

**Utilities 2018-2023 Financial Forecasts**  
**Water, Sewer, and Storm & Surface Water Funds**

***Executive Summary:***

*The Utilities Department operates as an enterprise within the City structure and functions much like a private business entity.*

- *The Department does not receive any General Fund funding and relies primarily on rates to fund its operating and capital programs.*
- *The forecasted rates are designed to generate sufficient revenues to fund Utilities operations, asset replacements (e.g., vehicles), capital investment programs (CIP), and the long-term infrastructure Renewal and Replacement (R&R) requirements.*
- *The forecasted rates are consistent with the rates anticipated in the 2017-2018 Utilities Budget.*

The Utilities Department faces the following key challenges, constraints, and risk in the 2018-2023 forecast period:

**1. Challenges**

- a. Capital infrastructure is aging. Utilities operates a highly capital-intensive business, and the Department's ability to deliver quality services to its customers is dependent on the ability of each system to function on demand, every day of the year.
- b. Supporting economic growth. Additional infrastructure capacity is needed to support development and population growth.
- c. Operational efficiency. We are mindful of the need to operate efficiently and continually evaluate business processes to seek opportunities to effectively deliver services in the most cost-effective manner.

**2. Constraints**

- a. Fixed cost structure. Utility operating expenditures are largely fixed, with the majority of these costs used to pay financial obligations, including payments to external and internal service providers and taxes.
- b. Legal mandates. Utilities must comply with State and Federal mandates, such as the Clean Water Act and National Pollution Discharge Elimination System (NPDES), to protect drinking water and surface water quality.

**3. Risk**

- a. Water wholesale costs. Drinking water for the Water Utility is purchased from the Cascade Water Alliance. As these costs represent approximately 40% of total Utility expenditures, changes in CWA operational costs can significantly affect the Water Utility. Consistent with Council adopted financial policies, wholesale costs are fully funded and passed directly through to the customer, thereby ensuring funding for local programs are not degraded.

## **UTILITY RATE DRIVERS**

The forecasted utility rates are prepared based on the following financial policies:

1. Plan for long term investment in infrastructure.
2. Maintain existing levels of service by maintaining, renewing and replacing systems.
3. Keep local rate increases gradual and uniform.
4. Pass wholesale costs through to customers.
5. Maintain intergenerational rate equity.

The following section provides further detail on the key rate drivers.

### ***Payments to External Service Providers***

#### *Wholesale Costs*

The single largest cost center for the Utilities Department is wholesale costs, which include payments to the Cascade Water Alliance (Cascade) for the purchase of water supply and regional capital facility charges and payments to King County for wastewater treatment. Combined, these expenses total \$111.2 million for the 2017-2018 biennium, or approximately 39% of the total budget for the Utilities Department.

The cost from Cascade to purchase water supply in 2017 is \$19.4 million and is projected to increase to \$20.2 million in 2018. The impact of this cost increase to the Bellevue retail water rate is 1.9% in 2018.

The cost from King County for wastewater treatment is projected to be \$33.6 million in 2017 with no projected cost increase for 2018.

To ensure local operations and the CIP are not degraded, the Department's approved 2017-2018 budget is consistent with the Council-adopted financial policy which directs rate increases necessary to fund wholesale costs be passed directly through to the customer.

### ***Local Costs***

#### *CIP / R&R*

Outside of wholesale costs discussed above, the next largest cost driver for the Utilities Department is the CIP and the cost to renew and replace infrastructure in the future, representing approximately 28% of the total budget for the Utilities department, or approximately \$79M for the 2017-2018 biennium. Utilities infrastructure has a replacement value of over \$3.5 billion, and most of the systems are well past their mid-life. As a result, the systems used to deliver water, convey wastewater, and manage stormwater runoff are experiencing more failures, and the cost to maintain, operate, rehabilitate, and replace this infrastructure is increasing. To minimize costs and optimize the integrity of the utility systems, the Utilities Department has developed a strategic 75-year asset management plan to systematically set aside funding for the future renewal and replacement of these assets. Consistent with Council-adopted financial policy, this long-term funding strategy is also designed to smooth future rate increases and provide for intergenerational equity.

Major projects supported by the adopted 2017-2023 CIP include small diameter water main replacements (\$70.3M), water pump station repairs (\$15.3M), sewer system pipeline major repairs (\$14.2M), sewer pipeline replacements (\$11.7M), sewer pump station improvements (\$7.4M), storm system conveyance repairs and replacements (\$10.4M), storm system flood control program (\$8.4M), and Lower Coal Creek flood hazard reduction (\$7.3M). CIP projects to support utility capacity to accommodate growth include West Operating Area water storage availability (\$1.6M), and constructing a new water inlet station (\$5.2M).

#### Taxes/Internal Service Provider Payments

Taxes and interfund payments represent approximately 14% of the total budget for the Utilities Department, or approximately \$38M for the 2017-2018 biennium. The amount of taxes paid is based upon the amount of revenue collected and the tax rates assessed by the State and cities. Interfund payments represent costs that Utilities pays to the General Fund for support services. The portion of the rate increase attributable to taxes and interfund payments is less than 1% per year within each utility.

#### Operations

Operating costs include personnel, supplies, and professional service expenses that are necessary to carry out the daily functions of the Utilities Department. This cost category totals \$54.3M, or about 19% of the Utilities budget for the 2017-2018 biennium. The portion of the rate increase attributable to ongoing operating costs is less than 1% per year within each utility.

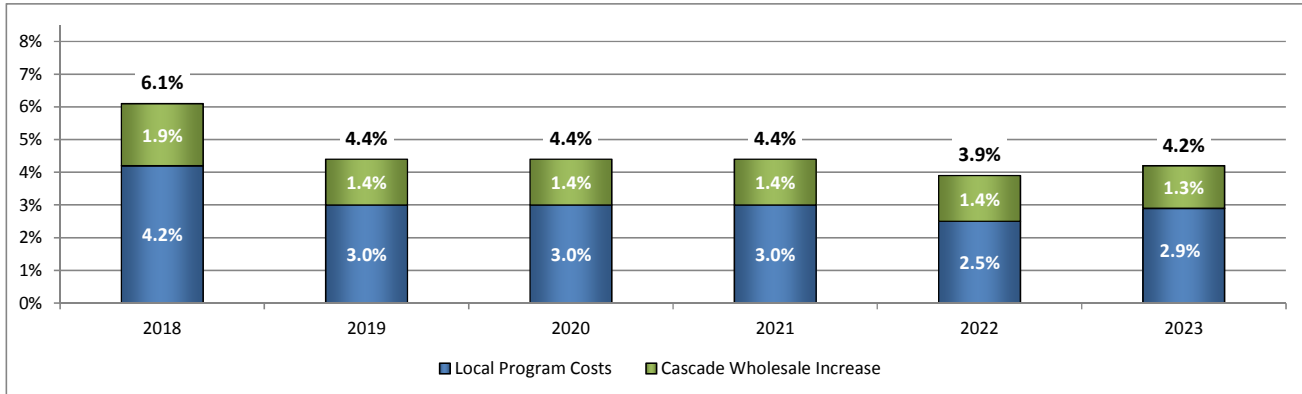
#### 2018-2023 Financial Forecast

The following pages provide a more in-depth discussion of the individual rate drivers and forecasted rate adjustments through the year 2023 for the water, sewer, and stormwater utilities.

**WATER UTILITY FUND  
2018 - 2023 Rate Forecast**

Attachment B: Utility Funds Financial Forecast  
November 13, 2017

**PROJECTED RATE INCREASES**



Impact to Monthly Bill for a Typical Residential Customer						
	2018	2019	2020	2021	2022	2023
Prior Year Bill	\$60.42	\$64.13	\$66.96	\$69.94	\$73.00	\$75.82
Increase:						
Cascade Wholesale						
Purchased Water	1.17	0.92	0.96	0.96	0.99	0.99
Local	2.54	1.91	2.02	2.10	1.83	2.20
Total	\$3.71	\$2.83	\$2.98	\$3.06	\$2.82	\$3.19
Projected Bill	\$64.13	\$66.96	\$69.94	\$73.00	\$75.82	\$79.01

*Minor differences may exist due to rounding.*

**Key Rate Drivers**

• **Wholesale Costs**

Drinking water for the City of Bellevue is provided by the Cascade Water Alliance (Cascade). Cascade costs are increasing primarily due to water purchase costs from Seattle. Per City financial policy, the wholesale cost of purchased water services are passed directly through to the ratepayer. The retail rate impact of the projected increase in Cascade's wholesale costs to Bellevue are 1.9% for 2018. Beyond that, the anticipated retail rate impacts due to Cascade's projected cost increases to the City of Bellevue average 1.4% per year for 2019 through 2023.

• **Capital Program**

The proposed 2017-2023 Water Capital program includes \$112.6M (excluding AMI which is discussed below) to preserve and protect system assets. The Water utility is in active system replacement and the majority of the proposed capital program (\$103.4M) will be invested to replace existing aging infrastructure. Significant projects include small diameter water main replacement and water pump station repair and replacements. Capital costs will require a rate increases of 3.1% in 2018, and an average of about 2.5% per year thereafter. Higher rate increases are required in 2018-2020 to bring rate revenues to levels sustainable to fund the Water CIP. During this period, R&R reserves are used to subsidize the Water CIP.

• **Taxes/Intergovernmental**

Taxes and interfund payments to other City departments will require a rate increase of about 0.8% in 2018. Increases for the remainder of the forecast period will average less than 0.1%.

• **Operations**

Projected operating costs will require a rate increase of about 0.3% in 2018, and an average of about 0.2% per year thereafter. Personnel costs are relatively flat with small increases associated with merit and PERS cost increases consistent with projections for other City departments.

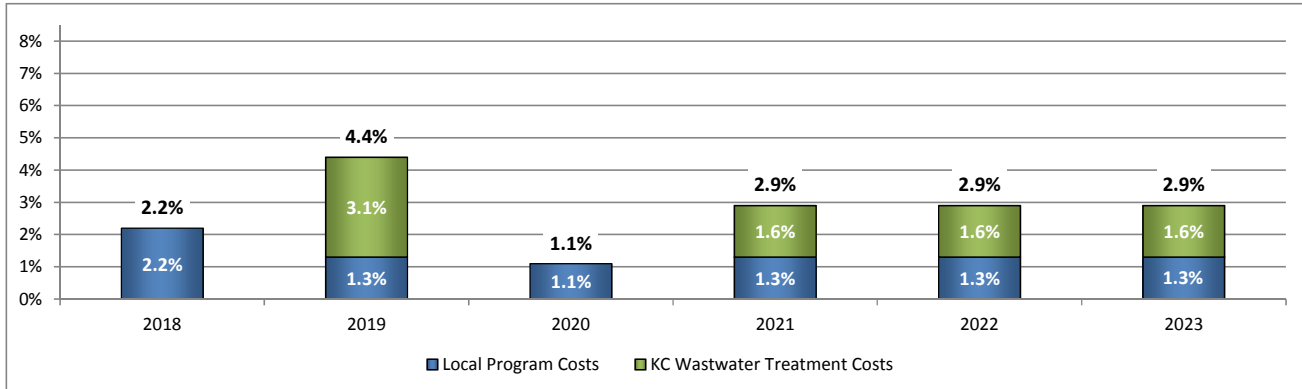
• **Advanced Metering Infrastructure**

The Utilities Department has begun implementation of AMI. The total cost of the AMI project is \$23.1 million and will be funded \$16.2 million from the water utility and \$6.9 million from the sewer utility. The water utility share will be fully funded through existing sources of revenue (no impact to rates), and include available reserves in the water utility (\$6.0 million) and available reserves in the water renewal and replacement (R&R) program (\$10.2 million).

**SEWER UTILITY FUND  
2018 - 2023 Rate Forecast**

Attachment B: Utility Funds Financial Forecast  
November 13, 2017

**PROJECTED RATE INCREASES**



Impact to Monthly Bill for a Typical Residential Customer						
	2018	2019	2020	2021	2022	2023
Prior Year Bill	\$78.68	\$80.38	\$83.88	\$84.82	\$87.27	\$89.81
Increase:						
KC Wastewater Treatment	0.00	2.47	0.00	1.33	1.36	1.44
Local	1.70	1.03	0.94	1.12	1.18	1.17
Total	1.70	3.50	0.94	2.45	2.54	2.61
Projected Bill	\$80.38	\$83.88	\$84.82	\$87.27	\$89.81	\$92.42

*Minor differences may exist due to rounding*

**Key Rate Drivers**

• **Wholesale Costs**

Per King County, the Wastewater Treatment Division's costs are increasing primarily due to ongoing debt service and capital program costs. The wholesale wastewater treatment rate is established by the County, and per City financial policy, are passed directly through to the ratepayer. The retail rate impacts of the projected increases in wastewater treatment costs to Bellevue are no increase in 2018, about 3.1% in 2019, no increase in 2020, and about 1.6% per year thereafter.

• **Capital Program**

The proposed 2017-2023 Sewer Capital program includes \$41.0M in investments (excluding AMI which is discussed below). The Sewer utility is beginning systematic asset replacement, most of the proposed capital program (\$39.1M) will be invested to replace existing aging infrastructure. Significant projects include sewer system pipeline major repairs, sewer pump station improvements and sewer system pipeline replacements. The remaining sewer capital investment includes the addition of on-site power generation for three high priority pumping stations (\$1.0M). Capital costs, including transfers to the R&R account, will require a rate increases of about 0.7% in 2018, and an average of 0.7% per year thereafter.

• **Taxes/Intergovernmental**

Taxes and interfund payments to other City departments will require a rate increase of about 0.8% in 2018 and an average of 0.3% per year thereafter.

• **Operations**

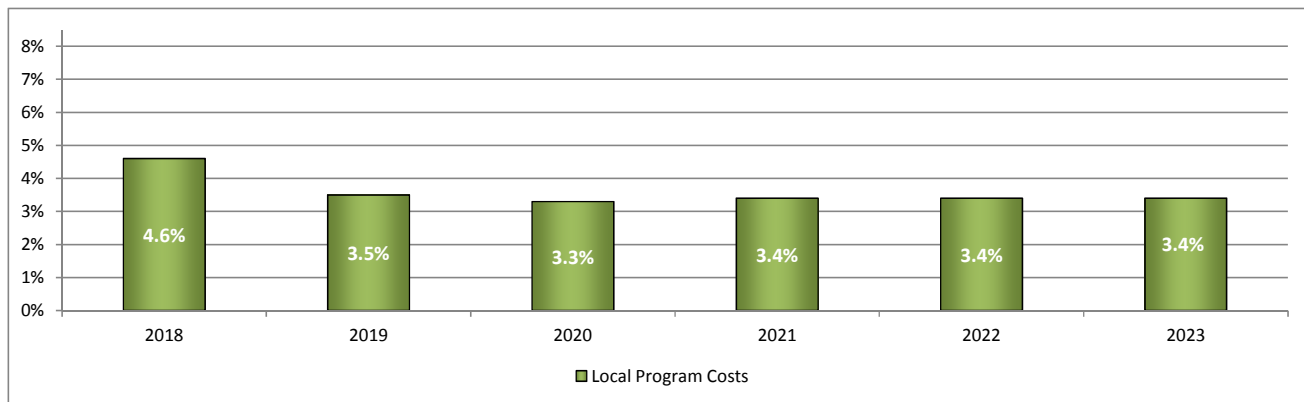
Operating costs will require a rate increase of about 0.7% in 2018 and an average of 0.3% per year for the remainder of the forecast period. Personnel costs are relatively flat with small increases associated with merit and PERS cost increases consistent with projections for other City departments.

• **Advanced Metering Infrastructure**

The Utilities Department has begun implementation of AMI. The total cost of the AMI project is \$23.1 million and will be funded \$6.9 million from the sewer utility with the remaining \$16.2 million from the water utility. The sewer utility share will be fully funded from available reserves in the sewer renewal and replacement (R&R) program (no increase to rates).

**STORM AND SURFACE WATER UTILITY FUND**  
**2018 - 2023 Rate Forecast**

**PROJECTED RATE INCREASES**



Impact to Monthly Bill for a Typical Residential Customer						
	2018	2019	2020	2021	2022	2023
Prior Year Bill	\$23.94	\$25.04	\$25.91	\$26.80	\$27.71	\$28.65
Increase	<u>\$1.10</u>	<u>\$0.87</u>	<u>\$0.89</u>	<u>\$0.91</u>	<u>\$0.94</u>	<u>\$0.97</u>
Projected Bill	\$25.04	\$25.91	\$26.80	\$27.71	\$28.65	\$29.62

*Minor differences may exist due to rounding*

#### **Key Rate Drivers**

Unlike the water and sewer utilities, the storm and surface water utility does not have a wholesale element as all services are provided in-house. This utility has the smallest rate base. A 1% rate increase in 2018 adds about \$0.24 to the monthly bill for the typical residential customer.

#### ● **Capital Program**

The proposed 2017-2023 Stormwater Capital program includes \$43.9M in investments. \$26.8M of the Stormwater utility capital investments are for environmental preservation and include stream restoration for the Mobility and Infrastructure Initiative, mitigating flood hazards, and constructing fish passage and stream improvement projects. The remaining capital investments include enhancing current pipeline video inspection efforts to evaluate current infrastructure condition, storm system conveyance repairs and replacement, and replacing the NE 8th Street culvert at Kelsey Creek. Capital costs, including transfers to the R&R account, will require a rate increase of about 2.3% in 2018 and an average of about 2.4% per year thereafter. As previously approved by Council, a 1.5% rate increase is required in 2018 for the Mobility and Infrastructure Initiative.

#### ● **Taxes/Intergovernmental**

Taxes and interfund payments to other City departments will require a rate increase of about 0.4% in 2018, and increases averaging about 0.4% per year thereafter.

#### ● **Operations**

Operating costs will require a rate increase of about 0.4% in 2018, and about 0.7% per year thereafter. Personnel costs are relatively flat with small increases associated with merit and PERS cost increases consistent with projections for other City departments.