

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 City 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

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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

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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.

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- 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 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.

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- **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 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 Proposed 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.

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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

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.

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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 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

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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 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

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- 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 Proposed 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.

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Project Summary

BCL/Program Name/ Project Title & ID	LTD Actuals	2013	2014	2015	2016	2017	2018	2019	Total
Protection of Beneficial Uses		BCL/Program Code:							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
Water Quality & Flow Improvements (C3393)	0	0	0	0	0	4,000	4,000	4,000	12,000
Protection of Beneficial Uses	12,066	5,667	3,195	3,003	6,985	4,347	4,695	4,000	43,958
Sediments		BCL/Program Code:							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		BCL/Program Code:							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		BCL/Program Code:							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

*Amounts in thousands of dollars

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BCL/Program Name/ Project Title & ID	LTD Actuals	2013	2014	2015	2016	2017	2018	2019	Total
Outfall Rehabilitation Program (C3708)	6	504	1,893	1,186	1,542	500	500	500	6,631
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

*Amounts in thousands of dollars

2014 - 2019 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

Project Summary

BCL/Program Name/ Project Title & ID	LTD Actuals	2013	2014	2015	2016	2017	2018	2019	Total
Integrated Control Monitoring Program - DWF (C4108-DWF)	14,084	1,050	800	500	250	250	250	250	17,434
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	108,970	105,883	86,292	1,062,573

*Amounts in thousands of dollars

2014 - 2019 Proposed 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	108,970	105,883	86,292	1,062,573
Department Total*:	337,319	112,067	106,933	92,326	112,784	108,970	105,883	86,292	1,062,573

**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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed 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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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 Proposed 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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed 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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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 Proposed 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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2014 - 2019 Proposed Capital Improvement Program

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 Proposed 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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2014 - 2019 Proposed Capital Improvement Program

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 Proposed 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 Proposed 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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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed 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

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2014 - 2019 Proposed Capital Improvement Program

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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2014 - 2019 Proposed Capital Improvement Program

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 Proposed 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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed 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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2014 - 2019 Proposed Capital Improvement Program

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

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2014 - 2019 Proposed Capital Improvement Program

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 Proposed 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 Proposed 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 Proposed Capital Improvement Program