

SPU Financial Forecast Appendix

Key Rate Drivers

The rate paths for each fund contain key assumptions regarding debt issuances, capital accomplishment, consumption, and the Utility Discount Program. Below is a summary matrix of the primary assumptions. Each fund has additional assumptions that are unique to its structure, which are explored in the following sections.

Overall, the Utility is anticipating continued declines in all services - residential-, commercial-, and developer-related - into 2021 as the area and economy weather the impacts of COVID-19.

Simultaneously, increases in the Utility Discount Program are anticipated and have already materialized in 2020. The following table highlights key assumptions over the six-year period.

Proposed Strategic Business Plan Rate Path

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2021-26</u>
Water	0.0%	2.7%	4.7%	3.6%	4.2%	5.5%	3.4%
Wastewater	7.3%	3.1%	5.9%	0.5%	7.8%	3.6%	4.7%
Drainage	7.4%	8.6%	7.2%	3.9%	6.5%	6.7%	6.7%
Solid Waste	2.9%	2.9%	2.2%	2.3%	2.1%	2.1%	2.4%
Combined	4.5%	3.9%	5.0%	2.2%	5.4%	4.2%	4.2%

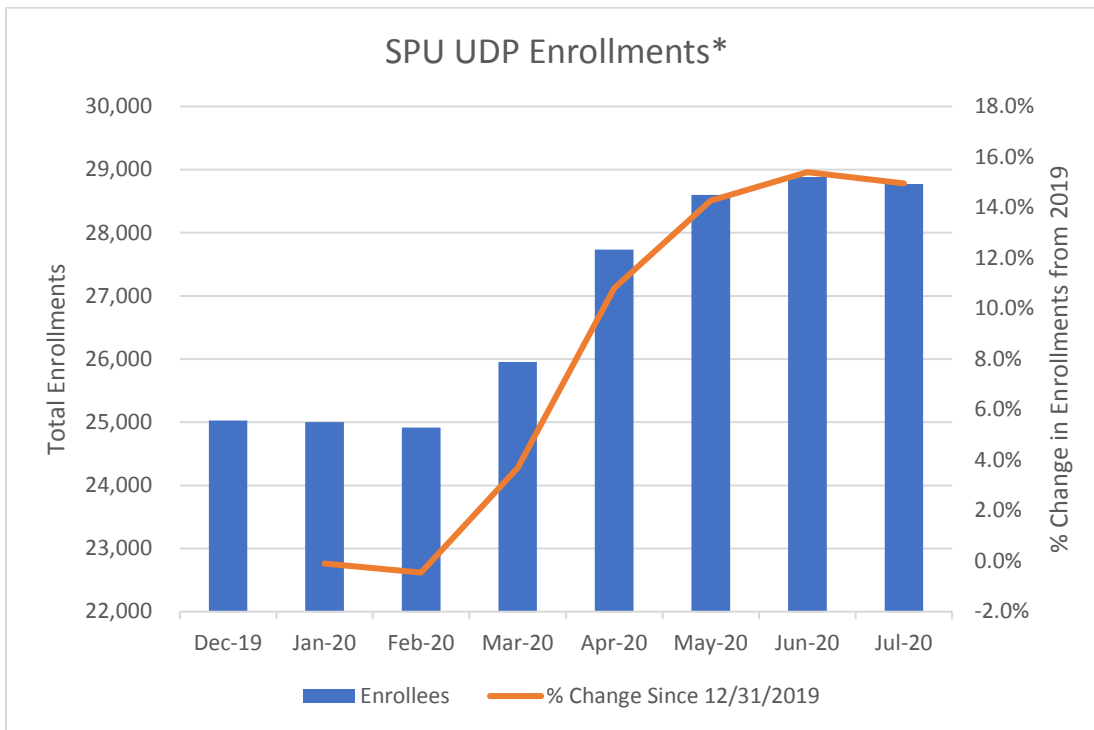
Approved rate legislation that is currently in effect

	Water	Drainage & Wastewater	Solid Waste
Average Interest Rate on Bonds	2021: 4.5% 2022: 5.0% 2023-2026: 5.0%	2021: 4.5% 2022: 5.0% 2023-2026: 5.0%	No planned debt issuances
Capital Accomplishment Rate	85%	85%*	90%
Consumption	Residential: -5.3% Commercial: -0.1%	Residential: -5% Commercial: -7%	Residential: -1% Commercial: -15% Transfer Stations: -5%
Utility Discount Program Accounts	2021: +3,000	2021: +3,000	2021: +3,000

*Drainage & Wastewater Fund accomplishment rate is 85% for all projects except for the Ship Canal project, which is at a 95% accomplishment rate.

Utility Discount Program

The City of Seattle has one of the most robust Utility Discount Programs (UDP) in the country. SPU provides a 50% credit on all qualifying customer bills. Recent modifications have expanded outreach to include an auto-enroll program, which was extended to the end of 2020. The Utility also supports an Emergency Assistance Program (EAP) that has been modified to provide relief for up to 50% of the bill two times per year instead of one, for qualifying individuals. For more information about the UDP and EAP programs, please visit [insert website link]. The chart below provides monthly enrollment year-to-date for 2020.



The following sections go into detail for each individual Fund. All three Funds entered 2020 in a healthy financial position, which is anticipated to allow them to weather the economic impacts over the course of the SBP period.

Water

Water Fund rate projections are anticipated to increase an average of 3.4% per year during the period of 2021-2026. The projected average rate increase for the first 3 years of the SBP is 2.4% (including 0% in 2021); the average increase over the second half of the SBP is 4.4%.

During the six-year plan, operational expenses are projected to increase between 4% and 6% per year. Non-rate revenues and cash reserves help offset the above-inflation cost increases. In addition, in 2023 the last payments related to the 1993 bond issue will be made. As a result, currently scheduled debt payments will be lower by \$9M in 2024.

Key Rate Drivers

The key rate driver for the Water Fund is increasing operational expense (O&M). Debt Service Coverage is the binding constraint, or the financial policy that is just met, for the rate period. Debt service coverage is a calculation that estimates the utility’s ability to cover debt payments. The Water Fund’s policy target is 1.7x debt service coverage. While debt service coverage is the binding constraint, debt service payments are projected to be relatively flat until 2026. Currently scheduled debt payments are scheduled to decline as debt originated in the early 1990s is fully retired. New debt payments are projected to be roughly equal to retired debt payments until 2026. As a result, rate increases are driven by increases in O&M, not debt service.

SPU Financial Forecast Appendix

Revenue and Expenditure Assumptions

2021-2026 SBP	2021	2022	2023	2024	2025	2026
Total Retail Rate Revenue (\$M)	215.4	225.1	235.5	243.2	252.7	265.7
Annual Change	1.5%	4.5%	4.6%	3.3%	3.9%	5.2%
Retail Consumption (M CCF)	26.4	26.4	26.3	26.2	26.0	25.9
Annual Change	-0.3%	-0.2%	-0.3%	-0.5%	-0.5%	-0.5%
Annual Rate Increase	0.0%	2.7%	4.7%	3.6%	4.2%	5.5%
Retail Rate Revenue (\$M)	215.4	225.1	235.5	243.2	252.7	265.7
Debt Service (\$M)	85.7	88.5	92.3	88.2	93.8	99.3
O&M incl. Taxes (\$M)	185.8	195.1	202.9	212.3	224.4	235.5
Cash-to-CIP (\$M)	39.1	39.9	25.5	35.6	25.9	25.5
Less: Wholesale Revenue (\$M)	(52.2)	(52.4)	(54.3)	(63.1)	(61.4)	(62.7)
Other Net Expense / (Revenue)	(43.0)	(46.0)	(31.0)	(29.8)	(30.1)	(31.9)

*Other Net Expense/Revenue include taps and capital contributions, other non-operating income, miscellaneous charges, and changes in cash balance.

Risks and Watch Areas for Rate Path

For the Water Fund, the most likely risks are poor summer weather and a prolonged recession. Long-term risks include climate change and seismic events.

A new risk to utility rates is the continued shift towards working-at-home. Many workers in Seattle do not live in Seattle. As fewer people commute into the city each day, water use in the retail area will decline. The size of this risk is difficult to estimate as the work from home trend only recently began, and current economic conditions are also depressing consumption.

Financial Indicators

The Water Fund is expected to meet or exceed all financial policy targets during the SBP period.

(\$ in millions)	2021	2022	2023	2024	2025	2026
Debt Service Coverage	1.73	1.70	1.70	1.89	1.75	1.70
Net Income	33.5	33.1	35.4	40.4	32.9	34.1
Cash-to-CIP	38.1%	39.9%	24.6%	28.2%	24.3%	26.8%
Cash Balance	90.0	75.0	75.0	75.0	75.0	75.0
RSF Withdrawals/(Deposits)	0	0	0	0	0	0
Bond Issues	100.6	71.5	91.2	98.6	151.9	0
Debt Service	85.7	88.5	92.3	88.2	93.8	99.3
Consumption (ccf, millions)	26.4	26.4	26.3	26.2	26.0	25.9

Drainage & Wastewater Fund

The Drainage & Wastewater Fund (DWF) receives revenue from two separate sets of rates. Wastewater rates are projected to increase an average of 4.7% per year during the period of 2021-2026. The projected average rate increase for the first 3 years of the SBP is 5.4%; the average increase over the second half of the SBP is 4.0%. Drainage rates are projected to increase an average of 6.7% per year during the period of 2021-2026. The projected average rate increase for the first 3 years of the SBP is 7.7%; the average increase over the second half of the SBP is 5.7%.

Cash is being used to reduce the rate path over the next few years. This cash is the product of unspent capital funds, lower than projected O&M expenditures, and surplus revenues generated by higher-than-expected demand. The specific use of this cash is to offset the consent-decree driven spike in the DWF capital program, keeping the Fund's periodic debt issuance related rate increases closer to a steady, long-term baseline. Because the cash is being used to offset the investment spike, as opposed to offset baseline investment or to pay for current O&M expenses, there is no bow-wave effect on rates, which would be the case when, for example, expenses increase annually and steadily but rate increases are held flat.

Key Rate Drivers

The key rate driver for the DWF is increasing capital investment necessitated by consent decree programs. To offset the investment cost spike these programs are creating, the DWF will spend down operating cash to 80 days of operating cash on hand, a level that, through consultation with SPU's financial advisors, was deemed adequate to defend the Fund's bond ratings and inexpensive access to capital. Through 2026, 80 days of operating cash is roughly \$100 million, and this becomes the binding constraint, or the financial policy that is just met, for the SBP period.

Revenue and Expenditure Assumptions

2021-2026 SBP	2021	2022	2023	2024	2025	2026
Wastewater Rate Revenue (\$M)	345.4	357.0	377.7	379.7	408.9	423.3
Annual Change	10.1%	3.4%	5.8%	0.6%	7.7%	3.5%
Consumption (M CCF)	21.2	21.2	21.2	21.2	21.2	21.2
Annual Change	2.6%	0.3%	-0.1%	0.1%	-0.1%	0.0%
Annual Rate Increase	7.3%	3.1%	5.9%	0.5%	7.8%	3.6%
Drainage Rate Revenue (\$M)	164.9	178.2	192.1	199.6	212.6	225.7
Annual Rate Increase	7.4%	8.6%	7.2%	3.9%	6.5%	6.7%
Retail Rate Revenue (\$M)	510.3	536.2	569.7	579.4	621.5	649.0
Debt Service (\$M)	70.7	73.9	77.9	84.8	92.4	104.0
O&M incl. Taxes (\$M)	217.5	227.2	239.7	250.2	270.4	281.4
Treatment (\$M)	178.6	188.2	208.4	209.7	232.2	233.7
Cash-to-CIP (\$M)	111.4	105.3	75.8	66.5	38.6	42.6
King County Treatment Rate ¹	4.5%	4.5%	10.3%	0%	10.3%	0%

¹ King County Treatment Rate: 2021 is adopted; 2022 – 2026 are based on County projections.

Risks and Watch Areas for Rate Path

For the DWF, the most likely risks are capital project cost overruns, increased interest rates, and increases in King County treatment rates. The DWF has entered a period of intense capital investment, requiring the Fund to access capital markets frequently over the SBP period. As the economy recovers, interest rates are expected to rise, placing pressure on rates. Both wastewater and drainage rates have a treatment and system component. Treatment expense is the Fund’s largest expenditure obligation. King County wastewater treatment rates are projected to have double digit rate increases during the SBP period as the County continues an intense capital program driven by asset management and regulatory requirements. Long-term risks include climate change and seismic events.

As discussed in the Water section, a new risk to utility rates is the continued shift towards working-at-home. Sewer consumption is driven by metered water consumption and construction activity. Like Water, the Fund is projecting reduced consumption and development in the city. The size of this risk is difficult to estimate as the work-from-home trend only recently began, and current economic conditions are also depressing consumption.

Financial Indicators

The DWF is expected to meet or exceed all financial policy targets during the SBP period.

(\$ in millions)	2021	2022	2023	2024	2025	2026
Debt Service Coverage	2.00	2.01	1.91	1.72	1.56	1.55
Net Income	48.0	57.4	60.8	57.7	48.6	40.6
Cash-to-CIP	53%	51%	43%	39%	25%	25%
Cash Balance	140.4	97.7	98.7	101.6	110.3	112.9
Bond Issues	87.1	54.5	74.5	96.4	116.2	128.1
Debt Service	70.7	73.9	77.9	84.8	92.4	104.0
Consumption (ccf, millions)	21.2	21.2	21.2	21.2	21.2	21.2

Solid Waste

Solid Waste rates are projected to increase an average of 2.4% per year during the period of 2021-2026. The projected average rate increase for the first three years of the SBP is 3.0% and the average increase over the second half of the SBP is 2.2%. These rate increases are at or just slightly above inflation and are consistent with the annual increases in operational expense.

The SBP rate path considers the latest capital projects plan and the Solid Waste fund has sufficient balances to cash fund all capital projects. This eliminates the need for bond issues and helps to reduce the rate path. SWF does not anticipate a bow wave of rate increases in the future.

Key Rate Drivers

The key rate driver for the Solid Waste Fund is increasing operational expense (O&M). Debt Service Coverage is the binding constraint, or the financial policy that is just met, for the rate period. Debt service coverage is a calculation that estimates the utility’s ability to cover debt payments. The Solid Waste Fund’s policy target is 1.5x debt service coverage. While debt service coverage is the binding

SPU Financial Forecast Appendix

constraint, debt service payments are projected to be flat throughout the SBP period. There are no new debt issues projected, so rate increases are driven by increases in O&M expenditures.

Revenue and Expenditure Assumptions

2021-2026 SBP	2021	2022	2023	2024	2025	2026
Total Retail Rate Revenue (\$M)	214.0	221.5	230.8	237.3	249.6	259.0
Annual Change	3.5%	4.2%	2.8%	3.2%	1.9%	3.8%
Annual Rate Increase²	2.9%	2.9%	2.2%	2.3%	2.1%	2.1%
Retail Rate Revenue (\$M)	214.0	221.5	230.8	237.3	249.6	259.0
Debt Service (\$M)	15.4	15.4	15.4	15.4	15.4	15.4
O&M incl. Taxes (\$M)	202.7	214.1	219.9	224.9	233.0	243.8
Cash-to-CIP (\$M)	24.0	30.0	13.8	4.2	3.4	2.2
Other Net Expense / (Revenue)	(20.7)	(28.9)	(11.9)	0.2	(2.4)	(2.6)

*Other Net Expense/(Revenue) non-operating income, miscellaneous charges, and changes in cash balance.

Risks and Watch Areas for Rate Path

For the Solid Waste fund, potential risks include recession, market forces, and contract risk. Solid waste collections, processing, and transfer rely on contractors. There is risk during contract renewals and negotiations, as well as risk if contractors run into any issues that could impede their ability to provide services.

Market forces could drive risk for the Solid Waste fund. Recycling markets and commodity revenues are subject to external economic forces. Creation of new services could require new solid waste facilities or additional contracting cost.

A new risk to utility rates is the continued shift towards working-at-home. Current conditions in 2020 have shown this translates to a decrease in commercial tonnage and revenues. The size of this risk is difficult to estimate as the work-from-home trend only recently began and the duration of this trend continuing is unknown.

Financial Indicators

The Solid Waste Fund is expected to meet or exceed all financial policy targets during the SBP period.

(\$ in millions)	2021	2022	2023	2024	2025	2026
Debt Service Coverage	1.72	1.65	1.68	1.59	1.70	1.51
Net Income	3.4	1.6	1.2	0	1.7	0
Cash-to-CIP	100%	100%	100%	100%	100%	100%
Cash Balance	58.5	40.2	40.0	48.1	58.6	67.4
RSF Withdrawals/(Deposits)	\$0	\$0	\$0	\$0	\$0	1.1
Debt Service	15.4	15.4	15.4	15.4	15.4	15.4

² Weighted annual rate increase to account for Solid Waste rates updating on April 1 of every year compared with January 1.

SPU Financial Forecast Appendix

Fund Financial Policies

Metric	WF	DWF	SWF
Debt service coverage			
- Adopted	1.7x	1.8x	1.7X; 1.5X (less taxes)
- Internal	NA	2.0X; 1.5X (less taxes)	na
Debt-to-Asset Ratio	NA	<=70 percent	NA
Cash-financed CIP	20 percent over rate period; 15 percent minimum in a given year	25 percent minimum 4-yr rolling average	Greater of \$3.7 million or 10 percent of CIP
Net Income	Generally positive	Generally positive	Generally positive
Year-end cash balance			
- Adopted	One-month current year operating expense (\$12M)	One-month treatment expense (\$15M)	20 days contract expense (\$6M)
- Internal	\$34M in 2021, increasing \$1M per year	80 days operating cash (\$100M)	45 days operating cash (\$23M)
Variable Rate Debt	<=15 percent	<=15 percent	<=15 percent

Bill Tables

The following tables project the typical monthly bill for the following average customers.

Single Family	2021	2022	2023	2024	2025	2026
Water	\$45.69	\$46.95	\$49.16	\$50.91	\$53.03	\$55.92
Wastewater	\$72.24	\$74.50	\$78.90	\$79.29	\$85.45	\$88.55
Drainage	\$49.94	\$54.23	\$58.13	\$60.40	\$64.33	\$68.64
Solid Waste	\$54.75	\$56.35	\$57.60	\$58.90	\$60.15	\$61.40
Combined	\$222.62	\$232.03	\$243.79	\$249.50	\$262.96	\$274.51
Annual Change	\$14.52	\$9.41	\$11.76	\$5.71	\$13.46	\$11.55
Convenience store	2021	2022	2023	2024	2025	2026
Water	\$107	\$110	\$115	\$120	\$125	\$131
Wastewater	\$325	\$335	\$355	\$357	\$385	\$399
Drainage	\$121	\$131	\$140	\$146	\$155	\$166
Solid Waste	\$556	\$573	\$585	\$599	\$611	\$623
Combined	\$1,109	\$1,149	\$1,196	\$1,221	\$1,275	\$1,319
Annual Change	\$38	\$40	\$47	\$25	\$55	\$44
Multifamily	2021	2022	2023	2024	2025	2026
Water	\$25	\$26	\$27	\$28	\$29	\$31
Wastewater	\$65	\$67	\$71	\$71	\$77	\$80

SPU Financial Forecast Appendix

Drainage	\$9	\$10	\$11	\$11	\$12	\$13
Solid Waste	\$28	\$29	\$30	\$30	\$31	\$32
Combined	\$127	\$132	\$138	\$141	\$149	\$155
Annual Change	\$4	\$4	\$7	\$2	\$8	\$6