

SEATTLE PUBLIC UTILITIES (SPU)

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INTRODUCTION

The Seattle Public Utilities (SPU) is the second largest City of Seattle department by budget (about \$1 billion in 2015). SPU is a public utility that provides Seattle residents (rate payers) safe drinking water and solid waste services, as well as manages the City’s municipal stormwater drainage and sewer systems.

SPU’s primary lines of business include: (1) Drainage and Wastewater Utility, (2) Solid Waste Utility and (3) Drinking Water Utility.

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GOVERNANCE AND THE ROLE OF COUNCIL

SPU is a public utility with a fiduciary responsibility to rate payers across all four lines of business. While the Director of SPU reports directly to the Mayor, the Seattle City Council (Council) serves as SPU’s regulator, responsible for approving rates across all four lines of business and ensuring that SPU’s use of public resources are in alignment with City policies.

From time to time, three citizen advisory committees (roles described below) provide Council and Mayor with input—through written reports and sometimes at Council meetings—on rate making decisions and policy positions. The three committees and their policy topic areas are described below.

- Creeks, Drainage and Wastewater Advisory Committee - Review policies and services related to stormwater management, pollution prevention and urban creeks and wastewater systems.

- Solid Waste Advisory Committee - Address policies and services related to waste management systems policy, recycling, food and yard waste, collection contracts, transfer stations, garbage systems and waste prevention.
- Water System Advisory Committee - Reviews policies and services related to drinking water system, water conservation, drinking water supply and demand, as well as the management of Cedar River and Tolt River Watersheds. The committee usually meets the second Wednesday of each month from 5:30 p.m. to 7:30 p.m.

STRATEGIC BUSINESS PLAN

Council adopted Resolution [31534](#) in August 2014 establishing SPU's [Strategic Business Plan](#) (SBP) that balances investments and spending over a 6-year period (2015-2020). The SBP established a policy objective of achieving an average annual rate increase of 4.6 percent across all lines of business from 2015 to 2020. The SBP also identifies operational efficiencies and targeted investments to control costs and meet programmatic goals. Below is a brief summary of the SBP's goals.

- Create predictable billing rates while controlling costs
- Find new ways to be more efficient
- Ensure continued high quality, reliable services
- Meet federal and state regulatory mandates
- Develop more effective ways to communicate and partner with customers, neighborhoods and communities

SPU will update the SPB as circumstances change and elements of the Plan become outdated. Council will review and amend Plan updates as it deems appropriate.

STORMWATER DRAINAGE AND WASTEWATER UTILITIES

Seattle's sewer and drainage utilities, in many cases, are physically linked, and thus share personnel and a common financial structure. Since 1989, SPU has managed the two utilities as a combined "enterprise," referred to as the Drainage and Wastewater Fund. However, the two utilities' revenues and expenses are tracked as separate lines of business.

Stormwater Drainage Utility

SPU owns and operates the stormwater drainage system to protect life, property and the environment from the hazards of flooding and pollution. About 55 percent of Seattle's land area is covered by roads, sidewalks, roofs, patios and other hard surfaces that do not absorb rainfall. The City's drainage system exists to collect and convey the flow of rainwater runoff from these hard surfaces either to the King County-owned wastewater treatment facilities or to adjacent receiving waters such as Puget Sound and Lake Washington. Of the four lines of business managed by SPU, the drainage utility is smallest by revenue collecting about \$93 million in 2014. Rate payer revenue covers the cost of operations, maintenance and capital improvements.

Costs to operate, maintain and improve the drainage system are recovered through charges to drainage rate payers. Drainage fees are charged to property owners and appear as a separate

line-item on their King County property tax bills. Drainage rates are applied based on the size of each property and (for non-residential property) the proportion of impervious surface. In 2015, Council adopted new drainage rates for 2016 through 2018, increasing rates on average about 9 percent for small residential properties¹ and about 11 percent for properties exceeding 10,000 square feet due to increased capital spending related to the federal Consent Decree and the Port of Seattle becoming its own drainage utility.² The adopted drainage rates exceed the Strategic Business Plan's overall policy objective of achieving an average annual rate increase of 4.6 percent across all SPU funds over the six-year planning horizon. However, other utility rate increases have been trending lower than this overall policy objective, and this will help the utility trend towards achieving the overall policy objective. For instance water rates experienced no growth in 2015; and the existing forecast for 2016 is 1.7 percent—well below the 4.6 percent rate objective. More information on the City's drainage rate structure can be found [here](#).

Wastewater Utility

SPU owns and operates the City's municipal wastewater system—commonly known as the sewer system – with the goal of protecting and improving the health and well-being of Seattle's residents, businesses and natural environment.³ Of the four lines of business managed by SPU, the wastewater utility is the second largest by revenue collecting about \$245 million in 2014.

The City maintains and operates three types of sewer systems:

- “Combined sewers” collect sewage and stormwater from private properties and public rights-of-way (typically streets and sidewalks) and convey the combined effluent to King County's wastewater treatment facilities in one pipe.
- “Partially separated systems” are combined sewers *without* the additional flow of roadway runoff. The separated roadway runoff is typically sent to outfalls discharging to receiving water bodies such as Lake Washington, Puget Sound or one of Seattle's many urban creeks.
- “Sanitary sewer system” conveys sewage (not stormwater runoff) in a dedicated pipe to King County's wastewater treatment facilities (see below for more details).

Together, the combined sewer and partially separated systems make up about two-thirds of Seattle's sewer conveyance infrastructure. The remaining one-third is made up of separated sanitary sewers. Map 1 shows the distribution of sewer and stormwater drainage systems in Seattle.

Costs to manage and treat sewage wastewater are recovered through charges to sewer rate payers. Sewer charges are handled differently than drainage fees. Instead of applying a fee based on property characteristics a wastewater bill is based on water use, seasonality and the type of property—typically single-family residential, multi-family residential or commercial. SPU

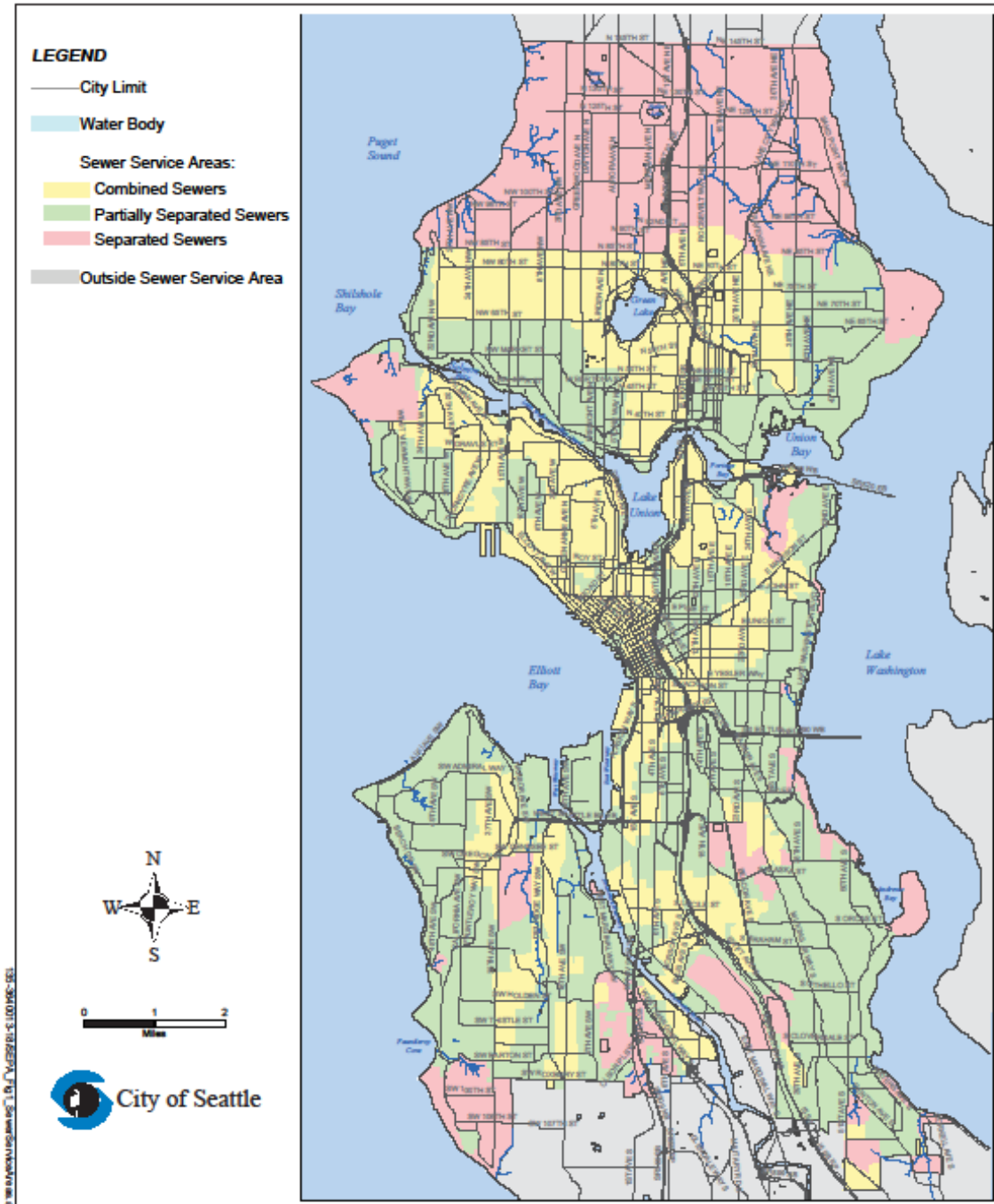
¹ Small residential properties up to 10,000 square feet pay a flat fee dependent upon parcel size.

² The Port of Seattle became its own stormwater utility in 2015 resulting in a \$4 million revenue loss to the drainage utility that must be recovered through charges to rate payers.

³ Note: Often referred to as sewage, wastewater is the processed domestic water from residences and businesses that is conveyed via the sewer system to King County's wastewater treatment facilities.

includes a sewer service line item in its combined, bi-monthly utility bill, which also includes drinking water and solid waste services. Information regarding sewer rates and charges can be found [here](#).

Map 1: City of Seattle Sewer and Drainage Service Areas



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Seattle Public Utilities
**2010 CSO REDUCTION
PLAN AMENDMENT
SEPA CHECKLIST**

**Figure 1
CITY OF SEATTLE NPDES BASINS
SEWER SERVICE AREAS**

King County Wastewater Treatment Plants

SPU contracts with King County to treat the City's wastewater. King County owns and operates two wastewater treatment plants: (1) West Point Wastewater Treatment Facility located in Discovery Park and (2) Brightwater Sewage Treatment Facility located in Woodinville. Treatment costs are the single largest expense component for SPU's wastewater utility, accounting for about 77 percent of SPU's wastewater maintenance and operating costs since 2001. Treatment costs are similar to other utility expenses and recouped through charges to all wastewater utility rate payers.

Consent Decree

As described above, parts of Seattle are served by a combined sewer system that handles both stormwater runoff and wastewater generated by businesses and residents. Heavy rains can overwhelm the sewer systems causing Combined Sewer Overflows (CSOs). CSO discharge events contribute pollutants to surrounding water bodies (also known as receiving waters). In 2009, the frequency and volume of Seattle's CSO discharges led to the Environmental Protection Agency (EPA) finding the City non-compliant with the federal Clean Water Act. As a result, the City entered into a written legal agreement, known as a Consent Decree, with the state and federal governments.

In July 2013, Council passed ordinance [124766](#) codifying and formalizing the requirement of the Consent Decree with the U.S. Department of Justice. The Consent Decree describes the actions the City must undertake to comply with the Clean Water Act. The City committed to develop and implement a long-range plan for increasing control of stormwater runoff to the benefit of receiving water bodies such as Puget Sound, Lake Washington and the Duwamish River. Consequently, the City developed the [Plan to Protect Seattle's Waterways](#), a comprehensive strategy to reduce CSOs and the resulting discharges of pollution from storm drains and outfalls.

Drainage and Wastewater rates will support implementation of the Plan to Protect Seattle's Waterways. By 2020, SPU estimates spending related to plan implementation will increase rates on a typical residential monthly bill⁴ by about five dollars. SPU anticipates the typical monthly wastewater and drainage rate—adjusted for inflation—will increase from \$111 to \$115 in 2020.⁵

⁴ The typical residential monthly system rate is based on 4.3 ccf (100 cubic feet) of drinking water consumption per month.

⁵ Seattle Public Utilities, [Plan to Protect Seattle's Waterways: Executive Summary](#), May 29, 2015, p. 19

SOLID WASTE UTILITY

SPU operates and manages the City's solid waste utility; providing garbage, food and yard waste, and recycling services to Seattle residents and businesses through private contracts with haulers and processors. Measured by revenue, solid waste is the third largest of SPU's four lines of business collecting about \$168 million in revenue and has the smallest capital program with net assets of \$129 million at the end of 2012 compared to \$700 million for drainage and wastewater and \$1.2 billion for drinking water. Historically, spending on operations has been the principal solid waste rate driver.

SPU operates the solid waste utility with a mix of private contractors and public employees. Solid waste collection and processing services are provisioned by private contractors through a competitive public procurement process whereas City employees operate SPU's two transfer stations. Map 2 illustrates the garbage collection service territory for the entire city as well as a breakout of the territories covered by the City's two garbage collection contractors: Waste Management and Cleanscapes. Seattle's garbage – non-recyclable, inorganic solid waste is sent by rail to the Columbia Ridge landfill in Arlington, Oregon.

The City contracts with private businesses to process recycling and food and yard waste. In the case of recyclables, the processors sort, package and ship materials—such as glass, plastic and paper—for re-use by domestic and international manufacturers. Seattle's food and yard waste collections are sent to private regional processors who are responsible for turning collection materials into marketable products such as mulch, animal feed and fuel. More information on Seattle's solid waste processing contracts can be found [here](#).

Rate payers residing in single-family houses or multi-family developments are required by ordinance to have separate containers for garbage, food and yard waste, and recyclables. A rate payer's solid waste bill is based on the dimensions of their garbage container. In some situations, such as a multi-family development, payment of solid waste fees may be the responsibility of the owner of the property rather than the resident. Costs for the collection, processing and disposal of all types of solid waste are recouped through charges to rate payers on a bi-monthly utility bill that includes a line-item for solid waste, drinking water and sewer service fees. More information on recycling options, food and yard waste disposal and garbage rates can be found [here](#).

Map 2: Solid Waste Collection Service Areas by Vendor and Day of Collection



Major Solid Waste Assets

SPU owns and operates two recycling and disposal stations: the North Transfer Station located in the Wallingford neighborhood and the South Transfer Station located in the South Park neighborhood (see Map 2). The City originally constructed both facilities in the 1960s when waste shipments were being sent to landfills outside the City. As solid waste processing evolved, the functions provided by transfer stations expanded. As the result of facility master planning efforts to re-build the north and south transfer stations and to address the waste and recycling needs of a growing city, both transfer stations were significantly upgraded in recent years. A new South Transfer Station opened in 2013. A new North Transfer Station is under construction and scheduled to open in 2016. Both transfer stations are operated by City employees.

DRINKING WATER UTILITY

The City owns two separate mountain watersheds that provide some of the safest, cleanest, high quality drinking water in the nation to Seattle residents and businesses, and neighboring municipalities. The costs to provide water to residents and businesses are recovered through rates charged to all customers. SPU's drinking water rates are generally tiered based on consumption levels but also depend on customer characteristics and seasonality. Additional information on drinking water rates and water conservation goals can be found [here](#). The drinking water utility is the largest of the four lines of business generating \$251 million in revenue in 2014.

Seattle's Water Supply

SPU's drinking water supply originates from two mountain watersheds: (1) the Cedar River watershed in southeast King County and (2) the Tolt River watershed in northeast King County. The Cedar River contributes about 60 percent of the supplied drinking water whereas the Tolt River makes up the remaining 40 percent. Seattle residents and businesses pay a retail rate to SPU for the provision of drinking water. Some suburbs and nearby cities (such as the City of Shoreline) have negotiated wholesale agreements with SPU to purchase Seattle's drinking water.

Key Drinking Water Facilities

SPU's drinking water utility owns \$1.2 billion in assets due in large part to owning the majority of property in two mountain watersheds. The photo montage below provides visual context for these special natural resources.

Seattle's Drinking Water Supply



Clockwise from top left – (1) Chester Morse Lake, (2) Masonry Pool Dam, (3) South Fork Tolt River Reservoir, (4) Landsburg Diversion Dam ⁶

- Chester Morse Lake and Masonry Pool Reservoir Complex – Located on the upper reaches of the Cedar River watershed, the Chester Morse Lake and Masonry Pool Reservoir Complex is a major component of SPU's drinking water supply system. The reservoir complex provides multiple functions including drinking water supply storage and conditioning, hydroelectric power generation, instream flow management for protected species, and limited flood control. SPU works to preserve the water quality in part by restricting access to the reservoir complex.
- South Fork Tolt River Dam and Reservoir Complex, built in 1962, is another critical component of the City's drinking water supply. These assets also provide flood control for portions of the Snoqualmie Valley.

Map 3 provides a look at SPU's regional drinking water system including transmission paths and the political boundaries of wholesale franchise customers.

⁶ All photos courtesy of Seattle Public Utilities

Map 3: Seattle Drinking Water Distribution System

