code: | | C510B |
| Asset Information Management (C5407) | 7,278 | 4,620 | 2,460 | 2,258 | 2,344 | 2,358 | 2,415 | 2,000 | 25,732 |
| Customer Contact & Billing (C5402) | 1,483 | 14,982 | 11,445 | 9,881 | 3,404 | 3,552 | 3,369 | 1,250 | 49,366 |
| Enterprise Information Management (C5403) | 143 | 1,171 | 2,126 | 2,365 | 2,550 | 1,100 | 1,350 | 2,600 | 13,405 |
| IT Infrastructure (C5404) | 3,526 | 2,507 | 3,109 | 2,250 | 3,100 | 1,950 | 3,700 | 2,200 | 22,343 |
| Project Delivery & Performance (C5405) | 5,015 | 3,549 | 3,359 | 5,106 | 4,050 | 4,750 | 2,649 | 2,300 | 30,778 |
| Science & System Performance (C5406) | 1,155 | 945 | 1,423 | 2,342 | 2,341 | 2,061 | 2,498 | 1,000 | 13,765 |
| Technology | 18,600 | 27,774 | 23,922 | 24,202 | 17,790 | 15,770 | 15,980 | 11,350 | 155,388 |
| Department Total*: | 18,600 | 27,774 | 23,922 | 24,202 | 17,790 | 15,770 | 15,980 | 11,350 | 155,388 |

*Amounts in thousands of dollars

SPU-Technology

Fund Summary

| Fund Name & Code | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--------------------------------------|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Drainage and Wastewater Fund (44010) | 7,341 | 10,559 | 9,196 | 8,929 | 6,884 | 6,149 | 6,443 | 4,778 | 60,280 |
| Solid Waste Fund (45010) | 2,656 | 6,248 | 5,337 | 5,269 | 3,122 | 2,443 | 2,352 | 1,482 | 28,910 |
| Water Fund (43000) | 8,603 | 10,966 | 9,389 | 10,004 | 7,783 | 7,178 | 7,185 | 5,090 | 66,199 |
| Department Total*: | 18,600 | 27,774 | 23,922 | 24,202 | 17,790 | 15,770 | 15,980 | 11,350 | 155,388 |

**Amounts in thousands of dollars*

2014 - 2019 Adopted Capital Improvement Program

SPU-Technology

Asset Information Management

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Technology | BCL/Program Code: | C510B |
| Project Type: | New Investment | Start Date: | ONGOING |
| Project ID: | C5407 | 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 ongoing program provides applications, upgrades and data management tools in support of SPU's work and asset management programs. Several new and updated technology solutions designed to enhance the efficiency and effectiveness of drinking water, sewer, drainage, and solid waste operations are planned. These include the development of an Asset Data Register in support of performance analytics, and dispatch and emergency response systems. Other related, but as yet undetermined projects will be undertaken to further enhance safety and improve responsiveness of SPU's utility operations.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 3,725 | 2,188 | 1,060 | 1,048 | 1,048 | 1,093 | 1,120 | 910 | 12,192 |
| Drainage and Wastewater Rates | 2,477 | 1,802 | 945 | 847 | 934 | 886 | 905 | 865 | 9,660 |
| Solid Waste Rates | 1,076 | 630 | 455 | 364 | 363 | 379 | 389 | 225 | 3,880 |
| Total: | 7,278 | 4,620 | 2,460 | 2,258 | 2,344 | 2,358 | 2,415 | 2,000 | 25,732 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 3,725 | 2,188 | 1,060 | 1,048 | 1,048 | 1,093 | 1,120 | 910 | 12,192 |
| Drainage and Wastewater Fund | 2,477 | 1,802 | 945 | 847 | 934 | 886 | 905 | 865 | 9,660 |
| Solid Waste Fund | 1,076 | 630 | 455 | 364 | 363 | 379 | 389 | 225 | 3,880 |
| Total*: | 7,278 | 4,620 | 2,460 | 2,258 | 2,344 | 2,358 | 2,415 | 2,000 | 25,732 |
| O & M Costs (Savings) | | | 262 | 262 | 262 | 262 | 262 | 262 | 1,574 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 2,060 | 1,060 | 1,048 | 1,048 | 1,093 | 1,120 | 910 | 8,338 |
| Drainage and Wastewater Fund | | 1,390 | 945 | 847 | 934 | 886 | 905 | 865 | 6,771 |
| Solid Waste Fund | | 622 | 455 | 364 | 363 | 379 | 389 | 225 | 2,797 |
| Total: | | 4,071 | 2,460 | 2,258 | 2,344 | 2,358 | 2,415 | 2,000 | 17,906 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Technology

Customer Contact & Billing

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Technology | BCL/Program Code: | C510B |
| Project Type: | New Investment | Start Date: | ONGOING |
| Project ID: | C5402 | 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 program will provide technology solutions and business application upgrades in support of SPU's Customer Contact Center and activities carried out by the Customer Service Branch. Planned projects include, but are not limited to, a replacement of the Consolidated Customer Service System and new technology solutions for enhanced customer contact management. This program is intended to enhance customer service, customer contact, and ensure accurate Utility billing.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|--------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 663 | 5,423 | 4,214 | 3,782 | 1,579 | 1,648 | 1,689 | 550 | 19,549 |
| Drainage and Wastewater Rates | 590 | 5,130 | 3,848 | 3,414 | 1,276 | 1,332 | 1,230 | 513 | 17,333 |
| Solid Waste Rates | 230 | 4,429 | 3,382 | 2,685 | 548 | 572 | 450 | 188 | 12,484 |
| Total: | 1,483 | 14,982 | 11,445 | 9,881 | 3,404 | 3,552 | 3,369 | 1,250 | 49,366 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 663 | 5,423 | 4,214 | 3,782 | 1,579 | 1,648 | 1,689 | 550 | 19,549 |
| Drainage and Wastewater Fund | 590 | 5,130 | 3,848 | 3,414 | 1,276 | 1,332 | 1,230 | 513 | 17,333 |
| Solid Waste Fund | 230 | 4,429 | 3,382 | 2,685 | 548 | 572 | 450 | 188 | 12,484 |
| Total*: | 1,483 | 14,982 | 11,445 | 9,881 | 3,404 | 3,552 | 3,369 | 1,250 | 49,366 |
| O & M Costs (Savings) | | | 494 | 494 | 494 | 494 | 494 | 494 | 2,962 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 2,449 | 4,214 | 3,782 | 1,579 | 1,648 | 1,689 | 550 | 15,912 |
| Drainage and Wastewater Fund | | 2,317 | 3,848 | 3,414 | 1,276 | 1,332 | 1,230 | 513 | 13,930 |
| Solid Waste Fund | | 1,909 | 3,382 | 2,685 | 548 | 572 | 450 | 188 | 9,734 |
| Total: | | 6,676 | 11,445 | 9,881 | 3,404 | 3,552 | 3,369 | 1,250 | 39,576 |

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

2014 - 2019 Adopted Capital Improvement Program

Enterprise Information Management

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Technology | BCL/Program Code: | C510B |
| Project Type: | New Investment | Start Date: | ONGOING |
| Project ID: | C5403 | 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 program will provide integrated technology solutions in support of the management of SPU's corporate knowledge, including data, information, documents, and web content. Typical improvements may include, but are not limited to, replacement of shared file storage, new online collaboration tools, introduction of workflow, tracking & reporting applications, web content management systems, and an enterprise document management solution. This program enhances SPU's ability to retrieve, share, distribute and manage corporate information.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 66 | 525 | 940 | 1,043 | 1,123 | 484 | 598 | 1,150 | 5,929 |
| Drainage and Wastewater Rates | 54 | 464 | 864 | 965 | 1,044 | 451 | 548 | 1,056 | 5,445 |
| Solid Waste Rates | 23 | 182 | 322 | 357 | 383 | 165 | 205 | 394 | 2,031 |
| Total: | 143 | 1,171 | 2,126 | 2,365 | 2,550 | 1,100 | 1,350 | 2,600 | 13,405 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 66 | 525 | 940 | 1,043 | 1,123 | 484 | 598 | 1,150 | 5,929 |
| Drainage and Wastewater Fund | 54 | 464 | 864 | 965 | 1,044 | 451 | 548 | 1,056 | 5,445 |
| Solid Waste Fund | 23 | 182 | 322 | 357 | 383 | 165 | 205 | 394 | 2,031 |
| Total*: | 143 | 1,171 | 2,126 | 2,365 | 2,550 | 1,100 | 1,350 | 2,600 | 13,405 |
| O & M Costs (Savings) | | | 134 | 134 | 134 | 134 | 134 | 134 | 804 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 649 | 940 | 1,043 | 1,123 | 484 | 598 | 1,150 | 5,986 |
| Drainage and Wastewater Fund | | 578 | 864 | 965 | 1,044 | 451 | 548 | 1,056 | 5,505 |
| Solid Waste Fund | | 218 | 322 | 357 | 383 | 165 | 205 | 394 | 2,044 |
| Total: | | 1,444 | 2,126 | 2,365 | 2,550 | 1,100 | 1,350 | 2,600 | 13,535 |

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

SPU-Technology

IT Infrastructure

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Technology | BCL/Program Code: | C510B |
| Project Type: | New Investment | Start Date: | ONGOING |
| Project ID: | C5404 | 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 ongoing IT asset management program ensures the availability, reliability, and security of SPU's corporate computing infrastructure. The program acquires and maintains SPU-owned and managed servers, local networks, shared storage and backup systems, operating software, and communications infrastructure.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,630 | 1,215 | 1,369 | 990 | 1,364 | 858 | 1,628 | 968 | 10,022 |
| Drainage and Wastewater Rates | 1,444 | 913 | 1,276 | 923 | 1,271 | 800 | 1,517 | 902 | 9,045 |
| Solid Waste Rates | 452 | 379 | 464 | 338 | 465 | 293 | 555 | 330 | 3,275 |
| Total: | 3,526 | 2,507 | 3,109 | 2,250 | 3,100 | 1,950 | 3,700 | 2,200 | 22,343 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 1,630 | 1,215 | 1,369 | 990 | 1,364 | 858 | 1,628 | 968 | 10,022 |
| Drainage and Wastewater Fund | 1,444 | 913 | 1,276 | 923 | 1,271 | 800 | 1,517 | 902 | 9,045 |
| Solid Waste Fund | 452 | 379 | 464 | 338 | 465 | 293 | 555 | 330 | 3,275 |
| Total*: | 3,526 | 2,507 | 3,109 | 2,250 | 3,100 | 1,950 | 3,700 | 2,200 | 22,343 |
| O & M Costs (Savings) | | | 223 | 223 | 223 | 223 | 223 | 223 | 1,341 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 1,209 | 1,369 | 990 | 1,364 | 858 | 1,628 | 968 | 8,387 |
| Drainage and Wastewater Fund | | 1,007 | 1,276 | 923 | 1,271 | 800 | 1,517 | 902 | 7,695 |
| Solid Waste Fund | | 284 | 464 | 338 | 465 | 293 | 555 | 330 | 2,728 |
| Total: | | 2,500 | 3,109 | 2,250 | 3,100 | 1,950 | 3,700 | 2,200 | 18,809 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Technology

Project Delivery & Performance

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Technology | BCL/Program Code: | C510B |
| Project Type: | New Investment | Start Date: | ONGOING |
| Project ID: | C5405 | 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 ongoing program provides technology applications and application upgrades in support of improvements to project delivery and performance. Planned projects include continued development of an Enterprise Project Management System, replacement of the Engineering Support Contract Payments system, and SPU's share of costs for the City's central financial system upgrades. Future projects may include development of new Enterprise Resource Planning systems such as HR provisioning and financial reporting. This program will result in an improved ability to plan and deliver projects on schedule and within budget.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 2,444 | 1,615 | 1,533 | 2,261 | 1,789 | 2,095 | 1,229 | 1,012 | 13,979 |
| Drainage and Wastewater Rates | 1,783 | 1,375 | 1,294 | 2,069 | 1,648 | 1,939 | 993 | 943 | 12,043 |
| Solid Waste Rates | 788 | 559 | 533 | 776 | 613 | 716 | 426 | 345 | 4,757 |
| Total: | 5,015 | 3,549 | 3,359 | 5,106 | 4,050 | 4,750 | 2,649 | 2,300 | 30,778 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 2,444 | 1,615 | 1,533 | 2,261 | 1,789 | 2,095 | 1,229 | 1,012 | 13,979 |
| Drainage and Wastewater Fund | 1,783 | 1,375 | 1,294 | 2,069 | 1,648 | 1,939 | 993 | 943 | 12,043 |
| Solid Waste Fund | 788 | 559 | 533 | 776 | 613 | 716 | 426 | 345 | 4,757 |
| Total*: | 5,015 | 3,549 | 3,359 | 5,106 | 4,050 | 4,750 | 2,649 | 2,300 | 30,778 |
| O & M Costs (Savings) | | | 308 | 308 | 308 | 308 | 308 | 308 | 1,847 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 2,107 | 1,533 | 2,261 | 1,789 | 2,095 | 1,229 | 1,012 | 12,027 |
| Drainage and Wastewater Fund | | 1,805 | 1,294 | 2,069 | 1,648 | 1,939 | 993 | 943 | 10,690 |
| Solid Waste Fund | | 721 | 533 | 776 | 613 | 716 | 426 | 345 | 4,131 |
| Total: | | 4,634 | 3,359 | 5,106 | 4,050 | 4,750 | 2,649 | 2,300 | 26,848 |

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

2014 - 2019 Adopted Capital Improvement Program

SPU-Technology

Science & System Performance

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Technology | BCL/Program Code: | C510B |
| Project Type: | New Investment | Start Date: | ONGOING |
| Project ID: | C5406 | 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 ongoing program will provide new and improved technology applications and accompanying data management tools to support the gathering, monitoring, tracking and analysis of science and engineering information. Several planned projects include replacement of obsolete regulatory compliance tracking applications, upgrades to field monitoring equipment, and the integration of SCADA data with other data systems. This program enhances SPU's ability to control water quality and comply with environmental and health regulations.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 75 | 0 | 272 | 880 | 880 | 1,000 | 921 | 500 | 4,529 |
| Drainage and Wastewater Rates | 992 | 876 | 970 | 711 | 711 | 742 | 1,250 | 500 | 6,754 |
| Solid Waste Rates | 87 | 68 | 181 | 750 | 750 | 319 | 327 | 0 | 2,482 |
| Total: | 1,155 | 945 | 1,423 | 2,342 | 2,341 | 2,061 | 2,498 | 1,000 | 13,765 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 75 | 0 | 272 | 880 | 880 | 1,000 | 921 | 500 | 4,529 |
| Drainage and Wastewater Fund | 992 | 876 | 970 | 711 | 711 | 742 | 1,250 | 500 | 6,754 |
| Solid Waste Fund | 87 | 68 | 181 | 750 | 750 | 319 | 327 | 0 | 2,482 |
| Total*: | 1,155 | 945 | 1,423 | 2,342 | 2,341 | 2,061 | 2,498 | 1,000 | 13,765 |
| O & M Costs (Savings) | | | 143 | 143 | 143 | 143 | 143 | 143 | 856 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 394 | 272 | 880 | 880 | 1,000 | 921 | 500 | 4,848 |
| Drainage and Wastewater Fund | | 1,389 | 970 | 711 | 711 | 742 | 1,250 | 500 | 6,274 |
| Solid Waste Fund | | 47 | 181 | 750 | 750 | 319 | 327 | 0 | 2,373 |
| Total: | | 1,830 | 1,423 | 2,342 | 2,341 | 2,061 | 2,498 | 1,000 | 13,495 |

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

2014 - 2019 Adopted Capital Improvement Program

Seattle Public Utilities

Water

Overview

SPU delivers an average of 120 to 125 million gallons of drinking water per day to more than 1.3 million people and businesses in Seattle and 18 surrounding cities and water districts, plus the Cascade Water Alliance. The water system infrastructure includes:

- The Cedar and South Fork Tolt supply sources;
- Two well fields;
- Two primary water treatment plants;
- 11 booster chlorination facilities;
- 354.5 million gallons of treated water storage;
- 30 pump stations;
- Approximately 1,900 miles of transmission and distribution system pipelines;
- Over 188,000 meters and service connections;
- More than 21,000 distribution system valves;
- About 18,000 hydrants;
- Monitoring and control systems; and,
- Various buildings and other related facilities.

The capital program also includes investments in watershed stewardship projects, Cedar River Watershed Habitat Conservation Plan implementation, water conservation programs, vehicles, heavy equipment, and technology.

Planned spending in the Water Capital Improvement Program (CIP) is \$409 million over the next six years. Major projects include:

- Covering of open reservoirs to ensure water purity as required by state regulations;
- Morse Lake Pump Plant changes to improve water storage access;
- Water system improvements associated with transportation projects; and,
- Cedar River watershed investments mandated by the Habitat Conservation Plan (HCP).

The 2014-2019 Adopted CIP also includes many ongoing programs, such as improving the distribution system of water mains, valves, and pump stations, watershed stewardship and conservation projects and programs, and facilities, vehicles, and heavy equipment investments. By 2018, however, the overall CIP will be reduced, and investments will be substantially focused on rehabilitating and replacing infrastructure for delivery of clean drinking water, with continued watershed stewardship.

SPU funds Water capital projects through a combination of cash and issuance of bonds. The primary source of cash and debt repayment funds come from sale of water charged to retail and wholesale customers in the region. In Spring 2011, Water rates were approved by the Executive and City Council for the period 2012 through 2014. SPU has updated the Water System Plan through 2018, a Washington Department of Health (WDOH) regulatory requirement due every 6 years.

Summary of Upcoming Budget Issues and Challenges

Three important issues create financial challenges and opportunities for the Water Fund in the future.

Promoting Conservation: The City of Seattle, Seattle residents, and Seattle’s wholesale water partners have worked together to reduce water consumption. As a result, consumption has declined since 1990 and is projected to further decline. In 2010, consumption was 33% below 1990 levels, despite serving a larger population. Seattle currently has some of the lowest per capita water consumption in the nation. While this accomplishment helps contribute to a sustainable future for the region, it puts financial pressure on the utility because fixed costs, including the costs of the CIP, need to be distributed across fewer units of water sold. This trend also puts pressure on SPU management and employees to deliver services as efficiently as possible.

Transitioning from Major Projects toward Asset Management: The Water Fund is transitioning from a period of building large capital projects, in response to regulatory requirements, to a time of physical infrastructure rehabilitation. Past investments include water treatment facilities for the Tolt and Cedar water supplies, coverings for five open reservoirs in response to federal/state regulations, and investments to meet federal requirements embodied in the Cedar River Watershed Habitat Conservation Plan (HCP). These investments helped secure the supply and distribution of high-quality drinking water and provide appropriate stewardship of the watersheds consistent with federal and state requirements.

The City of Seattle is now better positioned than many water utilities in the nation in terms of regulatory compliance. Residents, businesses and rate payers will benefit from these investments for years to come. Although the focus will shift from major projects to physical infrastructure rehabilitation, the utility will be paying debt service over the next several budget cycles on the bonds that were issued for major projects.

Responding to the Economy: Recent economic changes help shape the 2014-2019 Adopted Water CIP. Although there are signs of recovery in the national economy, the overall economic downturn continues to impact new development, which is a source of CIP-related Water Fund revenue via the New Taps program. When new housing is brought on line, new services (i.e. New Taps) are required to supply those units with water. Due to the housing decline, since 2008, annual revenue from New Taps decreased 42% through 2012. As the housing market improves, the New Taps revenue is beginning to show signs of rebounding in 2013.

Against the backdrop of these trends, the 2014-2019 Adopted Water CIP has been developed to:

- Preserve the transmission and distribution systems, as well as stewardship of the watersheds, to ensure a reliable source of high-quality drinking water;
- Comply with federal and state regulations governing water quality, system reliability, and habitat protection in the watersheds in which SPU operates; and,
- Prioritize projects to deliver on infrastructure and regulatory requirements within the limited resources of the Water Fund.

Thematic Priorities

The overarching goal of the Water CIP is to ensure that the water system is properly maintained, upgraded, and expanded to reliably deliver high-quality, safe drinking water to customers, protect the environment, and comply with regulations. The primary themes driving the CIP in the next six years are health and human safety, asset preservation, environmental sustainability, and race and social justice.

- SPU is committed to making **asset preservation** investments to create or enhance operational efficiency. SPU uses asset management principles to determine the timing of rehabilitation or replacement of its infrastructure. Projects that fall into this category vary, ranging from water main replacement related to transportation projects to decommissioning of steel storage facilities.
- SPU's commitment to **health and human safety** is also addressed through SPU's reservoir covering projects. Consistent with Ordinance 120899 and required by state regulators, SPU is replacing its open finished drinking water reservoirs with underground structures that will improve water quality and system security. Seismic retrofits are planned for four of the buried reservoirs. SPU plans to decommission Roosevelt Reservoir, and further evaluate the possibility of decommissioning Volunteer Reservoir. However, permanent actions at these two reservoirs are not expected to occur until enough time has elapsed to observe the water system's performance without them. Additionally, by 2019, SPU will begin constructing new covers on the Lake Forest Park and Bitter Lake reservoirs to replace the existing floating covers that will have reached the end of their useful life.
- SPU is committed to **environmental sustainability**. This can best be seen in SPU's responsibilities as outlined in the 50-year Habitat Conservation Plan (HCP), an agreement between local, state and federal agencies. The HCP seeks to ensure the long-term ecological integrity of the Cedar River Watershed, which supplies the majority of the City's drinking water. It simultaneously addresses the needs of protected wildlife species in and along the Cedar River. Investments in the regional conservation and low-income conservation programs also help in management of our natural resources, while helping customers reduce their utility bills.
- SPU is also committed to **race and social justice**. One example of this commitment is the Low Income Water Conservation Program. This ongoing program provides water use efficiency resources to the City's low-income customers to implement water conservation measures. Typical improvements consist of, but are not limited to, installing water-efficient fixtures, such as aerating showerheads and faucets, low water-use toilets and efficient clothes washers. The program is cooperatively managed by SPU and the City's Human Services Department.

Project Selection Criteria

SPU identifies candidate capital projects from several sources – planning (e.g. comprehensive plans, program plans), external projects and opportunities, and emergencies or other unexpected events. Under SPU’s Asset Management system, projects must be justified through a business case process that establishes that a problem or opportunity is timely and important, and that the proposed solution is superior to alternatives based on a triple bottom line analysis (economic, environmental and social) of life cycle costs and benefits. The process also recognizes that a project may be a “must do” project (e.g. required by regulation).

SPU prioritizes its capital projects into three categories – Priorities 1, 2 and 3, with 1 being the most important and critical. Some projects are part of an externally driven project. Typically, SPU lacks control over the timing of externally driven projects.

Priority rankings are based on the following set of criteria:

- **Regulatory Mandates, Legal Agreements:** The degree to which a project is driven by federal, state, and local laws, permit and regulatory requirements, and consent decrees; as well as by legal agreements with public and private parties. Examples of highly ranked projects in this category include the reservoir covering programs and the Habitat Conservation Program.
- **External Drivers:** SPU’s responsiveness to, or engagement with, projects of other Departments or Jurisdictions, and the specific mandates of the City Council and Mayor. Examples of highly ranked projects in this category include the Alaskan Way Viaduct, Yesler Terrace, and Mercer Corridor projects.
- **Infrastructure:** How a project addresses infrastructure conditions or vulnerabilities. Examples of highly ranked projects in this category include the Watermain Rehabilitation, Distribution System Improvements and Tank Improvements programs.
- **Level of Service:** The importance of a project in providing or improving services to customers. Examples of highly ranked projects in this category include the Water Infrastructure – New Taps and Service Renewals programs.
- **Other Factors:** Other important factors include high net present value or cost-effectiveness, social or environmental benefits not otherwise captured, a project already in progress or near completion, limited time opportunity, demonstration projects, community visibility, outside funding. An example of a highly ranked project in this category includes Rattlesnake Lake Sanitary Facilities.

Every project is rated against each criterion. Criteria ratings are then considered in determining an overall project priority ranking, using expert judgment (rather than a formula). Priority rankings for the CIP are determined by the leads for each Line of Business (LOB), with review by key internal stakeholders. The ranking scheme and criteria are the same for all LOBs and are approved by the SPU Director and Asset Management Committee. Project priority rankings are used to clarify and document which projects are most important (and why), to help determine which projects at the margin will be included or excluded

(or deferred) from the CIP, and which projects should receive priority attention if a staff or financial resource constraint should arise.

In recent years, this prioritization process and business case analysis has resulted in decisions to defer some capital projects and retire or downsize some facilities, primarily finished water reservoirs. Retiring facilities reduces capital expenditures since these facilities are in need of major improvements (such as seismic retrofits) that are avoided, as well as reduces annual operating costs since the level of maintenance is greatly reduced. Downsizing or retiring storage facilities is possible because the need for storage has changed over time as the system has been reconfigured, transmission and treatment has become more reliable, and demands, particularly for fire flows, have declined.

Some examples of retirements are:

- Richmond Highlands Tanks (decommissioning the smaller of two): \$1.8 million in capital cost savings;
- Foy Standpipe: \$2 million in capital cost savings;
- Myrtle Tank #1: \$900,000 in capital cost savings;
- Roosevelt Reservoir: \$24 million in capital cost savings;
- Volunteer Reservoir retirement is under consideration (\$25 million in potential capital savings since this reservoir would have to be buried if it were kept in service); and,
- Lincoln, Beacon and West Seattle Reservoirs were downsized based on demand analysis.

Some examples of deferrals are:

- Landsburg Flood Passage Improvements to improve woody debris management and performance during high flood flows at Landsburg Diversion (\$5M): Moved to 2013 and scope downsized;
- Cedar Falls Facilities Development to improve buildings and office space at Cedar Falls Headquarters: Shifted start of planning from 2009 to 2011. Construction shifted from 2012 to 2017; and
- Desktop and laptop replacement frequency lengthened.

Aligning Infrastructure with Planned Growth

In its Water System Plan updates, SPU forecasts water demands to meet the growth projections as planned for in Seattle's most recent Comprehensive Plan and ensures that there will be adequate water supply for at least the next 20 years. These growth projections include expected residential and commercial growth into designated Urban Centers and Urban Villages. The 2013 Water System Plan indicates that new sources of supply would not be needed until sometime after 2060.

Growth-based infrastructure needs in Urban Centers and Urban Villages are addressed through specific programs in the Water CIP, including water main extensions, new water connections for new construction, fire flow improvements, and water main rehabilitations. The water distribution system in these areas is fairly robust, and needed improvements are generally located within areas where the land use is changed from single family zoning to a more intensive use needing higher flows for firefighting. Projects containing these improvements are evaluated through a business case process and are prioritized among the other projects in the CIP.

Future Projects/What is on the Horizon

The Water CIP is coming to the end of a 20-year period of investments in major infrastructure projects. These projects have positioned SPU to meet drinking water quality and environmental regulations. Projects have included the Tolt and Cedar Water Treatment Facilities, Reservoir Covering Program, the Cedar River Watershed HCP, and a new Water Quality Laboratory. SPU has also made a major reinvestment in the Supervisory Control and Data Acquisition System which is used to monitor and control the regional and retail water system. However, these investments have also led to increasing debt service payments that constrain future budgets.

There is only one remaining large project, Morse Lake Pump Plant, and a few special mid-range programs, such as seismic retrofitting of reservoirs, and programs related to transportation projects and improvements to SPU facilities. The Morse Lake Pump Plant project provides for reliable release of water from Morse Lake into the Cedar River. This is necessary to maintain the supply of drinking water to the region and meet regulatory minimums for the amount of “in-stream flows” in the river to support aquatic habitat, wetlands, riparian vegetation, and water quality.

Beyond these projects, emphasis will be on asset management based rehabilitation and replacement of distribution system infrastructure (e.g. mains, valves, hydrants, meters). Example of such projects to date are the 3rd Ave West PRVs project, which installed new pressure reducing valves (PRVs) in the Ballard neighborhood, and the WM Ship Canal Crossing at 3rd Ave West project, which rehabilitates a failing watermain (WM) underneath the Ship Canal Bridge. There is significant planning and analysis work involved in applying asset management and determining the appropriate level of CIP versus operating and maintenance work needed for each asset, and shifting the workforce accordingly.

CIP Revenue Sources

SPU’s Water CIP is funded largely by Water ratepayers. About 71% of the Water Fund’s overall revenues come from retail ratepayers, split approximately evenly between residential and commercial customers. Another 23% of the Water Fund’s overall revenues come from wholesale purveyors who serve surrounding jurisdictions. The remaining 6% consists of non-rate revenue, which includes such things as tap fees received and developer watermain reimbursements. SPU issues bonds, serviced by ratepayers, which in the current period covers 49% of the CIP, with the remainder funded by cash, ie: directly by ratepayer revenue.

SPU actively seeks grants, low interest loans, and other funding sources whenever possible. And, as mentioned above, SPU also receives payments from developers that are intended to offset the cost of installing new taps when they connect newly constructed buildings to the SPU watermains. These “tap fees” are a volatile revenue source, trending with the construction-related sectors of the economy.

CIP Spending by Major Category

(In '000s; total may not sum due to rounding)

| Water Fund | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| DISTRIBUTION | 22,600 | 21,451 | 24,773 | 23,307 | 25,728 | 27,180 | 145,038 |
| TRANSMISSION | 2,916 | 5,636 | 2,823 | 2,721 | 2,773 | 2,827 | 19,695 |
| WATERSHED STEWARDSHIP | 27 | 6 | 451 | 451 | 250 | 250 | 1,435 |
| WATER QUALITY AND TREATMENT | 11,279 | 9,821 | 249 | 100 | 100 | 1,280 | 22,830 |
| WATER RESOURCES | 4,215 | 13,167 | 24,976 | 11,073 | 3,953 | 3,612 | 60,995 |
| HABITAT CONSERVATION | 2,610 | 2,375 | 2,680 | 2,121 | 1,934 | 1,941 | 13,661 |
| SHARED COST | 23,387 | 18,957 | 15,880 | 11,764 | 13,280 | 15,393 | 98,662 |
| TECHNOLOGY | 9,389 | 10,004 | 7,783 | 7,178 | 7,185 | 5,090 | 46,630 |
| Total | 76,424 | 81,416 | 79,616 | 58,716 | 55,203 | 57,571 | 409,045 |

Distribution: Projects and programs in this category relate to rehabilitation and improvements to the City's water mains and appurtenances, pump stations, and other facilities that are part of the system that distributes treated water throughout the City of Seattle to retail customers.

Increases in the **Distribution BCL** for 2014, compared to amounts adopted in 2013 in the 2013-2018 CIP, reflect accelerating the schedule of the Watermain Rehabilitation project near Seward Park to replace corroded watermains located in corrosive soils and a Multiple Utility Relocation project that provides necessary modifications to pipes and related infrastructure in support of the City of Shoreline's Aurora Avenue North project. Reductions in 2015 reflect Tank Improvement projects starting in 2016 rather than 2015 as initially anticipated.

Transmission: The purpose of this program category is to rehabilitate and improve the City's large transmission pipelines that bring untreated water to the treatment facilities, and convey water from the treatment facilities to Seattle and to other local utilities that purchase a portion of SPU's supply for their customers.

Reductions in the **Transmission BCL** in 2014 compared to amounts adopted in 2013 in the 2013-2018 CIP, are primarily due to delays in 2013 of the presentation of plans for the Cathodic Protection program to SPU's Asset Management Committee. This program will begin to accelerate in 2015. An increase in

2015 reflects critical work in the Transmission Pipelines Rehabilitation program in response to a slide area through which the Tolt Pipelines traverse.

Watershed Stewardship: Projects and programs in this category improve protection of our sources of drinking water, provide habitat protection and restoration, sustain the environment, and enhance environmental quality, both locally and regionally. Most of the projects in this program category are located within the Cedar and Tolt River municipal watersheds. Three of these projects are being carried out in response to the Endangered Species Act’s designation of the Chinook salmon as a threatened species.

- The Cedar River Municipal Watershed is 90,638 acres of land owned by the City of Seattle and provides about 70% of the drinking water used by over 1.3 million people in the greater Seattle area. The City of Seattle is required by law to maintain a clean drinking water supply. To that end the City restricts public access and management is guided by a Habitat Conservation Plan. The Cedar River Watershed is an unfiltered surface water supply which produces some of the best water in the world.
- The South Fork Tolt River Watershed is the smaller and lesser known but still essential second supply watershed in SPU’s freshwater supply system. Located in the foothills of the Cascades in east King County, it first came on-line in 1964, and since 1989 has also supported a small Seattle City Light hydro-electric facility. The Tolt Treatment Facilities can provide up to 120 million gallons of drinking water per day.

Water Quality and Treatment: The purpose of this program category is to construct, rehabilitate or improve water treatment facilities, and cover the remaining open water reservoirs. State and federal drinking water regulations and public health protection are key drivers of investments in this program category. To comply with regulations, SPU has invested hundreds of millions of dollars in building two new treatment facilities and burying five reservoirs that contain already treated water that is distributed directly to Seattle residents and wholesale customers for drinking purposes.

The **Water Quality and Treatment BCL** increase in 2014 and 2015 compared to the same years adopted in the 2013-2018 CIP reflects a new approach to expedite design and construction for all four reservoirs as well as adding construction costs for both Maple Leaf and Myrtle reservoirs (both had only accounted for design costs up to this point). Additionally, the increase reflects changes to the Landsburg Chlorination project at the Landsburg Facility. The current major issue that is affecting cost and schedule at Landsburg is the Puget Sound Energy (PSE) power pole relocation and King County building permit process.

Water Resources: The purpose of this program category is to manage our water resources to meet anticipated demands and in-stream flow requirements – the amount of water provided to the river to support aquatic habitat, wetlands, riparian vegetation, and water quality – and to promote residential and commercial water conservation. The requirements for in-stream flows are detailed in agreements with state and federal agencies and include provisions for minimum stream flows in the Cedar and South Fork Tolt Rivers. Examples of the types of projects in this category include the Dam Safety Program and the Morse Lake Pump Plant. The Morse Lake Pump Plant is one of the last big investments contemplated in the Water CIP in this decade.

Reductions in the **Water Resources BCL** in 2014 compared to amounts adopted in the 2013-2018 CIP, are primarily due to delays with the Morse Lake Pump Plant, which is pushing construction to start in late

2015. Schedule delays are due to additional departmental reviews of the project and permit requirements that could impact design.

Habitat Conservation Program: This program category includes projects and programs directly related to implementation of the Cedar River Watershed Habitat Conservation Plan. The Habitat Conservation Plan benefits the utility and the ratepayers it serves by providing legal certainty under the Endangered Species Act for the City's continued operations within the Cedar River Watershed, which supplies 70% of the region's drinking water. The Habitat Conservation Program requires SPU to invest \$100 million over 50 years, with \$60 million in the first decade, on approximately 30 capital projects and 60 O&M activities in three areas: management of in-stream flows for people and fish, forest and land conservation activities, and mitigation for the blockage of salmon and steelhead fish as they return to the Cedar River to spawn. The Water Fund's CIP projects in this area are grouped into eight categories: road improvements and decommissioning, stream and riparian restoration, upland forest restoration, Landsburg fish passage, Cedar River sockeye hatchery, improvements to the Ballard Locks for fish passage and water conservation, fish habitat protection and restoration in the lower Cedar River below the municipal watershed boundary, and evaluation of Cedar permanent dead storage in Chester Morse Lake.

The size of the **Habitat Conservation Program BCL** decreases over the course of the six-year CIP as major capital projects required under the Habitat Conservation Plan agreement are completed and land-acquisition commitments are satisfied.

Shared Cost Projects: This program includes individual capital improvement projects which typically benefit multiple lines of business (e.g. the water line of business and the drainage and wastewater line of business) and whose costs are "shared," or paid for, by more than one of SPU's utility funds. In 2014, the Shared Cost program includes funding for a number of interdepartmental projects including the Alaskan Way Viaduct and Seawall Replacement, Yesler Terrace, Mercer Corridor and Sound Transit Link Light Rail. Funding is also included for SPU's Heavy Equipment Purchases, the Integrated Control Monitoring Program and a number of smaller projects.

The Shared Cost Projects BCL increases in 2014 and 2015 compared to the Adopted 2013-2018 CIP. Primary drivers of the increase include the Operations Control Center Main Warehouse Ventilation project, with increased costs related to a higher than anticipated consultant contract; and the Landsburg Facility Upgrades which added an antenna tower and is mitigating the addition of a power pole relocation. The Alaskan Way Viaduct project costs have also been revised to reflect the latest estimates.

Technology: The Technology capital portfolio is managed in six program areas, which provide a department-wide view of technology investments to address SPU's strategic, business, and City-wide priorities. These areas are:

- Customer Contact and Billing
- Enterprise Information Management
- IT Infrastructure
- Project Delivery & Performance
- Science & System Performance
- Asset Information Management

Investments in 2014 and 2015 address SPU's key initiatives, which focus on:

- Improving Internal Controls,
- Improving Productivity and Performance

- Improving Customer Service
- Transitioning from Data Rich to Knowledge Rich
- Improving Project Delivery

The 2014-2019 Adopted CIP increases Technology CIP spending for all utility funds by \$2.8 million in 2014 and \$10.4 million in 2015 as compared to the 2013-2018 Adopted CIP. The Water Utility's Technology CIP amount increases by \$0.79 million in 2014 and by \$3.65 million in 2015. These amounts are based on the Water Utility's share of benefit from these projects.

City Council Provisos to the CIP

The City Council adopted the following budget proviso:

- None of the money appropriated in the 2014 budget for the Seattle Public Utilities' Shared Cost Projects BCL may be spent for the Yesler Terrace - DWF project (#C4136-DWF) or the Yesler Terrace – WF project (#C4136-WF) until Seattle Public Utilities (SPU) files a written notice with the City Clerk that SPU has made a presentation to the appropriate Council committee describing the scope of the projects, benefits for the SPU system as a whole, and the schedule for completing the projects in 2014.

Project Summary

| BCL/Program Name/ | | | | | | | | | |
|--|--------------------|---------------|---------------|---------------|--------------------------|---------------|---------------|---------------|----------------|
| Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
| Distribution | | | | | BCL/Program Code: | | | | C110B |
| Chamber Upgrades - Distribution (C1137) | 22 | 38 | 27 | 27 | 28 | 28 | 29 | 29 | 227 |
| Distribution System Improvements (C1128) | 2,786 | 1,556 | 3,530 | 3,800 | 4,800 | 5,490 | 5,500 | 5,800 | 33,262 |
| Distribution System In-Line Gate Valves (C1136) | 564 | 300 | 318 | 325 | 331 | 338 | 345 | 351 | 2,873 |
| Multiple Utility Relocation (C1133) | 5,114 | 2,136 | 1,839 | 541 | 552 | 563 | 574 | 586 | 11,904 |
| Pump Station Improvements (C1135) | 233 | 200 | 250 | 541 | 552 | 563 | 574 | 586 | 3,499 |
| Tank Improvements (C1134) | 4,161 | 120 | 0 | 500 | 2,500 | 0 | 0 | 500 | 7,781 |
| Water Infrastructure - Distribution System Modifications (C1138) | 0 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 1,400 |
| Water Infrastructure - Hydrant Replacement/Relocation (C1110) | 4,667 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 7,374 |
| Water Infrastructure - New Hydrants (C1112) | 514 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 1,287 |
| Water Infrastructure - New Taps (C1113) | 94,646 | 5,000 | 4,900 | 5,000 | 5,100 | 5,200 | 5,300 | 5,406 | 130,552 |
| Water Infrastructure - Service Renewal (C1109) | 96,458 | 5,722 | 5,837 | 5,953 | 6,072 | 6,194 | 6,318 | 6,444 | 138,998 |
| Water Infrastructure - Watermain Extensions (C1111) | 12,861 | 800 | 796 | 812 | 828 | 845 | 862 | 1,000 | 18,803 |
| Watermain Rehabilitation (C1129) | 5,649 | 3,866 | 4,426 | 3,264 | 3,313 | 3,379 | 5,509 | 5,750 | 35,156 |
| Distribution | 227,674 | 20,406 | 22,600 | 21,451 | 24,773 | 23,307 | 25,728 | 27,180 | 393,118 |
| Transmission | | | | | BCL/Program Code: | | | | C120B |
| Cathodic Protection Program (C1208) | 608 | 350 | 1,219 | 1,848 | 1,082 | 1,104 | 1,126 | 1,149 | 8,486 |
| Purveyor Meters Replace - SPU (C1206) | 690 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 1,433 |
| Replace Air Valve Chambers (C1209) | 1,647 | 112 | 117 | 122 | 125 | 125 | 127 | 130 | 2,505 |
| Transmission Pipelines Rehabilitation (C1207) | 2,963 | 1,040 | 1,376 | 3,457 | 1,404 | 1,276 | 1,299 | 1,322 | 14,137 |
| Water System Dewatering (C1205) | 179 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 922 |
| Transmission | 6,086 | 1,703 | 2,916 | 5,636 | 2,823 | 2,721 | 2,773 | 2,827 | 27,484 |

*Amounts in thousands of dollars

2014 - 2019 Adopted Capital Improvement Program

Project Summary

| BCL/Program Name/ Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------|--------|-------|--------|-------|-------|-------|--------------|
| Watershed Stewardship | | | | | | | | | C130B |
| Cedar Bridges (C1307) | 1,618 | 1 | 1 | 1 | 1 | 1 | 250 | 250 | 2,123 |
| Tolt Bridges (C1308) | 0 | 1 | 0 | 0 | 450 | 450 | 0 | 0 | 901 |
| Tolt Watershed Restoration (C1310) | 288 | 28 | 6 | 5 | 0 | 0 | 0 | 0 | 327 |
| Transmission Right-of-Way Improvements (C1316) | 1 | 70 | 20 | 0 | 0 | 0 | 0 | 0 | 91 |
| Watershed Stewardship | 1,907 | 100 | 27 | 6 | 451 | 451 | 250 | 250 | 3,442 |
| Water Quality & Treatment | | | | | | | | | C140B |
| Landsburg Chlorination Upgrades (C1417) | 172 | 524 | 1,016 | 865 | 29 | 0 | 0 | 0 | 2,606 |
| Reservoir Covering-Bitter Lake (C1419) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 590 | 590 |
| Reservoir Covering - Beacon (C1408) | 41,916 | 650 | 925 | 4,243 | 50 | 0 | 0 | 0 | 47,784 |
| Reservoir Covering - Maple Leaf (C1411) | 38,059 | 1,250 | 4,760 | 3,328 | 50 | 0 | 0 | 0 | 47,447 |
| Reservoir Covering - Myrtle (C1410) | 12,273 | 50 | 315 | 1,235 | 20 | 0 | 0 | 0 | 13,893 |
| Reservoir Covering - Volunteer (C1407) | 97 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 117 |
| Reservoir Covering - West Seattle (C1409) | 33,644 | 750 | 4,020 | 50 | 0 | 0 | 0 | 0 | 38,464 |
| Reservoir Covering-Lake Forest Park (C1418) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 590 | 590 |
| Treatment Facility/Water Quality Improvements (C1413) | 186 | 30 | 100 | 100 | 100 | 100 | 100 | 100 | 816 |
| Water Quality Equipment (C1414) | 249 | 140 | 143 | 1 | 0 | 0 | 0 | 0 | 533 |
| Water Quality & Treatment | 126,596 | 3,414 | 11,279 | 9,821 | 249 | 100 | 100 | 1,280 | 152,840 |
| Water Resources | | | | | | | | | C150B |
| Dam Safety Program (C1506) | 6,714 | 315 | 150 | 2,025 | 1,432 | 1,040 | 800 | 800 | 13,276 |
| Morse Lake Pump Plant (C1508) | 12,639 | 3,800 | 1,372 | 7,119 | 18,788 | 6,846 | 0 | 0 | 50,563 |
| Regional Water Conservation Program (C1504) | 17,526 | 1,769 | 1,803 | 1,839 | 1,876 | 1,914 | 1,952 | 1,991 | 30,671 |
| Seattle Direct Service Additional Conservation (C1505) | 5,724 | 676 | 690 | 704 | 718 | 732 | 747 | 762 | 10,751 |
| Water Supply Flexibility Program (C1507) | 333 | 669 | 200 | 1,480 | 2,052 | 0 | 0 | 0 | 4,735 |

**Amounts in thousands of dollars*

Project Summary

| BCL/Program Name/ Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|---|----------------|-------|-------|--------|--------|--------|-------|-------|--------------------------------|
| Water System Plan - 2019 (C1510) | 0 | 0 | 0 | 0 | 110 | 541 | 454 | 59 | 1,164 |
| Water Resources | 42,937 | 7,229 | 4,215 | 13,167 | 24,976 | 11,073 | 3,953 | 3,612 | 111,160 |
| Habitat Conservation Program | | | | | | | | | BCL/Program Code: C160B |
| Ballard Locks Improvements (C1606) | 9,145 | 0 | 0 | 0 | 200 | 200 | 200 | 200 | 9,945 |
| Cedar Sockeye Hatchery (C1605) | 21,380 | 46 | 205 | 100 | 40 | 0 | 0 | 0 | 21,771 |
| Downstream Fish Habitat (C1607) | 3,687 | 435 | 520 | 460 | 595 | 215 | 0 | 0 | 5,912 |
| Instream Flow Management Studies (C1608) | 4,782 | 229 | 204 | 208 | 212 | 216 | 221 | 225 | 6,298 |
| Stream & Riparian Restoration (C1602) | 7,232 | 383 | 394 | 395 | 397 | 292 | 292 | 292 | 9,678 |
| Upland Reserve Forest Restoration (C1603) | 6,850 | 530 | 283 | 188 | 192 | 132 | 135 | 115 | 8,425 |
| Watershed Road Improvement/Decommissioning (C1601) | 11,170 | 984 | 1,004 | 1,023 | 1,044 | 1,066 | 1,087 | 1,108 | 18,486 |
| Habitat Conservation Program | 64,247 | 2,606 | 2,610 | 2,375 | 2,680 | 2,121 | 1,934 | 1,941 | 80,514 |
| Shared Cost Projects | | | | | | | | | BCL/Program Code: C410B |
| 1% for Art – WF (C4118-WF) | 1,225 | 181 | 125 | 109 | 64 | 66 | 70 | 71 | 1,912 |
| Alaskan Way Viaduct & Seawall Replacement Program - WF (C4102-WF) | 5,107 | 2,430 | 4,682 | 3,074 | 2,380 | 930 | 803 | 284 | 19,690 |
| Bridging the Gap - WF (C4119 -WF) | 6,113 | 1,572 | 1,604 | 1,636 | 1,668 | 100 | 100 | 100 | 12,893 |
| Emergency Storms - WF (C4120-WF) | 95 | 50 | 105 | 100 | 100 | 100 | 100 | 100 | 750 |
| First Hill Streetcar - WF (C4130-WF) | 0 | 0 | 150 | 500 | 1,000 | 50 | 0 | 0 | 1,700 |
| Heavy Equipment Purchases - WF (C4116-WF) | 8,427 | 3,618 | 2,600 | 2,566 | 2,000 | 2,000 | 2,000 | 2,000 | 25,210 |
| Integrated Control Monitoring Program - WF (C4108-WF) | 7,385 | 446 | 405 | 480 | 480 | 480 | 480 | 480 | 10,636 |
| Mercer Corridor Project East Phase - WF (C4114-WF) | 3,428 | 520 | 30 | 0 | 0 | 0 | 0 | 0 | 3,978 |
| Mercer Corridor Project West Phase - WF (C4133-WF) | 162 | 939 | 455 | 320 | 0 | 0 | 0 | 0 | 1,875 |
| Meter Replacement - WF (C4101-WF) | 4,666 | 707 | 634 | 645 | 655 | 666 | 683 | 689 | 9,345 |

*Amounts in thousands of dollars

2014 - 2019 Adopted Capital Improvement Program

Project Summary

| BCL/Program Name/ | | | | | | | | | |
|--|------------------------|---------------|---------------|---------------|---------------|---------------|--------------------------|---------------|------------------|
| Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
| Operational Facility - Construction - WF (C4106- WF) | 14,724 | 1,416 | 1,492 | 1,048 | 690 | 2,829 | 3,450 | 5,155 | 30,804 |
| Operational Facility - Other - WF (C4115-WF) | 973 | 276 | 256 | 300 | 300 | 0 | 0 | 0 | 2,105 |
| Operations Control Center - WF (C4105-WF) | 4,555 | 170 | 1,630 | 76 | 122 | 431 | 623 | 783 | 8,390 |
| Other Major Transportation Projects - WF (C4123-WF) | 36 | 290 | 265 | 54 | 105 | 50 | 300 | 500 | 1,601 |
| Regional Facility - WF (C4107 -WF) | 3,713 | 3,321 | 6,515 | 5,781 | 4,418 | 2,200 | 2,825 | 3,425 | 32,197 |
| Security Improvements - WF (C4113-WF) | 6,228 | 2,000 | 1,713 | 2,038 | 1,788 | 1,763 | 1,771 | 1,731 | 19,031 |
| Sound Transit - North Link - WF (C4135-WF) | 58 | 87 | 300 | 125 | 100 | 100 | 75 | 75 | 920 |
| Sound Transit - Water Betterment (C4125) | 1,502 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 1,602 |
| Sound Transit – University Link - WF (C4110-WF) | 329 | 202 | 137 | 41 | 10 | 0 | 0 | 0 | 719 |
| Sound Transit-East Link (C4122-WF) | 0 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 55 |
| Yesler Terrace-WF (C4136- WF) | 0 | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 200 |
| Shared Cost Projects | 68,726 | 18,226 | 23,387 | 18,957 | 15,880 | 11,764 | 13,280 | 15,393 | 185,613 |
| Technology | | | | | | | BCL/Program Code: | | C510B |
| Asset Information Management (C5407) | 3,725 | 2,188 | 1,060 | 1,048 | 1,048 | 1,093 | 1,120 | 910 | 12,192 |
| Customer Contact & Billing (C5402) | 663 | 5,423 | 4,214 | 3,782 | 1,579 | 1,648 | 1,689 | 550 | 19,549 |
| Enterprise Information Management (C5403) | 66 | 525 | 940 | 1,043 | 1,123 | 484 | 598 | 1,150 | 5,929 |
| IT Infrastructure (C5404) | 1,630 | 1,215 | 1,369 | 990 | 1,364 | 858 | 1,628 | 968 | 10,022 |
| Project Delivery & Performance (C5405) | 2,444 | 1,615 | 1,533 | 2,261 | 1,789 | 2,095 | 1,229 | 1,012 | 13,979 |
| Science & System Performance (C5406) | 75 | 0 | 272 | 880 | 880 | 1,000 | 921 | 500 | 4,529 |
| Technology | 8,603 | 10,966 | 9,389 | 10,004 | 7,783 | 7,178 | 7,185 | 5,090 | 66,199 |
| Department Total*: | 546,776 | 64,649 | 76,424 | 81,416 | 79,616 | 58,716 | 55,203 | 57,571 | 1,020,371 |

*Amounts in thousands of dollars

Fund Summary

| Fund Name & Code | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|-----------------------------|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Water Fund (43000) | 546,776 | 64,649 | 76,424 | 81,416 | 79,616 | 58,716 | 55,203 | 57,571 | 1,020,371 |
| Department Total*: | 546,776 | 64,649 | 76,424 | 81,416 | 79,616 | 58,716 | 55,203 | 57,571 | 1,020,371 |

**Amounts in thousands of dollars*

1% for Art – WF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2001 |
| Project ID: | C4118-WF | 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 ongoing program provides the Water funding for Seattle Public Utilities' 1% for Arts contribution. Eligibility is determined at the individual project level, with payment occurring from this program. Funds contributed to the 1% for Art program allow the commission, purchase, and installation of art in City-owned properties that are accessible to the public. The Municipal Arts Plan, prepared annually, describes the status of ongoing art projects and establishes the scope of work and allocations for new art projects.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,225 | 181 | 125 | 109 | 64 | 66 | 70 | 71 | 1,912 |
| Total: | 1,225 | 181 | 125 | 109 | 64 | 66 | 70 | 71 | 1,912 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 1,225 | 181 | 125 | 109 | 64 | 66 | 70 | 71 | 1,912 |
| Total*: | 1,225 | 181 | 125 | 109 | 64 | 66 | 70 | 71 | 1,912 |
| O & M Costs (Savings) | | | 19 | 19 | 19 | 19 | 19 | 19 | 115 |

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

Alaskan Way Viaduct & Seawall Replacement Program - WF

| | | | |
|-------------------------------|---------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Facility | Start Date: | Q1/2004 |
| Project ID: | C4102-WF | End Date: | Q4/2019 |
| Location: | SR 99 / Battery St | | |
| Neighborhood Plan: | In more than one Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | In more than one District | Urban Village: | In more than one Urban Village |

This program relocates, replaces, and protects water infrastructure affected by the replacement of the Alaskan Way Viaduct and Seawall. This project encompasses many sub-projects which are collectively known as the “Alaskan Way Viaduct and Seawall Replacement Program” (AWVSR Program.) The Washington State Department of Transportation (WSDOT) is the lead for the SR-99 replacement, while the City of Seattle is the lead on development of the waterfront public space, implementation of the new surface Alaskan Way, and design and construction of the seawall.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 5,107 | 2,430 | 4,682 | 3,074 | 2,380 | 930 | 803 | 284 | 19,690 |
| Total: | 5,107 | 2,430 | 4,682 | 3,074 | 2,380 | 930 | 803 | 284 | 19,690 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 5,107 | 2,430 | 4,682 | 3,074 | 2,380 | 930 | 803 | 284 | 19,690 |
| Total*: | 5,107 | 2,430 | 4,682 | 3,074 | 2,380 | 930 | 803 | 284 | 19,690 |
| O & M Costs (Savings) | | | 197 | 197 | 197 | 197 | 197 | 197 | 1,181 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 1,080 | 4,682 | 3,074 | 2,380 | 930 | 803 | 284 | 13,233 |
| Total: | | 1,080 | 4,682 | 3,074 | 2,380 | 930 | 803 | 284 | 13,233 |

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Ballard Locks Improvements

| | | | |
|-------------------------------|------------------------------|----------------------------------|------------------|
| BCL/Program Name: | Habitat Conservation Program | BCL/Program Code: | C160B |
| Project Type: | Improved Facility | Start Date: | Q1/2000 |
| Project ID: | C1606 | End Date: | Q4/2020 |
| Location: | NW 54th St /30th Ave NW | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Ballard | Urban Village: | Ballard Interbay |

This program provides improvements at the Ballard Locks to upgrade conditions for salmon. Improvements are focused on conserving the amount of freshwater needed to operate the locks to reduce the demand for freshwater from the Cedar River and increase the availability of freshwater for salmon. This program is a requirement of the Cedar River Habitat Conservation Plan (HCP.)

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 9,145 | 0 | 0 | 0 | 200 | 200 | 200 | 200 | 9,945 |
| Total: | 9,145 | 0 | 0 | 0 | 200 | 200 | 200 | 200 | 9,945 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 9,145 | 0 | 0 | 0 | 200 | 200 | 200 | 200 | 9,945 |
| Total*: | 9,145 | 0 | 0 | 0 | 200 | 200 | 200 | 200 | 9,945 |
| O & M Costs (Savings) | | | 99 | 99 | 99 | 99 | 99 | 99 | 597 |

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Bridging the Gap - WF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2008 |
| Project ID: | C4119-WF | 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 multi-year, multi-project program funds assessments, repairs, and improvements to SPU's drinking water utility infrastructure at sites chosen by the Seattle Department of Transportation (SDOT) for bridge improvements and pedestrian and bicycle safety improvements within its "Bridging the Gap" program. SPU assesses the condition of its utility infrastructure at SDOT's project sites and conducts repairs and improvements as needed.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 6,113 | 1,572 | 1,604 | 1,636 | 1,668 | 100 | 100 | 100 | 12,893 |
| Total: | 6,113 | 1,572 | 1,604 | 1,636 | 1,668 | 100 | 100 | 100 | 12,893 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 6,113 | 1,572 | 1,604 | 1,636 | 1,668 | 100 | 100 | 100 | 12,893 |
| Total*: | 6,113 | 1,572 | 1,604 | 1,636 | 1,668 | 100 | 100 | 100 | 12,893 |
| O & M Costs (Savings) | | | 129 | 129 | 129 | 129 | 129 | 129 | 774 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 572 | 1,604 | 1,636 | 1,668 | 100 | 100 | 100 | 5,780 |
| Total: | | 572 | 1,604 | 1,636 | 1,668 | 100 | 100 | 100 | 5,780 |

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Cathodic Protection Program

| | | | |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Transmission | BCL/Program Code: | C120B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2004 |
| Project ID: | C1208 | 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 ongoing program installs corrosion protection systems that prevent external corrosion of water transmission pipelines located in Seattle and throughout King County. The cathodic protection systems extend the life of buried pipelines made of ductile iron, steel, and concrete cylinder pipe.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|------------------------|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 608 | 350 | 1,219 | 1,848 | 1,082 | 1,104 | 1,126 | 1,149 | 8,486 |
| Total: | 608 | 350 | 1,219 | 1,848 | 1,082 | 1,104 | 1,126 | 1,149 | 8,486 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 608 | 350 | 1,219 | 1,848 | 1,082 | 1,104 | 1,126 | 1,149 | 8,486 |
| Total*: | 608 | 350 | 1,219 | 1,848 | 1,082 | 1,104 | 1,126 | 1,149 | 8,486 |
| O & M Costs (Savings) | | | 85 | 85 | 85 | 85 | 85 | 85 | 509 |

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Cedar Bridges

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Watershed Stewardship | BCL/Program Code: | C130B |
| Project Type: | Improved Facility | Start Date: | Q1/2007 |
| Project ID: | C1307 | 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 replaces aging bridges and related structures, such as abutments, asphalt approaches, and guardrails in the Cedar River Watershed. Projects within this program improve aging bridge assets on priority roads in the watershed transportation system to provide City employees, City contractors, and visitors with safe and adequate access to City water supply and hydroelectric assets while minimizing and reducing environmental impacts over time. Work in this program also maintains compliance with state laws, safety and environmental regulations, and tribal access agreements including Washington Department of Natural Resources (WDNR) forest practice regulations, Washington Department of Health (DOH) Watershed Protection Plan regulations, and Cedar River Habitat Conservation Plan (HCP) restoration commitments.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,618 | 1 | 1 | 1 | 1 | 1 | 250 | 250 | 2,123 |
| Total: | 1,618 | 1 | 1 | 1 | 1 | 1 | 250 | 250 | 2,123 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 1,618 | 1 | 1 | 1 | 1 | 1 | 250 | 250 | 2,123 |
| Total*: | 1,618 | 1 | 1 | 1 | 1 | 1 | 250 | 250 | 2,123 |
| O & M Costs (Savings) | | | 21 | 21 | 21 | 21 | 21 | 21 | 127 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 0 | 1 | 1 | 1 | 1 | 250 | 250 | 504 |
| Total: | | 0 | 1 | 1 | 1 | 1 | 250 | 250 | 504 |

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Cedar Sockeye Hatchery

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Habitat Conservation Program | BCL/Program Code: | C160B |
| Project Type: | New Facility | Start Date: | Q1/2000 |
| Project ID: | C1605 | End Date: | Q2/2016 |
| 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 provides a sockeye salmon hatchery to replace the interim hatchery on the Cedar River at Landsburg Dam, and includes a broodstock collection facility in Renton near the I-405 overpass, and a state-of-the-art hatchery facility located near the Landsburg Dam. These facilities are a requirement of the Cedar River Habitat Conservation Plan (HCP).

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 21,380 | 46 | 205 | 100 | 40 | 0 | 0 | 0 | 21,771 |
| Total: | 21,380 | 46 | 205 | 100 | 40 | 0 | 0 | 0 | 21,771 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 21,380 | 46 | 205 | 100 | 40 | 0 | 0 | 0 | 21,771 |
| Total*: | 21,380 | 46 | 205 | 100 | 40 | 0 | 0 | 0 | 21,771 |
| O & M Costs (Savings) | | | 218 | 218 | 218 | 218 | 218 | 218 | 1,306 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 295 | 205 | 100 | 40 | 0 | 0 | 0 | 640 |
| Total: | | 295 | 205 | 100 | 40 | 0 | 0 | 0 | 640 |

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

Chamber Upgrades - Distribution

| | | | |
|-------------------------------|--------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2003 |
| Project ID: | C1137 | End Date: | ONGOING |
| Location: | Citywide | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Not in a Neighborhood District | Urban Village: | In more than one Urban Village |

This ongoing project improves access to the chambers throughout the water distribution system. The replacement and/or enlargement of the entrance to distribution chambers improves the health and safety of workers who need to access chambers and meets Occupational, Safety, and Health Administration (OSHA) and Washington Safety and Health Administration (WSHA) safety and health requirements.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 22 | 38 | 27 | 27 | 28 | 28 | 29 | 29 | 227 |
| Total: | 22 | 38 | 27 | 27 | 28 | 28 | 29 | 29 | 227 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 22 | 38 | 27 | 27 | 28 | 28 | 29 | 29 | 227 |
| Total*: | 22 | 38 | 27 | 27 | 28 | 28 | 29 | 29 | 227 |
| O & M Costs (Savings) | | | 2 | 2 | 2 | 2 | 2 | 2 | 14 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 50 | 27 | 27 | 28 | 28 | 29 | 29 | 217 |
| Total: | | 50 | 27 | 27 | 28 | 28 | 29 | 29 | 217 |

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

Dam Safety Program

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Resources | BCL/Program Code: | C150B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2008 |
| Project ID: | C1506 | 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 ongoing program maintains the safety of SPU's water supply dams in the Cedar River and South Fork Tolt River Municipal Watersheds and the in-town reservoir dams. Typical improvements may include, but are not limited to, upgrades to the dams' failure warning systems, spillways, outlet works, piping, and other civil, mechanical, and structural systems. This program ensures the continuing safe functioning, operation and monitoring of SPU's water supply dams and associated facilities per Federal Energy Regulatory Commission (FERC), state and local regulations, and SPU requirements to prevent loss of life and/or property damage and loss of SPU's ability to deliver reliable drinking water supply to its customers.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|-------|-------|-------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 6,714 | 315 | 150 | 2,025 | 1,432 | 1,040 | 800 | 800 | 13,276 |
| Total: | 6,714 | 315 | 150 | 2,025 | 1,432 | 1,040 | 800 | 800 | 13,276 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 6,714 | 315 | 150 | 2,025 | 1,432 | 1,040 | 800 | 800 | 13,276 |
| Total*: | 6,714 | 315 | 150 | 2,025 | 1,432 | 1,040 | 800 | 800 | 13,276 |
| O & M Costs (Savings) | | | 133 | 133 | 133 | 133 | 133 | 133 | 797 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 315 | 150 | 2,025 | 1,432 | 1,040 | 800 | 800 | 6,562 |
| Total: | | 315 | 150 | 2,025 | 1,432 | 1,040 | 800 | 800 | 6,562 |

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

Distribution System Improvements

| | | | |
|-------------------------------|----------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | Improved Facility | Start Date: | Q1/2003 |
| 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 ongoing program improves service reliability, pressure, capacity, and fire flow in the City's water distribution system. Typical improvements may include, but are not limited to, booster pump station installation, creation of new service zones, and tank elevation or replacement, as well as additional watermain pipelines and pressure reducing valves. These improvements to service levels meet Washington Department of Health (DOH) regulations and SPU's Distribution System Pressure Policy to provide greater than 20 psi service pressure. These improvements provide higher flow of water for fire protection which improves public safety and results in smaller and shorter fires.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 2,786 | 1,556 | 3,530 | 3,800 | 4,800 | 5,490 | 5,500 | 5,800 | 33,262 |
| Total: | 2,786 | 1,556 | 3,530 | 3,800 | 4,800 | 5,490 | 5,500 | 5,800 | 33,262 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 2,786 | 1,556 | 3,530 | 3,800 | 4,800 | 5,490 | 5,500 | 5,800 | 33,262 |
| Total*: | 2,786 | 1,556 | 3,530 | 3,800 | 4,800 | 5,490 | 5,500 | 5,800 | 33,262 |
| O & M Costs (Savings) | | | 333 | 333 | 333 | 333 | 333 | 333 | 1,996 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 3,133 | 3,530 | 3,800 | 4,800 | 5,490 | 5,500 | 5,800 | 32,053 |
| Total: | | 3,133 | 3,530 | 3,800 | 4,800 | 5,490 | 5,500 | 5,800 | 32,053 |

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Distribution System In-Line Gate Valves

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/1999 |
| Project ID: | C1136 | 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 ongoing project replaces line valves in the water distribution system throughout the City of Seattle that fail or are obsolete due to age or lack of replacement parts. The replacement of these gate valves extends the useful life of the watermain and restores the performance of the water distribution system. This ongoing project also adds valves within the system to enhance system performance, enhance operational control, and reduce the number of customers whose service is interrupted during a watermain shut down.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 564 | 300 | 318 | 325 | 331 | 338 | 345 | 351 | 2,873 |
| Total: | 564 | 300 | 318 | 325 | 331 | 338 | 345 | 351 | 2,873 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 564 | 300 | 318 | 325 | 331 | 338 | 345 | 351 | 2,873 |
| Total*: | 564 | 300 | 318 | 325 | 331 | 338 | 345 | 351 | 2,873 |
| O & M Costs (Savings) | | | 29 | 29 | 29 | 29 | 29 | 29 | 172 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 300 | 318 | 325 | 331 | 338 | 345 | 351 | 2,308 |
| Total: | | 300 | 318 | 325 | 331 | 338 | 345 | 351 | 2,308 |

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Downstream Fish Habitat

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Habitat Conservation Program | BCL/Program Code: | C160B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2001 |
| Project ID: | C1607 | End Date: | Q4/2017 |
| 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 ongoing program provides protection and restoration of fish habitat along the lower Cedar River, below the City's municipal watershed boundary at the Landsburg Dam and includes both acquisition of habitat lands and habitat restoration on the mainstem of the Cedar River. Although this is an ongoing program, no work is currently planned for 2018. This program is a requirement of the Cedar River Habitat Conservation Plan (HCP.)

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 3,687 | 435 | 520 | 460 | 595 | 215 | 0 | 0 | 5,912 |
| Total: | 3,687 | 435 | 520 | 460 | 595 | 215 | 0 | 0 | 5,912 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 3,687 | 435 | 520 | 460 | 595 | 215 | 0 | 0 | 5,912 |
| Total*: | 3,687 | 435 | 520 | 460 | 595 | 215 | 0 | 0 | 5,912 |
| O & M Costs (Savings) | | | 59 | 59 | 59 | 59 | 59 | 59 | 355 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 1,248 | 520 | 460 | 595 | 215 | 0 | 0 | 3,038 |
| Total: | | 1,248 | 520 | 460 | 595 | 215 | 0 | 0 | 3,038 |

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Emergency Storms - WF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q3/2007 |
| Project ID: | C4120-WF | 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 ongoing program funds water infrastructure capital improvement projects resulting from previous and possible future storm events. Projects within this program are potentially Federal Emergency Management Agency (FEMA) reimbursable and need to be separated for tracking and reimbursement purposes. Typical improvements include, but are not limited to, repairing and improving roads, bridges, and other stream crossing structures in the City's Municipal Watersheds, as well as replacing damaged equipment, such as pumps and security gates, and stabilizing debris slide areas and stream banks.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 95 | 50 | 105 | 100 | 100 | 100 | 100 | 100 | 750 |
| Total: | 95 | 50 | 105 | 100 | 100 | 100 | 100 | 100 | 750 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 95 | 50 | 105 | 100 | 100 | 100 | 100 | 100 | 750 |
| Total*: | 95 | 50 | 105 | 100 | 100 | 100 | 100 | 100 | 750 |
| O & M Costs (Savings) | | | 8 | 8 | 8 | 8 | 8 | 8 | 45 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 0 | 105 | 100 | 100 | 100 | 100 | 100 | 605 |
| Total: | | 0 | 105 | 100 | 100 | 100 | 100 | 100 | 605 |

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First Hill Streetcar - WF

| | | | |
|-------------------------------|----------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2010 |
| Project ID: | C4130-WF | End Date: | Q4/2017 |
| Location: | First Hill | | |
| 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 plans and relocates water facilities that will be impacted by the SDOT-led First Hill Streetcar project, which will connect major employment centers on First Hill to the regional light rail system stations on Capitol Hill and in the International District. It is currently in the planning phase.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 150 | 500 | 1,000 | 50 | 0 | 0 | 1,700 |
| Total: | 0 | 0 | 150 | 500 | 1,000 | 50 | 0 | 0 | 1,700 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 0 | 0 | 150 | 500 | 1,000 | 50 | 0 | 0 | 1,700 |
| Total*: | 0 | 0 | 150 | 500 | 1,000 | 50 | 0 | 0 | 1,700 |
| O & M Costs (Savings) | | | 17 | 17 | 17 | 17 | 17 | 17 | 102 |

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Heavy Equipment Purchases - WF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Investment | Start Date: | ONGOING |
| Project ID: | C4116-WF | 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 ongoing program provides SPU's Water Utility crews with new and replacement heavy equipment that is used throughout Seattle and King County. Typical purchases include backhoes, graders, loaders, dozers, service trucks, and dump trucks. This equipment transports work crews and tools to jobsites and supports the safe and efficient replacement, repair, and maintenance of infrastructure that delivers high quality drinking water to 1.5 million customers in King County. This project is one of four SPU fund-specific heavy equipment CIP projects.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 8,427 | 3,618 | 2,600 | 2,566 | 2,000 | 2,000 | 2,000 | 2,000 | 25,210 |
| Total: | 8,427 | 3,618 | 2,600 | 2,566 | 2,000 | 2,000 | 2,000 | 2,000 | 25,210 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 8,427 | 3,618 | 2,600 | 2,566 | 2,000 | 2,000 | 2,000 | 2,000 | 25,210 |
| Total*: | 8,427 | 3,618 | 2,600 | 2,566 | 2,000 | 2,000 | 2,000 | 2,000 | 25,210 |
| O & M Costs (Savings) | | | 252 | 252 | 252 | 252 | 252 | 252 | 1,513 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 2,929 | 2,600 | 2,566 | 2,000 | 2,000 | 2,000 | 2,000 | 16,095 |
| Total: | | 2,929 | 2,600 | 2,566 | 2,000 | 2,000 | 2,000 | 2,000 | 16,095 |

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Instream Flow Management Studies

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Habitat Conservation Program | BCL/Program Code: | C160B |
| Project Type: | Improved Facility | Start Date: | Q4/2003 |
| Project ID: | C1608 | 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 provides research and monitoring to examine the effects of instream flows on salmon species in the Cedar River. This program monitors flow compliance, verifies accretion flows downstream of Landsburg, improves flow-switching criteria, and develops a better understanding of relationships between stream flow and aquatic habitat. This program is a requirement of the Cedar River Habitat Conservation Plan (HCP.)

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 4,782 | 229 | 204 | 208 | 212 | 216 | 221 | 225 | 6,298 |
| Total: | 4,782 | 229 | 204 | 208 | 212 | 216 | 221 | 225 | 6,298 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 4,782 | 229 | 204 | 208 | 212 | 216 | 221 | 225 | 6,298 |
| Total*: | 4,782 | 229 | 204 | 208 | 212 | 216 | 221 | 225 | 6,298 |
| O & M Costs (Savings) | | | 63 | 63 | 63 | 63 | 63 | 63 | 378 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 1,487 |
| Total: | | 200 | 204 | 208 | 212 | 216 | 221 | 225 | 1,487 |

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Integrated Control Monitoring Program - WF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Investment | Start Date: | Q1/2002 |
| Project ID: | C4108-WF | 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 ongoing program funds improvements to the centralized monitoring and control of the drinking water portion of the overall Supervisory Control and Data Acquisition (SCADA) system infrastructure throughout King County. Infrastructure affected may include, but is not limited to, flow and pressure sensors, remote control pumps, and valves. This program enhances the delivery and quality of drinking water and the delivery of water to fire hydrants, also known as "fire flow."

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 7,385 | 446 | 405 | 480 | 480 | 480 | 480 | 480 | 10,636 |
| Total: | 7,385 | 446 | 405 | 480 | 480 | 480 | 480 | 480 | 10,636 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 7,385 | 446 | 405 | 480 | 480 | 480 | 480 | 480 | 10,636 |
| Total*: | 7,385 | 446 | 405 | 480 | 480 | 480 | 480 | 480 | 10,636 |
| O & M Costs (Savings) | | | 106 | 106 | 106 | 106 | 106 | 106 | 638 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 660 | 405 | 480 | 480 | 480 | 480 | 480 | 3,465 |
| Total: | | 660 | 405 | 480 | 480 | 480 | 480 | 480 | 3,465 |

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Landsburg Chlorination Upgrades

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Quality & Treatment | BCL/Program Code: | C140B |
| Project Type: | Improved Facility | Start Date: | Q1/2011 |
| Project ID: | C1417 | End Date: | Q4/2016 |
| 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 constructs new sodium hypochlorite (liquid) chlorination facilities at the Landsburg Cedar River Diversion Facilities. The project will enhance safety and site security through replacement of the aging gas chlorine facilities at the site.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 172 | 524 | 1,016 | 865 | 29 | 0 | 0 | 0 | 2,606 |
| Total: | 172 | 524 | 1,016 | 865 | 29 | 0 | 0 | 0 | 2,606 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 172 | 524 | 1,016 | 865 | 29 | 0 | 0 | 0 | 2,606 |
| Total*: | 172 | 524 | 1,016 | 865 | 29 | 0 | 0 | 0 | 2,606 |
| O & M Costs (Savings) | | | 26 | 26 | 26 | 26 | 26 | 26 | 156 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 266 | 1,016 | 865 | 29 | 0 | 0 | 0 | 2,177 |
| Total: | | 266 | 1,016 | 865 | 29 | 0 | 0 | 0 | 2,177 |

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Mercer Corridor Project East Phase - WF

| | | | |
|-------------------------------|----------------------|----------------------------------|------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2007 |
| Project ID: | C4114-WF | End Date: | Q4/2014 |
| Location: | South Lake Union | | |
| Neighborhood Plan: | South Lake Union | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Lake Union | Urban Village: | South Lake Union |

This program funds the repair, relocation, protection, and upgrade of water infrastructure related to the redevelopment of the South Lake Union neighborhood. This effort identifies SPU water system direct impacts, opportunities for system improvements, and cost responsibility. This program also funds planning-level coordination with other City departments on projects within the South Lake Union area.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 3,428 | 520 | 30 | 0 | 0 | 0 | 0 | 0 | 3,978 |
| Total: | 3,428 | 520 | 30 | 0 | 0 | 0 | 0 | 0 | 3,978 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 3,428 | 520 | 30 | 0 | 0 | 0 | 0 | 0 | 3,978 |
| Total*: | 3,428 | 520 | 30 | 0 | 0 | 0 | 0 | 0 | 3,978 |
| O & M Costs (Savings) | | | 40 | 40 | 40 | 40 | 40 | 40 | 239 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 300 | 30 | 0 | 0 | 0 | 0 | 0 | 330 |
| Total: | | 300 | 30 | 0 | 0 | 0 | 0 | 0 | 330 |

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Mercer Corridor Project West Phase - WF

| | | | |
|-------------------------------|---|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2010 |
| Project ID: | C4133-WF | End Date: | Q4/2015 |
| Location: | Mercer ST /Elliot AVE W/Dexter AVE N | | |
| Neighborhood Plan: | In more than one Plan | Neighborhood Plan Matrix: | T01, T02, T03, T11, T15 |
| Neighborhood District: | In more than one District | Urban Village: | In more than one Urban Village |

This project provides water utility improvements and relocations related to the Mercer Corridor Project, West phase. Work in this project will convert Mercer Street to a two-way street between Dexter Ave and Elliott Ave West. The Mercer underpass at Aurora Ave will be widened to allow for six travel lanes and a bicycle/pedestrian shared use path between Dexter Ave and 5th Ave North. Roy Street, between Aurora and Queen Anne Ave., will also be converted to a two-way street with on-road bicycle lanes.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 162 | 939 | 455 | 320 | 0 | 0 | 0 | 0 | 1,875 |
| Total: | 162 | 939 | 455 | 320 | 0 | 0 | 0 | 0 | 1,875 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 162 | 939 | 455 | 320 | 0 | 0 | 0 | 0 | 1,875 |
| Total*: | 162 | 939 | 455 | 320 | 0 | 0 | 0 | 0 | 1,875 |
| O & M Costs (Savings) | | | 19 | 19 | 19 | 19 | 19 | 19 | 112 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 675 | 455 | 320 | 0 | 0 | 0 | 0 | 1,449 |
| Total: | | 675 | 455 | 320 | 0 | 0 | 0 | 0 | 1,449 |

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Meter Replacement - WF

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2004 |
| Project ID: | C4101-WF | 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 ongoing program funds replacement of existing water meters when they fail or become obsolete. Meters measuring up to two inches are replaced when they stop running. Meters measuring three inches or more are repaired when possible, but are replaced when repair costs exceed replacement costs. Accurate water meters ensure that customers are billed fairly for the water they use. Since water meters also are used to bill customers for their wastewater discharges, 48 percent of the funding is allocated to the Drainage and Wastewater line of business.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 4,666 | 707 | 634 | 645 | 655 | 666 | 683 | 689 | 9,345 |
| Total: | 4,666 | 707 | 634 | 645 | 655 | 666 | 683 | 689 | 9,345 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 4,666 | 707 | 634 | 645 | 655 | 666 | 683 | 689 | 9,345 |
| Total*: | 4,666 | 707 | 634 | 645 | 655 | 666 | 683 | 689 | 9,345 |
| O & M Costs (Savings) | | | 93 | 93 | 93 | 93 | 93 | 93 | 561 |

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Morse Lake Pump Plant

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Resources | BCL/Program Code: | C150B |
| Project Type: | Improved Facility | Start Date: | Q1/2003 |
| Project ID: | C1508 | End Date: | Q4/2017 |
| 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 includes funding to replace the existing barge-mounted pump plants at Chester Morse Lake. The pump plants at Chester Morse Lake are nearing the end of their useful lives. These pumps are designed for drought situations to access so-called "dead storage" at the lake, which is at or below the level that drains by gravity. The improvements enhance the ability to provide reliable water supply and in-stream flows in the Cedar River during drought conditions and to address requirements of the Habitat Conservation Plan. Most pre-2012 costs are deferred costs that will be amortized over ten years.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|--------|-------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 12,639 | 3,800 | 1,372 | 7,119 | 18,788 | 6,846 | 0 | 0 | 50,563 |
| Total: | 12,639 | 3,800 | 1,372 | 7,119 | 18,788 | 6,846 | 0 | 0 | 50,563 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 12,639 | 3,800 | 1,372 | 7,119 | 18,788 | 6,846 | 0 | 0 | 50,563 |
| Total*: | 12,639 | 3,800 | 1,372 | 7,119 | 18,788 | 6,846 | 0 | 0 | 50,563 |
| O & M Costs (Savings) | | | 506 | 506 | 506 | 506 | 506 | 506 | 3,034 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 3,800 | 1,372 | 7,119 | 18,788 | 6,846 | 0 | 0 | 37,924 |
| Total: | | 3,800 | 1,372 | 7,119 | 18,788 | 6,846 | 0 | 0 | 37,924 |

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Multiple Utility Relocation

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2007 |
| Project ID: | C1133 | 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 ongoing program provides funding for necessary modifications to the location and depth of water pipes when they come into conflict with street improvements or other utility projects. The benefit is continued water service to customers while accommodating transportation and other needs in the street right-of-way.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 5,114 | 2,136 | 1,839 | 541 | 552 | 563 | 574 | 586 | 11,904 |
| Total: | 5,114 | 2,136 | 1,839 | 541 | 552 | 563 | 574 | 586 | 11,904 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 5,114 | 2,136 | 1,839 | 541 | 552 | 563 | 574 | 586 | 11,904 |
| Total*: | 5,114 | 2,136 | 1,839 | 541 | 552 | 563 | 574 | 586 | 11,904 |
| O & M Costs (Savings) | | | 119 | 119 | 119 | 119 | 119 | 119 | 714 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 1,430 | 1,839 | 541 | 552 | 563 | 574 | 586 | 6,085 |
| Total: | | 1,430 | 1,839 | 541 | 552 | 563 | 574 | 586 | 6,085 |

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Operational Facility - Construction - WF

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2004 |
| Project ID: | C4106-WF | 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 ongoing facilities program renovates, rehabilitates, and replaces existing buildings and constructs new facilities at various locations within the city limits to address deficiencies, failures, and functional changes in the SPU Lines of Business. Typical improvements include, but are not limited to, roof replacements, exterior wall or cladding replacements, and improvements to administrative office space, crew and shop space, lighting, heating and ventilation systems, and facilities structures. These improvements increase the useful life of the facilities, preserve the value of the assets, and provide a safe working environment.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 14,724 | 1,416 | 1,492 | 1,048 | 690 | 2,829 | 3,450 | 5,155 | 30,804 |
| Total: | 14,724 | 1,416 | 1,492 | 1,048 | 690 | 2,829 | 3,450 | 5,155 | 30,804 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 14,724 | 1,416 | 1,492 | 1,048 | 690 | 2,829 | 3,450 | 5,155 | 30,804 |
| Total*: | 14,724 | 1,416 | 1,492 | 1,048 | 690 | 2,829 | 3,450 | 5,155 | 30,804 |
| O & M Costs (Savings) | | | 308 | 308 | 308 | 308 | 308 | 308 | 1,848 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 1,571 | 1,492 | 1,048 | 690 | 2,829 | 3,450 | 5,155 | 16,235 |
| Total: | | 1,571 | 1,492 | 1,048 | 690 | 2,829 | 3,450 | 5,155 | 16,235 |

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

Operational Facility - Other - WF

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q4/2006 |
| Project ID: | C4115-WF | End Date: | ONGOING |
| Location: | Various | | |
| 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 ongoing facilities program provides funding to purchase, replace, or install new building materials or building equipment within the city limits to address deficiencies, failures, and functional changes in the SPU Lines of Business. Typical improvements include, but are not limited to, water systems, prefabricated buildings, storage buildings, and fencing. Specific projects have been identified through 2016. As future projects are identified, necessary funding will be requested.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 973 | 276 | 256 | 300 | 300 | 0 | 0 | 0 | 2,105 |
| Total: | 973 | 276 | 256 | 300 | 300 | 0 | 0 | 0 | 2,105 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 973 | 276 | 256 | 300 | 300 | 0 | 0 | 0 | 2,105 |
| Total*: | 973 | 276 | 256 | 300 | 300 | 0 | 0 | 0 | 2,105 |
| O & M Costs (Savings) | | | 21 | 21 | 21 | 21 | 21 | 21 | 126 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 276 | 256 | 300 | 300 | 0 | 0 | 0 | 1,132 |
| Total: | | 276 | 256 | 300 | 300 | 0 | 0 | 0 | 1,132 |

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

Operations Control Center - WF

| | | | |
|-------------------------------|----------------------------|----------------------------------|----------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2003 |
| Project ID: | C4105-WF | End Date: | ONGOING |
| Location: | 2700 Airport Way S | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This ongoing facilities program renovates, rehabilitates, and replaces existing buildings and constructs new facilities at the Operations Control Center located at 2700 Airport Way South to improve the efficiency and effectiveness of the field crews delivering utility services to customers. Typical improvements include, but are not limited to, roof and other exterior replacements, improvements to public spaces, office and crew spaces and lighting, and heating and ventilation systems. These improvements increase the useful life of the facility, preserve the value of the asset, and provide a safe work and public space environment.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 4,555 | 170 | 1,630 | 76 | 122 | 431 | 623 | 783 | 8,390 |
| Total: | 4,555 | 170 | 1,630 | 76 | 122 | 431 | 623 | 783 | 8,390 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 4,555 | 170 | 1,630 | 76 | 122 | 431 | 623 | 783 | 8,390 |
| Total*: | 4,555 | 170 | 1,630 | 76 | 122 | 431 | 623 | 783 | 8,390 |
| O & M Costs (Savings) | | | 84 | 84 | 84 | 84 | 84 | 84 | 503 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 134 | 1,630 | 76 | 122 | 431 | 623 | 783 | 3,799 |
| Total: | | 134 | 1,630 | 76 | 122 | 431 | 623 | 783 | 3,799 |

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Other Major Transportation Projects - WF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q2/2008 |
| Project ID: | C4123-WF | 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 ongoing program funds Water projects that mitigate undesirable impacts and take advantage of opportunities generated by the capital transportation projects of the Washington State Department of Transportation (WSDOT) and the Seattle Department of Transportation (SDOT) throughout the City. Work may include, but is not limited to, physically protecting the infrastructure during the transportation construction process, repairing and replacing damaged infrastructure, and improving existing infrastructure to meet higher standards. Project sites may include, but are not limited to, State Route 520, Interstate 5, and Interstate 90.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 36 | 290 | 265 | 54 | 105 | 50 | 300 | 500 | 1,601 |
| Total: | 36 | 290 | 265 | 54 | 105 | 50 | 300 | 500 | 1,601 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 36 | 290 | 265 | 54 | 105 | 50 | 300 | 500 | 1,601 |
| Total*: | 36 | 290 | 265 | 54 | 105 | 50 | 300 | 500 | 1,601 |
| O & M Costs (Savings) | | | 16 | 16 | 16 | 16 | 16 | 16 | 96 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 80 | 265 | 54 | 105 | 50 | 300 | 500 | 1,355 |
| Total: | | 80 | 265 | 54 | 105 | 50 | 300 | 500 | 1,355 |

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

Pump Station Improvements

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q3/2008 |
| Project ID: | C1135 | 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 ongoing program makes improvements to water pump stations by replacing electric motors, starters, control systems, and other elements. The benefit is improved reliability of water pump stations which in turn reduces the likelihood of large scale water outages.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 233 | 200 | 250 | 541 | 552 | 563 | 574 | 586 | 3,499 |
| Total: | 233 | 200 | 250 | 541 | 552 | 563 | 574 | 586 | 3,499 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 233 | 200 | 250 | 541 | 552 | 563 | 574 | 586 | 3,499 |
| Total*: | 233 | 200 | 250 | 541 | 552 | 563 | 574 | 586 | 3,499 |
| O & M Costs (Savings) | | | 35 | 35 | 35 | 35 | 35 | 35 | 210 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 100 | 250 | 541 | 552 | 563 | 574 | 586 | 3,167 |
| Total: | | 100 | 250 | 541 | 552 | 563 | 574 | 586 | 3,167 |

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Purveyor Meters Replace - SPU

| | | | |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Transmission | BCL/Program Code: | C120B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2000 |
| Project ID: | C1206 | 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: | Not in an Urban Village |

This ongoing program installs new meters for Seattle's wholesale customers at the customer's request. In addition, existing meters are upgraded to current safety standards. The benefits are accurate metering and billing for Seattle's wholesale customers while meeting their water needs.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 690 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 1,433 |
| Total: | 690 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 1,433 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 690 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 1,433 |
| Total*: | 690 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 1,433 |
| O & M Costs (Savings) | | | 14 | 14 | 14 | 14 | 14 | 14 | 86 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 200 | 102 | 104 | 106 | 108 | 111 | 113 | 844 |
| Total: | | 200 | 102 | 104 | 106 | 108 | 111 | 113 | 844 |

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Regional Facility - WF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2007 |
| Project ID: | C4107-WF | 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 ongoing facilities program renovates, rehabilitates, replaces existing buildings, and constructs new facilities at various locations outside the city limits to address deficiencies, failures, and functional changes in the drinking water system.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 3,713 | 3,321 | 6,515 | 5,781 | 4,418 | 2,200 | 2,825 | 3,425 | 32,197 |
| Total: | 3,713 | 3,321 | 6,515 | 5,781 | 4,418 | 2,200 | 2,825 | 3,425 | 32,197 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 3,713 | 3,321 | 6,515 | 5,781 | 4,418 | 2,200 | 2,825 | 3,425 | 32,197 |
| Total*: | 3,713 | 3,321 | 6,515 | 5,781 | 4,418 | 2,200 | 2,825 | 3,425 | 32,197 |
| O & M Costs (Savings) | | | 322 | 322 | 322 | 322 | 322 | 322 | 1,932 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 2,291 | 6,515 | 5,781 | 4,418 | 2,200 | 2,825 | 3,425 | 27,455 |
| Total: | | 2,291 | 6,515 | 5,781 | 4,418 | 2,200 | 2,825 | 3,425 | 27,455 |

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Regional Water Conservation Program

| | | | |
|-------------------------------|----------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Water Resources | BCL/Program Code: | C150B |
| Project Type: | Improved Facility | Start Date: | Q1/1999 |
| Project ID: | C1504 | End Date: | ONGOING |
| Location: | Citywide Plus Wholesale | | |
| 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 ongoing program provides customer incentives for residential, commercial, institutional, and industrial water efficiency capital improvements. Typical examples include, but are not limited to, water efficient toilets and urinals, clothes washers, landscape irrigation devices, upgrades in industrial process water, and replacing water-cooled equipment with air-cooled versions. The program benefits both existing and future ratepayers. Water conservation provides low-cost options for meeting potential challenges from climate change, managing Seattle's drinking water resources, and customer efficiency and potential cost savings on water bills.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 17,526 | 1,769 | 1,803 | 1,839 | 1,876 | 1,914 | 1,952 | 1,991 | 30,671 |
| Total: | 17,526 | 1,769 | 1,803 | 1,839 | 1,876 | 1,914 | 1,952 | 1,991 | 30,671 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 17,526 | 1,769 | 1,803 | 1,839 | 1,876 | 1,914 | 1,952 | 1,991 | 30,671 |
| Total*: | 17,526 | 1,769 | 1,803 | 1,839 | 1,876 | 1,914 | 1,952 | 1,991 | 30,671 |
| O & M Costs (Savings) | | | 307 | 307 | 307 | 307 | 307 | 307 | 1,840 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 1,768 | 1,803 | 1,839 | 1,876 | 1,914 | 1,952 | 1,991 | 13,144 |
| Total: | | 1,768 | 1,803 | 1,839 | 1,876 | 1,914 | 1,952 | 1,991 | 13,144 |

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

Replace Air Valve Chambers

| | | | |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Transmission | BCL/Program Code: | C120B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q3/1999 |
| Project ID: | C1209 | 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 ongoing project improves access to the chambers located throughout the transmission water system. The replacement and enlargement of the entrance to transmission chambers increase the safety for workers that need to enter the chambers twice per year.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|------------------------|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,647 | 112 | 117 | 122 | 125 | 125 | 127 | 130 | 2,505 |
| Total: | 1,647 | 112 | 117 | 122 | 125 | 125 | 127 | 130 | 2,505 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 1,647 | 112 | 117 | 122 | 125 | 125 | 127 | 130 | 2,505 |
| Total*: | 1,647 | 112 | 117 | 122 | 125 | 125 | 127 | 130 | 2,505 |
| O & M Costs (Savings) | | | 25 | 25 | 25 | 25 | 25 | 25 | 150 |

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Reservoir Covering-Bitter Lake

| | | | |
|-------------------------------|-----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Quality & Treatment | BCL/Program Code: | C140B |
| Project Type: | Improved Facility | Start Date: | Q1/2019 |
| Project ID: | C1419 | End Date: | Q4/2020 |
| Location: | N 143rd St and Linden Ave N | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Northwest | Urban Village: | Not in an Urban Village |

This project addresses the need for a new cover on Bitter Lake Reservoir once the existing floating cover has reached the end of its useful life. Replacing the existing structure with a new hard covered structure within the same footprint will be one of the options considered. A new cover will be designed and constructed to improve and maintain the water quality protection and security enhancement functions of the existing cover.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 590 | 590 |
| Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 590 | 590 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 590 | 590 |
| Total*: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 590 | 590 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 6 | 6 |

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

Reservoir Covering - Beacon

| | | | |
|-------------------------------|---------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Quality & Treatment | BCL/Program Code: | C140B |
| Project Type: | Improved Facility | Start Date: | Q1/2001 |
| Project ID: | C1408 | End Date: | Q4/2016 |
| Location: | S Spokane St/Beacon Ave S | | |
| Neighborhood Plan: | North Beacon Hill | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Not in an Urban Village |

This project will construct a 50 million gallon reinforced concrete buried reservoir in compliance with new state and federal regulations and improves water quality as well as the security of the drinking water system. It is part of the reservoir burying program which was adopted by Ordinance 120899 in August 2002.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|-------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 41,916 | 650 | 925 | 4,243 | 50 | 0 | 0 | 0 | 47,784 |
| Total: | 41,916 | 650 | 925 | 4,243 | 50 | 0 | 0 | 0 | 47,784 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 41,916 | 650 | 925 | 4,243 | 50 | 0 | 0 | 0 | 47,784 |
| Total*: | 41,916 | 650 | 925 | 4,243 | 50 | 0 | 0 | 0 | 47,784 |
| O & M Costs (Savings) | | | 478 | 478 | 478 | 478 | 478 | 478 | 2,867 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 650 | 925 | 4,243 | 50 | 0 | 0 | 0 | 5,868 |
| Total: | | 650 | 925 | 4,243 | 50 | 0 | 0 | 0 | 5,868 |

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

Reservoir Covering - Maple Leaf

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Quality & Treatment | BCL/Program Code: | C140B |
| Project Type: | Improved Facility | Start Date: | Q4/2001 |
| Project ID: | C1411 | End Date: | Q2/2016 |
| Location: | NE 86th St/Roosevelt Wy NE | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | North | Urban Village: | Not in an Urban Village |

This project will construct a 60 million gallon, dual-cell, reinforced concrete buried reservoir in compliance with new state and federal regulations. This effort improves water quality and the security of the drinking water system. It is part of the Reservoir burying program which was adopted by Ordinance 120899 in August 2002.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 38,059 | 1,250 | 4,760 | 3,328 | 50 | 0 | 0 | 0 | 47,447 |
| Total: | 38,059 | 1,250 | 4,760 | 3,328 | 50 | 0 | 0 | 0 | 47,447 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 38,059 | 1,250 | 4,760 | 3,328 | 50 | 0 | 0 | 0 | 47,447 |
| Total*: | 38,059 | 1,250 | 4,760 | 3,328 | 50 | 0 | 0 | 0 | 47,447 |
| O & M Costs (Savings) | | | 474 | 474 | 474 | 474 | 474 | 474 | 2,847 |

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

Reservoir Covering - Myrtle

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Quality & Treatment | BCL/Program Code: | C140B |
| Project Type: | Improved Facility | Start Date: | Q4/2001 |
| Project ID: | C1410 | End Date: | Q4/2016 |
| Location: | SW Myrtle St/35th Ave SW | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Southwest | Urban Village: | Not in an Urban Village |

This project will construct a 5 million gallon reinforced concrete buried reservoir in compliance with new state and federal regulations. This effort improves water quality and the security of the drinking water system. It is part of the Reservoir burying program which was adopted by Ordinance 120899 in August 2002.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|------------------------|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 12,273 | 50 | 315 | 1,235 | 20 | 0 | 0 | 0 | 13,893 |
| Total: | 12,273 | 50 | 315 | 1,235 | 20 | 0 | 0 | 0 | 13,893 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 12,273 | 50 | 315 | 1,235 | 20 | 0 | 0 | 0 | 13,893 |
| Total*: | 12,273 | 50 | 315 | 1,235 | 20 | 0 | 0 | 0 | 13,893 |
| O & M Costs (Savings) | | | 139 | 139 | 139 | 139 | 139 | 139 | 834 |

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

Reservoir Covering - Volunteer

| | | | |
|-------------------------------|----------------------------|----------------------------------|--------------|
| BCL/Program Name: | Water Quality & Treatment | BCL/Program Code: | C140B |
| Project Type: | Improved Facility | Start Date: | Q4/2001 |
| Project ID: | C1407 | End Date: | Q4/2013 |
| Location: | E Prospect St./12th Ave. E | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | East District | Urban Village: | Capitol Hill |

This project will either reconstruct the 20 million gallon concrete-lined reservoir in compliance with new state and federal regulations, or remove it from service and construct a bypass pipe system around the Reservoir. SPU will be taking the reservoir offline in 2013 to evaluate the impact to the water system. Pending the outcome of the evaluation, the reservoir will either be decommissioned or buried and SPU will seek appropriations for those costs when more information is available. Permanent action is not expected to occur until after Maple Leaf Reservoir is completed and the City has had an opportunity to take the Volunteer Reservoir off-line for a period of time to observe the water system's performance without it. Thus no spending is planned between 2014 and 2016. LTD expenditures in this project are related to preliminary engineering. This effort improves water quality and the security of the drinking water system and is part of the Reservoir burying program which was adopted by Ordinance 120899 in August 2002.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 97 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 117 |
| Total: | 97 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 117 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 97 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 117 |
| Total*: | 97 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 117 |
| O & M Costs (Savings) | | | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Total: | | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |

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

Reservoir Covering - West Seattle

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Quality & Treatment | BCL/Program Code: | C140B |
| Project Type: | Improved Facility | Start Date: | Q4/2001 |
| Project ID: | C1409 | End Date: | Q1/2015 |
| Location: | SW Henderson St/8th Ave SW | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Delridge | Urban Village: | Not in an Urban Village |

This project will construct a 30 million gallon reinforced concrete buried reservoir in compliance with new state and federal regulations. This effort improves water quality and the security of the drinking water system. It is part of the Reservoir burying program which was adopted by Ordinance 120899 in August 2002.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|------------------------|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 33,644 | 750 | 4,020 | 50 | 0 | 0 | 0 | 0 | 38,464 |
| Total: | 33,644 | 750 | 4,020 | 50 | 0 | 0 | 0 | 0 | 38,464 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 33,644 | 750 | 4,020 | 50 | 0 | 0 | 0 | 0 | 38,464 |
| Total*: | 33,644 | 750 | 4,020 | 50 | 0 | 0 | 0 | 0 | 38,464 |
| O & M Costs (Savings) | | | 385 | 385 | 385 | 385 | 385 | 385 | 2,308 |

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

Reservoir Covering-Lake Forest Park

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Quality & Treatment | BCL/Program Code: | C140B |
| Project Type: | Improved Facility | Start Date: | Q1/2019 |
| Project ID: | C1418 | End Date: | Q4/2020 |
| Location: | | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Outside Seattle City | Urban Village: | Not in an Urban Village |

This project addresses the need for a new cover on Lake Forest Park Reservoir once it has reached the end of its useful life. The project will evaluate options for a new cover, including replacing the existing floating Hypolan cover with a similar design. A new cover will be designed and constructed to maintain and improve the water quality protection and security enhancement functions of the existing cover.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 590 | 590 |
| Total: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 590 | 590 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 590 | 590 |
| Total*: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 590 | 590 |
| O & M Costs (Savings) | | | 0 | 0 | 0 | 0 | 0 | 6 | 6 |

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Seattle Direct Service Additional Conservation

| | | | |
|-------------------------------|----------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Water Resources | BCL/Program Code: | C150B |
| Project Type: | Improved Facility | Start Date: | Q1/2001 |
| Project ID: | C1505 | End Date: | ONGOING |
| Location: | Citywide & Direct Service | | |
| 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 ongoing program provides water use efficiency resources to the City's low-income customers to implement water conservation measures authorized by Ordinance 120532, adopted in 2001, and supplements funding provided under SPU's Regional Water Conservation Program (C1504). Typical improvements consist of, but are not limited to, installing water-efficient fixtures, such as aerating showerheads and faucets, low water use toilets and efficient clothes washers. The program is cooperatively managed by SPU and the City's Human Services Department and requires an annual report to be provided to Council.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 5,724 | 676 | 690 | 704 | 718 | 732 | 747 | 762 | 10,751 |
| Total: | 5,724 | 676 | 690 | 704 | 718 | 732 | 747 | 762 | 10,751 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 5,724 | 676 | 690 | 704 | 718 | 732 | 747 | 762 | 10,751 |
| Total*: | 5,724 | 676 | 690 | 704 | 718 | 732 | 747 | 762 | 10,751 |
| O & M Costs (Savings) | | | 108 | 108 | 108 | 108 | 108 | 108 | 645 |

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Security Improvements - WF

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2005 |
| Project ID: | C4113-WF | 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 ongoing program funds physical, integrated security system components on water infrastructure throughout the City. Components may include, but are not limited to, fences, gates, access control card readers, intercoms, lighting, door and hatch contacts, CCTV cameras, motion detection devices, and fiber and conduit. This program enhances protection of SPU's critical infrastructure and addresses vulnerabilities identified in U.S. Environmental Protection Agency (EPA) mandated vulnerability assessments.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 6,228 | 2,000 | 1,713 | 2,038 | 1,788 | 1,763 | 1,771 | 1,731 | 19,031 |
| Total: | 6,228 | 2,000 | 1,713 | 2,038 | 1,788 | 1,763 | 1,771 | 1,731 | 19,031 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 6,228 | 2,000 | 1,713 | 2,038 | 1,788 | 1,763 | 1,771 | 1,731 | 19,031 |
| Total*: | 6,228 | 2,000 | 1,713 | 2,038 | 1,788 | 1,763 | 1,771 | 1,731 | 19,031 |
| O & M Costs (Savings) | | | 190 | 190 | 190 | 190 | 190 | 190 | 1,142 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 2,000 | 1,713 | 2,038 | 1,788 | 1,763 | 1,771 | 1,731 | 12,803 |
| Total: | | 2,000 | 1,713 | 2,038 | 1,788 | 1,763 | 1,771 | 1,731 | 12,803 |

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Sound Transit - North Link - WF

| | | | |
|-------------------------------|---------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Facility | Start Date: | Q1/2012 |
| Project ID: | C4135-WF | End Date: | Q4/2020 |
| Location: | Various | | |
| Neighborhood Plan: | In more than one Plan | Neighborhood Plan Matrix: | |
| Neighborhood District: | In more than one District | Urban Village: | In more than one Urban Village |

This program funds relocation, replacement, and protection of water infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the third segment of their electrical light rail transit system that includes 4.3 mile light rail extension, three additional stations, and other supporting facilities from the University of Washington to Northgate.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 58 | 87 | 300 | 125 | 100 | 100 | 75 | 75 | 920 |
| Total: | 58 | 87 | 300 | 125 | 100 | 100 | 75 | 75 | 920 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 58 | 87 | 300 | 125 | 100 | 100 | 75 | 75 | 920 |
| Total*: | 58 | 87 | 300 | 125 | 100 | 100 | 75 | 75 | 920 |
| O & M Costs (Savings) | | | 9 | 9 | 9 | 9 | 9 | 9 | 55 |

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Sound Transit - Water Betterment

| | | | |
|-------------------------------|----------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2014 |
| Project ID: | C4125 | End Date: | Q4/2015 |
| Location: | Central & South areas of Seattle | | |
| Neighborhood Plan: | In more than one Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | In more than one District | Urban Village: | In more than one Urban Village |

This project funds improvements to watermains and appurtenances (hydrants, valves, coatings, cathodic protection, etc.) affected by the development of Sound Transit's Light Rail System. These improvements are "opportunity" projects that become available and are cost effective as Sound Transit constructs Light Rail and rebuilds the street right-of-way. This project covers Sound Transit's alignment within SPU's service area, including the South Link to SeaTac International Airport, the University Link, and the North Link towards Northgate.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1,502 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 1,602 |
| Total: | 1,502 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 1,602 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 1,502 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 1,602 |
| Total*: | 1,502 | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 1,602 |
| O & M Costs (Savings) | | | 16 | 16 | 16 | 16 | 16 | 16 | 96 |

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Sound Transit – University Link - WF

| | | | |
|-------------------------------|---------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Facility | Start Date: | Q1/2007 |
| Project ID: | C4110-WF | End Date: | Q2/2016 |
| Location: | Various | | |
| Neighborhood Plan: | In more than one Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | In more than one District | Urban Village: | In more than one Urban Village |

This program funds relocation, replacement, and protection of water system infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the second segment of their electrical light rail transit system that includes 3.15 miles of tunnel, two additional stations, and other supporting facilities from downtown to the University of Washington.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 329 | 202 | 137 | 41 | 10 | 0 | 0 | 0 | 719 |
| Total: | 329 | 202 | 137 | 41 | 10 | 0 | 0 | 0 | 719 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 329 | 202 | 137 | 41 | 10 | 0 | 0 | 0 | 719 |
| Total*: | 329 | 202 | 137 | 41 | 10 | 0 | 0 | 0 | 719 |
| O & M Costs (Savings) | | | 7 | 7 | 7 | 7 | 7 | 7 | 43 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 202 | 137 | 41 | 10 | 0 | 0 | 0 | 390 |
| Total: | | 202 | 137 | 41 | 10 | 0 | 0 | 0 | 390 |

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Sound Transit-East Link

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Facility | Start Date: | Q2/2013 |
| Project ID: | C4122-WF | End Date: | Q4/2015 |
| 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 program funds relocation, replacement, and protection of water infrastructure affected by the development of Sound Transit's Link Light Rail System. Sound Transit is constructing the next segment of their electrical light rail transit system that includes 14 mile light rail extension, 10 additional stations total (one in Seattle) and other supporting facilities from the International District (ID) across I-90 to Bellevue/Redmond.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 55 |
| Total: | 0 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 55 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 0 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 55 |
| Total*: | 0 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 55 |
| O & M Costs (Savings) | | | 1 | 1 | 1 | 1 | 1 | 1 | 3 |

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Stream & Riparian Restoration

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Habitat Conservation Program | BCL/Program Code: | C160B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q2/2000 |
| Project ID: | C1602 | 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 provides stream and riparian restoration in the Cedar River Watershed, including large woody debris placement, riparian conifer underplanting, and culvert replacement for fish passage and peak storm flows. This program is a requirement under the Cedar River Habitat Conservation Plan (HCP.)

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 7,232 | 383 | 394 | 395 | 397 | 292 | 292 | 292 | 9,678 |
| Total: | 7,232 | 383 | 394 | 395 | 397 | 292 | 292 | 292 | 9,678 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 7,232 | 383 | 394 | 395 | 397 | 292 | 292 | 292 | 9,678 |
| Total*: | 7,232 | 383 | 394 | 395 | 397 | 292 | 292 | 292 | 9,678 |
| O & M Costs (Savings) | | | 97 | 97 | 97 | 97 | 97 | 97 | 581 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 377 | 394 | 395 | 397 | 292 | 292 | 292 | 2,440 |
| Total: | | 377 | 394 | 395 | 397 | 292 | 292 | 292 | 2,440 |

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Tank Improvements

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2008 |
| Project ID: | C1134 | 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 ongoing program implements water quality, seismic, and other improvements to steel water tanks in Seattle. Functional water tanks are essential to public health protection as they assure that the distribution system is under pressure at all times, even when pump stations or control valves malfunction. Depressurization of the water system may result in siphoning back contaminants from faulty private systems and from the ground into the water pipes.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 4,161 | 120 | 0 | 500 | 2,500 | 0 | 0 | 500 | 7,781 |
| Total: | 4,161 | 120 | 0 | 500 | 2,500 | 0 | 0 | 500 | 7,781 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 4,161 | 120 | 0 | 500 | 2,500 | 0 | 0 | 500 | 7,781 |
| Total*: | 4,161 | 120 | 0 | 500 | 2,500 | 0 | 0 | 500 | 7,781 |
| O & M Costs (Savings) | | | 78 | 78 | 78 | 78 | 78 | 78 | 467 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 135 | 0 | 500 | 2,500 | 0 | 0 | 500 | 3,635 |
| Total: | | 135 | 0 | 500 | 2,500 | 0 | 0 | 500 | 3,635 |

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Tolt Bridges

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Watershed Stewardship | BCL/Program Code: | C130B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2004 |
| Project ID: | C1308 | End Date: | ONGOING |
| 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 program replaces aging bridges on forest roads in the Tolt River Watershed, including Chuck Judd Creek Bridge and Siwash Creek Bridge. It improves aging bridge assets in the watershed transportation system to provide City employees, City contractors, and visitors with safe and adequate access to City water supply and hydroelectric assets while minimizing and reducing environmental impacts over time. This program maintains compliance with state laws and safety and environmental regulations, including Washington Department of Natural Resources (WDNR) forest practice regulations and Washington Department of Health (DOH) Watershed Protection Plan regulations.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 1 | 0 | 0 | 450 | 450 | 0 | 0 | 901 |
| Total: | 0 | 1 | 0 | 0 | 450 | 450 | 0 | 0 | 901 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 0 | 1 | 0 | 0 | 450 | 450 | 0 | 0 | 901 |
| Total*: | 0 | 1 | 0 | 0 | 450 | 450 | 0 | 0 | 901 |
| O & M Costs (Savings) | | | 9 | 9 | 9 | 9 | 9 | 9 | 54 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 0 | 0 | 0 | 450 | 450 | 0 | 0 | 900 |
| Total: | | 0 | 0 | 0 | 450 | 450 | 0 | 0 | 900 |

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Tolt Watershed Restoration

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Watershed Stewardship | BCL/Program Code: | C130B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2009 |
| Project ID: | C1310 | End Date: | Q4/2020 |
| 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 program provides aquatic and riparian restoration, and funds improvements and decommissioning of the road system in the Tolt River Municipal Watershed. This program improves Tolt Watershed management practices to be consistent with the land management practices in the Cedar River Watershed, the City's other primary water supply watershed. Projects are based upon recommendations of the 2011 Tolt Watershed Management Plan.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 288 | 28 | 6 | 5 | 0 | 0 | 0 | 0 | 327 |
| Total: | 288 | 28 | 6 | 5 | 0 | 0 | 0 | 0 | 327 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 288 | 28 | 6 | 5 | 0 | 0 | 0 | 0 | 327 |
| Total*: | 288 | 28 | 6 | 5 | 0 | 0 | 0 | 0 | 327 |
| O & M Costs (Savings) | | | 3 | 3 | 3 | 3 | 3 | 3 | 20 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 29 | 6 | 5 | 0 | 0 | 0 | 0 | 40 |
| Total: | | 29 | 6 | 5 | 0 | 0 | 0 | 0 | 40 |

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Transmission Pipelines Rehabilitation

| | | | |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Transmission | BCL/Program Code: | C120B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2005 |
| Project ID: | C1207 | 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: | Not in an Urban Village |

This program rehabilitates and upgrades water pipes and associated structures in the City of Seattle's transmission system. It assists SPU in providing agreed-upon pressure and flow for wholesale customers, limiting drinking water supply outages, and meeting applicable regulatory requirements of the Washington Department of Health (DOH).

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 2,963 | 1,040 | 1,376 | 3,457 | 1,404 | 1,276 | 1,299 | 1,322 | 14,137 |
| Total: | 2,963 | 1,040 | 1,376 | 3,457 | 1,404 | 1,276 | 1,299 | 1,322 | 14,137 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 2,963 | 1,040 | 1,376 | 3,457 | 1,404 | 1,276 | 1,299 | 1,322 | 14,137 |
| Total*: | 2,963 | 1,040 | 1,376 | 3,457 | 1,404 | 1,276 | 1,299 | 1,322 | 14,137 |
| O & M Costs (Savings) | | | 141 | 141 | 141 | 141 | 141 | 141 | 848 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 450 | 1,376 | 3,457 | 1,404 | 1,276 | 1,299 | 1,322 | 10,584 |
| Total: | | 450 | 1,376 | 3,457 | 1,404 | 1,276 | 1,299 | 1,322 | 10,584 |

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Transmission Right-of-Way Improvements

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Watershed Stewardship | BCL/Program Code: | C130B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2012 |
| Project ID: | C1316 | End Date: | Q4/2014 |
| 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 provides drainage and vegetation improvements within and adjacent to water transmission rights-of-way and in the Lake Youngs Reserve. These improvements will reduce long-term maintenance costs, contribute to worker safety, and reduce sediment delivery adjacent waterways.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 1 | 70 | 20 | 0 | 0 | 0 | 0 | 0 | 91 |
| Total: | 1 | 70 | 20 | 0 | 0 | 0 | 0 | 0 | 91 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 1 | 70 | 20 | 0 | 0 | 0 | 0 | 0 | 91 |
| Total*: | 1 | 70 | 20 | 0 | 0 | 0 | 0 | 0 | 91 |
| O & M Costs (Savings) | | | 1 | 1 | 1 | 1 | 1 | 1 | 5 |

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Treatment Facility/Water Quality Improvements

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Quality & Treatment | BCL/Program Code: | C140B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2007 |
| Project ID: | C1413 | 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 ongoing program provides construction of various smaller scale water quality and treatment facility rehabilitation and improvement projects that may develop on short notice over the course of each year. It enhances SPU's ability to address water system improvement needs that relate to public health protection and drinking water regulatory compliance.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 186 | 30 | 100 | 100 | 100 | 100 | 100 | 100 | 816 |
| Total: | 186 | 30 | 100 | 100 | 100 | 100 | 100 | 100 | 816 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 186 | 30 | 100 | 100 | 100 | 100 | 100 | 100 | 816 |
| Total*: | 186 | 30 | 100 | 100 | 100 | 100 | 100 | 100 | 816 |
| O & M Costs (Savings) | | | 8 | 8 | 8 | 8 | 8 | 8 | 49 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 30 | 100 | 100 | 100 | 100 | 100 | 100 | 630 |
| Total: | | 30 | 100 | 100 | 100 | 100 | 100 | 100 | 630 |

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Upland Reserve Forest Restoration

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Habitat Conservation Program | BCL/Program Code: | C160B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q2/2000 |
| 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 ongoing program provides upland forest restoration in the Cedar River Watershed, including ecological and restoration thinning, conifer planting, forest inventory and modeling, and species monitoring. This program is a requirement under the Cedar River Habitat Conservation Plan (HCP.)

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 6,850 | 530 | 283 | 188 | 192 | 132 | 135 | 115 | 8,425 |
| Total: | 6,850 | 530 | 283 | 188 | 192 | 132 | 135 | 115 | 8,425 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 6,850 | 530 | 283 | 188 | 192 | 132 | 135 | 115 | 8,425 |
| Total*: | 6,850 | 530 | 283 | 188 | 192 | 132 | 135 | 115 | 8,425 |
| O & M Costs (Savings) | | | 84 | 84 | 84 | 84 | 84 | 84 | 505 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 520 | 283 | 188 | 192 | 132 | 135 | 115 | 1,565 |
| Total: | | 520 | 283 | 188 | 192 | 132 | 135 | 115 | 1,565 |

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

Water Infrastructure - Hydrant Replacement/Relocation

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q4/1998 |
| Project ID: | C1110 | 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 ongoing program renews or replaces existing hydrants in the City's water distribution system. In general, hydrant renewal or replacement may occur as a result of hydrant malfunction, catastrophic failure due to vehicle damage, or to meet SPU criticality criteria such as spacing, location, cost, opportunity projects, or flow and pressure problems. This program improves access to fire hydrants for the Seattle Fire Department (SFD) and helps to reduce the damage as a result of fire by locating fire hydrants in alternate or additional locations.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 4,667 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 7,374 |
| Total: | 4,667 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 7,374 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 4,667 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 7,374 |
| Total*: | 4,667 | 364 | 371 | 379 | 386 | 394 | 402 | 410 | 7,374 |
| O & M Costs (Savings) | | | 74 | 74 | 74 | 74 | 74 | 74 | 442 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 150 | 371 | 379 | 386 | 394 | 402 | 410 | 2,493 |
| Total: | | 150 | 371 | 379 | 386 | 394 | 402 | 410 | 2,493 |

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Water Infrastructure - New Hydrants

| | | | |
|-------------------------------|----------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | New Facility | Start Date: | Q2/1999 |
| Project ID: | C1112 | 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 ongoing program installs new hydrants in the City's water distribution system. In general, new hydrants are installed to meet service requests made by private property owners and to comply with Washington Administrative Code (WAC) or Seattle Fire Department (SFD) requirements. This program helps to reduce the damage as a result of fire by locating new fire hydrants throughout the City's direct service area.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 514 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 1,287 |
| Total: | 514 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 1,287 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 514 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 1,287 |
| Total*: | 514 | 104 | 106 | 108 | 110 | 113 | 115 | 117 | 1,287 |
| O & M Costs (Savings) | | | 13 | 13 | 13 | 13 | 13 | 13 | 77 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 50 | 106 | 108 | 110 | 113 | 115 | 117 | 719 |
| Total: | | 50 | 106 | 108 | 110 | 113 | 115 | 117 | 719 |

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Water Infrastructure - New Taps

| | | | |
|-------------------------------|----------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | New Facility | Start Date: | Q4/1998 |
| Project ID: | C1113 | 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 ongoing program installs new drinking water services throughout the City of Seattle. This program provides new connections to existing water mains with no interruption of service to adjacent existing customers, and the installation of metered water service lines from the new tap to the new customer's property lines. This program meets City responsibility for new service connections in the Seattle Municipal Code (SMC) to provide reliable drinking water supply to customers.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|---------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 94,646 | 5,000 | 4,900 | 5,000 | 5,100 | 5,200 | 5,300 | 5,406 | 130,552 |
| Total: | 94,646 | 5,000 | 4,900 | 5,000 | 5,100 | 5,200 | 5,300 | 5,406 | 130,552 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 94,646 | 5,000 | 4,900 | 5,000 | 5,100 | 5,200 | 5,300 | 5,406 | 130,552 |
| Total*: | 94,646 | 5,000 | 4,900 | 5,000 | 5,100 | 5,200 | 5,300 | 5,406 | 130,552 |
| O & M Costs (Savings) | | | 1,306 | 1,306 | 1,306 | 1,306 | 1,306 | 1,306 | 7,833 |

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Water Infrastructure - Service Renewal

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q4/1998 |
| Project ID: | C1109 | 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 ongoing program replaces existing plastic or galvanized water services in the City's water distribution system. Service replacement may occur as a result of leaking, failing, or to reduce damage in case of failure of the water service. This program improves Seattle's water system and extends the life of the system.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|---------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 96,458 | 5,722 | 5,837 | 5,953 | 6,072 | 6,194 | 6,318 | 6,444 | 138,998 |
| Total: | 96,458 | 5,722 | 5,837 | 5,953 | 6,072 | 6,194 | 6,318 | 6,444 | 138,998 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 96,458 | 5,722 | 5,837 | 5,953 | 6,072 | 6,194 | 6,318 | 6,444 | 138,998 |
| Total*: | 96,458 | 5,722 | 5,837 | 5,953 | 6,072 | 6,194 | 6,318 | 6,444 | 138,998 |
| O & M Costs (Savings) | | | 1,390 | 1,390 | 1,390 | 1,390 | 1,390 | 1,390 | 8,340 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 5,722 | 5,837 | 5,953 | 6,072 | 6,194 | 6,318 | 6,444 | 42,540 |
| Total: | | 5,722 | 5,837 | 5,953 | 6,072 | 6,194 | 6,318 | 6,444 | 42,540 |

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Water Infrastructure - Watermain Extensions

| | | | |
|-------------------------------|----------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | New Facility | Start Date: | Q1/1998 |
| Project ID: | C1111 | 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 ongoing program assists developers by adding new water mains to the water system in order to serve new residential and commercial developments. Most of the costs are recovered through standard charges. The benefit of this program is that water service is provided to new housing and businesses throughout Seattle.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 12,861 | 800 | 796 | 812 | 828 | 845 | 862 | 1,000 | 18,803 |
| Total: | 12,861 | 800 | 796 | 812 | 828 | 845 | 862 | 1,000 | 18,803 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 12,861 | 800 | 796 | 812 | 828 | 845 | 862 | 1,000 | 18,803 |
| Total*: | 12,861 | 800 | 796 | 812 | 828 | 845 | 862 | 1,000 | 18,803 |
| O & M Costs (Savings) | | | 188 | 188 | 188 | 188 | 188 | 188 | 1,128 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 500 | 796 | 812 | 828 | 845 | 862 | 1,000 | 5,643 |
| Total: | | 500 | 796 | 812 | 828 | 845 | 862 | 1,000 | 5,643 |

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Water Quality Equipment

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Quality & Treatment | BCL/Program Code: | C140B |
| Project Type: | Improved Facility | Start Date: | Q1/2007 |
| Project ID: | C1414 | End Date: | Q4/2015 |
| 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 installs water quality monitoring equipment throughout the drinking water distribution system and enhances SPU's drinking water quality, security, and public health surveillance system. This effort will improve Seattle's ability to detect and respond appropriately to potential drinking water contamination events as recommended by research produced by SPU and the Environmental Protection Agency (EPA) for online monitoring equipment and SPU's broader efforts to increase the security of the water system.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 249 | 140 | 143 | 1 | 0 | 0 | 0 | 0 | 533 |
| Total: | 249 | 140 | 143 | 1 | 0 | 0 | 0 | 0 | 533 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 249 | 140 | 143 | 1 | 0 | 0 | 0 | 0 | 533 |
| Total*: | 249 | 140 | 143 | 1 | 0 | 0 | 0 | 0 | 533 |
| O & M Costs (Savings) | | | 5 | 5 | 5 | 5 | 5 | 5 | 32 |

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Water Supply Flexibility Program

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Resources | BCL/Program Code: | C150B |
| Project Type: | New Investment | Start Date: | Q1/2008 |
| Project ID: | C1507 | End Date: | Q4/2016 |
| 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 improves water system performance, reliability, and flexibility during severe weather events, supply and infrastructure emergencies, as well as enhancing environmental performance for fish and supporting regulatory and policy compliance in these areas. Project improvements include Tolt Reservoir Temperature and the Overflow Dike in Chester Morse Lake, and may include but are not limited to, dam integrity and alternatives to improved crest control, reservoir water temperature, and water quality management.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|-------|-------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 333 | 669 | 200 | 1,480 | 2,052 | 0 | 0 | 0 | 4,735 |
| Total: | 333 | 669 | 200 | 1,480 | 2,052 | 0 | 0 | 0 | 4,735 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 333 | 669 | 200 | 1,480 | 2,052 | 0 | 0 | 0 | 4,735 |
| Total*: | 333 | 669 | 200 | 1,480 | 2,052 | 0 | 0 | 0 | 4,735 |
| O & M Costs (Savings) | | | 47 | 47 | 47 | 47 | 47 | 47 | 284 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 469 | 200 | 1,480 | 2,052 | 0 | 0 | 0 | 4,201 |
| Total: | | 469 | 200 | 1,480 | 2,052 | 0 | 0 | 0 | 4,201 |

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Water System Dewatering

| | | | |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Transmission | BCL/Program Code: | C120B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2007 |
| Project ID: | C1205 | 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: | Not in an Urban Village |

This ongoing program improves structures used to empty the water from larger pipelines when necessary for inspection or repair. The new structures better control the impact of the water discharged to the environment and comply with current environmental regulations.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 179 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 922 |
| Total: | 179 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 922 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 179 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 922 |
| Total*: | 179 | 100 | 102 | 104 | 106 | 108 | 111 | 113 | 922 |
| O & M Costs (Savings) | | | 9 | 9 | 9 | 9 | 9 | 9 | 55 |

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Water System Plan - 2019

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Water Resources | BCL/Program Code: | C150B |
| Project Type: | New Investment | Start Date: | Q1/2016 |
| Project ID: | C1510 | End Date: | Q4/2019 |
| 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 develops the 2019 Water System Plan. This project meets the State requirement that SPU update a water system plan every six years and submit the plan to the Washington Department of Health (DOH) for approval as a condition of the operating permit for the drinking water system.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 0 | 0 | 110 | 541 | 454 | 59 | 1,164 |
| Total: | 0 | 0 | 0 | 0 | 110 | 541 | 454 | 59 | 1,164 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 0 | 0 | 0 | 0 | 110 | 541 | 454 | 59 | 1,164 |
| Total*: | 0 | 0 | 0 | 0 | 110 | 541 | 454 | 59 | 1,164 |
| O & M Costs (Savings) | | | 12 | 12 | 12 | 12 | 12 | 12 | 70 |

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Watermain Rehabilitation

| | | | |
|-------------------------------|-------------------------------|----------------------------------|--------------------------------|
| BCL/Program Name: | Distribution | BCL/Program Code: | C110B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2004 |
| 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 ongoing program replaces or rehabilitates existing watermains in Seattle. Replacements occur when leaks become too frequent. Rehabilitation by lining the interior of the pipe with cement mortar restores the capacity of watermains that have degraded due to interior deposits. The benefits of this program are restored quality of the delivered water, lower use of chlorine to maintain required chlorine residual, and restored pressures.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 5,649 | 3,866 | 4,426 | 3,264 | 3,313 | 3,379 | 5,509 | 5,750 | 35,156 |
| Total: | 5,649 | 3,866 | 4,426 | 3,264 | 3,313 | 3,379 | 5,509 | 5,750 | 35,156 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 5,649 | 3,866 | 4,426 | 3,264 | 3,313 | 3,379 | 5,509 | 5,750 | 35,156 |
| Total*: | 5,649 | 3,866 | 4,426 | 3,264 | 3,313 | 3,379 | 5,509 | 5,750 | 35,156 |
| O & M Costs (Savings) | | | 352 | 352 | 352 | 352 | 352 | 352 | 2,109 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 2,033 | 4,426 | 3,264 | 3,313 | 3,379 | 5,509 | 5,750 | 27,675 |
| Total: | | 2,033 | 4,426 | 3,264 | 3,313 | 3,379 | 5,509 | 5,750 | 27,675 |

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Watershed Road Improvement/Decommissioning

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Habitat Conservation Program | BCL/Program Code: | C160B |
| Project Type: | Rehabilitation or Restoration | Start Date: | Q1/2001 |
| 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 provides forest road improvements and decommissioning in the Cedar River Watershed. The purpose of this program is to reduce the delivery of sediment into the waterways in the watershed to protect both aquatic habitat and water quality. This program is a requirement under the Cedar River Watershed Habitat Conservation Plan (HCP.)

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 11,170 | 984 | 1,004 | 1,023 | 1,044 | 1,066 | 1,087 | 1,108 | 18,486 |
| Total: | 11,170 | 984 | 1,004 | 1,023 | 1,044 | 1,066 | 1,087 | 1,108 | 18,486 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 11,170 | 984 | 1,004 | 1,023 | 1,044 | 1,066 | 1,087 | 1,108 | 18,486 |
| Total*: | 11,170 | 984 | 1,004 | 1,023 | 1,044 | 1,066 | 1,087 | 1,108 | 18,486 |
| O & M Costs (Savings) | | | 185 | 185 | 185 | 185 | 185 | 185 | 1,109 |
| Spending Plan by Fund | | | | | | | | | |
| Water Fund | | 975 | 1,004 | 1,023 | 1,044 | 1,066 | 1,087 | 1,108 | 7,307 |
| Total: | | 975 | 1,004 | 1,023 | 1,044 | 1,066 | 1,087 | 1,108 | 7,307 |

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Yesler Terrace-WF

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Facility | Start Date: | Q1/2014 |
| Project ID: | C4136-WF | End Date: | Q4/2014 |
| Location: | Yesler and Broadway | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Central | Urban Village: | Not in an Urban Village |

Seattle Housing Authority (SHA) is leading a major project to replace Yesler Terrace's aging public housing buildings with a new mixed-income community. This project provides funding for SPU Water infrastructure investments in association with this project.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Water Rates | 0 | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 200 |
| Total: | 0 | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 200 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Water Fund | 0 | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 200 |
| Total*: | 0 | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 200 |
| O & M Costs (Savings) | | | 2 | 2 | 2 | 2 | 2 | 2 | 12 |

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