

Baseline Rate Path Assumptions – September 12, 2013

Driver	Water Fund	Drainage & Wastewater Fund	Solid Waste Fund												
Demand	<ul style="list-style-type: none"> • Retail water demand projected to decline by an average of 1% per year. • Demand has been steadily falling for about two decades and is expected to continue to decline in the short run. The forecasting model used looks at customer consumption projections based on population trends and business activity, which captures changes in customer accounts, as well as conservation efforts and other water consumption factors. • As population continues to rise and conservation efforts only offer marginal savings, total water consumption is projected to begin to increase after 2020. • No assumed changes in the make-up of wholesale customers. 	<ul style="list-style-type: none"> • Wastewater demand declines 0.6% to 1.2% per year. Wastewater consumption change by year: <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 2px;">2015</th> <th style="padding: 2px;">2016</th> <th style="padding: 2px;">2017</th> <th style="padding: 2px;">2018</th> <th style="padding: 2px;">2019</th> <th style="padding: 2px;">2020</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">-0.68%</td> <td style="padding: 2px;">-0.9%</td> <td style="padding: 2px;">-0.86%</td> <td style="padding: 2px;">-0.97%</td> <td style="padding: 2px;">-1.0%</td> <td style="padding: 2px;">-1.16%</td> </tr> </tbody> </table> • Sewer demand is based on historical consumption and projected water consumption, which takes into consideration population trends, business activity, conservation efforts and other factors. • Water and sewer demand will follow a similar trajectory but not identical due to the ‘sewer max,’ which effectively caps residential summer sewer consumption at the level of winter consumption. • Drainage demand is “fixed”; no parcel count or parcel surface make-up changes are assumed for drainage. 	2015	2016	2017	2018	2019	2020	-0.68%	-0.9%	-0.86%	-0.97%	-1.0%	-1.16%	<ul style="list-style-type: none"> • Overall expect 0.9% to 1.1% a year decline in volume, 0.1% to 0.7%¹ decline in average residential disposal container size. • Residential disposal container customer counts have declined by 1.1% a year since 2005; expected to slow to 0.4% based on post-recession trends. • Residential organics expected to increase by 1% a year as multi-family and commercial food waste program penetration is increased and more single family homes come into compliance. • Multi-family dumpster unit customers expected to decline slightly. Customer counts declined 1% a year since 2009 but this is expected to slow to 0.18% to 0.65%. Newer, larger multi-family buildings will lower customer counts but keep volume relatively stable. • Commercial customer counts are expected to remain relatively flat; dumpster volumes have declined 4% a year and expected to continue.
2015	2016	2017	2018	2019	2020										
-0.68%	-0.9%	-0.86%	-0.97%	-1.0%	-1.16%										
O&M Inflation (excludes debt service, taxes, major contracts)	See Attachment 1 – Inflation Assumptions and Historic Actuals for more details	See Attachment 1 – Inflation Assumptions and Historic Actuals for more details	See Attachment 1 – Inflation Assumptions and Historic Actuals for more details												

¹ The August 20th materials stated that the average can size is expected to decline by 0.1% to 0.3%. This was incorrect because the wrong time period was used.

Driver	Water Fund	Drainage & Wastewater Fund	Solid Waste Fund
Debt Service	<ul style="list-style-type: none"> • 2.6% average annual growth rate for debt service • Anticipated bond issuances: <ul style="list-style-type: none"> 2014: \$83.8M 2016: \$65.0M 2018: \$51.3M 2020: \$77.7M The bonds fund the capital program, projected to be \$395M between 2015 and 2020. See Attachment 2 for details. • 85% CIP accomplishment rate assumed for all years 	<ul style="list-style-type: none"> • 11.5% average annual growth rate for debt service • Anticipated bond issuances: <ul style="list-style-type: none"> 2014: \$102.7M 2015: \$62.8M 2016: \$127.4M 2018: \$111M The bonds fund the capital program, projected to be \$611M between 2015 and 2020. See Attachment 2 for details. • 90% CIP accomplishment rate assumed for all years 	<ul style="list-style-type: none"> • 9.8% average annual growth rate for debt service • Anticipated bond issuances: <ul style="list-style-type: none"> 2014: \$70M 2015: \$42M 2017: \$19M The bonds fund the capital program, projected to be \$119M between 2015 and 2020. See Attachment 2 for details. • 90% CIP accomplishment rate assumed for all years
Major Contracts	N/A	<ul style="list-style-type: none"> • 2.0% average annual growth rate in wastewater treatment payments to King County. Latest King County projected treatment rate increases (as of 6/13) <ul style="list-style-type: none"> 2015: 5.4% 2016: 1.9% 2017: 4.2% 2018: 1.5% 2019: 1.6% 	<ul style="list-style-type: none"> • 3% a year for contracts (based on 2013-16 rate study) • No major changes assumed to contracts (no assumption of implementing One Less Truck/Every Other Week Garbage)
Other Cost Adjustments (adjustments to the O&M <u>branch</u> baseline budget)	<ul style="list-style-type: none"> • \$3.2M (2015), increasing to \$4.3M (2020) [updated since Aug. 20] <p>See Attachment 2 – O&M Baseline Adjustments for more details</p>	<ul style="list-style-type: none"> • \$2.3M (2015), increasing to \$7.1M (2020) [updated since Aug. 20] <p>See Attachment 2 – O&M Baseline Adjustments for more details</p>	<ul style="list-style-type: none"> • \$1.3M (2015), increasing to \$4.7M (2020) [note: the Aug. 20 materials stated a \$300K reduction by 2020 because contract savings were included at that time] <p>See Attachment 2 – O&M Baseline Adjustments for more details</p>

Driver	Water Fund	Drainage & Wastewater Fund	Solid Waste Fund
Non-Rates Revenues	<ul style="list-style-type: none"> • Wholesale water – 3% average annual growth rate. • Most non-rate revenues are calculated based on inflation with the exception of tap fees, which are based on recent levels and then forecasted to increase with inflation in outer years. • No expectation to use funds from the revenue stabilization fund (RSF) during the years covered; in 2014 there is a deposit forecast for \$7M. 	<ul style="list-style-type: none"> • Cash – Drainage LOB excess cash is spent down by 2016 and Wastewater LOB excess cash spent down by 2017. The excess is used to fund the CIP. • Miscellaneous revenues (e.g. permit fees, map sales, delinquent fees) are historically small and are unpredictable, so projections based on recent actuals. 	<ul style="list-style-type: none"> • Recycling market price revenues projected to decline from \$3.2M in 2012 to \$1.6M in 2013, and partially recover in 2014 to \$2.3M, then inflated for outer years. • Assumed income from 2014 sale of Kent-Highlands Landfill.
Financial Policy Issues	No new information since Aug. 20	No new information since Aug. 20	No new information since Aug. 20

Attachment 1 – Inflation Assumptions and Historic Actuals

The yellow cells in the following table shows the assumed first and second year inflation rate in each biennium, with brief explanations. Only cost centers assumed to be above 2% are listed. The table also shows the 8-year inflation average (2005-2012) and the 5-year average (2008-2012) for these cost centers.

Type of Expenditure	8-Year Average	5-Year Average	Assumed Year 1	Assumed Year 2	Comments
CAPITAL	9%	0%	2%	2%	Still under review
COST ALLOCATION CHARGES	-5%	-6%	8%	4%	Annual data shows large fluctuations; assume the average of 2012-2013 of 6%. 2010-2011 were unusual years in that these cost areas had significant budget cuts. There are major City initiatives in the next 6 years that will require SPU financial contribution, such as the City's financial system upgrade. SPU spends about \$11M per year in these cost categories.
COST ALLOCATION CHARGES FAS	1%	1%	8%	5%	
DOIT ALLOCATIONS	10%	4%	12%	5%	Annual data shows large cost fluctuations. Assume each year may be different, but on average the two years equal a 9% increase per year.
DOIT BILLED CHARGES	20%	-2%	12%	7%	Annual data shows large cost fluctuations. Assume each year may be different, but on average the two years equal a 10% increase per year.
FAS* ALLOCATIONS	31%	-1%	11%	7%	Annual data shows large cost fluctuations. Assume each year may be different, but on average the two years equal a 9% increase per year.
FAS* Fleet	-6%	-3%	11%	11%	Over the past few years, SPU has reduced the SPU fleet by 57 vehicles and this will result in additional use of the City motorpool and higher costs.
FAS* Fuel	15%	14%	11%	7%	Annual data shows large cost fluctuations. Assume each year may be different, but on average the two years equal a 9% increase per year.
FAS* Maintenance	8%	2%	11%	4%	Annual data shows large cost fluctuations. Assume each year may be different, but on average the two years equal a 8% increase per year.
PROFESSIONAL AND TECH SER	6%	0%	3%	3%	Assume future inflation will be half as much as the past 8-year average.
REGULAR BENEFITS COLA	4%	3%	2.5%	4.0%	Assume future inflation will be 3.3% on average.
REGULAR BENEFITS MEDICAL	8%	7%	7%	7%	
REGULAR BENEFITS OTHER	4.67%	4.40%	7%	7%	This average does not include 2013 which increases 183%.
REGULAR OVERTIME	5%	-3%	2.5%	4.0%	Used the COLA* assumption to assume the baseline with increases only due to salary increases.
REGULAR SALARY/WAGES	4%	3%	5.0%	5.0%	8-year average is 5% if 2010-2011 are excluded (furloughs, no COLAs* for salaried staff).
RETIREMENT	8%	10%	12%	12%	Assumes employer contributions will increase 1% a year.
TEMPORARY LABOR COSTS	15%	21%	2.5%	2.5%	
UNEMPLOYMENT INSURANCE	58%	46%	2.5%	4.0%	Annual data shows large fluctuations; assume steady increase in the future.
UTILITIES	5%	9%	4%	4%	
WORKERS COMP INDUS INSR	6%	2%	3%	3%	

*FAS = Finance and Administrative Services Department; COLA = cost of living adjustment

Attachment 2 – CIP Baseline

The following tables show the estimated CIP spending (in thousands of dollars) for 2015-2020 with a list of a few of the largest projects. Note that a “plug” total is included in all funds for 2020* (and 2018 and 2019 for Solid Waste).

Water Fund	2015	2016	2017	2018	2019	2020*	2015-2020
WF CIP Total	81,516	79,716	58,816	55,203	57,571	62,282	395,104
C1109 - Wtr Infrastructure-Service Renewal	5,953	6,072	6,194	6,318	6,444	0	30,982
C1113 - Wtr Infrastructure-New Taps	5,000	5,100	5,200	5,300	5,406	0	26,006
C1128 - Distribution System Improvements	3,800	4,800	5,490	5,500	5,800	0	25,390
C1508 - Morse Lake Pump Plant	7,119	18,788	6,846	0	0	0	32,752
Total - WF Largest Projects	21,872	34,760	23,730	17,118	17,650	0	115,130

Drainage & Wastewater Fund	2015	2016	2017	2018	2019	2020*	2015-2020
DWF CIP Total	91,484	111,422	108,968	105,881	86,290	106,602	610,646
C3503 - Sediment Remediation - DWF	4,396	1,491	1,410	11,610	11,610	-	30,517
C3609 - S Henderson CSO Storage	18,039	18,268	15,528	317	(0)	-	52,152
C3612 - Future CSO Projects	3,619	17,400	20,400	28,000	28,000	-	97,419
C3802 - Localized Flood Control Program	2,550	4,823	5,839	5,956	6,075	-	25,243
C3804 - Sanitary Sewer Overflow Capacity	3,943	4,916	5,631	5,743	5,858	-	26,092
Total - DWF Largest Projects	32,547	46,898	48,808	51,626	51,544		231,423

Solid Waste Fund	2015	2016	2017	2018	2019	2020*	2015-2020
SWF CIP Total	55,546	30,587	24,924	4,463	3,823	4,229	119,344
C2302 - South Transfer Station Rebuild	1,500	8,000	10,000	0	0	0	19,500
C2304 - South Park Development	385	13,228	9,572	0	0	0	23,186
C2306 - North Transfer Station Rebuild	45,926	3,357	0	0	0	0	49,284
Total - SWF Largest Projects	47,812	24,585	19,572	0	0	0	91,969

Attachment 3 – O&M Baseline Adjustments

The following tables show the estimated adjustments to the O&M branch baseline (in thousands of dollars) for 2015-2020 with a list of a few of the larger drivers. Not included are adjustments to major contracts, debt service, taxes and other general expenses.

Water Fund	2015 WF	2016 WF	2017 WF	2018 WF	2019 WF	2020 WF	2015-2020
Water O&M Adjustments Total	2,034	2,382	3,223	3,867	3,830	4,253	19,589

Major Water O&M Drivers and 2015-2020 Estimates:

- Operation of the new sockeye hatchery (\$5.3M)
- Increased up-front planning and preliminary engineering (non-capitalizable) dollars to adequately support the CIP (\$3.5M)
- Retirement costs (\$3.2M - estimates are still under review)

Drainage & Wastewater Fund	2015 DWF	2016 DWF	2017 DWF	2018 DWF	2019 DWF	2020 DWF	2015-2020
Drainage & WW O&M Adjustments Total	2,260	4,330	5,418	5,673	6,191	7,060	30,962

Major Drainage & Wastewater O&M Drivers and 2015-2020 Estimates:

- Additional crews and services to maintain and operate new DWW assets and structures (\$8.7M)
- Services needed for maintenance of Green Stormwater Infrastructure assets (\$7.1M)
- Updates to the stormwater code and manuals and tracking citywide implementation of these (\$1.1M)
- Implementation of real-time controls and other measures to meeting the CSO Consent Decree sewer maintenance requirements (\$3.5M)
- Services required to clean drains in the lower Duwamish waterway to meet new requirements anticipated in 2017 (\$1.1M)
- Retirement costs (\$2.9M - estimates are still under review)

Solid Waste Fund	2015 SWF	2016 SWF	2017 SWF	2018 SWF	2019 SWF	2020 SWF	2015-2020
Solid Waste O&M Adjustments Total	1,320	1,826	2,895	3,380	3,947	4,731	18,098

Major Solid Waste O&M Drivers and 2015-2020 Estimates:

- Continuation of meeting SPU's recycling goals, which results in a net savings by reducing disposal costs (\$7.7M)
- Reduced transfer station hauling costs for organics due to having the new contractors provide hauling services (-\$4.0M)
- Additional staffing to provide night-time garbage services at the transfer stations, which results in a net savings by reducing payments to the private station (\$2.8M)
- Retirement costs (\$1.1M - estimates are still under review)