DATE: October 6, 2016

TO: Environmental Services Commission

FROM: Nav Otal, Utilities Director
Andrew Lee, Utilities Deputy Director
Lucy Liu, Assistant Utilities Director
Martin Chaw, Utilities Fiscal Manager

SUBJECT: **Utilities Proposed 2017-2018 Budget and Rates**

We are pleased to submit the 2017-2018 Utilities proposed budget and rates for your review and consideration for recommendation to the City Council.

This notebook highlights the key challenges facing the Utilities Department, and highlights the key programs and programmatic changes for the Commission's consideration.

This notebook is organized into the following sections:

Section	Description
1 – Introduction	Overview of the Utilities Department proposed 2017-2018 budget
2 - Overview	Overview of Department Mission, Strategic Priorities, Accomplishments, Major Work Initiatives, and Performance Results
3 – Operating Budget Proposals	Summary of 2017-2018 proposed budget and rate drivers, Department's Operating Budget Proposals, including comparison of budgeted 2015-2016 expenditures/staffing and proposed 2017-2018 expenditures/staffing
4 – Capital Budget Proposals	Summary of the Department's proposed 2017-2023 Capital Budget Proposals
5 - Appendix	Utilities 2017-2022 financial forecasts, 2017-2018 proposed rates, rate ordinances, and financial policies

SUMMARY

The 2017-2018 Utilities Department Preliminary Budget is a representation of the strategies and policies that the Department is recommending to address key financial and operational challenges over the next biennium. As a reminder, the Utilities Department operates as a business enterprise within the City structure. As a business, Utilities does not receive any City General Fund revenues for utility functions and relies primarily on rates to fund operations and capital programs. With this as context, the proposed 2017-2018 budget was prepared with a watchful eye towards rate affordability and to capitalize on opportunities to improve business processes and leverage efficiencies where possible to ensure value to the rate-payer. See Attachment A for a summary of the proposed 2017 – 2018 Utilities operating budget.

KEY COUNCIL-APPROVED FINANCIAL POLICIES GUIDING BUDGET DEVELOPMENT

The 2017-2018 Utilities Department Preliminary Budget is a consequence of longer-term financial forecasts that, according to Council-approved financial policies, are based on the full costs of providing utility services now and in the future. The Waterworks Utility Financial Policies were first adopted by Council in 1995 and updated in subsequent budgets. A copy of these policies is included in section 5. Key financial policies affecting the budget and rates development process are summarized below:

- *Rate Levels*. Rates should be set at a level sufficient to cover current and future expenses, maintain reserves consistent with Utility financial policies and the long-term financial plans, and to pass through wholesale cost increases directly to Utility customers. Changes in rate levels should be gradual and uniform to the extent that costs can be forecasted. Inflationary indices should be used as a basis for evaluating proposed rate increases.

- *Reserves*. Each Utility shall maintain a reserve to protect the solvency of the funds. Additionally, to provide rate stabilization, reserves will be managed to target levels. The reserve policy was updated in 1997-1998 to stipulate all unanticipated reserves (ending fund balances) greater than planned levels will be transferred to the Renewal and Replacement (R&R) Account in a manner consistent with the long range Utility financial plan. The reserve criteria were updated in 2004 for the impact of the new water arrangement with the Cascade Water Alliance (Cascade).

- *Capital Investment/Reinvestment*. Investment in capital infrastructure and/or deposit of funds in an R&R account are to be made to ensure that current and future customers pay an equitable amount for the long-term integrity of utility systems.

KEY PRINCIPLES AND INITIATIVES GUIDING BUDGET DEVELOPMENT

The following are the key principles and initiatives that guided the development of the Department's budget:

Lean operating expenditures: The proposed budget includes minimal new programs. Local cost increases are below inflation. New staffing is proposed to implement Advanced Metering Infrastructure (AMI) and to address increased workload demands to meet regulatory compliance requirements, operational and maintenance needs, and support the CIP. The following table summarizes the proposed new FTEs included in the 2017-2018 budget.

Table 1: Proposed New FTEs

	FTEs
Project Manager (AMI)	1.0
Skilled Worker (Stormwater NPDES Compliance)	1.0
Skilled Worker (Water Maintenance & CIP support)	1.0
Senior Engineer (CIP Support)	1.0
Total	**4.0**

Infrastructure preservation: The City's utility infrastructure is aging and increased maintenance and capital investments are inevitable. System failures are on the rise. The future capital program will focus largely on renewal and replacement of this aging infrastructure. Over the 2017-2023 planning period, the City's investment in the proposed Utilities CIP totals $220.6 million. Operating expenses in support of the CIP total $79.3 million and 30FTEs.

The following tables provide a summary of projected CIP expenditures by year and utility for the 7-year CIP period. See Attachment B for additional detail on the proposed 2017-2023 CIP.

Table 2: 2017-2023 CIP Expenditures ($000's)

	2017	2018	2019	2020	2021	2022	2023	Total
Water CIP	$15,196	$21,369	$29,014	$14,932	$15,417	$16,284	$16,520	$128,732
Sewer CIP	$10,169	$7,311	$10,856	$5,386	$4,529	$4,414	$5,259	$47,924
Storm CIP	$9,347	$14,525	$6,190	$3,329	$3,306	$3,397	$3,815	$43,909
Total – Utility CIP	**$34,712**	**$43,205**	**$46,060**	**$23,647**	**$23,252**	**$24,095**	**$25,594**	**$220,565**

Major areas of capital investment over the 2017-2023 planning period include:

- ***Aging infrastructure***: $159.6 million, or 73% of the total CIP, is proposed to address aging infrastructure needs.
  - $103.4 million is proposed to address aging water infrastructure needs. Major projects include $70.3 million for small diameter water main replacements and $15.3 million for water pump station rehabilitation or replacement. The water utility is in active system replacement and the majority of water utility CIP expenditures will be used to support replacement of existing aging infrastructure.
  - $39.1 million to address aging sewer infrastructure needs. Major projects include $14.0 million for sewer system pipeline repairs, $11.7 million for sewer system pipeline replacements, and $7.4 million for sewer pump station improvements. The sewer utility is beginning systematic asset replacement.
  - $17.1 million to address aging storm infrastructure needs. Major projects include $10.4 million for storm system conveyance repairs and replacement, $3.6 million for replacement of the NE 8th Street Culvert at Kelsey Creek, and $1.7 million to fund a video inspection and condition assessment of the storm utility pipelines. The storm utility is in the early stages of determining asset replacement needs.
- ***Environmental preservation:*** $27.8 million, or 13% of the total CIP, is proposed for environmental preservation. Significant investments include funding for stream restoration for the Mobility and Infrastructure Initiative ($5.0 million), storm flood control ($8.4 million) and lower Coal Creek flood hazard reduction ($7.3 million).
- ***Capacity for Growth:*** $9.7 million, or 4% of the total CIP, is proposed to address Utilities' capacity to meet growth in the City. Significant projects include construction of a new water inlet station ($5.2 million).
- ***Customer service enhancement****:* $23.1 million, or 10% of the total CIP, will support implementation of the Advanced Metering Infrastructure (AMI) project. This project will be implemented over a three year period starting in 2017 the cost of which will be shared 70% by the Water Utility and 30% by the Sewer Utility. This project will be fully funded with existing resources and will not require an increase to rates. The following table summarizes the sources of funds for the AMI project.

Table 3: Proposed AMI Funding Sources ($ Millions)

	Water	Sewer	Total
2016 Excess Operating Reserves	$ 6.0		$ 6.0
Infrastructure R&R Reserves	$10.2	$6.9	$17.1
Total	$16.2	$6.9	$23.1

The R&R reserves will be replenished over time by anticipated cost savings and net revenue gains from the AMI investment.

Long Range Infrastructure Renewal and Replacement (R&R) Planning

Bellevue Utilities is better prepared than most utilities to meet increasing infrastructure resource requirements due to the R&R Fund and the use of long-term infrastructure financial planning to accumulate funds necessary to replace Utilities infrastructure as it ages. This allows Utilities to amortize major pending liabilities over a long time span, while maintaining current service levels, keep rate increases gradual and uniform, and maintain intergenerational equity. The following tables provide a summary of the projected R&R reserves for the 7-year CIP period.

Table 4: Renewal/Replacement Account Ending Fund Balance ($000's)

	2017	2018	2019	2020	2021	2022	2023
Water	$46,066	$38,627	$24,484	$25,400	$26,998	$28,785	$31,611
Sewer	$64,052	$68,966	$70,739	$78,399	$87,346	$96,852	$105,973
Storm	$56,158	$56,396	$65,108	$75,152	$85,793	$96,934	$108,284
Total	**$166,276**	**$163,989**	**$160,331**	**$178,951**	**$200,137**	**$222,571**	**$245,868**

Operational efficiency: The Utilities Department continues to focus on operational efficiencies. For example, during the previous biennium the City Council approved funding for the mobile workforce initiative to improve the operational efficiency of field staff. Implementation of this initiative will conclude in late 2016 and includes deployment of technology hardware and software to enable mobile workflow solutions so that field staff are able to operate more efficiently and effectively. This deployment is expected to result in immediate tangible benefits starting in late 2016 and continuing into 2017 and beyond. These benefits include real-time data access and uploads of information such as utility maps, remote work order dispatching and documentation and immediate data entry from the field.

Resiliency preparedness: Preparing Utilities to minimize service disruptions to customers in the event of natural disasters is critical. The proposed 2017-2018 budget includes resiliency investments to prepare Bellevue Utilities for emergency events, such as a major earthquake. The propose budget includes funding to evaluate the development of Bellevue's wells as a source of emergency water supply. Additionally, funding is proposed to assess the seismic vulnerability of Bellevue's water pipes. Findings from these evaluations will inform future resiliency funding needs.

Customer service enhancements: The proposed budget includes a significant enhancement in customer service through the installation of a new Advanced Metering Infrastructure (AMI) system. The AMI system will enable customers to access drinking water consumption information real-time through their computer or mobile device. In addition, the AMI system will enable real-time notification of leaks on customer premises, promote conservation activities, and enhance water system modeling. Over the 2017-2023 planning period, the City's investment in the AMI system totals $23.1 million.

Fully fund wholesale costs: Consistent with Council adopted financial policies, the proposed budget fully funds wholesale cost increases, thereby ensuring funding for local programs are not degraded. Wholesale costs for 2017-2018 total $111.2 million and represent approximately 39% of the Utilities Department's proposed 2017-2018 budget. Wholesale costs include payments to the Cascade Water Alliance for the cost of purchasing water supply and regional capital facility charges and payments to King County Metro for wastewater treatment.

UTILITY RATES

The following table summarizes the rate adjustments in 2017 and 2018 that are necessary to support the Utility Department's proposed budget as well as forecasted annual rate adjustments for the period 2019 to 2022.

Table 5: Proposed and Projected Utility Rate Increases 2017-2022

	Water Utility	Sewer Utility	Stormwater Utility
2017 Proposed	3.4%	4.4%	4.3%
2018 Proposed	6.1%	2.2%	4.6%
2019 Projected	*4.4%*	*4.4%*	*3.5%*
2020 Projected	*4.4%*	*1.1%*	*3.3%*
2021 Projected	*4.4%*	*2.9%*	*3.4%*
2022 Projected	*3.9%*	*2.9%*	*3.4%*

Included under section 5 is a proposed rate schedule for 2017 and 2018 for the water, sewer and stormwater utilities.

Significant rate drivers in proposed 2017-2018 Budget:
As with any business enterprise, changes in the cost to deliver services must be evaluated and incorporated into the budget. For the 2017-2018 biennium, the Utilities proposed rates reflect the following cost drivers:

Water:

- The cost of purchased water is the single largest cost center for the Water Utility, accounting for approximately 37% of annual expenditures. The City is a member of the Cascade Water Alliance, which serves to provide water supply for Alliance members. Other member jurisdictions include the cities of Issaquah, Kirkland, Redmond, Tukwila, Sammamish Plateau Water and Sewer District, and the Skyway Water and Sewer District. Payments to Cascade Water Alliance for purchased water totaled $19.1 million in 2016 and is expected to increase to $19.4 million in 2017 and $20.2 million in 2018. This will result in retail rate increases to City of Bellevue customers of 0.8% in 2017 and 1.9% in 2018 for wholesale water purchases.

- Additional increases of 2.6% in 2017 and 4.2% in 2018 are needed to continue providing existing levels of service through operations and maintenance activities and fund local programs, including investment in new infrastructure. More than half of this increase is attributable to funding to support the proposed CIP and long-term asset replacement needs of the utility.

- The City of Issaquah will assume delivery of water and sewer services to about 1,000 customer accounts in the South Cove/Greenwood Pointe area effective January 1, 2017. The assumption is estimated to result in an annual net revenue loss to the water utility of $260,000. This will result in a rate increase of 0.7% in 2017.

  The following table summarizes the water utility rate drivers for 2017 and 2018.

Table 6: Water Utility Rate Drivers

Category	**2017**	**2018**
Wholesale Rate Driver	0.8%	1.9%
Local Rate Drivers		
CIP / R&R	1.5%	3.1%
Taxes / Interfunds	0.2%	0.8%
Operations	0.2%	0.3%
Issaquah assumption	0.7%	0.0%
Total Local Rate Drivers	2.6%	4.2%
Total Increase	**3.4%**	**6.1%**

Sewer:

- The cost of wastewater treatment services is the single largest cost center for the Sewer Utility, accounting for approximately 56% of annual expenditures. King County-METRO provides wastewater treatment services to 34 local cities and sewer utilities in the King, Snohomish and Pierce County region. Bellevue contracts with King County Metro for waste water treatment. Payments to King County-METRO are expected to increase from $32.0 million in 2016 to $33.6 million in 2017 and remain at that level through 2018. The resulting pass-through rate increases to Bellevue customers are estimated to be 3.1% in 2017 and 0.0% in 2018.

- Additional increases of 1.3% in 2017 and 2.2% in 2018 are needed to continue providing existing levels of service through maintenance and operations activities and fund local programs, including investment in new infrastructure.

- As discussed above, the City of Issaquah will assume delivery of water and sewer services to about 1,000 customer accounts in the South Cove/Greenwood Pointe area effective January 1, 2017. The assumption is estimated to result in an annual net revenue loss to the sewer utility of $280,000. This will result in a rate increase of 0.6% in 2017.

  The following table summarizes the sewer utility rate drivers for 2017 and 2018.

Table 7: Sewer Utility Rate Drivers

Category	2017	2018
Wholesale Rate Driver	3.1%	0.0%
Local Rate Drivers		
CIP / R&R	0.7%	0.7%
Taxes / Interfunds	0.0%	0.8%
Operations	0.0%	0.7%
Issaquah assumption	0.6%	0.0%
Total Local Rate Drivers	1.3%	2.2%
Total Increase	**4.4%**	**2.2%**

Storm & Surface Water:

- Annual rate increases of 4.3% in 2017 and 4.6% in 2018 are necessary to maintain current service levels as well as provide funding for capital needs. There is no wholesale component to Storm rates since all services are provided by the Storm Utility. The following table summarizes the storm utility rate drivers for 2017 and 2018.

Table 8: Storm Utility Rate Drivers

Category	2017	2018
Local Rate Drivers		
CIP / R&R	3.2%	3.8%
Taxes / Interfunds	0.0%	0.4%
Operations	1.1%	0.4%
Total Local Rate Drivers	4.3%	4.6%
Total Increase	**4.3%**	**4.6%**

Total Utilities Rate Impact to Customer

The monthly utility bill for the typical single-family residential customer for water, sewer, and storm and surface water services is $156.74 in 2016. With the above proposed rate increases, the total monthly bill for the typical single-family resident would increase by 4.0% or $6.30 in 2017 and 4.0% or $6.51 in 2018. Bellevue's utility rates are competitive and will continue to be competitive in the future with the Council-

adopted financial policy to proactively plan and prepare for infrastructure replacement and renewal. Sample monthly bills for selected types of Utility customers can be found in sections 7 and 8.

Solid Waste:

- The contract with Republic Services for garbage, recycling, and organics collection includes an annual adjustment based upon changes in the consumer price index as applied to the service portion of customer rates to reflect the normal cost increase of doing business. Effective January 1, 2017, the rate for a typical single family residential customer[1] will increase by 1.55% consistent with the provisions of their contract with the City.

BUDGETING FOR OUTCOMES

Like the previous budget, the 2017-2018 Preliminary Budget is based on a "Budgeting for Outcomes" approach adopted by the City. The approach focuses on services that deliver outcomes that are important to the community and aligns departmental priorities to these outcomes, reflecting the values of the community and important community-wide priorities recognized by the City Council. Departments, including Utilities, submitted "proposals" that were each developed to respond to key purchasing strategies for one of seven Outcomes. Most of Utilities' proposals were submitted to the Healthy and Sustainable Environment outcome. A copy of each of the Utilities Department operating and capital budget proposals can be found under sections 3 and 4.

[1] Assumes 32 gallon size.

Attachment A
Utilities Proposed 2017-2018 Operating Budget

The following tables provide a summary of operating expenses and personnel requirement by fund for 2017 and 2018, respectively, broken down by major category.

Table 1: Proposed 2017 Budget

Cost Element	Water	Sewer	Stormwater	Solid Waste	Total
Wholesale	$21,577,875	$33,638,851	$ 0	$ 0	$ 55,216,726
Capital Program	12,770,357	13,326,347	12,172,558	0	38,269,262
Taxes / Intergovernmental	7,960,803	6,325,367	3,931,813	425,853	18,643,836
Operations	10,640,040	7,471,549	7,554,474	720,778	26,386,841
Subtotal	**$52,949,075**	**$60,762,114**	**$23,658,845**	**$1,146,631**	**$138,516,665**
Reserves					
Ending Fund Balance	$10,135,948	$ 4,327,130	$ 1,683,196	$1,144,266	$ 17,290,540
Asset Repl. Resv	3,719,746	3,013,601	3,462,417	0	10,195,764
Subtotal	**$13,855,694**	**$ 7,340,731**	**$ 5,145,613**	**$1,144,266**	**$ 27,486,304**
Total	**$66,804,769**	**$68,102,845**	**$28,804,458**	**$2,290,897**	**$166,002,969**
FTEs	70.75	52.00	50.00	1.00	173.75
LTEs	1.00	1.00	0.00	0.00	2.00
Total FTEs/LTEs	**71.75**	**53.00**	**50.00**	**1.00**	**175.75**

Table 2: Proposed 2018 Budget

Cost Element	Water	Sewer	Stormwater	Solid Waste	Total
Wholesale	$22,356,650	$33,662,398	$ 0	$ 0	$56,019,048
Capital Program	14,286,085	13,691,857	13,032,277	0	41,010,219
Taxes / Intergovernmental	8,343,525	6,489,877	4,077,845	443,061	19,354,308
Operations	10,572,754	8,335,395	8,288,601	738,196	27,934,946
Subtotal	**$55,559,014**	**$62,179,527**	**$25,398,723**	**$1,181,257**	**$144,318,521**
Reserves					
Ending Fund Balance	$10,298,331	$4,145,999	$1,991,941	$1,046,590	$17,482,861
Asset Repl. Resv	4,170,072	2,894,532	3,408,474	0	10,473,078
Subtotal	**$14,468,403**	**$7,040,531**	**$5,400,415**	**$1,046,590**	**$27,955,939**
Total	**$70,027,417**	**$69,220,058**	**$30,799,138**	**$2,227,847**	**$172,274,460**
FTEs	70.75	52.00	50.00	1.00	173.75
LTEs	1.00	1.00	0.00	0.00	2.00
Total LTEs/FTEs	**71.75**	**53.00**	**50.00**	**1.00**	**175.75**

Note: Capital program expenditures include capital project delivery operating expenditures and transfers to CIP/Renewal and Replacement program.

Attachment B
Utilities Proposed 2017-2023 CIP

The following tables summarizes the projected CIP expenditures by utility for the 7-year CIP period.

Table 1: 2017-2023 CIP Expenditures by Utility ($000's)

Investment Category	2017	2018	2019	2020	2021	2022	2023	Total
Water CIP								
Replace Aging Infrastructure	$13,388	$12,574	$15,369	$14,599	$15,167	$16,029	$16,260	$103,386
Capacity for Growth	1,598	3,150	3,337	333	250	255	260	9,183
Service Enhancement (AMI)	210	5,645	10,308	--	--	--	--	16,163
Subtotal – Water CIP	**$15,196**	**$21,369**	**$29,014**	**$14,932**	**$15,417**	**$16,284**	**$16,520**	**$128,732**
Sewer CIP								
Replace Aging Infrastructure	$ 9,208	$4,804	$ 5,840	$5,105	$4,518	$4,402	$5,259	$39,136
Capacity for Growth	870	11	11	11	11	12	--	926
Environmental Preservation	1	77	587	270	--	--	--	935
Service Enhancement (AMI)	90	2,419	4,418	--	--	--	--	6,927
Subtotal – Sewer CIP	**$10,169**	**$7,311**	**$10,856**	**$5,386**	**$4,529**	**$4,414**	**$5,259**	**$47,924**
Storm CIP								
Replace Aging Infrastructure	$3,595	$4,844	$1,734	$1,575	$1,674	$1,778	$1,892	$17,092
Environmental Preservation	5,752	9,681	4,456	1,754	1,632	1,619	1,923	26,817
Subtotal – Storm CIP	**$9,347**	**$14,525**	**$6,190**	**$3,329**	**$3,306**	**$3,397**	**$3,815**	**$43,909**
Total – Utility CIP	**$34,712**	**$43,205**	**$46,060**	**$23,647**	**$23,252**	**$24,095**	**$25,594**	**$220,565**

MISSION & STRATEGIC PRIORITIES

Utilities' Mission

Deliver high quality, reliable drinking water, wastewater, storm and surface water, and solid waste services in a manner that is environmentally responsible and cost-competitive.

Utilities' Strategic Priorities

Business Sustainability: Make decisions that are sustainable under changing economic, social, and environmental conditions.

Customer Value: Provide excellent service and value to the community.

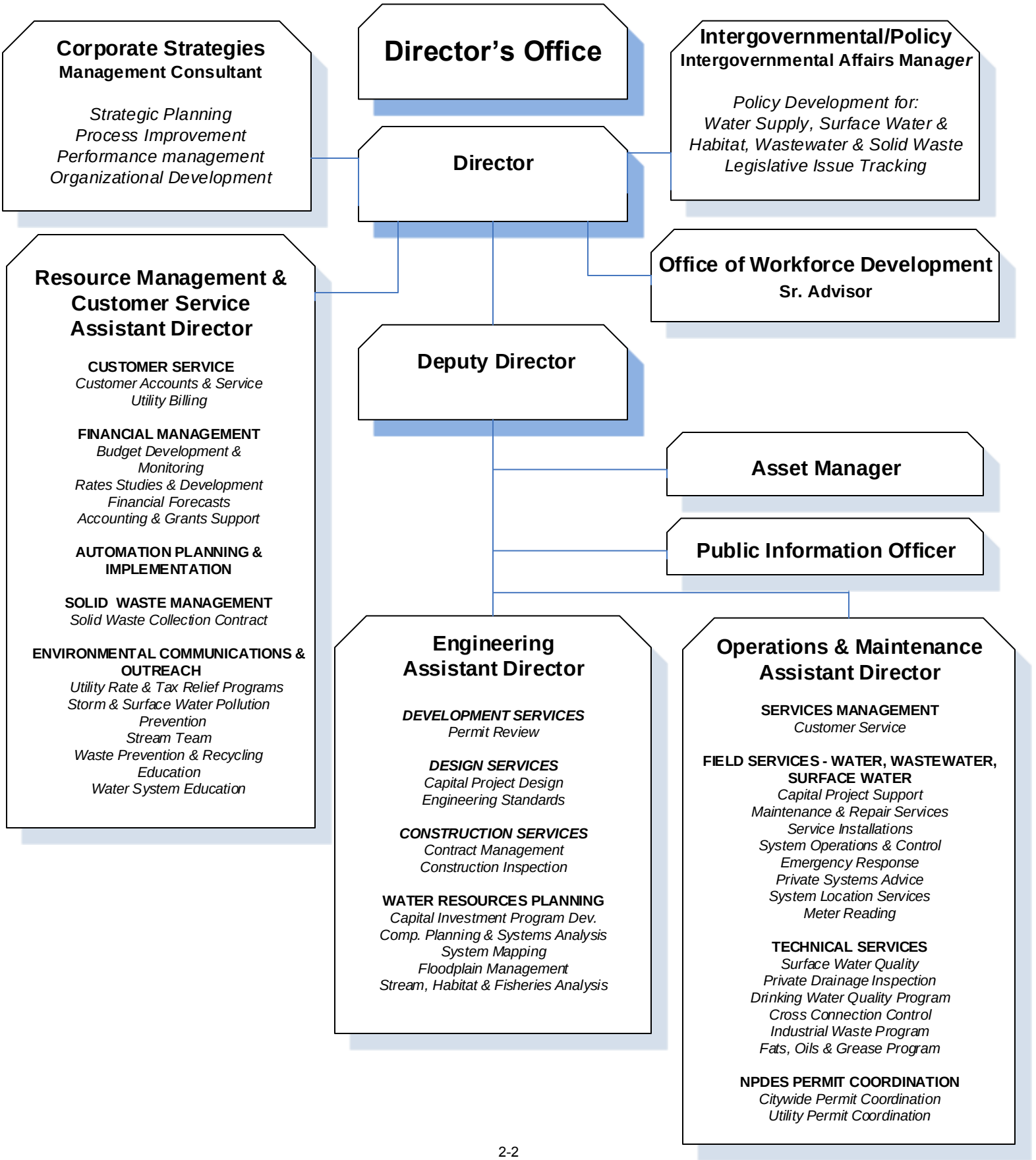
Employee Development: Recruit, develop, and retain a workforce that is equipped to meet current and future business needs.

Environmental Stewardship: Promote environmental stewardship by protecting and restoring the natural environment.

High Performance Organization: Increase City wide collaboration and employee engagement through a culture of shared leadership and open communication.

CITY OF BELLEVUE UTILITIES

Water Utility Fund, Sewer Utility Fund, Storm & Surface Water Utility Fund, Solid Waste Fund



Water Utility Overview

Mission Statement
Provide a reliable supply of safe, secure, high-quality drinking water that meets all the community's water needs in an environmentally responsible manner.

Major Issues
- Utilities drinking water infrastructure is aging and most of the system is well past its midlife. Utilities has a strategic asset management plan in place to repair or replace failing components that includes a 75-year financial plan and rate model to minimize system failures and mitigate future rate spikes.
- Slightly more than 40 percent of the water main is asbestos cement (AC) pipe, generally the oldest pipe in Bellevue's water system and the type that wears out the fastest. Ductile and cast iron pipe comprise almost 60 percent of the system. Whereas ductile iron pipe failures often start out as small leaks that can be detected before much damage is done, AC pipe fails "catastrophically" without warning. Replacing AC pipe is the focus of Utilities replacement program.
- Cascade Water Alliance, Bellevue's primary water supplier, will likely make significant investments in new infrastructure over the next 20-50 years. Financial impacts to Bellevue Utilities will depend on the extent and timing of the investments.
- State and federal water quality mandates are increasing.
- Investment is needed to build facilities that provide capacity for Bellevue's expected growth.

Service Area
The City of Bellevue's drinking water utility serves 37,400 customer accounts, and the service area covers over 37 square miles, including the adjacent communities of Clyde Hill, Hunts Point, Medina, Yarrow Point, and sections of the cities of Issaquah and Kirkland.

Sewer Utility Overview

Mission Statement
Provide a reliable wastewater disposal system that ensures public health and safety, and protects the environment.

Major Issues
- Utilities wastewater infrastructure is aging, and most of the system is well past its midlife. Utilities has a strategic asset management plan in place to repair or replace failing components that includes a 75-year financial plan and rate model, to minimize system failures and mitigate future rate spikes.
- The full cost to repair or replace the aging sewer mains, especially in-lake submerged wastewater pipes (also known as lake lines), will be substantial.
- Utilities contracts with King County for treatment and disposal of wastewater at their South Treatment Plant in Renton and their Brightwater Treatment Plant in Woodinville. This service accounts for approximately 58 percent of our Wastewater budget and will likely increase in the coming years due to costs of Brightwater, enhanced treatment requirements at the South Treatment Plant, and liability for the Lower Duwamish River Superfund Site clean-up.
- Investment is needed to build facilities that provide capacity for Bellevue's expected growth.

Service Area
The City of Bellevue's wastewater utility serves 37,100 customer accounts, and the service area covers over 37 square miles, including the adjacent communities of Beaux Arts, Clyde Hill, Hunts Point, Medina, Yarrow Point, and sections of the City of Issaquah.

Storm and Surface Water Utility Overview

Mission Statement
Provide a storm and surface water system that controls damage from storms, protects surface water quality, supports fish and wildlife habitat, and protects the environment.

Major Issues
- Utilities storm and surface water infrastructure is aging and most of the system is well past its midlife. Utilities has a strategic asset management plan in place to repair or replace failing components that includes a 75-year financial plan and rate model to minimize system failures and mitigate future rate spikes.
- Unlike the water and wastewater systems, the storm and surface water system is a combination of private and public systems. These systems, over half of which are private, work together to convey stormwater, control flooding, and protect water quality. Utilities establishes the standards for private property owners to develop and manage their stormwater systems to comply with local, state, and federal regulations and to protect surface water.
- Compliance with the city's National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, a Federal Clean Water Act mandate that affects programs citywide, will have significant long-term impacts on the way the city does business, on city expenses, and on private development costs.

Service Area
Bellevue Utilities provides storm and surface water utility service to all properties in the City of Bellevue, (33,000 customer accounts). There are 26 drainage basins in the city, most with year-round streams.

Solid Waste Utility Overview

Mission Statement
Provide a convenient, unobtrusive solid waste collection system that contributes to a healthy and pleasing cityscape in an environmentally sensitive way.

The city contracts with Republic Services to provide solid waste services to residents and businesses.

Major Issues
- Policies that are aligned with Bellevue's interests need to be included in King County's update of the 2001 Comprehensive Solid Waste Management Plan.
- Broad waste prevention and recycling strategies will need to be implemented to extend the useful life of the Cedar Hills Regional Landfill.
- Bellevue decided not to extend the Solid Waste Interlocal Agreement (ILA) with King County, originally signed in 1988 and ending in 2028, under which the county provides solid waste planning, transfer, and disposal services. This decision means that the city needs to begin laying the

foundation to take on all responsibilities for the planning, collection, transfer, and disposal of solid waste generated within its boundaries, including the financing and development of any necessary infrastructure required to ensure continued excellent service.

Utilities Department, City of Bellevue
2015-16 Accomplishments and 2017-18 Goals & Initiatives

This document describes the significant accomplishments of the Utilities Department during the past two years (2015-16) and the major goals/initiatives of the department for the next two years (2017-18). Consistent with the attributes of an effectively managed utility, these accomplishments and goals cover key areas such as workforce management, regulatory compliance, infrastructure, and financial performance.

2015-2016 Accomplishments	2017-2018 Goals & Initiatives
• Developed 2015 Utilities Strategic Plan, which will guide Utilities actions through 2019. • Completed system plan updates for the water, sewer and stormwater utilities. • Operated with 100% uninterrupted water and wastewater services during winter storms and power outages. • Inspected and maintained all surface water assets in compliance with the Stormwater NPDES permit. • Completed agreement for Issaquah's assumption of water and sewer service for the South Cove/Greenwood Point area. • Achieved Bellevue's interests through the King County Solid Waste Transfer Plan Report's recommendation to retain a new northeast King County transfer station as a future system option. • Completed technology evaluation/recommendation for converting to Advanced Metering Infrastructure (AMI) technology for water metering.	• Invest $78 million in capital improvements to maintain the long-term integrity of utility infrastructure. • Retain an option of a new northeast King County transfer station in the King County Solid Waste Comprehensive Plan and protect the Factoria Transfer Station and Bellevue from inequitable negative impacts. • Conduct seismic vulnerability assessment of water utility distribution system. • Develop master plan for well/water rights. • Monitor federal, state and local legislation and rulemaking that could impact utility operations. • Complete Maintenance Facility master plan. • Implement Utilities IT strategic plan. • Maintain robust performance management program. • Complete Sewer cost of service study. • Produce SCADA master plan. • Conduct Asset Management life cycle cost analysis. • Begin Advanced Metering Infrastructure (AMI) implementation.

140 Utilities KDIs

Report Author: Nav Otal
Generated on: July 21, 2016

Top 7 Performance Category	Performance Measure	Data Reported As Of	Traffic Light Icon	2015 Annual Data: Current Value	Current Target	Variance Vs Target	Value Vs Target (%)
Solid Waste Management	140.0435 Utilities: Achieve minimum single family customer satisfaction score of 75.1% on 100% of survey questions	2015 result		85.00%	80%	5.00%	106.25%
	140.0436 Utilities: Achieve minimum multifamily/commercial customer satisfaction score of 73.1% on 100% of survey questions	2015 result		85.00%	80%	5.00%	106.25%
	140.0433 Utilities: Achieve overall recycling rate of 70% for contracted solid waste services by 2020**	2015 result		39.73%	45%	-5.27%	88.29%
	140.0434 Utilities: Improve multifamily and commercial organics recycling rate for contracted solid waste services to 7.2% by year end 2016.	2015 result		2.20%	7.20%	-5.00%	30.56%
Financial Stability	140.0120 Utilities: Maintain a minimum Aa2 bond rating	2015 result		Yes	Yes	-	-
	140.0131f Utilities: Average monthly utility bill comparison to select neighboring municipalities	2015 result		104.82%	100%	4.82%	104.82%
	140.0183f Utilities: Percent of total CIP expended vs budgeted	2015 result		70.45%	85%	-14.55%	82.88%
	140.0420 Utilities: Percentage to target: Operating Reserves balance	2015 result		144.04%	100%	44.04%	144.04%
	140.0421 Utilities: Percentage to targeted Renewal & Replacement contribution	2015 result		100%	100%	0%	100%
Workforce Management	140.0422 Utilities Percent of CIP Design projects completed on schedule	Cumulative result for 2016 as of Q2 2016		64.29%	80%	-15.71%	80.36%
	140.0114f Utilities: Percent of Public Works contracts completed under the original Bid	Cumulative result for 2016 as of Q2 2016		94.12%	360%	-265.88%	26.14%
	140.0099f Utilities: Percent of Utility Extension (UE) permit first reviews meeting First Review Decision targeted timeline	Cumulative result for 2016 as of Q2 2016		59.62%	80%	-20.38%	74.53%
	140.0306 Utilities: Utilities services customer satisfaction survey - (Citywide citizen survey)	2015 result		94%	85%	9%	110.59%
Water System Integrity	140.0078f Utilities: Percentage of customer accounts with minimum water system pressures ≥ 30 psi	2015 result		99.93%	100%	-0.07%	99.93%
	140.0180f Utilities: Distribution system water loss percentage (rolling 3 year average)	2015 result		4.95%	6%	-1.05%	82.50%
	140.0212f Utilities: Unplanned water service interruptions per 1,000 customer accounts	2015 result		1.91	3.00	-1.09	63.67%
	140.0378 Utilities: Total cost of Water claims paid	2015 result		$47,279	$200,000	($152,721)	23.64%
Wastewater System Integrity	140.0430f Utilities: Wastewater overflow events per 100 miles of pipe	2015 result		2.29	4	-1.71	57.25%
	140.0379 Utilities: Total cost of Wastewater claims paid	2015 result		$91,650	$60,000	$31,650	152.75%
Storm System Integrity	140.0305 Utilities: Structural flooding occurrences for storms less than a 100 year storm event (Storm Water)	2015 result		0	5	-5	0%
	140.0380 Utilities: Total cost of Storm and Surface Water claims paid	2015 result		$21,771	$25,000	($3,229)	87.08%
Regulatory Compliance	140.0264 Utilities: Percentage of days per year in compliance with state and federal drinking water regulations	2015 result		100%	100%	0%	100%
	140.0269 Utilities: Compliant with citywide NPDES permit requirements	2015 result		Yes	Yes	-	-

**Solid waste recycling rate goal and calculation methodology were changed for 2015.

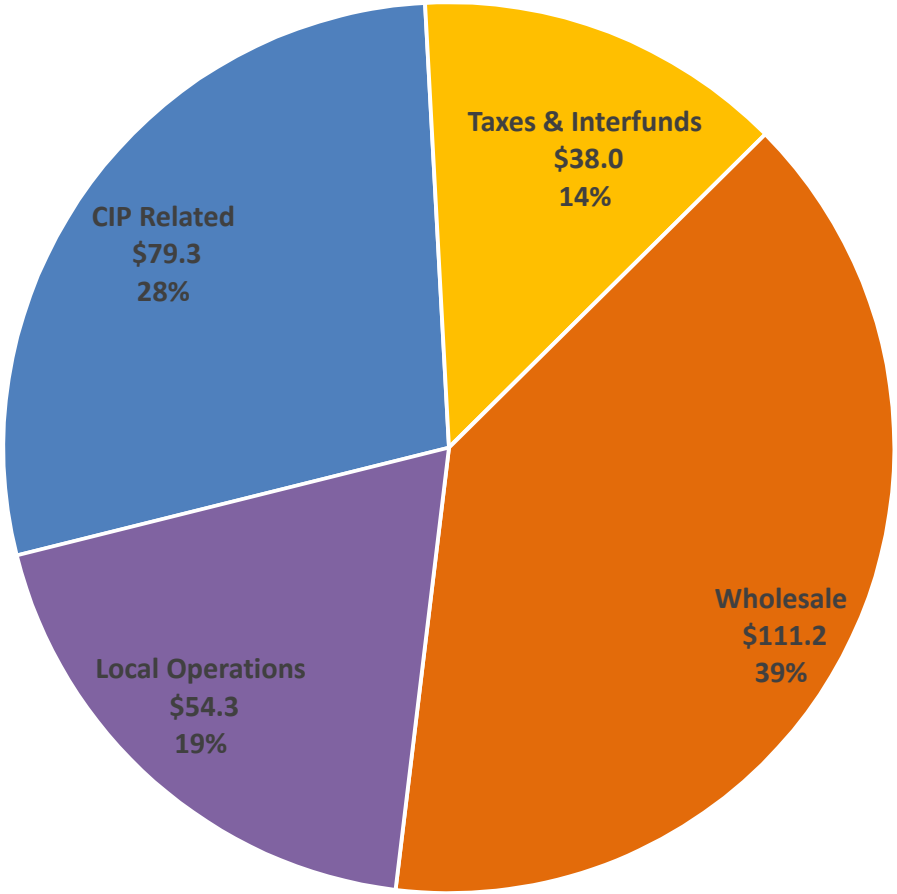
140 Utilities KDIs

Report Author: Nav Otal
Generated on: July 21, 2016

Top 7 Performance Category	Performance Measure	Historical Data							
		2012		2013		2014		2015	
		Value	Target	Value	Target	Value	Target	Value	Target
Solid Waste Management	140.0435 Utilities: Achieve minimum single family customer satisfaction score of 75.1% on 100% of survey questions	100%	100%	43%	80%	85.71%	80%	85.00%	80%
	140.0436 Utilities: Achieve minimum multifamily/commercial customer satisfaction score of 73.1% on 100% of survey questions	100%	100%	100%	80%	100%	80%	85%	80%
	140.0433 Utilities: Achieve overall recycling rate of 70% for contracted solid waste services by 2020**	45.75%	50%	42.48%	50%	41.36%	50%	39.73%	50%
	140.0434 Utilities: Improve multifamily and commercial organics recycling rate for contracted solid waste services to 7.2% by year end 2016.			New measure for 2015.				2.20%	7.20%
Financial Stability	140.0120 Utilities: Maintain a minimum Aa2 bond rating	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	140.0131f Utilities: Average monthly utility bill comparison to select neighboring municipalities	96.04%	100%	99.94%	100%	102.77%	100%	104.82%	100%
	140.0183f Utilities: Percent of total CIP expended vs budgeted	49.78%	75%	66.15%	80%	42.59%	80%	70.45%	85%
	140.0420 Utilities: Percentage to target: Operating Reserves balance	163.12%	100%	122.62%	100%	122.69%	100%	144.04%	100%
	140.0421 Utilities: Percentage to targeted Renewal & Replacement contribution	100%	100%	100%	100%	100%	100%	100%	100%
Workforce Management	140.0422 Utilities Percent of CIP Design projects completed on schedule	N/A	80%	N/A	80%	N/A	80%	64.29%	80%
	140.0114f Utilities: Percent of Public Works contracts completed under the original Bid	72.22%	90%	100.00%	90%	88%	90%	94.12%	90%
	140.0099f Utilities: Percent of Utility Extension (UE) permit first reviews meeting First Review Decision targeted timeline	70.83%	80%	64.44%	80%	72%	80%	59.62%	80%
	140.0306 Utilities: Utilities services customer satisfaction survey – (Citywide citizen survey)	95%	85%	93%	85%	91%	85%	94%	85%
Water System Integrity	140.0078f Utilities: Percentage of customer accounts with minimum water system pressures ≥ 30 psi	100%	100%	100%	100%	100%	100%	99.93%	100%
	140.0180f Utilities: Distribution system water loss percentage (rolling 3 year average)	5.62%	6%	5.67%	6%	4.93%	6%	4.95%	6%
	140.0212f Utilities: Unplanned water service interruptions per 1,000 customer accounts	1.37	3	1.15	3	1.85	3	1.91	3
	140.0378 Utilities: Total cost of Water claims paid	$271,934	$200,000	$237,170	$200,000	$105,903	$200,000	$47,279	$200,000
Wastewater System Integrity	140.0430f Utilities: Wastewater overflow events per 100 miles of pipe	2.44	4	4.58	4	3.36	4	2.29	4
	140.0379 Utilities: Total cost of Wastewater claims paid	$45,704	$60,000	$97,945	$60,000	$184,824	$60,000	$91,650	$60,000
Storm System Integrity	140.0305 Utilities: Structural flooding occurrences for storms less than a 100 year storm event (Storm Water)	13	5	14	5	49	5	0	5
	140.0380 Utilities: Total cost of Storm and Surface Water claims paid	$1,971	$25,000	$0	$25,000	$0	$25,000	$21,771	$25,000
Regulatory Compliance	140.0264 Utilities: Percentage of days per year in compliance with state and federal drinking water regulations	100%	100%	100%	100%	100%	100%	100%	100%
	140.0269 Utilities: Compliant with citywide NPDES permit requirements	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

**Solid waste recycling rate goal and calculation methodology were changed for 2015.

2017-2018 Utilities Department Operating Budget
$282.8M



10/03/2016
Figures exclude ending operating reserves

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\ESC Prelim Budget Notebook\Sec 3 - Op Budget Proposals\[Utilities Prelim Proposals - source file - do not print.xlsx]OP PIE CHART

Utilities Department
2017-2018 Operating Budget Proposals

Category / Proposal # and Title			Adopted 2015-16	Proposed 2017-18	2016 FTEs/LTEs	2018 FTEs/LTEs
CIP RELATED OPERATING PROPOSALS						
Capital Related Operating Budget Proposals						
140.01NA	Capital Project Delivery	a	7,648,438	8,370,027	27.71	28.96
140.39DA	Operating Transfer to CIP		50,000,608	55,190,555	-	-
140.48DA	Operating Transfer to R&R		12,950,692	15,193,898	-	-
140.69NA	Advanced Metering Infrastructure **(NEW)**		-	525,001	-	1.00
			70,599,738	**79,279,481**	**27.71**	**29.96**
Subtotal - Capital Related			**70,599,738**	**79,279,481**	**27.71**	**29.96**
FINANCIAL OBLIGATIONS						
1. Wholesale and RCFC Payments						
140.37NA	Cascade Regional Capital Facility Charges		4,000,000	4,000,000	-	-
140.61NA	Utilities Water Supply Purchase and Sewage Disposal		103,754,286	107,235,774	0.50	0.50
			107,754,286	**111,235,774**	**0.50**	**0.50**
TAXES AND INTERFUNDS						
1. Taxes and Franchise Fees						
140.34NA	Utility Taxes and Franchise Fees		23,921,226	21,554,146	-	-
			23,921,226	**21,554,146**	**-**	**-**

Utilities Department
2017-2018 Operating Budget Proposals

Category / Proposal # and Title			Adopted 2015-16	Proposed 2017-18	2016 FTEs/LTEs	2018 FTEs/LTEs
2. Payments to General Fund (Interfunds)						
999.xx	Interfund Payments		15,730,228	16,443,998	-	-
4. Operating Reserves (Ending biennial balances only in 2016 and 2018)						
140.40NA	Operating Reserves		24,852,996	27,955,939	-	-
Subtotal - Financial Obligations (INCLUDES RESERVES)			**172,258,736**	**177,189,857**	**0.50**	**0.50**
LOCAL OPERATIONS						
5. Customer Service / Outreach						
140.29NA	Utilities Rate Relief Program		1,417,216	1,343,118	0.70	0.70
140.30NA	Solid Waste, Waste Prevention, and Recycling	a	1,916,716	1,937,767	2.67	2.67
140.31DA	Storm and Surface Water Pollution Prevention	a	1,028,945	1,032,958	2.43	2.43
140.32NA	Water Systems and Conservation	a	276,363	287,392	0.45	0.45
140.33PA	Utilities Customer Service and Billing	a	2,336,746	2,583,875	9.05	7.75
140.45DA	Utility Water Meter Reading		1,116,206	1,113,678	5.80	6.80
			8,092,192	**8,298,788**	**21.10**	**20.80**
6. Engineering - Development Services						
110.01NA	Development Services Information Delivery		817,536	843,788	3.45	3.45
110.02NA	Policy Implementation, Code Amendments, & Consulting Service		415,644	458,000	1.58	1.58
110.03NA	Development Services Review Services		1,079,218	1,185,052	4.60	4.60
110.04NA	Development Services Inspection Services		1,181,773	1,408,299	5.27	5.27
			3,494,171	**3,895,139**	**14.90**	**14.90**

Utilities Department
2017-2018 Operating Budget Proposals

Category / Proposal # and Title			Adopted 2015-16	Proposed 2017-18	2016 FTEs/LTEs	2018 FTEs/LTEs
7. Engineering - Utility System Planning						
140.11NA	Utility Asset Management Program	a	1,443,736	1,488,096	5.00	5.00
140.63NA	Utility Planning and Systems Analysis	a	2,239,711	3,595,979	6.09	6.09
			3,683,447	**5,084,075**	**11.09**	**11.09**
8. Operations and Maintenance - Water						
140.13NA	Water Mains and Service Lines Repair Program	a	3,112,462	3,499,879	10.65	10.65
140.14NA	Water Distibution System Preventive Maintenance Program		1,654,240	1,753,770	6.85	6.85
140.15NA	Water Pump Station, Reservoir and PRV Maintenance Program		2,216,241	2,741,709	4.30	4.30
140.16NA	Water Meter Repair and Replacement Program		1,066,517	813,332	2.25	2.25
140.17NA	Water Service Installation and Upgrade Program		458,260	497,941	1.00	1.00
			8,507,720	**9,306,631**	**25.05**	**25.05**
9. Operations and Maintenance - Sewer						
140.18NA	Sewer Mains, Laterals and Manhole Repair Program	a	1,981,090	2,097,549	7.00	7.00
140.19NA	Sewer Condition Assessment Program	a	1,225,448	1,250,836	4.45	4.45
140.20NA	Sewer Mainline Preventive Maintenance Program	a	2,096,700	2,237,389	8.30	8.30
140.21NA	Sewer Pump Station Maintenance, Operations, and Repair Program		1,776,627	1,873,492	5.55	5.55
			7,079,865	**7,459,266**	**25.30**	**25.30**
10. Operations and Maintenance - Surface Water						
140.22NA	Storm and Surface Water Repair and Installation Program		1,704,160	1,898,585	4.65	4.65
140.23NA	Storm and Surface Water Infrastructure Condition Assessment		504,005	582,317	1.20	1.20
140.24NA	Storm & Surface Water Preventive Maintenance Program	a	3,654,094	3,889,210	10.75	11.75
			5,862,259	**6,370,112**	**16.60**	**17.60**

Utilities Department
2017-2018 Operating Budget Proposals

Category / Proposal # and Title			Adopted 2015-16	Proposed 2017-18	2016 FTEs/LTEs	2018 FTEs/LTEs
11. Regulatory						
140.26PA	Water Quality Regulatory Compliance and Monitoring Programs	a	1,355,809	1,613,060	3.30	3.30
140.27DA	Private Utility Systems Maintenance Programs	a	1,100,001	1,233,158	4.55	4.55
140.44NA	Utility Locates Program		612,782	833,850	2.65	3.40
			3,068,592	**3,680,068**	**10.50**	**11.25**
12. Support Systems / Assets						
140.25NA	Utilities Telemetry and Security Systems		1,161,151	1,570,356	3.80	3.80
140.47DA	Asset Replacement		1,597,750	2,139,700	-	-
140.49DA	Fiscal Management		1,597,279	1,673,586	6.00	6.00
140.60NA	Utilities Computer and Systems Support	a	2,961,624	3,171,150	5.20	5.50
			7,317,804	**8,554,792**	**15.00**	**15.30**
13. Department Management						
140.42NA	Utilities Department Management and Support		1,540,720	1,672,916	4.00	4.00
			1,540,720	**1,672,916**	**4.00**	**4.00**
Subtotal - Local Operations			**48,646,770**	**54,321,787**	**143.54**	**145.29**
Grand Total (includes reserves)			**$291,505,243**	**$310,791,125**	**171.75**	**175.75**
Grand Total (excluding reserves)			***266,652,247***	***282,835,186***		

a. 2015-2016 adjusted for internal reorganization of FTEs to better align existing resources to departmental service delivery. These changes doe not represent a net change in the total number of authorized departmental FTEs

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Development Services Information Delivery**
Proposal Number	110.01NA
Proposal Budget (2017-2018)	$843,788 3.45 FTEs/0.00 LTEs (2018)
Outcome	Responsive Government

Executive Summary

The Development Services (DS) Information Delivery function will support the Responsive Government outcome by providing broad access to development services information regarding properties, public and private development projects, development and construction codes and standards, inspection and enforcement procedures, public records, permit processes, timelines, and fees. Service delivery is provided consistent with customer-driven service expectations that focus on quality, customer experience, timeliness, and predictability.

The Utilities Department provides development inspection services of water, sewer and surface water facilities constructed or proposed to be constructed in the City. This summary represents the Utilities Department's share of this proposal only.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 397,795**	**$ 419,741**	**$ 817,536**	**$ 413,210**	**$ 430,578**	**$ 843,788**	**$ 26,252**	**3.2%**
FTEs								
FTEs	3.40	3.45		3.45	3.45		-	n/a
LTEs	-	-		-	-		-	n/a

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Policy Implementation, Code Amendments, & Consulting Service**
Proposal Number	110.02NA
Proposal Budget (2017-2018)	$458,000 1.58 FTEs/0.00 LTEs (2018)
Outcome	Responsive Government

Executive Summary

The Policy Development function of Development Services (DS) supports the Responsive Government outcome by implementing adopted City plans (e.g., Downtown Livability, Eastgate/I-90) and state and federal mandates (e.g., Shoreline Management Act, Critical Areas Update, NPDES) through amendments to codes, standards, and procedures. It aligns regional plans (e.g., Eastlink) with the Community Vision and values by providing development-related consulting advice. Delivering on Policy Development commitments to respond to community priorities maintains public trust and ensures delivery of customer-focused service. This proposal includes internal staff time, outside professional services (as needed), and code and policy implementation.

The Utilities Department provides development inspection services of water, sewer and surface water facilities constructed or proposed to be constructed in the City. This summary represents the Utilities Department's share of this proposal only.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 204,290**	**$ 211,354**	**$ 415,644**	**$ 225,310**	**$ 232,690**	**$ 458,000**	**$ 42,356**	**10.2%**
FTEs								
FTEs	1.58	1.58		1.58	1.58		-	n/a
LTEs	-	-		-	-		-	n/a

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Development Services Review Services**
Proposal Number	110.03NA
Proposal Budget (2017-2018)	$1,185,052 4.6 FTEs/0.00 LTEs (2018)
Outcome	Economic Growth and Competitiveness

Executive Summary

This proposal provides for Development Services (DS) review of designs and applications for private and public development projects. DS issues 12,000 to 14,000 permits and approvals per year that contribute to the economic prosperity of the City. The goals of development review are to ensure that buildings are safe, that land uses and project designs are consistent with the community vision, that the environment is protected, that traffic impacts are managed, and that developer-built utilities and other infrastructure meet the city's standards.

The Utilities Department provides development inspection services of water, sewer and stormwater facilities constructed or proposed to be constructed in the City. This summary represents the Utilities Department's share of this proposal only.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 530,291**	**$ 548,927**	**$ 1,079,218**	**$ 581,788**	**$ 603,264**	**$ 1,185,052**	**$ 105,834**	**9.8%**
FTEs								
FTEs	4.60	4.60		4.60	4.60		-	n/a
LTEs	-	-		-	-		-	n/a

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Development Services Inspection Services**
Proposal Number	110.04NA
Proposal Budget (2017-2018)	$1,408,299 5.27 FTEs/0.00 LTEs (2018)
Outcome	Safe Community

Executive Summary

This proposal provides for cross-departmental inspection services of all development & East Link related construction activity in order to provide safe buildings, appropriate construction of turnkey public infrastructure, protection of property and the environment while supporting economic development. Inspection services levels are sustained through development cycles by adjusting staffing levels based on demand for services and supporting permit fee revenue. A quality built environment supported by both public and private infrastructure is key to sustained economic vitality and competitiveness.

The Utilities Department provides development inspection services of water, sewer and stormwater facilities constructed or proposed to be constructed as part of proposed East link light-rail project. This summary represents the Utilities Department's share of this proposal only.

Description of change over previous biennium

The budget for this proposal includes $40,000 in funding in each year for contracted inspection resources to assist with keeping pace with the demands for inspection services. The cost for this effort is expected to be fully revenue recovered from development service fees.

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 506,679**	**$ 675,094**	**$ 1,181,773**	**$ 691,861**	**$ 716,438**	**$ 1,408,299**	**$ 226,526**	**19.2%**
FTEs								
FTEs	4.32	5.27		5.27	5.27		-	n/a
LTEs	-	-		-	-		-	n/a

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title **Capital Project Delivery**

Proposal Number 140.01NA

Proposal Budget (2017-2018) $8,370,027 27.96 FTEs/1.00 LTEs

Outcome Healthy and Sustainable Environment

Executive Summary

Capital Project Delivery develops and implements cost-effective capital investment projects necessary to accomplish the proposed $218 million 2017-2023 Utility Capital Investment Program (CIP), averaging $31 million per year. These projects are necessary to continue to provide utility services to Bellevue's citizens including providing drinking water, removing wastewater, managing surface water runoff, and eliminating impacts on the health of Bellevue's streams, lakes, wetlands, plants, and wildlife. This proposal includes staff and resources needed to develop, manage, design, and construct projects that accomplish the proposed 2017-2023 CIP.

Description of change over previous biennium

No significant changes are proposed in the 2017-2018 biennium.

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 3,687,707**	**$ 3,960,731**	**$ 7,648,438**	**$ 4,154,672**	**$ 4,215,355**	**$ 8,370,027**	**$ 721,590**	**9.4%**
FTEs - CIP								
FTEs	25.71	26.71		27.96	27.96		1.25	5%
LTEs	1.00	1.00		1.00	1.00		-	n/a

2017-2018 Utility Operating Budget Proposals

Proposal Title **Capital Project Delivery**

Proposal Number 140.01NA

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0111f: Pct. of Public Work contracts requiring warranty repair	0.0%	5.0%	5.0%	5.0%
140.0114f: Pct of Public Works contracts completed under the original Bid	94.1%	90.0%	90.0%	90.0%
140.0183f: Pct. of total CIP expended vs budgeted	70.5%	85.0%	90.0%	90.0%
140.0422: Pct. of CIP Design projects completed on schedule	71.4%	80.0%	80.0%	80.0%

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Utility Asset Management Program**
Proposal Number	140.11NA
Proposal Budget (2017-2018)	$1,488,096 5 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal funds the Utility Asset Management Program (AMP), to determine the resources needed to operate, maintain, repair, and eventually replace or rehabilitate utility system assets and assures they are used cost effectively. Prudent and proactive management of the City's vast network of utility infrastructure is critical to ensuring sustained services and minimizing failures within the system.

Bellevue Utilities operates more than $3.5 billion worth of utility assets such as pipelines, pump stations and reservoirs. AMP develops and employs strategies to assess asset condition so that service levels expected by customers and required by state and federal regulations are provided at the lowest cost. More than 50% of Utility assets are at least halfway through their useful life. As assets age they continue to deteriorate; maintenance, repair, rehabilitation and replacement costs increase, making it even more critical that resources are used effectively.

Description of change over previous biennium

$160,000 is included in 2018 to conduct a life-cycle cost analysis of the Department's water, sewer and stormwater infrastructure. This analysis is needed to help inform the long-term replacement value of this infrastructure.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Utility Asset Management Program**

Proposal Number 140.11NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 729,349**	**$ 714,387**	**$ 1,443,736**	**$ 651,340**	**$ 836,756**	**$ 1,488,096**	**$ 44,360**	**3.1%**
FTEs								
FTEs	5.00	5.00		5.00	5.00		-	n/a
LTEs	1.00	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0082f: Condition related water main failures per 100 miles of water main	3.2	1.3	5.0	5.0
140.0085f: Percentage of water pump stations rehabilitated within their useful life (25 years)	61.9%	76.0%	76.0%	76.0%
140.0092f: Percentage of sewer pump stations rehabilitated within their useful life (25 years)	58.7%	65.0%	65.0%	65.0%
140.0097 Utilities: Drainage system pipeline failures	1	5	5	5
140.0430f Utilities: Wastewater overflow events per 100 miles of pipe	2.3	4.0	4.0	4.0

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Water Mains and Service Lines Repair Program**
Proposal Number	140.13NA
Proposal Budget (2017-2018)	$3,499,879 10.65 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

The primary objective of the water repair program is to fix system breaks, stop leaks, protect drinking water quality, restore water service to customers, and mitigate environmental damage. The City also benefits financially from efficient repairs that minimize revenue loss and claims for damages. Failure from the water system infrastructure can have catastrophic consequences, including damaged property, roadways, the natural environment and water service interruption to homes and the businesses. While Utilities has sound water maintenance and capital improvement programs, main breaks can occur at any time and are increasing as the water infrastructure ages. Examples of services included in this proposal include leak detection services, repairs to broken, leaking or malfunctioning water mains, service lines, fire hydrants, and control valves.

The City's drinking water system includes 620 miles of water mains, 10,000 valves, 40,810 water service connections, and 6,000 fire hydrants. The water infrastructure is aging and most of the system is well past its mid-life. As a result, the drinking water system is experiencing more failures at increasing costs. This proposal requests the resources necessary to quickly respond to and repair drinking water infrastructure in order to minimize service disruption, property damage and claims for damages, revenue loss and the protection of drinking water quality.

Description of change over previous biennium

$180,000 is included in one-time funds in 2017 to address a backlog of asphalt restoration projects.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Water Mains and Service Lines Repair Program**

Proposal Number 140.13NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 1,539,015**	**$ 1,573,447**	**$ 3,112,462**	**$ 1,818,613**	**$ 1,681,266**	**$ 3,499,879**	**$ 387,417**	**12.4%**
FTEs								
FTEs	10.65	10.65		10.65	10.65		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0212f: Unplanned water service interruptions per 1,000 customer accounts	1.9	0.8	3.0	3.0
140.0215: Water distribution system - water loss percentage (most recent year)	3.3%	6.0%	6.0%	6.0%
140.0246: Number of water service repairs	284	250	250	250
140.0247: Number of water main repairs	27	7.5	30	30

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Water Distibution System Preventive Maintenance Program**
Proposal Number	140.14NA
Proposal Budget (2017-2018)	$1,753,770 6.85 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

Preventive maintenance services ensure the ongoing safety and operational integrity of the drinking water distribution system. Services include annual inspection and maintenance of fire hydrants, isolation valves, and system flushing (cleaning) programs. These programs extend the useful life of the drinking water system, are critical for system function and reliability, and maintain safe, high-quality drinking water for residents and businesses. Lack of adequate water system maintenance impacts the ability to quickly repair water main breaks, increases the chance of waterborne disease and problems with water quality. It could also result in fire hydrants and valves that do not work when needed for firefighting or other emergencies.

The City's drinking water system provides 6 billion gallons of drinking water annually throug a network of 620 miles of water mains, 10,000 valves, 40,810 water service connections, and 6,000 fire hydrants. The water infrastructure is aging and most of the system is well past its mid-life. Timely and proactive preventive maintenance is critical to ensuring the reliability and functionality of the water utility system.

Description of change over previous biennium

No significant changes are proposed in the 2015-2016 biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Water Distibution System Preventive Maintenance Program**

Proposal Number 140.14NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 833,561**	**$ 820,679**	**$ 1,654,240**	**$ 859,826**	**$ 893,944**	**$ 1,753,770**	**$ 99,530**	**6.0%**
FTEs								
FTEs	6.85	6.85		6.85	6.85		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0216: Number of fire hydrants that fail fireflow delivery at time of inspection	1	0	0	0
140.0220f: Percentage of fire hydrants inspected	49.3%	12.5%	50.0%	50.0%
140.0223f: Percentage of water system isolation valves inspected	36.3%	8.3%	33.0%	33.0%
140.0257: Number of water claims paid due to system failure	9.00	1.25	5.00	5.00
140.0258: Number of water claims paid greater than $20,000 due to system failure	0.00	0.00	0.00	0.00
140.0378: Total cost of Water claims paid	$47,279	$50,000	$200,000	$200,000

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Water Pump Station, Reservoir and PRV Maintenance Program**
Proposal Number	140.15NA
Proposal Budget (2017-2018)	$2,741,709 4.3 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal provides necessary preventive maintenance and repair throughout the public drinking water system. These services extend the useful life of assets; avoid costs associated with catastrophic failures and increase system reliability while maintaining drinking water quality. Bellevue's unique topography (with elevations ranging from sea level to 1,440 feet) requires a complicated system of reservoirs, pump stations, and pressure regulating valves (PRVs) to provide safe water and adequate fire flow throughout the service area. Due to the likelihood and high consequences of failure if preventive maintenance services are not provided, this proposal supports the goals for reliability and performance of the drinking water storage and delivery system.

Funding for this proposal provides the necessary resources to efficiently deliver an average daily demand of 16.7 million gallons per day (GPD) and peak summer demands averaging 32.8 million gallons per day (MGD) to customers, and maintain storage capacity of 42.5 million gallons for fire flow and peak demand. The proposal provides resources to ensure water supply and water quality of the drinking water system, and repair/replace pumps, motors, and valves as needed.

Description of change over previous biennium

In 2017, $400,000 in one-time funds will be paid to Coal Creek Utility District (CCUD) for water reservoir painting required under the joint use agreement. The reservoir is owned by CCUD and provides water to Bellevue customers under the joint use agreement.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Water Pump Station, Reservoir and PRV Maintenance Program**

Proposal Number 140.15NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 1,159,859**	**$ 1,056,382**	**$ 2,216,241**	**$ 1,595,565**	**$ 1,146,144**	**$ 2,741,709**	**$ 525,468**	**23.7%**
FTEs								
FTEs	4.30	4.30		4.30	4.30		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0226: Number of Water System Pressure Reducing Valve failures per year	2	0	0	0
140.0227: Number of water pump failures per year	1	0	0	0
140.0228: Number of reservoirs taken out of service as a result of drinking water quality concerns	0	0	0	0
140.0229f: Percent of Water System Pressure Reducing Valves maintained	27.0%	2.0%	20.0%	20.0%
140.0232f: Percent of reservoirs cleaned	24.0%	20.0%	20.0%	20.0%

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Water Meter Repair and Replacement Program**
Proposal Number	140.16NA
Proposal Budget (2017-2018)	$813,332 2.25 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal provides for regular testing, calibration, repair and replacement of City-owned water meters at established intervals to ensure meter accuracy for water and sewer revenue collection, equitable billing and rates, early leak detection for the customer, and to promote water conservation. Accurate water meters ensure fair and equitable billing for water and sewer services. Under-registering water meters result in lost revenues which are spread to the rest of the rate base. Resources in this proposal replace 2000 older water meters in accordance with AWWA and manufacturer recommendations on a 20 year replacement cycle. Meter box maintenance activities are included to ensure safe access for meter reading and to shut off the water service in the event of an emergency.

The proposal provides resources to ensure timely testing, calibration and repair/replacement of city-owned water meters . There is a nominal increase in materials costs built in to this propoosal to reflect the increased cost of no lead parts now required by the State.

Description of change over previous biennium

Starting in 2017, the budget for the meter repair and replacement program is reduced by $120,000 annually (to $80,000/yr), reflecting the anticipated implementation of Automated Meter Infrastructure.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Water Meter Repair and Replacement Program**

Proposal Number 140.16NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 532,046**	**$ 534,471**	**$ 1,066,517**	**$ 401,809**	**$ 411,523**	**$ 813,332**	**$ (253,185)**	**-23.7%**
FTEs								
FTEs	2.25	2.25		2.25	2.25		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0235f: Percent of commercial meters that meet accuracy standards at the time of the test	36.0%	85.0%	85.0%	85.0%
140.0238f: Percent of commercial meters tested annually	46.3%	20.0%	20.0%	20.0%

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Water Service Installation and Upgrade Program**
Proposal Number	140.17NA
Proposal Budget (2017-2018)	$497,941 1 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal provides resources for the installation of drinking water service for new homes and businesses to obtain occupancy permits without costly delays to the property owner or contractor. Utilities perform water main shutdowns, water main condition assessments, and pipe work to install new water services. Asphalt cuts and excavations needed for installation are completed by private contractors under the right-of-way (ROW) use permit process. This hybrid Utility/contractor approach to water service installations provides timely installation of new services for developers, condition assessment data critical for asset management, minimizes customer service impacts of water shutdowns and assures consistent quality control and sanitation while supporting economic development.

Water service connections support community growth and economic development if they are performed expeditiously and minimize construction delays. Commercial and residential development requires water service prior to occupancy, so delays can be very costly for customers and contractors. This service is cost-reimbursed by the development community.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Water Service Installation and Upgrade Program**

Proposal Number 140.17NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 228,188**	**$ 230,072**	**$ 458,260**	**$ 247,198**	**$ 250,743**	**$ 497,941**	**$ 39,681**	**8.7%**
FTEs								
FTEs	1.00	1.00		1.00	1.00		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0242f Utilities: Percent of water service installations completed within four weeks of request	100.0%	100.0%	100.0%	100.0%
140.0245 Utilities: Number of water service installations	16	50	50	50

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Sewer Mains, Laterals and Manhole Repair Program**
Proposal Number	140.18NA
Proposal Budget (2017-2018)	$2,097,549 7 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

The City of Bellevue's Sewer section is responsible for operation, maintenance, and repair of 655 miles of buried or submerged pipe and 14,508 manholes and cleanouts (maintenance access structures) within its service territory. This proposal provides repair services for the sewer collection system. These repairs correct deficiencies predominately due to aging infrastructure and allow the City to get the most use out of each pipe and manhole over the life of the asset for the least long-term cost. Raw sewage contains viruses, bacteria, chemicals and other pathogens that are an extreme threat to public health and the environment when not managed and contained within the sewer collection system. Broken or defective sewer mains and connections result in blockages and overflows of sewage that can flood and contaminate customer's homes, businesses or the environment; create public health issues and result in costly liability claims to the City.

The long-term goal is to eliminate the backlog and keep pace with newly identified repair needs on an ongoing basis. The condition assessment program continues to find an average of 10 new defects a month.

Description of change over previous biennium

Annual repairs and maintenance supplies is increased by $40,000, reflecting historical actuals.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Sewer Mains, Laterals and Manhole Repair Program**

Proposal Number 140.18NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 978,412**	**$ 1,002,679**	**$ 1,981,090**	**$ 1,034,062**	**$ 1,063,487**	**$ 2,097,549**	**$ 116,459**	**5.9%**
FTEs								
FTEs	7.00	7.00		7.00	7.00		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0187: Number of identified wastewater pipe defects requiring repair within 5 years	387	200	200	200
140.0188: Number of wastewater in-house pipe repairs completed annually	104	25	100	100
140.0338: Number of new wastewater pipe defects identified for repair or replacement	35	100	100	100

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Sewer Condition Assessment Program**
Proposal Number	140.19NA
Proposal Budget (2017-2018)	$1,250,836 4.45 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

The Sewer Condition Assessment Program uses Closed Circuit TV (CCTV) equipment to provide digital images of the inside of sewer pipes and stubs in the right-of-way (ROW) to identify and evaluate pipe defects that need repair and document less severe defects that need regular maintenance. Sewer pipe defects can cause catastrophic failures resulting in blockages, backups and sewer overflows which impact customers, public health, and the environment. In addition, identifying and repairing sewer defects prior to road overlay activities minimizes pavement impacts and lowers restoration costs. Condition assessment is the digital recording, evaluation, and reporting of CCTV video of sewer mains and service stubs. CCTV data is used by Utilities Engineering and Operations and Maintenance to identify and prioritize repairs and determine which pipe defects can be deferred for future monitoring. This data also provides needed information to proactively manage the sewer system including the development of long-term renewal and rehabilitation CIP programs .

As discussed in Proposal #140.18, the City of Bellevue's Sewer section is responsible for operation, maintenance, repair of 655 miles of buried or submerged pipe and 14,508 manholes and cleanouts (maintenance access structures) within its service territory. Most of this system is aging and requires scheduled and emergency repairs to ensure reliability and service to Bellevue's citizens and businesses.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Sewer Condition Assessment Program**

Proposal Number 140.19NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 604,951**	**$ 620,497**	**$ 1,225,448**	**$ 613,812**	**$ 637,024**	**$ 1,250,836**	**$ 25,388**	**2.1%**
FTEs								
FTEs	4.45	4.45		4.45	4.45		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0195: Linear feet of wastewater condition assessment performed	218,997	68,750	275,000	275,000
140.0336f: Percent of wastewater system video inspected	6.4%	2.0%	8.0%	8.0%
140.0338: Number of new wastewater pipe defects identified for repair or replacement	35	100	100	100

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Sewer Mainline Preventive Maintenance Program**
Proposal Number	140.20NA
Proposal Budget (2017-2018)	$2,237,389 8.3 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal provides preventive maintenance cleaning services on the sewer collection system to keep the lines clear. These services include root sawing to remove tree root intrusion, pipe cleaning using high pressure jetting, and other mechanical means ,and flushing to remove grease, solids and other debris that collect in sewer pipes and cause blockages and overflows.

Preventive maintenance services lower service interruptions due to blockages, the associated claims due to backups, and minimize overflows which impact the environment and public health. This preventive maintenance program allows us to maximize the life of the sewer system for the least long-term cost.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Sewer Mainline Preventive Maintenance Program**

Proposal Number 140.20NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 1,024,074**	**$ 1,072,626**	**$ 2,096,700**	**$ 1,102,451**	**$ 1,134,938**	**$ 2,237,389**	**$ 140,689**	**6.7%**
FTEs								
FTEs	8.30	8.30		8.30	8.30		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0199f: Percent of wastewater pipe cleaned	18.8%	5.0%	20.0%	20.0%
140.0211: Number of wastewater claims paid due to system failure	12.0	2.5	10.0	10.0
140.0315: Number of wastewater claims paid greater than $20,000 due to system failure	1.0	0.3	1.0	1.0
140.0379: Total cost of Wastewater claims paid	$91,650	$15,000	$60,000	$60,000
140.0430f: Wastewater overflow events per 100 miles of pipe	2.3	4.0	4.0	4.0

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Sewer Pump Station Maintenance, Operations, and Repair Program**
Proposal Number	140.21NA
Proposal Budget (2017-2018)	$1,873,492 5.55 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal provides sewer pump station maintenance and repairs to help minimize failures that cause sewer backups and overflows to the environment that can result in beach closures and surface water quality concerns. In addition, sewer backups can require a homeowner to move out or a business to close until cleanup is completed. Bellevue's unique topography with elevations ranging from sea level to 1,440 feet requires a diverse and complicated system of pump stations to provide continual service 24 hours a day/365 days a year. This proposal provides staff, vehicles, tools, equipment, and supplies for maintenance, operations, and repair services for sewer pump stations in the sewer collection system. These services ensure the 46 sewer pump stations, located along Lake Washington and Lake Sammamish, are adequately maintained and operating properly to minimize sewer blockages and overflows which impact customers, public health, and the environment.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Sewer Pump Station Maintenance, Operations, and Repair Program**

Proposal Number 140.21NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 889,599**	**$ 887,028**	**$ 1,776,627**	**$ 922,199**	**$ 951,293**	**$ 1,873,492**	**$ 96,865**	**5.5%**
FTEs								
FTEs	5.55	5.55		5.55	5.55		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0202f: Non-weather related pump station overflows per 1,000 wastewater customer accounts (value of 0.027 represent 1 overflow)	0.00	0.00	0.00	0.00
140.0205f: Weather related wastewater pump station overflows per 1,000 customer accounts (value of 0.027 represents 1 overflow)	0.00	0.00	0.00	0.00
140.0208f: Percent of wastewater pump station inspections completed as planned	93.6%	100.0%	100.0%	100.0%

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Storm and Surface Water Repair and Installation Program**
Proposal Number	140.22NA
Proposal Budget (2017-2018)	$1,898,585 4.65 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

The Storm and Surface Water System within the City of Bellevue is comprised of a network of public and privately owned pipes, open channels, catch basins, manholes, streams and detention facilities both above and below ground. This proposal provides repair and installation services for publicly owned drainage system components to ensure that the municipal storm drainage system functions as designed. This aids to protect life, property, and the environment during major storm and flooding events, and to reduce pollution entering streams and lakes. Much of the repair work surrounding the storm & surface water system is mandated under the National Pollution Discharge and Elimination System permit (NPDES). This proposal requests the resources necessary to quickly respond to and provide infrastructure repairs and installations.

Description of change over previous biennium

No significant changes are included over the previous biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Storm and Surface Water Repair and Installation Program**

Proposal Number 140.22NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 836,247**	**$ 867,913**	**$ 1,704,160**	**$ 939,564**	**$ 959,021**	**$ 1,898,585**	**$ 194,425**	**11.4%**
FTEs								
FTEs	4.65	4.65		4.65	4.65		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0291f: Percentage of Surface Water repairs completed	14.2%	100.0%	100.0%	100.0%
140.0371f: Labor hours per catch basin/manhole repair	12.8	12.0	12.0	12.0

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Storm and Surface Water Infrastructure Condition Assessment**
Proposal Number	140.23NA
Proposal Budget (2017-2018)	$582,317 1.2 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

The Surface Water O&M Infrastructure Condition Assessment Program uses Closed Circuit TV (CCTV) equipment to provide digital images of the inside of drainage pipes. These images are used to evaluate and identify defects that need repair. Undetected defects can lead to catastrophic failures that have the potential to result in flooding, damage to roadways and down-slope properties, and liability claims. The overall goal of this program is to locate and repair defects within pipes before failures occur and to also assess the system for longterm repair and replacement needs.

Condition assessment provides valuable asset management information for the Utilities repair and replacement program by identifying and documenting overall trends in pipe condition. This is essential information when developing long-term replacement funding strategies for aging infrastructure.

Description of change over previous biennium

This proposal conducts video assessment of storm drainage pipes at the rate of about 2% of the piped drainage system or approximately 8 miles per year. Information collected through condition assessment identifies ongoing trends in differing pipe materials to help with planning for future repair and replacement funding. Funding for the video assessment effort is proposed to increase by $140,000 (to $300,000) in the 2017-2018 biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Storm and Surface Water Infrastructure Condition Assessment**

Proposal Number 140.23NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 280,555**	**$ 223,450**	**$ 504,005**	**$ 286,712**	**$ 295,605**	**$ 582,317**	**$ 78,312**	**15.5%**
FTEs								
FTEs	1.20	1.20		1.20	1.20		-	n/a
LTEs	2.00	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0294: Number of surface water pipe defects identified through condition assessment activities requiring repair or replacement	3	25	25	25
140.0295f: Percent of surface water system video inspected	3.3%	0.6%	2.4%	2.4%
140.0296: Linear feet of surface water condition video assessment performed	69,066	12,461	49,844	49,844

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Storm & Surface Water Preventive Maintenance Program**
Proposal Number	140.24NA
Proposal Budget (2017-2018)	$3,889,210 11.75 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

The resources in this proposal fund preventative maintenance activities related to the City's storm and surface water system. For the drainage system to function correctly and provide adequate flood control, it must be kept free of excessive debris and sediment. These can cause blockages of catch basins and pipes during heavy rains leading to flooding, property damage claims, and environmental degradation. Sediment is also a pollutant. The drainage system contains a variety of water quality facilities that trap oils and other pollutants from roadways and allow for their removal during maintenance. Because the final discharge for all drainage in Bellevue is the City's streams and lakes, system maintenance is essential to keep them free of the sediment and pollutants generated from roadways and other impervious surfaces. The majority of maintenance activities funded by this proposal are mandated under the Federal

Description of change over previous biennium

Starting in 2017, $75,000 is included each year for major maintenance of regional detention ponds. $100,000 is included in 2017 for Meydenbauer Bay outfall sediment removal. In 2016, Utilities reorganized the Operations and Maintenance division to create a new Compliance Manager position that oversees the Water Quality and the Storm and Surface Water sections. This position was created by repurposing the previous NPDES coordinator position upon retirement of the previous FTE and incorporating the duties of that position into the Compliance Manager role supporting the Water Quality and Storm and Surface Water Superintendents. This did not result in any new costs but is a change in previous proposals as proposal 140.64NA has been incorporated into this proposal and others to account for the reorganization of duties.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Storm & Surface Water Preventive Maintenance Program**

Proposal Number 140.24NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 1,822,871**	**$ 1,831,223**	**$ 3,654,094**	**$ 1,994,123**	**$ 1,895,087**	**$ 3,889,210**	**$ 235,117**	**6.4%**
FTEs								
FTEs	10.75	10.75		11.75	11.75		1.00	9%
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0289: Number of surface water claims paid due to system failure	3.0	0.5	2.0	2.0
140.0290: Number of surface water claims paid greater than $20,000 due to system failure	0	0	0	0
140.0298f: Percent of NPDES required public infrastructure inspections completed	477.4%	100.0%	100.0%	100.0%
140.0301f: Percent of surface water planned preventive maintenance work orders completed	100.0%	100.0%	100.0%	100.0%
140.0380: Total cost of Storm and Surface Water claims paid	$21,771	$6,250	$25,000	$25,000

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Utilities Telemetry and Security Systems**
Proposal Number	140.25NA
Proposal Budget (2017-2018)	$1,570,356 3.8 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal provides for maintenance, operation, and repair of utilities telemetry (remote monitoring and data transmittal) sensing and measurement of information such as reservoir levels, water pressure and flows, sewage pump station levels, and storm retention pond levels at remote pump stations/reservoirs and transmission of that information to a central location, SCADA (Supervisory Control & Data Acquisition), and security components of the water, sewer, and surface water systems. Use of telemetry and SCADA equipment enables continuous automated monitoring and control of utility systems and significantly reduces operational staff needs. In addition, security systems continuously monitor water reservoirs and pump stations for signs of intrusion and notify operators of any security breaches 24 hours a day/365 days a year. These systems work to maintain drinking water quality, supply and security, avoid sewer overflows, and effectively manage regional storm water facilities.

Description of change over previous biennium

$150,000 is included in 2017 to fund a SCADA master planning effort. Starting in 2017, $94,000 is included each year for Telemetry leased line costs and was previously budgeted in the Information Technology Department.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Utilities Telemetry and Security Systems**

Proposal Number 140.25NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 572,872**	**$ 588,279**	**$ 1,161,151**	**$ 850,995**	**$ 719,361**	**$ 1,570,356**	**$ 409,205**	**35.2%**
FTEs								
FTEs	3.80	3.80		3.80	3.80		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0259: Number of water/sewer service interruptions caused by SCADA/Telemetry system	0	0	0	0
140.0260: Number of security breaches discovered but not detected at the time of the intrusion	0	0	0	0
140.0261f: Percent of planned preventive maintenance activities completed at telemetry sites	76.7%	100.0%	100.0%	100.0%
140.0317: Number of water or sewer pump station failures caused by SCADA/Telemetry failures	0	0	0	0

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Water Quality Regulatory Compliance and Monitoring Programs**
Proposal Number	140.26PA
Proposal Budget (2017-2018)	$1,613,060 3.3 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal provides Water Quality Regulatory Compliance and Monitoring Programs necessary to: Minimize the risk of drinking water supply contamination and resultant human illnesses and/or deaths; and protect surface water quality, reduce pollutant discharges, and provide emergency spill response. These programs are the primary means of managing compliance with the Safe Drinking Water Act's water quality sampling/monitoring requirements. In addition, they address operational mandates of the Clean Water Act and the City's National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Stormwater Permit. These programs also ensure compliance with an array of other requirements and contractual agreements, such as the Endangered Species Act (ESA) Regional Road Maintenance Program. This encompasses a wide range of activities from field work, water quality sampling and analysis, regulatory reporting, emergency response, and enforcement, to City Council communication/policy support.

Description of change over previous biennium

In 2016, Utilities reorganized the Operations and Maintenance division to create a new Compliance Manager position that oversees the Water Quality and the Storm and Surface Water sections. This position was created by repurposing the previous NPDES coordinator position upon retirement of the previous FTE and incorporating the duties of that position into the Compliance Manager role supporting the Water Quality and Storm and Surface Water Superintendents. This did not result in any new costs but is a change in previous proposals as proposal 140.64NA has been incorporated into this proposal and others to account for the reorganization of duties.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Water Quality Regulatory Compliance and Monitoring Programs**

Proposal Number 140.26PA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 681,583**	**$ 674,226**	**$ 1,355,809**	**$ 795,687**	**$ 817,373**	**$ 1,613,060**	**$ 257,251**	**19.0%**
FTEs								
FTEs	3.30	3.30		3.30	3.30		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0264: Percentage of days per year in compliance with state and federal drinking water regulations	100.0%	100.0%	100.0%	100.0%
140.0265f: Number of drinking water quality complaints per 1,000 water service connections	1.1	2.0	2.0	2.0
140.0270: Compliant with all Surface Water Regulatory Requirements	Yes	Yes	Yes	Yes
140.0271: Number of illicit discharges detected and corrected annually	251	155	200	200

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Private Utility Systems Maintenance Programs**
Proposal Number	140.27DA
Proposal Budget (2017-2018)	$1,233,158 4.55 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal protects public health by preventing drinking water from backflow cross contamination, reduces pollutants in surface water, and funds Fat's, Oil's and Grease program to reduce sewer blockages and overflows. These programs are mandated by the Federal Safe Drinking Water Act, Clean Water Act, and other regulations. Private Systems Maintenance Programs (PSMP) conduct field inspections and code enforcement at businesses and homes through education and code compliance for private water, stormwater, and wastewater systems to minimize public health risks, flooding, and pollution affecting homes, businesses, and the environment. Cross Connection Control (CCC), Private Drainage Inspection (PDI), Industrial Waste/Fats, Oils, and Grease (FOG) programs provide oversight of private infrastructure through education, inspection, and codes to ensure protection of public health and the environment and to protect the public infrastructure from premature failure or degradation.

This program ensures that appropriate testing and maintenance is performed at businesses and residences to ensure that they reliably protect public health and the environment. These programs provide education, inspection, and enforcement at over 90% of Bellevue's businesses and 4,000 residential properties.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Private Utility Systems Maintenance Programs**

Proposal Number 140.27DA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 541,071**	**$ 558,930**	**$ 1,100,001**	**$ 605,767**	**$ 627,391**	**$ 1,233,158**	**$ 133,157**	**12.1%**
FTEs								
FTEs	4.55	4.55		4.55	4.55		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0272f: Percent of Fat, Oil, Grease removal devices compliant with maintenance requirements	22.2%	50.0%	50.0%	100.0%
140.0278: Number of documented drinking water system backflow events	0.0%	0.0%	0.0%	0.0%
140.0281: Number of backflow assemblies tested annually	11,106	12,596	13,000	13,500
140.0319f: Percent of planned private drainage inspections performed	72.5%	100.0%	100.0%	100.0%

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Utilities Rate Relief Program**
Proposal Number	140.29NA
Proposal Budget (2017-2018)	$1,343,118 0.7 FTEs/0.00 LTEs
Outcome	Healthy and Sustainable Environment

Executive Summary

The Utilities Rate Relief Program is a support and safety net for Bellevue's low income senior and permanently disabled citizens. The Utilities Rate Relief Program is entirely supported by utility rates, and is designed to be a support and safety net for Bellevue's low income senior and permanently disabled citizens. To participate, customers must be over 62 years of age or permanently disabled, and meet income qualifications. These requirements are prescribed by BCC 24.10.

The program currently provides much-needed utilities rate relief to approximately 1,200 participants annually. These low income customers receive either a 40% or 75% discount off their Utilities costs, based upon income-qualifying criteria. There are two groups of customers – those that pay utilities costs directly to the Utilities, known as "Direct Customers," who get the discount applied directly to their Utilities bill, and those who pay through rental payments to a third-party, known as "Indirect Customers," who receive a relief check representing their discount from the previous year. In 2017, this program will provide approximately $895,000 in assistance to Direct and Indirect Customers combined.

Description of change over previous biennium

No significant change in operating expenditures or level of service is proposed.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Utilities Rate Relief Program**

Proposal Number 140.29NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 685,735**	**$ 731,481**	**$ 1,417,216**	**$ 658,081**	**$ 685,037**	**$ 1,343,118**	**$ (74,098)**	**-5.2%**
FTEs								
FTEs	0.70	0.70		0.70	0.70		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0001f: Rate relief program coverage of eligible customers	20.5%	25.0%	25.0%	25.0%

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Solid Waste, Waste Prevention, and Recycling**
Proposal Number	140.30NA
Proposal Budget (2017-2018)	$1,937,767 2.67 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

City customers generate approximately 120,000 tons of solid waste annually, 72,000 tons of which is garbage that must be hauled to the local landfill. Efficient and effective management of solid waste (i.e., garbage, recyclables, and organic waste) is critical to the health and appearance of the City, its continued economic viability, and the sustainability of both the local and global environment. This proposal provides for the management of the solid waste collection contract with Republic Services, the continuation of the City's successful waste prevention and recycling programs, and the exploration of what the City will do in 2028 when it leaves the King County solid waste transfer and disposal system.

Description of change over previous biennium

No significant changes in operating expenditures or level of service is proposed.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Solid Waste, Waste Prevention, and Recycling**

Proposal Number 140.30NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 949,187**	**$ 967,529**	**$ 1,916,716**	**$ 956,101**	**$ 981,666**	**$ 1,937,767**	**$ 21,051**	**1.1%**
FTEs								
FTEs	2.67	2.67		2.67	2.67		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0004: Solid waste collection contract customer satisfaction	89.0%	80.0%	80.0%	80.0%
140.0006f: Single-family Recycling Rate	67.5%	69.0%	69.0%	69.0%
140.0012f: Meet State recycling goal of 50% of generated solid waste	39.7%	50.0%	50.0%	50.0%
140.0433: Achieve overall recycling rate of 70% for contracted solid waste services by 2020	39.7%	50.0%	55.0%	60.0%
140.0434: Improve multifamily and commercial organics recycling rate for contracted solid waste services to 7.2% by year end 2016.	2.2%	7.2%	10.0%	15.0%

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Storm and Surface Water Pollution Prevention**
Proposal Number	140.31DA
Proposal Budget (2017-2018)	$1,032,958 2.43 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

On an average day, tens of thousands of pounds of toxic chemicals enter Puget Sound's waterways, most of which is carried by storm and surface water that runs off roads, driveways, rooftops, yards, and other developed land. Most people are not aware that water flowing into storm drains is not treated. Under this proposal, staff provides mandated public education and outreach to residents and businesses as required by the National Pollutant Discharge Elimination System (NPDES) Permit, increasing understanding of storm and surface water issues, and promoting behaviors that prevent pollution locally and regionally.

This program will continue current efforts to monitor toxic chemicals flowing off roads, driveways, rooftops, yards, and other developed land, which can impact storm and surface water quality and lead to devastating impacts on the health of local lakes, streams, and wetlands, and the fish and wildlife populations that depend on them.

Description of change over previous biennium

No significant changes are proposed over the previous biennium

2017-2018 Utility Operating Budget Proposals

Proposal Title **Storm and Surface Water Pollution Prevention**

Proposal Number 140.31DA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 507,285**	**$ 521,659**	**$ 1,028,945**	**$ 507,122**	**$ 525,836**	**$ 1,032,958**	**$ 4,013**	**0.4%**
FTEs								
FTEs	2.43	2.43		2.43	2.43		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0015: All public storm drains continue to be marked with message "Don't' Pollute - Drains to Stream"	No	Yes	Yes	Yes
140.0016: Number of volunteers participating in stream team events	93	100	100	100
140.0017: Number of people reached through storm and surface water pollution prevention events	1,800	1,200	1,200	1,200
140.0018: Number of middle and high school students reached by "Be the Solution" curriculum	210	360	450	450
140.0019: NPDES Compliant	Yes	Yes	Yes	Yes
140.0036: Number of elementary students reached by storm and surface water pollution prevention in-class presentations or field trips	2,000	1,500	1,500	1,500
140.0342: Percentage of Bellevue School District 6th Graders that attend the Powerful Choices curriculum.	75.0%	80.0%	80.0%	80.0%
140.0375: Number of attendees for Fall Natural Yard Care Classes	0	160	160	160

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Water Systems and Conservation**
Proposal Number	140.32NA
Proposal Budget (2017-2018)	$287,392 0.45 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

Conserving and promoting the efficient use of water resources to ensure an adequate supply of clean, safe drinking water into the future is critical to human health, the City's continued economic viability, and the sustainability of both the local and global environment. The City leverages resources by looking to Cascade Water Alliance for primary water conservation and efficiency program delivery, and supplements Cascade's programs through the management of the Waterwise Garden, the delivery of Natural Yard Care programs, and the provision of the Powerful Choices for the Environment program to 6th graders, all of which promote the wise use of water and elimination of waste in order meet the City's water use efficiency goals.

In compliance with state requirements and under the City's agreement with Cascade Water Alliance (Cascade), Cascade set a six-year regional water use efficiency savings goal that covers 2014-2019. The City's portion of this goal roughly translates to 228,000 gpd of savings on an annual basis and 380,000 gpd of savings during peak season by the end 2019.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Water Systems and Conservation**

Proposal Number 140.32NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 136,243**	**$ 140,120**	**$ 276,363**	**$ 141,383**	**$ 146,009**	**$ 287,392**	**$ 11,029**	**4.0%**
FTEs								
FTEs	0.45	0.45		0.45	0.45		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0342: Percentage of Bellevue School District 6th Graders that attend the Powerful Choices curriculum.	75.0%	80.0%	80.0%	80.0%
140.0375: Number of attendees for Fall Natural Yard Care Classes	0	160	160	160
140.0376: Save 228,000 gpd of drinking water on an annual basis to meet Cascade cumulative drinking water use efficiency goal by the end of 2019	257,664	114,000	152,000	190,000
140.0377: Save 380,000 gpd of drinking water during peak season on an annual basis to meet Cascade cumulative drinking water use efficiency goal by the end of 2019.	257,664	190,000	253,333	316,667

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Utilities Customer Service and Billing**
Proposal Number	140.33PA
Proposal Budget (2017-2018)	$2,583,875 7.75 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

Utilities Customer Service and Billing sends 5,000 bills each week and and manages 40,000 service connections for 130,000 customers in Bellevue and surrounding communities. Utilities bills for water, wastewater, and storm drainage services, services which are necessary to foster a healthy and sustainable environment. Services are entirely supported by ratepayers. In addition to payment by mail, customers are also able to pay by phone or on-line (using a credit card), or by automatic bank withdrawl.

Description of change over previous biennium

The annual budget for bank card fees is increased by $100,000 reflecting an increase in the number of ratepayers paying electronically using a credit card. This proposal includes a decrease of 1.3 FTE/LTE. This change does not represent a net decrease in the total number of authorized departmental staff. The proposed staff changes seen in this proposal reflect a department-wide effort to better align existing resources to departmental service delivery.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Utilities Customer Service and Billing**

Proposal Number 140.33PA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 1,148,498**	**$ 1,188,249**	**$ 2,336,746**	**$ 1,260,824**	**$ 1,323,051**	**$ 2,583,875**	**$ 247,129**	**10.6%**
FTEs								
FTEs	8.05	8.05		7.75	7.75		(0.30)	-4%
LTEs	1.00	1.00		-	-		(1.00)	-100%

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0025: Customer Calls Abandoned	6.9%	7.0%	7.0%	7.0%
140.0026: Average Customer Hold Time (in seconds)	25	35	35	35
140.0027f: Customer satisfaction survey (weekly Customer Service & Billing)	91.8%	80.0%	80.0%	80.0%

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Utility Taxes and Franchise Fees**
Proposal Number	140.34NA
Proposal Budget (2017-2018)	$21,554,146 0 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

Bellevue Utilities is required to pay State Utility and Business and Occupation (B&O) taxes (RCW 82.04.220 and 82.16.020), City of Bellevue Utility Taxes (BCC 4.10.025), and a franchise fee to neighboring communities that have a franchise agreement with the City to provide water and wastewater services in their jurisdiction. These payments are required by State and Local laws and binding agreements with neighboring jurisdictions. These taxes and fees are passed through directly to utility rate payers and included in their bi-monthly bills.

Description of change over previous biennium

The value of this request is a function of anticipated utility rate revenues. The increased budget over the previous biennium reflect the additional amount of taxes as a result of the proposed rate increases in 2017 and 2018. No changes to the City of Bellevue's or State's tax or franchise fee rates are anticipated.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Utility Taxes and Franchise Fees**

Proposal Number 140.34NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 11,700,724**	**$ 12,220,502**	**$ 23,921,226**	**$ 10,533,320**	**$ 11,020,826**	**$ 21,554,146**	**$ (2,367,080)**	**-9.9%**
FTEs								
FTEs	-	-		-	-		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0352: Percentage of Utility Tax & Franchise Fee payments made by applicable due date	100.0%	100.0%	100.0%	100.0%

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Cascade Regional Capital Facility Charges**
Proposal Number	140.37NA
Proposal Budget (2017-2018)	$4,000,000 0 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

The City's wholesale water supplier, Cascade Water Alliance (CWA), establishes rates to cover the cost of providing water to its members. Bellevue is a member of the CWA. One component of these rates is a fee assessed on each new connection for the equitable recovery of growth-related costs pertaining to Cascade's water supply system. The City has a policy of ensuring that "growth pays for growth" (City Comprehensive Financial Management Policies 10.1.III.A). Under this policy it is the responsibility of the party seeking Utility service to make and pay for any extensions and/or upgrades to the Utility systems that are needed to provide service to their property; Bellevue Utilities passes these charges directly through to customers connecting to the water system. This activity is 100% supported by direct charges assessed to new connections and redevelopments/upgrades to water services. This proposal covers the remittance of the Regional Capital Facility Charge (RCFC) to Cascade. RCFCs are collected and paid as outlined by Bellevue City Code 24.02.065 and Interlocal Contract, Cascade Water Alliance, December 15, 2004.

Description of change over previous biennium

No significant change in operating expenditures or level of service is proposed.

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 2,000,000**	**$ 2,000,000**	**$ 4,000,000**	**$ 2,000,000**	**$ 2,000,000**	**$ 4,000,000**	**$ -**	**0.0%**
FTEs								
FTEs	-	-		-	-		-	n/a
LTEs	-	-		-	-		-	n/a

2017-2018 Utility Operating Budget Proposals

Proposal Title **Cascade Regional Capital Facility Charges**

Proposal Number 140.37NA

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0354 Utilities: Percent of Monthly Regional Capital Facility Charge (RCFC) reports submitted by due date	100.0%	100.0%	100.0%	100.0%

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Operating Transfer to CIP**
Proposal Number	140.39DA
Proposal Budget (2017-2018)	$55,190,555 0 FTEs/0.00 LTEs
Outcome	Healthy and Sustainable Environment

The objective of financial planning for long-term capital investment is grounded on the principles of smooth rate transitions, maintaining high credit ratings, providing for financial flexibility and achieving inter-generational equity (City Comprehensive Financial Management Policies 10.1.II.A). Consistent with this policy, the vast majority of funding for Utilities' capital projects are provided by monthly transfer of rate revenues to the Utility Capital Investment Plan (CIP) . The amount of funding is determined by projecting the capital program's long-term cash flow requirements in a manner that result in smooth annual rate transitions while addressing short- and long-term rate impacts. This proposal establishes the annual transfers to the CIP in accordance with this policy.

Description of change over previous biennium

Rate revenues are the primary source of funding for: 1) the proposed CIP, and 2) long-term capital funding needs through the Utility Capital Facilities Renewal and Replacement (R&R) account. Both transfers work in tandem to provide a comprehensive source of funding for the City's current and long-term CIP needs. This proposal is consistent with City financial management policies. No changes to this historical approach to funding the CIP is anticipated as part of this proposal.

Proposal Financial Summary

	Adopted 2015-2016 Budget			**Proposed 2017-2018 Budget**			**Biennium Change**	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 25,557,720**	**$ 24,442,888**	**$ 50,000,608**	**$ 26,671,725**	**$ 28,518,830**	**$ 55,190,555**	**$ 5,189,947**	**10.4%**
FTEs								
FTEs	-	-		-	-		-	n/a
LTEs	-	-		-	-		-	n/a

2017-2018 Utility Operating Budget Proposals

Proposal Title **Operating Transfer to CIP**

Proposal Number 140.39DA

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0117: CIP Actual Expenditures versus Budget - Water	79.7%	85.0%	90.0%	90.0%
140.0118: CIP Actual Expenditures versus Budget - Wastewater	61.2%	85.0%	90.0%	90.0%
140.0119: CIP Actual Expenditures versus Budget - Storm Water	96.4%	85.0%	90.0%	90.0%
140.0183f: Percent of total CIP expended vs budgeted	70.5%	85.0%	90.0%	90.0%
140.0346: Percentage to target: Operating transfer to CIP account	100.0%	100.0%	100.0%	100.0%
140.0369: Ratio (as a percentage) between the actual Operating transfer to CIP account and the budgeted expense of the CIP plan	100.0%	100.0%	100.0%	100.0%

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Operating Reserves (2018 Only)**
Proposal Number	140.40PA
Proposal Budget (2017-2018)	$27,955,939 0 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

Operating reserves provide the foundational strength for Utilities to provide water, sewer, and storm drainage services that are critical to the health and safety of the community in both normal and emergency situations. These reserves help ensure continued financial and rate stability, help maintain our Aa1 bond rating (the highest rating for a Utility of our size), and protect utility customers from service disruptions that might otherwise result from unforeseen economic or emergency events.

Description of change over previous biennium

This proposal funds Utilities' operating reserves, including working capital, operating contingencies, and plant (utilities systems) emergency reserves, as well as asset (equipment) replacement reserves, consistent with the City and Utility financial management policies (City Comprehensive Financial Management Policy 10.1.V.A)

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 22,565,995**	**$ 24,852,996**	**$ 47,418,991**	**$ 27,486,304**	**$ 27,955,939**	**$ 55,442,243**	**$ 8,023,252**	**16.9%**
FTEs								
FTEs	-	-		-	-		-	n/a
LTEs	-	-		-	-		-	n/a

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Utilities Department Management and Support**
Proposal Number	140.42NA
Proposal Budget (2017-2018)	$1,672,916 4 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

Utilities is a self-supporting enterprise operating within the City of Bellevue, dedicated to actively supporting public health and safety, the environment, a sustainable economy, and neighborhood livability now and into the future. It does so by effectively and efficiently managing four distinct business lines (drinking water, wastewater, storm and surface water systems, and solid waste collection), with a proposed biennial operating budget of about $283M (excluding reserves), proposed capital budget of $218M (2017-2023), and 178.25 FTEs/LTEs. Because of the long lives of utility systems, Utilities planning horizon extends 75 years. With its diverse service portfolio, this large and complex department requires strong leadership, strategic vision, clear guidance, and thoughtful management.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Utilities Department Management and Support**

Proposal Number 140.42NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 755,042**	**$ 785,678**	**$ 1,540,720**	**$ 823,621**	**$ 849,295**	**$ 1,672,916**	**$ 132,196**	**8.6%**
FTEs								
FTEs	4.00	4.00		4.00	4.00		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0056: Employee job engagement score (Annual City Employee Survey)	3.9	3.6	3.6	3.6
140.0120: Maintain a minimum Aa2 bond rating	Yes	Yes	Yes	Yes
140.0306: Utilities services customer satisfaction survey - (Citywide citizen survey)	94.0%	85.0%	85.0%	85.0%
140.0417: Is the Bellevue Utilities Department an Accredited Agency?	Yes	Yes	Yes	Yes
140.0418: Percentage of Utilities customers rating Bellevue Utilities Department services as good value for the money.	88.0%	90.0%	90.0%	90.0%

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Utility Locates Program**
Proposal Number	140.44NA
Proposal Budget (2017-2018)	$833,850 3.4 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal provides resources for Utilities to protect underground City owned and operated utility infrastructure for the three piped utilities provided by the City. The locate program safeguards approximately 1675 miles of City owned underground utility pipelines for the delivery of drinking water and conveyance of surface runoff and sewer pipes by accurately marking utility locations prior to construction excavation in support of development, CIP and franchise utility renewal and repair.

Locators are required by Washington State law to mark underground City owned utilities Responsibilities include responding to excavation notices during normal business hours and after-hours for emergency locates. Locators work closely with the contractors to assure the locate markings are done within the 48-hour time requirement.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Utility Locates Program**

Proposal Number 140.44NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 302,595**	**$ 310,187**	**$ 612,782**	**$ 429,377**	**$ 404,473**	**$ 833,850**	**$ 221,068**	**36.1%**
FTEs								
FTEs	2.65	2.65		3.40	3.40		0.75	28%
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0248f: Percent of locates performed within mandated deadlines	100.0%	100.0%	100.0%	100.0%
140.0251: Dollar value of claims paid due to mis-locates	$0	$0	$0	$0
140.0252: Number of damaged assets due to mis-locates	1	0	0	0
140.0253: Number of locates received	23,730	26,000	28,500	31,000

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Utility Water Meter Reading**
Proposal Number	140.45DA
Proposal Budget (2017-2018)	$1,134,314 5.8 FTEs/1.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal provides services to read customer meters for all residential and commercial accounts in the water utility service area that includes the City of Bellevue, adjacent communities of Clyde Hill, Hunts Point, Medina, Yarrow Point, and sections of Kirkland, and Issaquah. Meter reading is essential to maintaining water and wastewater revenue flow and equity among ratepayers (winter water consumption is used as the consumption basis for wastewater billing). Other services are provided directly to property owners at their home or business, such as help locating leaks and meter turn-offs.

This proposal requests funding for meter reading staff, supplies, and equipment necessary to read, record, and report customer water consumption for customer billing purposes. Activities include reading all commercial and residential water meters, close out water meter accounts and re-read meters, and shut-off and turn-on meters due to delinquent accounts. Accurate meter reads ensure equitable revenue gained for the water sold, and efficiency ensures rate payers are receiving the best value for the rates they pay for these important utility services. If Advanced Metering Infrastructure (AMI) is funded and implemented in the next three years, the KPI's for meter reading will evolve to reflect those advances. Examples likely will include meter read accuracy, meter connectivty, meter battery life.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Utility Water Meter Reading**

Proposal Number 140.45DA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 569,759**	**$ 546,447**	**$ 1,116,206**	**$ 556,817**	**$ 577,497**	**$ 1,134,314**	**$ 18,108**	**1.6%**
FTEs								
FTEs	5.80	5.80		5.80	5.80		-	n/a
LTEs	-	-		1.00	1.00		1.00	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0254f Utilities: Meter reading accuracy	100.0%	99.8%	99.8%	99.8%
140.0316f Utilities: Meter reading productivity in meter reads per hour	75	43	43	43
140.0401f Utilities: Total cost per meter read	$0.69	$0.85	$0.85	$0.85

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

May 2, 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Asset Replacement**
Proposal Number	140.47DA
Proposal Budget (2017-2018)	$2,139,700 0 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

Consistent financial management policy dictates systematic Utility funding to replace vehicles and other work equipment that have reached the end of their useful lives (Comprehensive Financial Management Policy 10.1.V.C). Asset Replacement is Utilities' equivalent of the Electronic Replacement Fund (ERF) and Information Technology (IT) Replacement purchases and funds equipment for Water, Wastewater, and Stormwater activities. The utility vehicles and other equipment scheduled to be replaced in 2017-18 are needed to get crews, inspectors, and other staff to construction sites with the equipment and tools needed to perform their jobs. This proposal is funded from asset replacement reserves created specifically for this purpose, so there is no utility rate impact to customers.

Description of change over previous biennium

During 2017-2018, 12 assets are scheduled for replacement. Major units include two vactor trucks, a jet rodder and replacement of SCADA RTUs.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Asset Replacement**

Proposal Number 140.47DA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 980,701**	**$ 617,049**	**$ 1,597,750**	**$ 298,000**	**$ 1,841,700**	**$ 2,139,700**	**$ 541,950**	**33.9%**
FTEs								
FTEs	-	-		-	-		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0358: Percentage to target: Asset Replacement Account balance	103.8%	100.0%	100.0%	100.0%
140.0360: Percent Variance: Actual Capital Asset expenditures versus Budgeted Capital Asset expenditures	73.7%	100.0%	100.0%	100.0%

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Operating Transfer to R&R**
Proposal Number	140.48DA
Proposal Budget (2017-2018)	$15,193,898 0 FTEs/0.00 LTEs
Outcome	Healthy and Sustainable Environment

Executive Summary

Established by the City Council in 1995, and memorialized in the City's Comprehensive Financial Management Policy 10.1.II.D, the Utility Capital Facilities Renewal and Replacement (R&R) account proactively sets aside funds each year to replace the City's utility infrastructure as it ages, thereby avoiding the need for large rate spikes and ensuring that each generation of ratepayers pays its fair share of the burden of replacing these systems. Bellevue Utilities has infrastructure with a replacement value of about $3.5 billion. This proposal represents the annual transfer of rate revenue to fund future capital renewals and replacements consistent with this financial policy.

Description of change over previous biennium

Rate revenues are the primary source of funding for: 1) the proposed CIP, and 2) long-term capital funding needs through the Utility Capital Facilities Renewal and Replacement (R&R) account. Both transfers work in tandem to provide a comprehensive source of funding for the City's current and long-term CIP needs. This proposal is consistent with City financial management policies. No changes to this historical approach to funding the CIP is anticipated as part of this proposal.

Proposal Financial Summary

	Adopted 2015-2016 Budget			**Proposed 2017-2018 Budget**			**Biennium Change**	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 5,217,357**	**$ 7,733,335**	**$ 12,950,692**	**$ 7,307,709**	**$ 7,886,189**	**$ 15,193,898**	**$ 2,243,206**	**17.3%**
FTEs								
FTEs	-	-		-	-		-	n/a
LTEs	-	-		-	-		-	n/a

2017-2018 Utility Operating Budget Proposals

Proposal Title **Operating Transfer to R&R**

Proposal Number 140.48DA

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0121: Pct to target: Renewal & Replacement contribution for Water Utility	100.0%	100.0%	100.0%	100.0%
140.0122: Pct to target: Renewal & Replacement contribution for Wastewater Utility	100.0%	100.0%	100.0%	100.0%
140.0123: Pct to target: Renewal & Replacement contribution for Surface Water Utility	100.0%	100.0%	100.0%	100.0%

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Fiscal Management**
Proposal Number	140.49NA
Proposal Budget (2017-2018)	$1,673,586 6 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

Unlike General Funds departments, Utilities are separate enterprise funds that, by law, must each be self supporting. The objective of the Fiscal Management Team is to support the daily financial operations of the Utilities Department, monitor and report on the Utilities financial condition, conduct rate evaluations to ensure financial sustainability, protect the City's investment by maintaining adequate operating reserves, and act in the best interest of the ratepayers. Financial management of the Utilities are dictated by financial policies as memorialized in the City's Comprehensive Financial Management Policies (10.1). By adhering to these financial policies, taking a long-term approach to financial planning, and practicing vigilant financial management, Bellevue Utilities has earned a Aa1 bond rating (the highest rating possible for a utility our size) and is financially prepared to meet both operational and infrastructure replacement needs.

The Utilities' Fiscal Management Team supports four separate utilities (water, sewer, stormwater, solid waste), each with its own unique operational and capital requirements.

Description of change over previous biennium

No significant changes are proposed over the previous biennium.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Fiscal Management**

Proposal Number 140.49NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 837,547**	**$ 759,732**	**$ 1,597,279**	**$ 846,882**	**$ 826,704**	**$ 1,673,586**	**$ 76,307**	**4.8%**
FTEs								
FTEs	6.00	6.00		6.00	6.00		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0128f: Operating expenditures vs. amount budgeted	98.9%	100.0%	100.0%	100.0%
140.0470: Percentage of monthly financial reports distributed to workgroup managers within 10 days of reporting period end		100.0%	100.0%	100.0%
140.0471: Percentage of monthly financial reports distributed to BUD within 30 days of reporting period end		100.0%	100.0%	100.0%
140.0472: Percentage of quarterly financial reports distributed to the Budget Office within 45 days of the end of the quarter		100.0%	100.0%	100.0%

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Utilities Computer and Systems Support**
Proposal Number	140.60NA
Proposal Budget (2017-2018)	$3,171,150 5.5 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

Utilities relies on computers to provide efficient water, sewer, and storm drainage services to customers. This proposal includes all the Utilities' software, hardware, vendor maintenance, professional services, and department personnel who provide business automation user support. While we depend on services from our partners in City Information Technology (IT), this proposal meets them halfway by bringing business knowledge to automated solutions. Unlike General Fund departments, Utilities is funded by rates and must separately account for revenues and expenditures for each business line. Primary business systems include billing, work management, and sewer/storm condition assessment video systems. Many specialized systems also include the water meter reading, engineering design, and water modelling. User support personnel conduct automation planning, implementation/testing support for changes, system training, and process improvement analysis, and reporting. Technology services in this proposal differ from those provided by IT Department, and do not duplicate them. This proposal supports Utilities' share of the enterprise work management system (Maximo) vendor maintenance and the whole of the vendor maintenance for the billing and collections system (CIS). In 2016, the Department completed its first Information Technolgy Strategic Plan. This plan included a comprehensive evaluation of the Department's IT needs and identified a comprehensive strategy for optimizing the use of IT, enabling the department to continue operating efficiently and effectively.

Description of change over previous biennium

Funding in 2017 includes several one-time investments in IT needs and upgrades. Examples of these investments include CIS improvements including E-Billing, paper bill redesign and system major upgrade. Other investments include IVR enhancement, ArcGIS on-line licenses to enable use of mobile maps for field staff, and water quality software purchase. For more information, refer to the attached addendum which discusses in greater detail the proposed IT investments.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Utilities Computer and Systems Support**

Proposal Number 140.60NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 1,628,698**	**$ 1,332,926**	**$ 2,961,624**	**$ 1,544,228**	**$ 1,626,922**	**$ 3,171,150**	**$ 209,526**	**7.1%**
FTEs								
FTEs	5.20	5.20		5.50	5.50		0.30	6%
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0155f: IT Strategic Roadmap Completion Rate		80.0%	80.0%	80.0%
140.0339: Percentage of Business Systems user assistance requests completed		80.0%	80.0%	80.0%

Utilities IT Strategic Plan 2016-2018 as Supported in Proposal 140.60

Beginning in 2015, Utilities undertook a department-wide project to identify its IT Vision and emerging goals for the time horizon of 2016-2018. This was done in preparation for the 2017-2018 budget process and is intended to be a self-governed process that will continually renew vision and goals with associated change management governance. Budget Proposal 140.60 contains the majority of the IT-related costs associated with achieving the planned goals in 2017-2018. This addendum calls out those expenses that apply to the additional objectives of the plan. The one exception is the self-contained Advanced Meter Infrastructure (AMI) Proposal 140.69 which identifies the feasibility and cost benefit plan for achieving an AMI deployment that will replace the current manual reading system and support. This addendum to 140.60 is intended to call out those additional expense line items that exceed inflation or vendor-announced software maintenance increases.

New Costs in 140.60NA - 2017-2018	2016 Adjusted Budget	2017 Proposed Budget	2018 Proposed Budget	Comment
Asset/Work Management				
Additional Maximo User Licenses	$ 17,100	$ 35,200	$ 37,100	Increased utilization of Maximo Asset/Work management system as a function of projects and asset management initiative work
Additional RapidPlan License	$ -	$ 1,200	$ -	Increased work in Right-of-Way requires additional ROW traffic plan software
Additional Mobile DSD License	$ -	$ 1,500	$ -	Additional inspection workload driven by projects.
Maximo Scheduler Module(s) - New	$ -	$ -	$ 37,300	This new software supports proactive planning and scheduling of O&M crews using automation that connects preventive maintenance with work crew scheduling.
Interloc Professional Services	$ -	$ 15,000	$ 15,000	Interloc Professional Services for Maximo customizations to support Utility-generated changes to Maximo in order to support various asset/work management initiatives.
Water Quality – Private Inspection				
Backflow/Cross Connection XC2 Software Maintenance	$ -	$ 10,500	$ 11,000	2016 purchase of vendor software to support inspections has created an additional annual software maintenance expense.
Private Drainage Inspection NPDES Pro Software	$ -	$ 3,000	$ 3,150	2016 purchase of vendor cloud-based subscription software to support inspections has created an additional software subscription expense.
Mobile Workforce				
Utility Field Mobility Software Maintenance	$ -	$ 47,400	$ 49,800	2015-2016 Budget Proposal 140.62 Utility Mobile Workforce created funding for Utility Field Mobility (UFM) software purchased in 2016. This funding supports ongoing annual maintenance for these purchased modules which are now supported in 140.60.

New Costs in 140.60NA - 2017-2018	2016 Adjusted Budget	2017 Proposed Budget	2018 Proposed Budget	Comment
Utility Infrastructure Mapping				
Esri Enterprise Advantage Program Professional Services	$ -	$ -	$ 75,000	Utility Infrastructure Map Editing converted from AutoCAD drawings to Esri GIS Maps as part of a CIP in 2015-2016. Final Bellevue Utilities conversion cleanup is scheduled for a mid-2017 completion. This block of professional services from the Esri Water Resources Division supports enhancements and training to improve staff productivity and to enable use of ArcGIS and custom applications for Water Utilities
Adobe Illustrator Software for Map Editors	$ -	$ 600	$ -	Support for Map Editor symbology creation
Interfund Labor Distribution 1 LTE GIS Developer 3 - G30 Managed by ITD GTS	$ -	$ 100,000	$ 100,000	Utility department needs described in the Utilities IT Strategic Plan exceed support designated for Utilities by Baseline IT GTS Services. This .75 LTE Developer 3 which reports to ITD GTS will support necessary enhancements to support productive map editing of Utilities infrastructure, including field level red-lining.
Interfund Labor Distribution 1 Variable Temp GIS Analyst 2 G22 - Managed by ITD GTS	$ -	$ 50,000	$ 50,000	Utility department needs described in the Utilities IT Strategic Plan exceed support designated for Utilities by Baseline IT GTS Services. This 28 hr./week GIS Analyst 2 which reports to GTS will support necessary enhancements to support productive map editing of Utilities infrastructure, including field level red-lining.
Utility Billing & Customer Service				
Advanced Utility Systems (Software Vendor) Professional Services	$ -		$ 20,400	Customer Value Initiatives Driven by Utilities Strategic Plan
Advanced Utility Systems (Software Vendor) Professional Services - Version 4 Upgrade	$ -	$ 120,000	$ -	Originally budgeted for 2015-2016, this upgrade was deferred until a critical mass of utilities had completed implementation. Upgrade to Version 4 is a major upgrade which requires vendor professional services estimated at $120K. This will be approved by Council in a separate contract amendment.
Customer Bill Re-design Professional Services	$ -	$ -	$ 20,400	Customer bill design from 2004 to be re-designed to improves usability and possible print vendor change
Smartphone Electronic Payment Application License	$ -	$ -	$ 12,900	Enabling Smartphone payment submission by utility customers
Utilities IT Strategic Plan Increased Costs	$ 17,100	$ 384,400	$ 432,050	

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Utilities Water Supply Purchase and Sewage Disposal**
Proposal Number	140.61NA
Proposal Budget (2017-2018)	$107,235,774 0.5 FTEs/0.00 LTEs
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal continues the City's current purchase of wholesale water supply from the Cascade Water Alliance as described above and continues the City's purchase of wholesale sewage treatment and disposal services from King County Metro.

Water: The purchase of wholesale water supply from the Cascade Water Alliance allows Bellevue Utilities to provide water service to over 40,000 service connections in the Bellevue Utilities service area, which includes Clyde Hill, Medina, Yarrow Point, Hunts Point, with about 6.0 billion gallons of water used by customers of Bellevue Utilities. Annual expenditures in 2017-2018 for purchased water is about $20.0 million.

Sewer: The City of Bellevue provides sewage collection and transmission services for customers within its service area but does not provide treatment. The purchase of wholesale sewage treatment and disposal services from King County Metro allows Bellevue Utilities to provide sewer service to over 38,000 service connections in the City of Bellevue and surrounding jurisdictions and conveying about 3.0 billion gallons of sewage to King County for treatment and disposal. Forecasted expenses are based upon contractual provisions with the CWA and approved Metro wastewater treatment rates as established by the King County Council. Annual expenditures in 2017-2018 for King County wastewater treatment expenses is about $34.0 million.

Description of change over previous biennium

No significant change in operating expenditures or level of service is proposed.

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures - King Co	**$ 51,580,186**	**$ 52,174,100**	**$ 103,754,286**	**$ 53,216,726**	**$ 54,019,048**	**$ 107,235,774**	**$ 3,481,488**	**3.4%**
FTEs								
FTEs	0.50	0.50		0.50	0.50		-	n/a
LTEs	-	-		-	-		-	n/a

2017-2018 Utility Operating Budget Proposals

Proposal Title **Utilities Water Supply Purchase and Sewage Disposal**

Proposal Number 140.61NA

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0412: Number of years for which projected water supply is sufficient to meet future water demand	50	50	50	50
140.0413: Number of years projected wastewater disposal needs are secured	21	15	15	15

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Utility Planning and Systems Analysis**
Proposal Number	140.63NA
Proposal Budget (2017-2018)	$3,595,979 6.09 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal supports system analysis and comprehensive planning for three utilities: drinking water, wastewater, and stormwater systems. Demand for Utilities services changes over time, so the systems require periodic assessment of their capacity and integrity for conveyance, quantity and quality of flows, impacts on the natural environment, and opportunities for rehabilitation and improvements. System analysis provides the current state of the systems for capacity, integrity, and condition. The system plans guide projects and programs to continually improve Utility functions. System analysis supports customer requests for data, such as available sewer capacity, fire flow levels, and stream flow summaries. Stream health indicators are important as stormwater conveyance depends on local streams and influences their condition. Drinking water and wastewater comprehensive system plans have state mandated update requirements. Stormwater plan update intervals are set by city policy.

Description of change over previous biennium

Costs were adjusted for E-fishing for species analysis (from $7500/yr to $10,000/yr); stream water quality indicator B-IBI analysis (from $20,000/yr to $35,000/yr); and for management of Bellevue's stream gages (from $15,000/yr to $25,000/yr). The increases reflect actual costs to deliver minimum required analyses. One time cost of $200,000 for analysis of needs for a second utilities maintenance yard, $250,000 to start seismic vulnerability assessment of the water system in cooperation with other regional water purveyors; $350,000 to develop a master plan for Bellevue's drinking water wells and associated water rights; $110,000 to complete the Goff Creek Basin Study and to scope and collect data for the next stream basin study; $20,000 for water chemistry sampling on the Newcastle Tributary to inform future water quality CIP work; $5000 for milfoil management in Mercer Slough (in cooperation with Parks); $115,000 for professional services and temporary help to develop sewer models in areas where system capacity is of concern; and $150,000 for storm water quality research in the Kelsey Cr. Basin to reduce salmon pre-spawn mortality.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Utility Planning and Systems Analysis**

Proposal Number 140.63NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 1,102,653**	**$ 1,137,058**	**$ 2,239,711**	**$ 1,742,202**	**$ 1,853,777**	**$ 3,595,979**	**$ 1,356,268**	**60.6%**
FTES								
FTEs	6.09	6.09		6.09	6.09		-	n/a
LTEs	-	-		-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0045f: Stream Quality Indicator Trend - Insect samples (Healthy Natural Environment Indicator)		1	1	1
140.0052: Rainfall and Flow data downloaded and available for customer access each month (Storm)	Yes	Yes	Yes	Yes
140.0104f: Percent of requests for available wastewater capacity completed within 2 weeks	100.0%	100.0%	100.0%	100.0%
140.0305: Structural flooding occurrences for storms less than a 100 year storm event (Storm Water)	0.00	1.25	5.00	5.00
140.0307f: Percent of requests for fire flow data provided within 2 weeks (Water)	95.5%	100.0%	100.0%	100.0%
140.0414: Has lack of system capacity restricted or prevented any new development or redevelopment (System Capacity Planning)	No	No	No	No

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Advanced Metering Infrastructure**
Proposal Number	140.69NA
Proposal Budget (2017-2018)	$525,001 1 FTEs/0.00 LTEs
Outcome	Healthy and Sustainable Environment

Executive Summary

This proposal is for selection and implementation of Advanced Metering Infrastructure (AMI) throughout Bellevue's water service area. Adding smart workforce AMI automation technology will address utilities' aging meter infrastructure as well as reduce the total cost of services by processing more field work quickly and accurately. Replacement of Bellevue's water meters with AMI technology will immediately result in Financial, Social, and Environmental benefits as follows: Financial: Improved billing and meter accuracy, reduced labor costs for meter reading, reduced time between meter reads and bill productions, reduced capital expenditures for meter reader vehicles and inventory, reduced manual processing of data, improved system planning due to availability of local water use data for modeling. Social: Increased responsiveness to customers, more accurate and timely billing, reduced turnaround time related to off-cycle reads, ability to manage water use data holistically, rapid leak detection and reporting, improved staff and customer alarms and notifications. Environmental: Improved water conservation (less waste) through timely detection of leaks; improved backflow detection (potential for contamination); reduced motor vehicle emissions.

Description of change over previous biennium

This proposal is to support implementation of Advanced Metering Infrastructure throughout Bellevue's water service area. Implementation involves: Replacing almost all Utilities meters, total of 39,436 out of 40,804; Replacing half of the meter boxes, approximately 20,000 out of 40,804; Replacing the lids for the other half of the meter boxes, approximately 20,000 lids; Installing Meter Interface Units (MIU); Installing Communication equipment, 100 collectors and 25 repeaters; Implementation of an AMI Meter Data Management Software (MDMS); Systems Integration and Implementation services. This project will be funded 70% by water and 30% by sewer rates. The budget is based on a 2015 AMI feasibility study. Rapid implementation is planned to realize the maximum benefit from labor savings that will be realized by replacing the current manually-read meters, to minimize the time two systems need to be supported, and to deliver a common service level to all customers as rapidly as possible. See related CIP projects W-108 and S-108.

2017-2018 Utility Operating Budget Proposals

Proposal Title **Advanced Metering Infrastructure**

Proposal Number 140.69NA

Proposal Financial Summary

	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures								
AMI Annual Expenditures (Staffing)[a]				$ 135,156	$ 389,845	$ 525,001	$ 525,001	n/a
Total				$ 135,156	$ 389,845	$ 525,001	$ 525,001	n/a

[a] See the CIP budget detail for the capital budget detail for this initiative.

FTEs

FTEs	-	-	1.00	1.00		1.00	n/a
LTEs	-	-	-	-		-	n/a

Performance Measures and Targets

	2015-2016 Budget		2017-2018 Budget	
	2015 Actual	2016 Target	2017 Target	2018 Target
140.0469 Utilities: Number of Water Leak Billing Adjustments	355	300	300	200
140.0473 Utilities: Increased water revenue from improved meter registration	n/a	n/a	n/a	TBD

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\

Sep 27 2016

2017-2018 Utility Operating Budget Proposals

Proposal Title	**Interfund Payments**
Proposal Number	999.xx
Proposal Budget (2017-2018)	$16,443,998 0 FTEs/0.00 LTEs (2018)
Outcome	Healthy and Sustainable Environment

Executive Summary

Interfund transactions represent the payment for services provided by other areas of City government to the Utilities Department. Examples of these services include City Attorney, Finance, Human Resources, and Civic Services. These central administrative services represent internal support functions that are essential to daily operations of City business.

Description of change over previous biennium

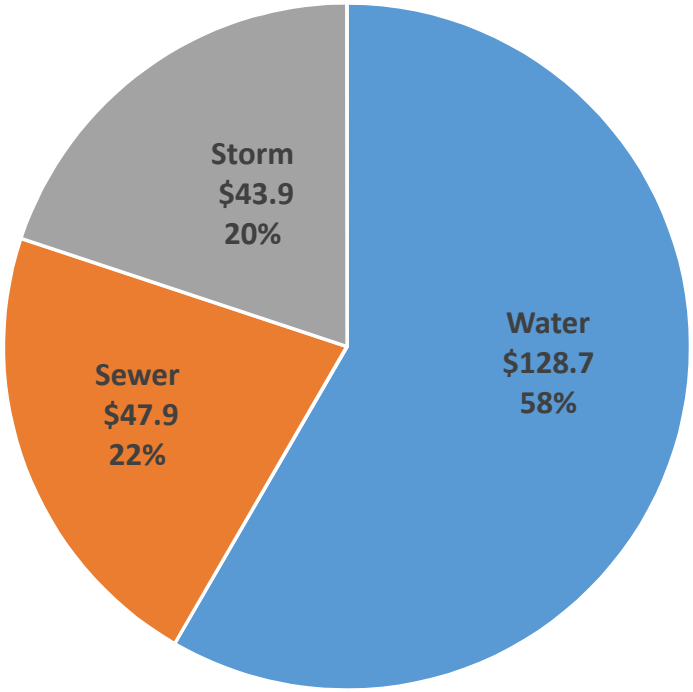
No significant change in service levels over the previous biennium.

Proposal Financial Summary

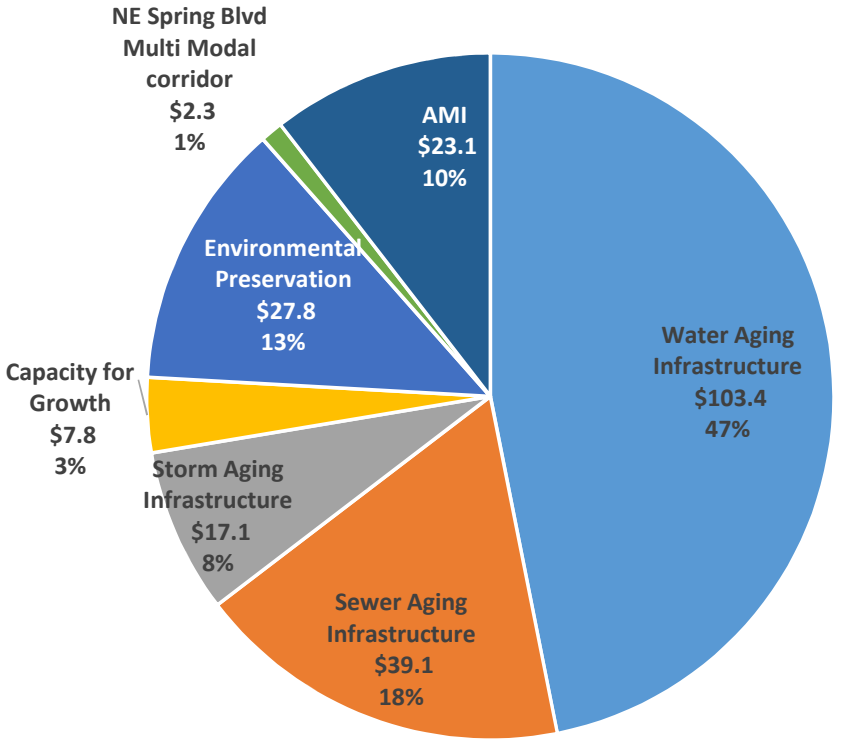
	Adopted 2015-2016 Budget			Proposed 2017-2018 Budget			Biennium Change	
	2015	2016	Total 2015-2016	2017	2018	Total 2017-2018	Dollar Change	Percent Change
Expenditures	**$ 7,760,777**	**$ 7,969,451**	**$ 15,730,228**	**$ 8,110,516**	**$ 8,333,482**	**$ 16,443,998**	**$ 713,770**	**4.5%**
FTEs								
FTEs	0	0		0	0		-	n/a
LTEs	0	0		0	0		-	n/a

Proposed 2017-2023 CIP by Fund
$220.6M

By Utility



By Area of Investment



10/03/2016

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\ESC Notebook\ESC Prelim Budget Notebook\Sec 4 - CIP Budget Proposals\[Source document - 2017-2023 CIP Summary.xlsx]CIP Pie Chart

City of Bellevue Utilities Department
2017-2018 Proposed Capital Investment Program
Proposal Descriptions

This section summarizes the proposed CIP program for each year 2017-2023. The following provides a brief description of each Proposal and the type of projects that are included.

Proposal: #140.02. Replacement of Aging Water Infrastructure
Description: This proposal funds replacement or rehabilitation of drinking water system infrastructure. Bellevue's water system is a complex network of pipes, reservoirs, pump stations, supply inlets, valves and meters that together deliver almost 6 billion gallons of drinking water to our customers annually. System replacement value is estimated at $1.1 billion, and most of the system is more than halfway through its useful life. Failure trends and obsolete equipment provides evidence that system components are rapidly approaching the end of their service life and must be replaced. This proposal implements the Utilities' long term water system renewal and replacement strategy by funding CIP programs for each major type of water system component, right-sized for proactive, sustainable, water system management to maintain acceptable service levels at the lowest life-cycle cost.

Proposal: #140.03. Replacement of Aging Sewer Infrastructure
Description: This proposal funds replacement or rehabilitation of sanitary sewer system infrastructure. Bellevue's wastewater system is comprised of pipes and pump stations that remove 11million gallons of sewage from homes and businesses every day, and convey it safely to King Co. Metro's regional system for treatment and disposal. System replacement value is estimated at $1.4 Billion, and most of the system is more than halfway through its useful life. Ongoing inspection of sewer asset condition and claims experience trends provide evidence that much of the system requires significant repair or will soon need to be replaced. This proposal implements the Utilities' long term sanitary sewer renewal and replacement strategy by funding CIP programs for each type of major sewer system component, each right-sized for proactive, sustainable wastewater system management to maintain acceptable service levels at the lowest life-cycle cost.

Proposal: #140.04. Replacement of Aging Storm Infrastructure
Description: This proposal funds replacement or rehabilitation of aging stormwater system infrastructure. Bellevue's stormwater system is comprised of regional detention facilities, pipes and culverts, and open streams that convey stormwater runoff to eventual outfall into Lake Washington or Lake Sammamish. The constructed portions of the system, with an estimated replacement value $1 Billion, are managed to prevent failures that cause flooding, erosion and traffic disruption, and to protect streams, lakes and wetlands as much as practicable from high velocity, erosive flows and pollution. Replacement of infrastructure prior to failure precludes property and environmental damage. This proposal implements the Utilities' long term stormwater management strategy by funding CJP programs for the replacement and rehabilitation of Storm infrastructure at the least life-cycle cost, while maintaining acceptable service levels, for sustainable storm system management.

Proposal: #140.05. Utility Capacity for Growth

Description: This proposal funds construction of additional utility system capacity so that development and re-development projects are not delayed. Planned population growth of residents and workers in downtown, the Bel-Red Corridor, and the Wilburton area will require more drinking water storage and water from our regional system supplier, sewer pump station capacity, and added water and sewer pipe capacity to meet state minimum requirements. Existing facilities are at or near capacity to serve the current population. The initial cost of growth-driven projects will be recovered via connection charges to benefited properties.

Proposal: #140.08. Environmental Preservation

Description: This proposal funds Utility CIP projects focused on environmental preservation or restoration. It includes ongoing programs and one-time projects intended to restore stream health and environmental habitat, or to prevent pollution of stream and habitat resources. These projects guard against harmful environmental impacts from City operations or repair environmental damage on public lands or lands with public responsibilities.

Proposal: #140.054. Water Facilities for NE Spring Blvd Multi-Modal Corridor

Description: This proposal is for design and construction of new water pipes under the new NE 15th Multi Modal Corridor, where they will be needed to provide water service for redeveloping properties in the Bel-Red Corridor. This proposal is required as a result of Transportation's proposal 130.52PA, R-163 NE 15th St Multi-Modal Corridor – 116th Ave NE at NE 12th St to 136th Pl NE at Northup Way, and is therefore developed to complement that proposal's scope. No new sewer pipes are needed in this section of the corridor.

Proposal: #140.069. Advanced Metering Infrastructure (AMI) Implementation

Description: Utility water service to customers is currently measured using water meters. These meters are manually read once every two months. Information from these reads form the basis of the current bi-monthly water and sewer utility billings. Over the past several years, the Utilities Department has evaluated the feasibility of migrating to an advanced technology that uses radio or cellular signals to securely measure and transmit real-time water usage information. AMI technology enables customers to have easier access to real-time water usage information, facilitates more proactive leak detection in public and private water systems, and reduces labor costs for performing manual meter reads.

Implementing AMI now is financially feasible and without impact to rates. The estimated cost ($23.1 million) for AMI will be shared between the water (70%) and sewer (30%) utilities as both utilities use metered water usage data for utility billing and operational needs. The AMI investment will be funded using $6.0 million water operating reserves from recent extraordinary water sales, $1.6 million in water CIP project savings, and $15.5 million from water and sewer infrastructure renewal and replacement (R&R) reserves. The Utilities forecast includes no increase in rates as a result of the proposed AMI investment. The R&R reserves will be replenished over time by anticipated cost savings and revenue gains from the AMI investment.

City of Bellevue Utilities Department
2017-2023 Capital Investment Program

Project #	Project Title	2017	2018	2019	2020	2021	2022	2023	2017-2023 Total
140.02NA	**Replacement of Aging Water Infrastructure**								
W-16	Small Diameter Water Main Replacement	10,325,000	9,542,000	9,722,000	9,916,000	10,114,000	10,317,000	10,358,000	70,294,000
W-67	Pressure Reducing Valve (PRV) Rehabilitation	545,000	400,000	281,000	541,000	424,000	433,000	441,000	3,065,000
W-69	Minor (Small) Water Capital Improvement Projects	216,000	253,000	223,000	206,000	119,000	245,000	250,000	1,512,000
W-82	Fire Hydrant Standardization	2,532	315,000	-	254,000	-	-	-	571,532
W-85	Reservoir Rehabilitation or Replacement	61,772	423,000	1,888,000	715,000	777,000	1,382,000	2,011,000	7,257,772
W-91	Water Pump Station Rehabilitation or Replacement	1,345,235	838,000	2,997,000	2,131,000	2,880,000	2,782,000	2,312,000	15,285,235
W-98	Replacement of Large Commercial Water Meters	119,855	550,000	-	573,000	584,000	596,000	608,000	3,030,855
W-99	Water Service Line and Saddle Replacement Program	72,568	253,000	258,000	263,000	269,000	274,000	280,000	1,669,568
W-109	Richards Road Inlet Supply Station Improvements	500,000	-	-	-	-	-	-	500,000
W-110	NE 40th and Enatai Inlet Water Station	200,000	-	-	-	-	-	-	200,000
140.02NA Total		**13,387,962**	**12,574,000**	**15,369,000**	**14,599,000**	**15,167,000**	**16,029,000**	**16,260,000**	**103,385,962**
140.03NA	**Replacement of Aging Sewer Infrastructure**								
S-16	Sewer Pump Station Improvements	40,664	1,815,000	1,095,000	1,118,000	1,110,000	1,013,000	1,212,000	7,403,664
S-24	Sewer System Pipeline Major Repairs	1,890,000	1,952,000	1,991,000	2,031,000	2,072,000	2,113,000	2,155,000	14,204,000
S-32	Minor (Small) Sewer Capital Improvement Projects	102,000	110,000	112,000	115,000	117,000	119,000	122,000	797,000
S-58	Lake Washington Sewer Lake Line Assessment Program	117,555	-	-	-	-	-	-	117,555
S-66	Sewer System Pipeline Replacement	2,732,789	677,000	2,419,000	1,745,000	1,219,000	1,157,000	1,770,000	11,719,789
S-67	I&I Investigations and Flow Monitoring	256,382	230,000	223,000	96,000	-	-	-	805,382
S-68	Sewer Force Main Condition Assessment	236,879	20,000	-	-	-	-	-	256,879
S-69	Meydenbauer Bay Park Sewer Line Replacement	3,832,000	-	-	-	-	-	-	3,832,000
140.03NA Total		**9,208,269**	**4,804,000**	**5,840,000**	**5,105,000**	**4,518,000**	**4,402,000**	**5,259,000**	**39,136,269**
140.04NA	**Replacement of Aging Storm Infrastructure**								
D-59	Minor (Small) Storm Capital Improvement Projects	-	221,000	218,000	237,000	242,000	246,000	251,000	1,415,000
D-64	Storm System Conveyance Repairs and Replacement	1,886,000	1,373,000	1,241,000	1,330,000	1,424,000	1,524,000	1,633,000	10,411,000
D-103	Replace Coal Creek Pkwy Culvert at Coal Creek	13,000	13,000	13,000	-	-	-	-	39,000
D-105	Replace NE 8th St Culvert at Kelsey Creek	733,000	2,778,000	16,000	8,000	8,000	8,000	8,000	3,559,000
D-107	Storm Water Video Inspection Enhancement	963,000	459,000	246,000	-	-	-	-	1,668,000
140.04NA Total		**3,595,000**	**4,844,000**	**1,734,000**	**1,575,000**	**1,674,000**	**1,778,000**	**1,892,000**	**17,092,000**

City of Bellevue Utilities Department
2017-2023 Capital Investment Program

Project #	Project Title	2017	2018	2019	2020	2021	2022	2023	2017-2023 Total
140.05NA	**Utility Capacity for Growth**								
S-60	Wilburton Sewer Capacity Upgrade	568,000	11,000	11,000	11,000	11,000	12,000	-	624,000
S-61	Midlakes Pump Station Capacity Improvements	301,980	-	-	-	-	-	-	301,980
W-103	Increase Drinking Water Storage Availability for West Operating Area	342,539	641,000	654,000	-	-	-	-	1,637,539
W-104	New Water Inlet Station	637,000	2,273,000	2,319,000	-	-	-	-	5,229,000
140.05NA Total		**1,849,519**	**2,925,000**	**2,984,000**	**11,000**	**11,000**	**12,000**	**-**	**7,792,519**
140.08NA	**Environmental Preservation**								
S-59	Add On-site Power at Sewer Pump Stations	1,013	77,000	587,000	270,000	-	-	-	935,013
D-81	Fish Passage Improvement Program	418,000	461,000	174,000	467,000	236,000	607,000	507,000	2,870,000
D-86	Stream Channel Modification Program	388,000	303,000	544,000	365,000	423,000	298,000	552,000	2,873,000
D-94	Flood Control Program	-	3,683,000	1,294,000	906,000	957,000	714,000	864,000	8,418,000
D-104	Stream Restoration for Mobility & Infrastructure Initiative	110,000	112,000	5,000	6,000	6,000	-	-	239,000
D-104-B	Stream Restoration for Mobility & Infrastructure Initiative (Bank)	2,231,300	2,522,167	-	-	-	-	-	4,753,467
D-106	Lower Coal Creek Flood Hazard Reduction Phase 1	2,515,000	2,475,000	2,311,000	10,000	10,000	-	-	7,321,000
D-109	Storm Retrofit in Kelsey Creek	90,000	125,000	128,000	-	-	-	-	343,000
140.08NA Total		**5,753,313**	**9,758,167**	**5,043,000**	**2,024,000**	**1,632,000**	**1,619,000**	**1,923,000**	**27,752,480**
140.54DA	**Water Facilities for NE Spring Blvd Multi-Modal Corridor**								
W-105	Water Facilities for NE Spring Blvd Multi-Modal Corridor	387,000	-	364,000	333,000	-	-	-	1,084,000
W-105-B	Water Facilities for NE Spring Blvd Multi-Modal Corridor (Bank)	231,000	236,000	-	-	250,000	255,000	260,000	1,232,000
140.54DA Total		**618,000**	**236,000**	**364,000**	**333,000**	**250,000**	**255,000**	**260,000**	**2,316,000**
140.69NA	**Advanced Metering Infrastructure (AMI) Implementation**								
W-108	Advanced Metering Infrastructure (AMI) Implementation (Water)	210,000	5,644,800	10,307,500	-	-	-	-	16,162,300
S-108	Advanced Metering Infrastructure (AMI) Implementation (Sewer)	90,000	2,419,200	4,417,500	-	-	-	-	6,926,700
140.69NA Total		**300,000**	**8,064,000**	**14,725,000**	**-**	**-**	**-**	**-**	**23,089,000**
Grand Total		**34,712,063**	**43,205,167**	**46,059,000**	**23,647,000**	**23,252,000**	**24,095,000**	**25,594,000**	**220,564,230**
Totals by Utility									
Water utility subtotal		*15,195,501*	*21,368,800*	*29,013,500*	*14,932,000*	*15,417,000*	*16,284,000*	*16,520,000*	*128,730,801*
Sewer utility subtotal		*10,169,262*	*7,311,200*	*10,855,500*	*5,386,000*	*4,529,000*	*4,414,000*	*5,259,000*	*47,923,962*
Storm utility subtotal		*9,347,300*	*14,525,167*	*6,190,000*	*3,329,000*	*3,306,000*	*3,397,000*	*3,815,000*	*43,909,467*
Total		*34,712,063*	*43,205,167*	*46,059,000*	*23,647,000*	*23,252,000*	*24,095,000*	*25,594,000*	*220,564,230*

APPENDIX

Utilities 2017-2022 Financial Forecasts
Water, Sewer, and Storm & Surface Water Funds

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 proposed rates presented herein are designed to generate sufficient revenues to fund the Utilities 2017-2018 budget proposals, which include operations, asset replacements (e.g., vehicles), capital investment programs (CIP), and the long-term infrastructure Renewal and Replacement (R&R) requirements. The proposed rates are lower than those presented in the Early Outlook forecast and reflect updated utility cost projections including further evaluation and smoothing of the rate impact from funding the Utilities capital needs.

The Utilities Department faces the following key challenges and constraints in the 2017-2018 biennium:

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. Issaquah assumption. Effective January 1, 2017, the City of Issaquah will assume delivery of water and sewer services to about 1,000 utility customer accounts in the South Cove/Greenwood Pointe area. The City of Issaquah annexed this area in 2006 and under the annexation agreement, the City agreed to eventually provide water and sewer services to this area. In 2015, the City Council approved Resolution #8981 authorizing Issaquah's assumption of these customer accounts.

d. Operational efficiency. We are mindful of the need to operate efficiently and continually evaluate business processes to seek opportunities to effectively deliver services in a more 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 National Pollution Discharge Elimination System (NPDES), to protect drinking water and surface water quality.

Within this context, the proposed 2017-2018 Utilities budget is prepared with the following guiding principles:

1. Operational efficiency
   - The Department continues to focus on controlling on-going operational expenses, finding efficiencies, and otherwise minimizing costs that impact local rate increases.

2. Fully fund wholesale cost increases so local programs are not degraded
3. Smart cities
    - The Department is proposing implementation of Advanced Metering Infrastructure (AMI). Funding for this initiative will be from existing water and sewer reserves and will not require any increase in rates. This proposal is discussed in greater detail below.
4. Proposed FTEs to address regulatory/workload demands
    - The Department is proposing 1.75 FTEs to support preventative maintenance activities in the Stormwater program to meet regulatory requirements and to support increased workload demands in the Water program.
5. Support of the CIP
    - The Department is proposing an additional 1.25 FTEs to support the delivery of the current and proposed CIP. This proposal is also discussed in greater detail below.

PROPOSED 2017-2018 UTILITY RATES

The following table summarizes the rate adjustments necessary to support the proposed 2017-2018 budget for the Water, Sewer, and Storm and Surface Water utilities by rate drivers.

	WATER		SEWER		STORM		TOTAL	
	2017	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**
Wholesale	**0.8%**	**1.9%**	**3.1%**	**0.0%**	**0.0%**	**0.0%**	**1.8%**	**0.7%**
Local								
CIP/R&R	1.5%	3.1%	0.7%	0.7%	3.2%	3.8%	1.4%	2.1%
Taxes/Interfunds	0.2%	0.8%	0.0%	0.8%	0.0%	0.4%	0.1%	0.7%
Operations	0.2%	0.3%	0.0%	0.7%	1.1%	0.4%	0.2%	0.5%
Issaquah Assump	0.7%	0.0%	0.6%	0.0%	0.0%	0.0%	0.5%	0.0%
Local subtotal	**2.6%**	**4.2%**	**1.3%**	**2.2%**	**4.3%**	**4.6%**	**2.2%**	**3.3%**
Total Rate Increase	**3.4%**	**6.1%**	**4.4%**	**2.2%**	**4.3%**	**4.6%**	**4.0%**	**4.0%**
Early Outlook Rate Increase	*5.6%*	*7.9%*	*6.2%*	*2.6%*	*4.4%*	*4.8%*	*5.7%*	*4.9%*

Minor differences may exist due to rounding

The total monthly utility bill for the typical single-family residential customer for water, sewer, and storm and surface water services is $156.74 in 2016. With the above proposed rate increases, the total monthly utility bill for the typical single-family resident would increase by 4.0% or $6.30 in 2017 and 4.0% or $6.51 in 2018.

The following section provides further detail on the key rate drivers for the proposed 2017-2018 Utilities budget.

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 is projected to increase from $19.1 million, in 2016 to $19.6 million[1] in 2017 and $20.4 million in 2018. The impact of this cost increase to the Bellevue retail water rate is 0.8% and 1.9% in 2017 and 2018, respectively.

The cost from King County for wastewater treatment is projected to increase from $32.0 million in 2016 to $33.6 million in 2017 and 2018.[2] The impact of the cost increase to the Bellevue retail sewer rate is 3.1% in 2017, with no increase in 2018.

To ensure local operations and the CIP are not degraded, the Department's proposed 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.

Issaquah Assumption

As discussed above, as approved by Council Resolution #8981, effective January 1, 2017, the City of Issaquah will assume delivery of water and sewer services to about 1,000 utility customer accounts in the South Cove/Greenwood Pointe area. The assumption is estimated to result in an annual net revenue loss to the water and sewer utilities of $260,000 and $280,000, respectively, or an equivalent impact to water and sewer utility rates of 0.7% and 0.6%, respectively.

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 $78M 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

[1] The 2016 amount excludes water supply cost of $0.3 million for the South Cove/Greenwood Pointe area to be assumed by the City of Issaquah effective January 1, 2017.

[2] The 2016 amount excludes King County wastewater treatment cost of $0.5 million for the South Cove/Greenwood Pointe area to be assumed by the City of Issaquah effective January 1, 2017.

policy, this long-term funding strategy is also designed to smooth future rate increases and provide for intergenerational equity.

Major projects supported by the proposed 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). Proposed 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. No changes to the current State and city tax rates are assumed in the proposed budget. 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% 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% for the water and sewer utilities and about 1% in 2017 and less than 1% in 2018 for the storm utility.

New Initiative – Advanced Metering Infrastructure (AMI)

The Utilities proposed capital budget includes funding to support one major new capital investment - AMI. Utility water service to customers is currently measured using water meters. These meters are manually read once every two months. Information from these reads form the basis of the current bi-monthly water and sewer utility billings. Over the past several years, the Utilities Department has evaluated the feasibility of migrating to an advanced technology that uses radio or cellular signals to securely measure and transmit real-time water usage information. AMI technology enables customers to have easier access to real-time water usage information, facilitates more proactive leak detection in public and private water systems, and reduces labor costs for performing manual meter reads.

Implementing AMI now is financially feasible and without impact to rates. The estimated cost ($23.1 million) for AMI will be shared between the water (70%) and sewer (30%) utilities as both utilities use metered water usage data for utility billing and operational needs. The AMI investment will be funded using $6.0 million water operating reserves from recent extraordinary water sales and $17.1 million from water and sewer infrastructure renewal and replacement (R&R) reserves. The Utilities forecast includes no increase in rates as a result of the proposed AMI investment. The R&R reserves will be replenished over time by anticipated cost savings and revenue gains from the AMI investment.

2017-2022 Financial Forecast

The following pages provide a more in-depth discussion of the individual rate drivers and forecasted rate adjustments through the year 2022 for the water, sewer, and stormwater utilities.

2017-2018 Utilities Department Preliminary Budget
Typical Residential Monthly Utility Bill Rate Drivers

	WATER			SEWER			STORM			TOTAL		
2016 Monthly Bill		**$**	**58.44**		**$**	**75.35**		**$**	**22.95**		**$**	**156.74**
2017 Rate Drivers												
Wholesale	**0.8%**	**$**	**0.47**	**3.1%**	**$**	**2.35**	**0.0%**	**$**	**-**	**1.8%**	**$**	**2.82**
Local												
CIP/R&R	*1.5%*	*$*	*0.86*	*0.7%*	*$*	*0.53*	*3.2%*	*$*	*0.74*	*1.4%*	*$*	*2.13*
Taxes/Interfunds	*0.2%*	*$*	*0.12*	*0.0%*	*$*	*-*	*0.0%*	*$*	*-*	*0.1%*	*$*	*0.12*
Operations	*0.2%*	*$*	*0.12*	*0.0%*	*$*	*-*	*1.1%*	*$*	*0.25*	*0.2%*	*$*	*0.37*
Issaquah Assumption	*0.7%*	*$*	*0.41*	*0.6%*	*$*	*0.45*	*0.0%*	*$*	*-*	*0.5%*	*$*	*0.86*
Local	**2.6%**	**$**	**1.51**	**1.3%**	**$**	**0.98**	**4.3%**	**$**	**0.99**	**2.2%**	**$**	**3.48**
Total Increase		$	1.98		$	3.33		$	0.99		$	6.30
2017 Monthly Bill	**3.4%**	**$**	**60.42**	**4.4%**	**$**	**78.68**	**4.3%**	**$**	**23.94**	**4.0%**	**$**	**163.04**
2018 Rate Drivers												
Wholesale	**1.9%**	**$**	**1.17**	**0.0%**	**$**	**-**	**0.0%**	**$**	**-**	**0.7%**	**$**	**1.17**
Local												
CIP/R&R	*3.1%*	*$*	*1.88*	*0.7%*	*$*	*0.54*	*3.8%*	*$*	*0.91*	*2.1%*	*$*	*3.33*
Taxes/Interfunds	*0.8%*	*$*	*0.49*	*0.8%*	*$*	*0.62*	*0.4%*	*$*	*0.09*	*0.7%*	*$*	*1.20*
Operations	*0.3%*	*$*	*0.17*	*0.7%*	*$*	*0.54*	*0.4%*	*$*	*0.10*	*0.5%*	*$*	*0.81*
Local	**4.2%**	**$**	**2.54**	**2.2%**	**$**	**1.70**	**4.6%**	**$**	**1.10**	**3.3%**	**$**	**5.34**
Total Increase		$	3.71		$	1.70		$	1.10		$	6.51
2018 Monthly Bill	**6.1%**	**$**	**64.13**	**2.2%**	**$**	**80.38**	**4.6%**	**$**	**25.04**	**4.0%**	**$**	**169.55**
2018 Bill (EO Forecast)		*$*	*66.59*		*$*	*82.10*		*$*	*25.11*		*$*	*173.80*
Change		*$*	*(2.46)*		*$*	*(1.72)*		*$*	*(0.07)*		*$*	*(4.25)*

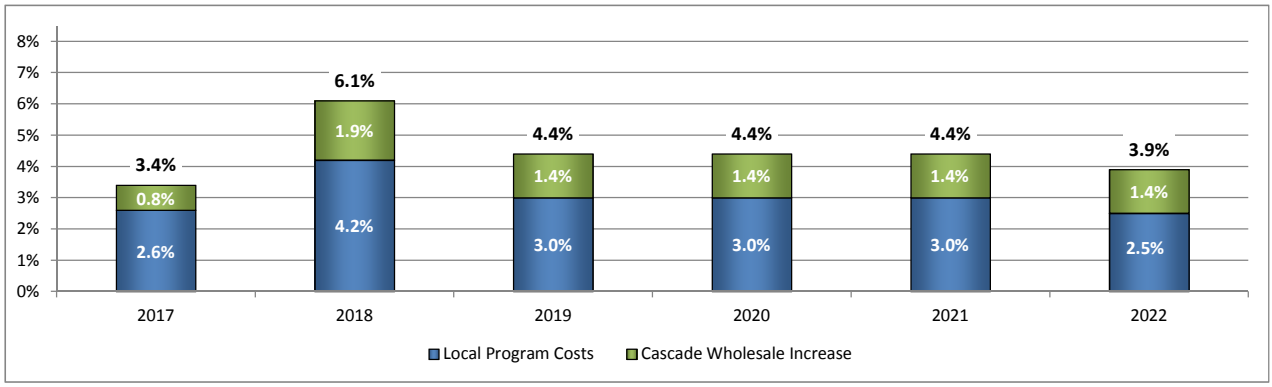
Minor differences may exist due to rounding

K:\Secured\Bus_Admin - Finance\2017-2018 Budget\City Budget Book\[1 Rate Drivers - 2017-18 council book - PUBLISHED.xlsx]Rate Drivers (Pers-Ops Comb)

Sept 26, 2016; Prepared by SEP/MHC

WATER UTILITY FUND
2017 - 2022 Rate Forecast

PROJECTED RATE INCREASES



Impact to Monthly Bill for a Typical Residential Customer

	2017	2018	2019	2020	2021	2022
Prior Year Bill	$58.44	$60.42	$64.13	$66.96	$69.94	$73.00
Increase:						
Cascade Wholesale Purchased Water	0.47	1.17	0.92	0.96	0.96	0.99
Local	1.51	2.54	1.91	2.02	2.10	1.83
Total	$1.98	$3.71	$2.83	$2.98	$3.06	$2.82
Projected Bill	$60.42	$64.13	$66.96	$69.94	$73.00	$75.82

Minor differences may exist due to rounding. 2015 reflect water cost-of-service adjustments.

Key Rate Drivers

- **Wholesale Costs**

  Drinking water for the City of Bellevue is provided by the Cascade Water Alliance. 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. Retail rate impacts of the projected increases in Cascade's wholesale costs to Bellevue are 0.8% for 2017 and 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 2022.

- **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 rate increases of 1.5% in 2017 and 3.1% in 2018, and an average of about 2.5% per year thereafter. Higher rate increases are required in 2017-2020 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 rate increases of about 0.2% in 2017 and 0.8% in 2018. Increases for the remainder of the forecast period will average less than 0.1%.

- **Operations**

  Projected operating costs will require rate increases of about 0.2% in 2017 and 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.

- **Issaquah Assumption**

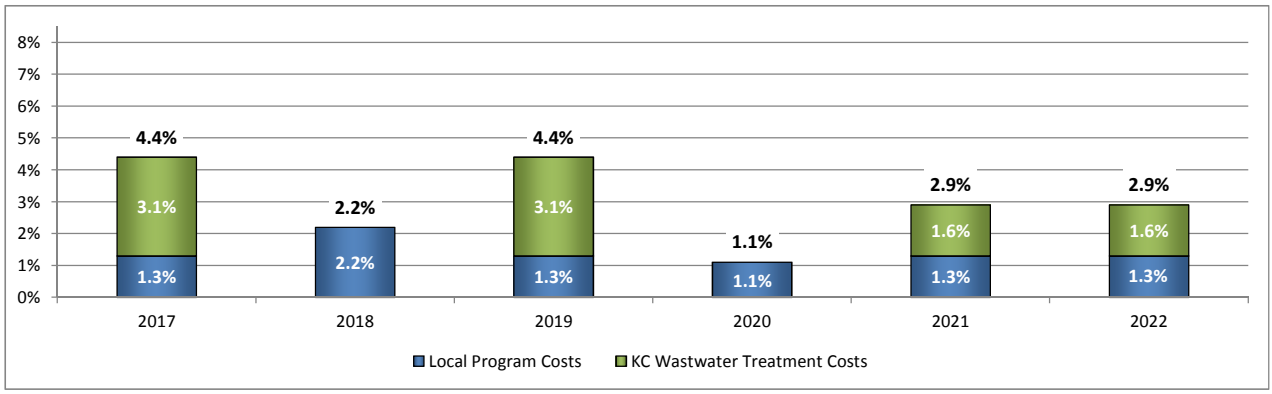
  The Issaquah Assumption is estimated to result in a net annual loss of water revenue in the amount of $260K. To address the anticipated revenue shortfall an increase in water rates of about 0.7% is needed in 2017.

- **Advanced Metering Infrastructure**

  The Utilities Department is proposing the 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
2017 - 2022 Rate Forecast

PROJECTED RATE INCREASES



Impact to Monthly Bill for a Typical Residential Customer

	2017	2018	2019	2020	2021	2022
Prior Year Bill	$75.35	$78.68	$80.38	$83.88	$84.82	$87.27
Increase:						
KC Wastewater Treatment	2.35	0.00	2.47	0.00	1.33	1.36
Local	0.98	1.70	1.03	0.94	1.12	1.18
Total	$3.33	$1.70	$3.50	$0.94	$2.45	$2.54
Projected Bill	$78.68	$80.38	$83.88	$84.82	$87.27	$89.81

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 for a two-year period starting 2017, 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 about 3.1% in 2017, 3.1% in 2019, and 1.6% for 2021-2022.

- **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 rate increases of about 0.7% each year in 2017 and 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.

- **Issaquah Assumption**

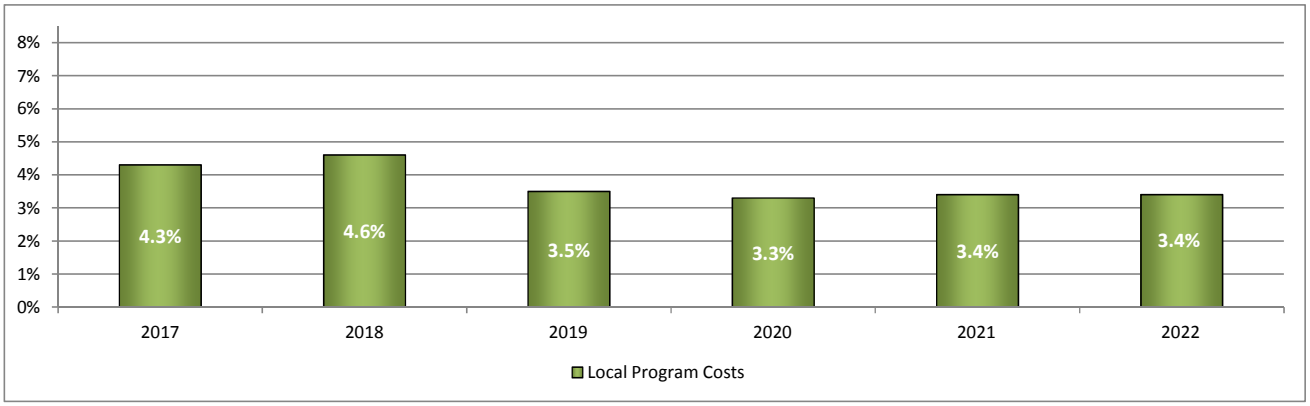
  The Issaquah Assumption is estimated to result in a net annual loss of sewer revenue in the amount of $280K. To address the anticipated revenue shortfall an increase in sewer rates of 0.6% is needed in 2017.

- **Advanced Metering Infrastructure**

  The Utilities Department is proposing the 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
2017 - 2022 Rate Forecast

PROJECTED RATE INCREASES



Impact to Monthly Bill for a Typical Residential Customer

	2017	2018	2019	2020	2021	2022
Prior Year Bill	$22.95	$23.94	$25.04	$25.91	$26.80	$27.71
Increase	$0.99	$1.10	$0.87	$0.89	$0.91	$0.94
Projected Bill	$23.94	$25.04	$25.91	$26.80	$27.71	$28.65

Minor differences may exist due to rounding

Key Rate Drivers

- **Capital Program**

  The proposed 2017-2023 Stormwater Capital program includes $43.9M in investments. $26.8Mof 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 rate increases of about 1.7% in 2017 and 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 each year in 2017 and 2018 for the Mobility and Infrastructure Initiative.

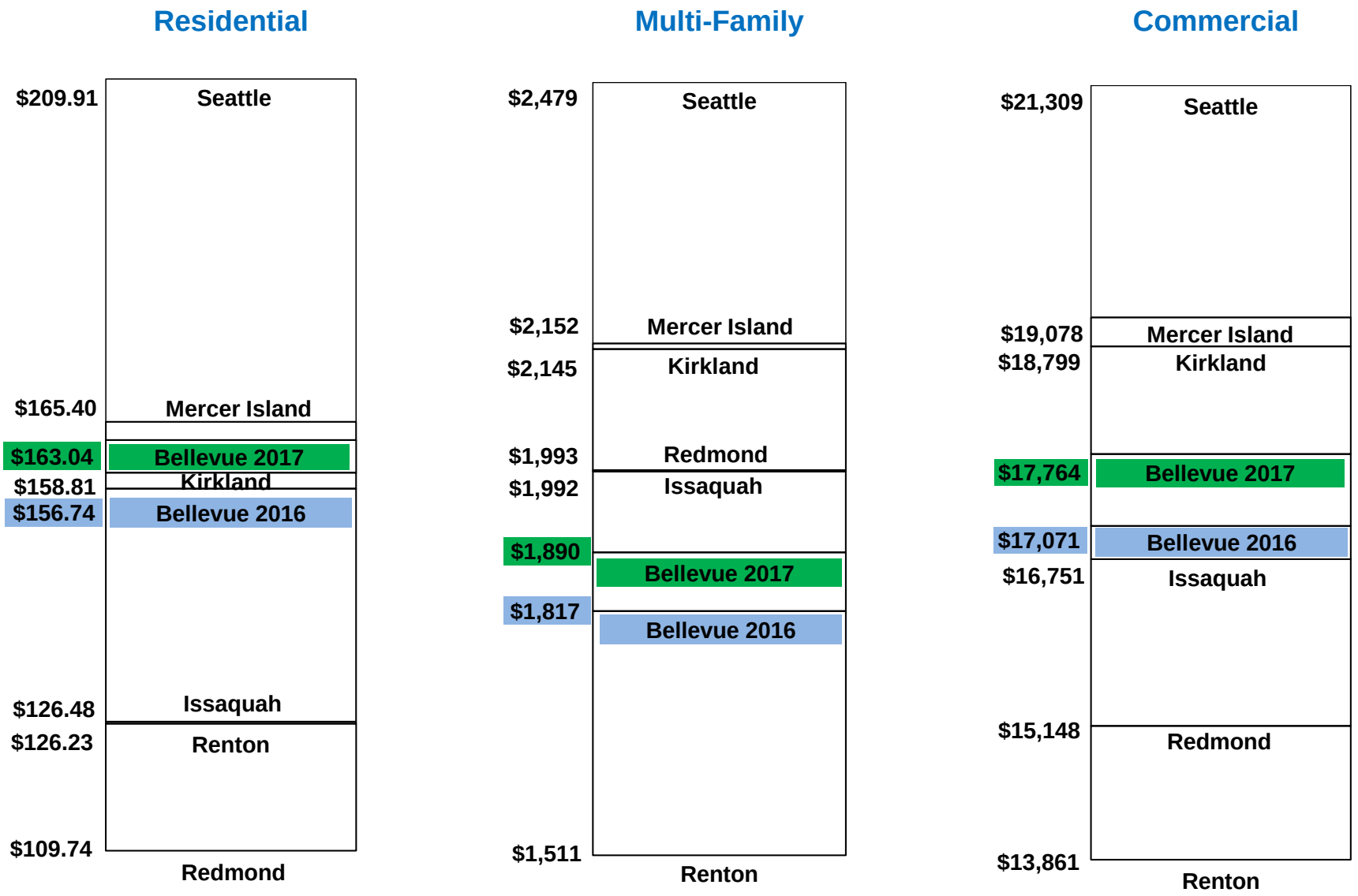
- **Taxes/Intergovernmental**

  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**

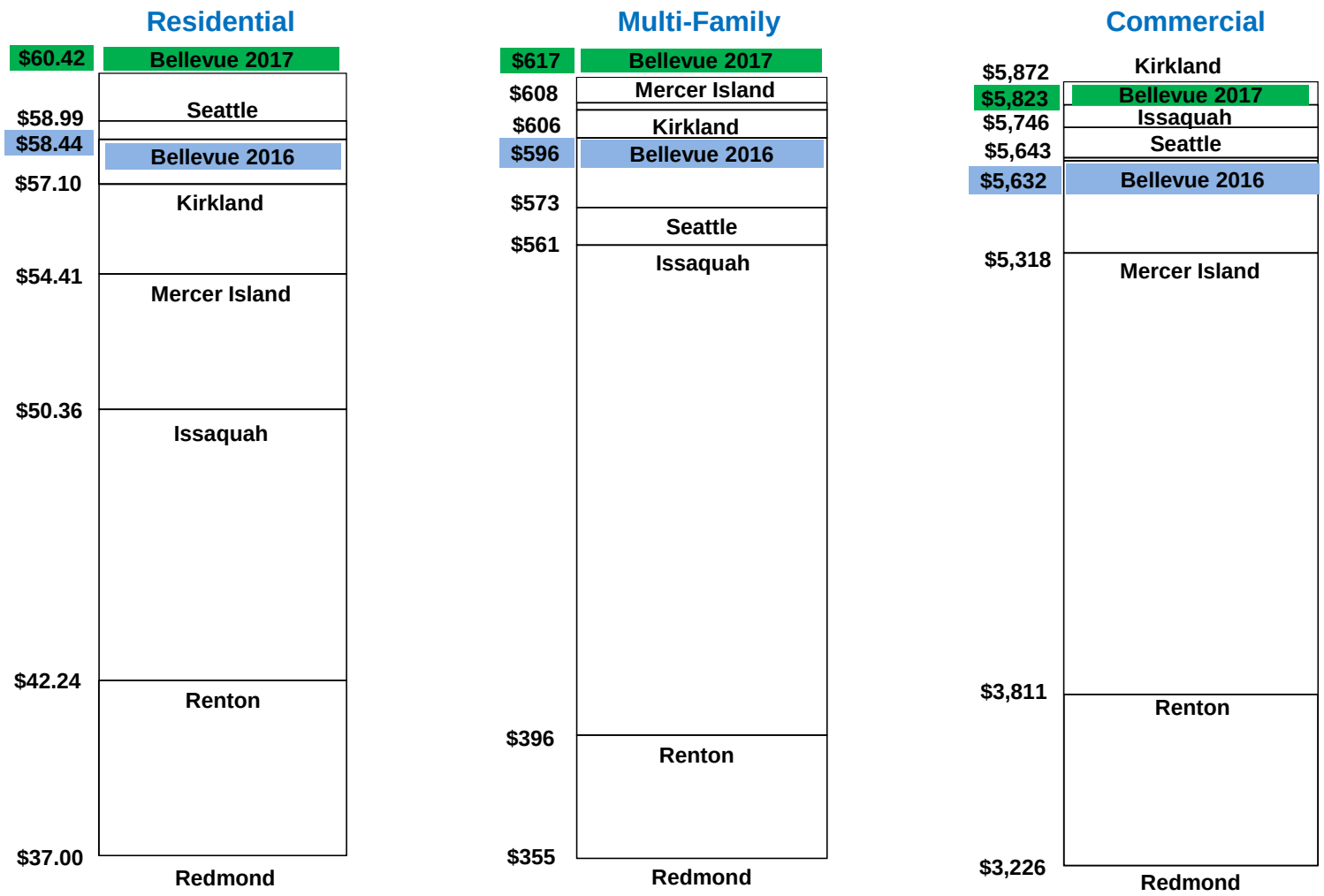
  Operating costs will require rate increases of about 1.1% in 2017, 0.4% in 2018, and about 0.7% per year thereafter. Personnel costs are relatively flat with small increases associated with merit and PERS cost increases consistent with projections for other City departments.

WATER, SEWER AND STORM & SURFACE WATER UTILITIES
2016 COMBINED MONTHLY BILL COMPARISON
WITH 2017 PROPOSED BELLEVUE RATES



Source: All rate information was obtained from municipality websites

WATER UTILITY
2016 MONTHLY BILL COMPARISON
WITH 2017 PROPOSED BELLEVUE RATES

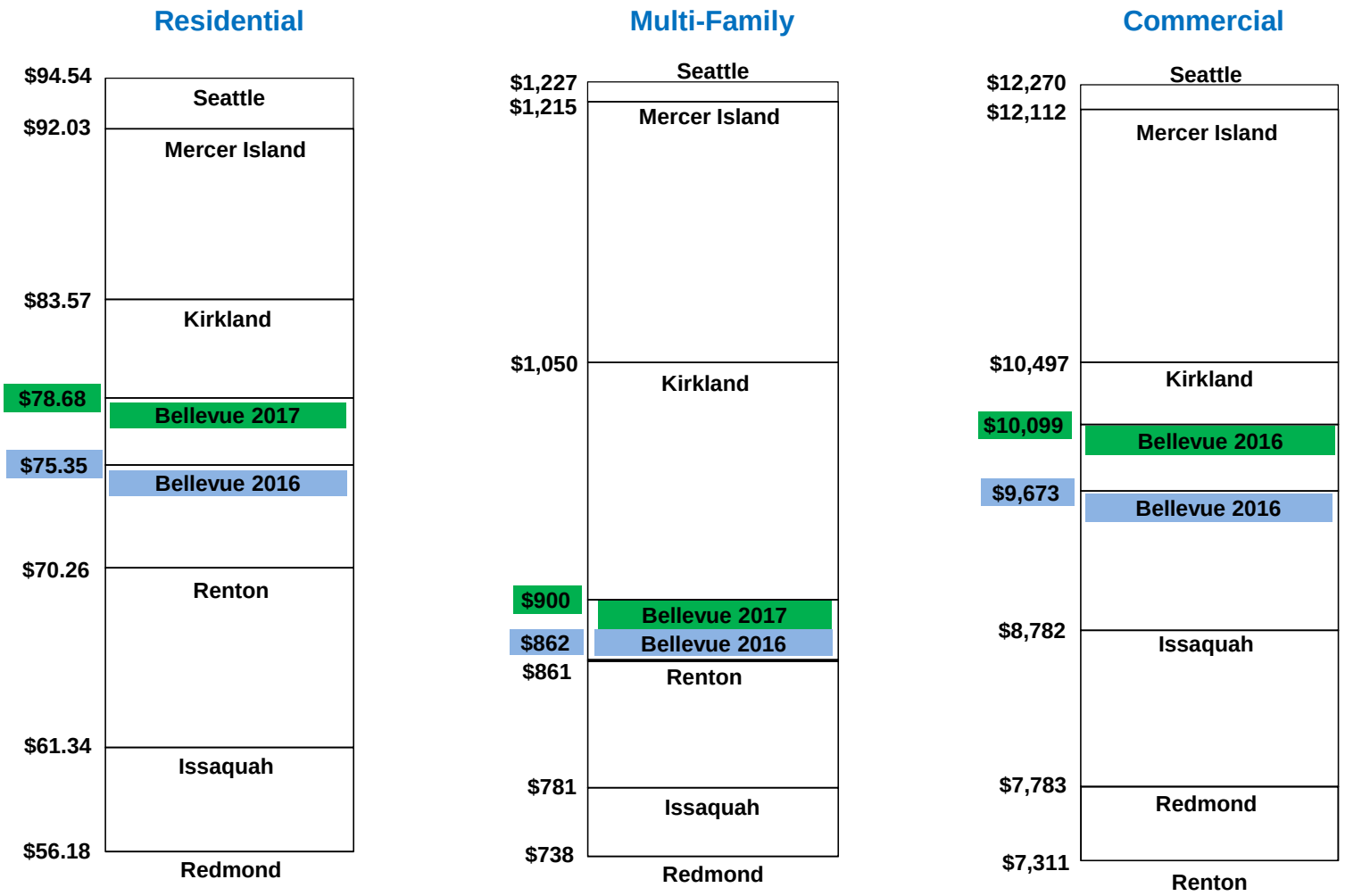


Comparisons based on the following criteria established by City Engineers Association of Washington.

1. **Residential: A single-family dwelling with 3/4-inch meter and monthly consumption of 850 cubic feet.**
2. **Multi-family: A 12 unit multi-family building with a single 1 1/2-inch meter and monthly consumption of 10,000 cubic feet.**
3. **Commercial: A commercial/industrial user with a 4-inch meter and monthly consumption of 100,000 cubic feet.**

Source: All rate information was obtained from municipality websites and verified with staff as available.

SEWER UTILITY
2016 MONTHLY BILL COMPARISON
WITH 2017 PROPOSED BELLEVUE RATES

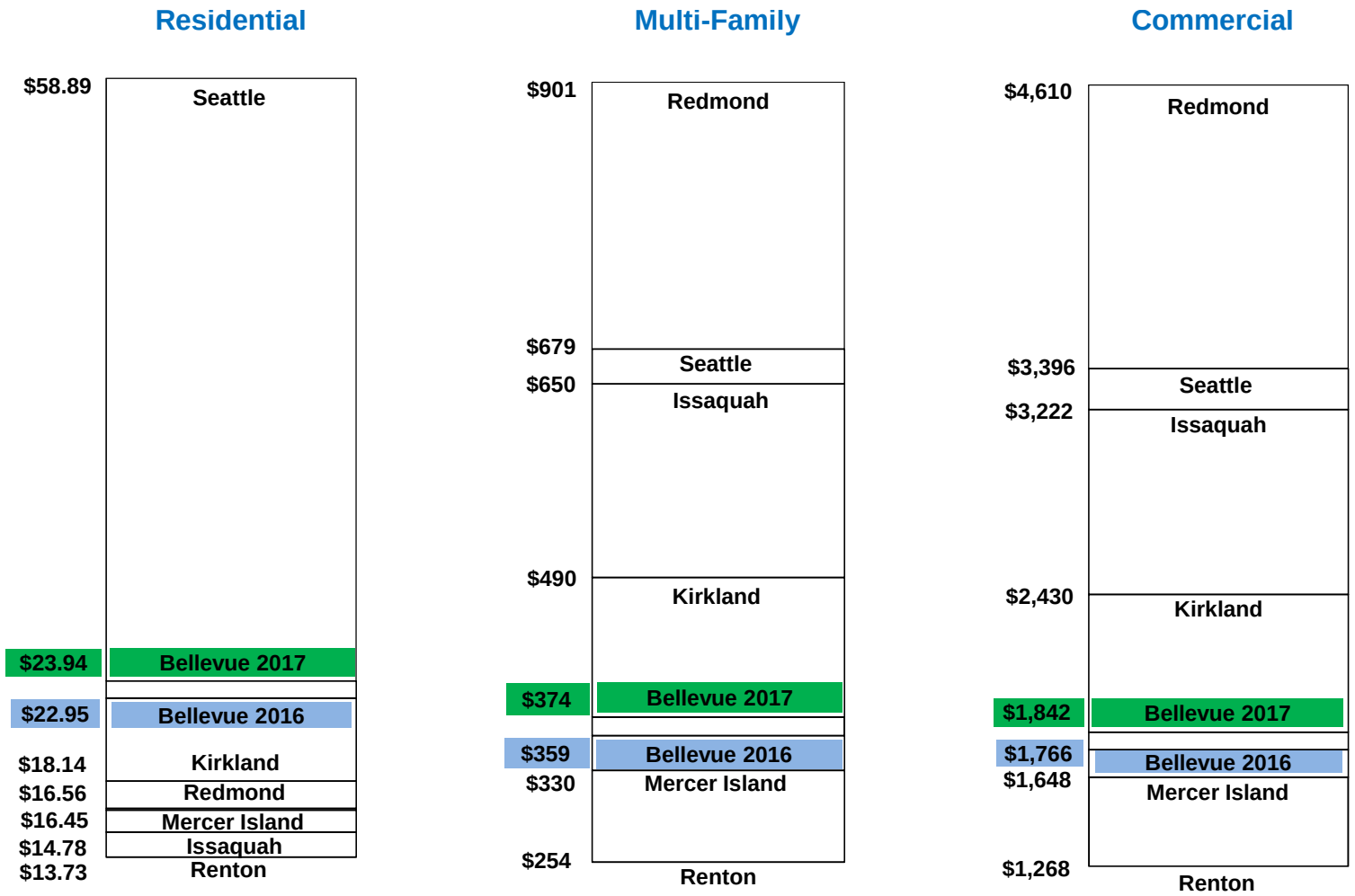


Comparisons based on the following criteria established by City Engineers Association of Washington.

1. Residential: Either a flat rate or metered service with monthly consumption of 750 cubic feet.
2. Multi-family: A 12 unit multi-family building with a single 1 1/2-inch meter and monthly consumption of 10,000 cubic feet.
3. Commercial: A commercial/industrial user with a 4-inch meter and monthly consumption of 100,000 cubic feet.

Source: All rate information was obtained from municipality websites and verified with staff as available.

STORM & SURFACE WATER UTILITY
2016 COMBINED MONTHLY BILL COMPARISON
WITH 2017 PROPOSED BELLEVUE RATES



Comparisons based on the following criteria established by City Engineers Association of Washington.

1. Residential: Flat rate for single family dwelling on individual lot, or on10,000 square foot moderately developed lot.
2. Multi-family: Rate for a 10 unit multi-family building on a 2 acre site with 80% impervious surface. (very heavy development)
3. Commercial: Rate for a commercial/industrial site of 10 acres with 80% impervious surface. (very heavy development)

Source: All rate information was obtained from municipality websites and verified with staff as available.

WATER UTILITY
2016-2018 RATE COMPARISONS
Bimonthly Basic Charges (Excluding City Tax)
Adopted - Ordinance #_____

Basic Charges	2016 Rates	2017 Rates	% Increase *	2018 Rates	% Increase *
Domestic Meters					
5/8" or 3/4"	$42.28	$43.72	3.4%	$46.39	6.1%
1"	$74.83	$77.37	3.4%	$82.09	6.1%
1-1/2 "	$126.60	$130.90	3.4%	$138.88	6.1%
2"	$194.56	$201.18	3.4%	$213.45	6.1%
3"	$425.05	$439.50	3.4%	$466.31	6.1%
4"	$626.22	$647.51	3.4%	$687.01	6.1%
6"	$1,172.18	$1,212.03	3.4%	$1,285.96	6.1%
8"	$1,823.54	$1,885.54	3.4%	$2,000.56	6.1%
10"	$2,561.18	$2,648.26	3.4%	$2,809.80	6.1%
Domestic/ Fire Combo Meter					
1"	$45.36	$46.90	3.4%	$49.76	6.1%
1 1/2"	$49.91	$51.61	3.4%	$54.76	6.1%
2"	$69.89	$72.27	3.4%	$76.68	6.1%
Irrigation Meters					
5/8" or 3/4"	$42.28	$43.72	3.4%	$46.39	6.1%
1"	$74.83	$77.37	3.4%	$82.09	6.1%
1-1/2 "	$126.60	$130.90	3.4%	$138.88	6.1%
2"	$194.56	$201.18	3.4%	$213.45	6.1%
3"	$425.05	$439.50	3.4%	$466.31	6.1%
4"	$626.22	$647.51	3.4%	$687.01	6.1%
6"	$1,172.18	$1,212.03	3.4%	$1,285.96	6.1%
8"	$1,823.54	$1,885.54	3.4%	$2,000.56	6.1%
10"	$2,561.18	$2,648.26	3.4%	$2,809.80	6.1%
Service Charge For Private Fire Protection					
5/8" or 3/4"	$23.15	$23.94	3.4%	$25.40	6.1%
1"	$26.89	$27.80	3.4%	$29.50	6.1%
1-1/2 "	$30.73	$31.77	3.4%	$33.71	6.1%
2"	$41.23	$42.63	3.4%	$45.23	6.1%
3"	$118.40	$122.43	3.4%	$129.90	6.1%
4"	$146.99	$151.99	3.4%	$161.26	6.1%
6"	$213.73	$221.00	3.4%	$234.48	6.1%
8"	$289.93	$299.79	3.4%	$318.08	6.1%
10"	$356.67	$368.80	3.4%	$391.30	6.1%

**** Minor differences may exist due to rounding.***

September 26, 2016

WATER UTILITY
2016-2018 RATE COMPARISONS
Bimonthly Volume Charges (Excluding City Tax)
Adopted - Ordinance #_____

Customer Type	2016 Rates	2017 Rates	% Increase *	2018 Rates	% Increase *
VOLUME CHARGES (Per ccf)					
Single Family					
0 - 20 ccf	n/a	n/a	n/a	n/a	n/a
21 - 30 ccf	n/a	n/a	n/a	n/a	n/a
31 - 100 ccf	n/a	n/a	n/a	n/a	n/a
Over 100 ccf	n/a	n/a	n/a	n/a	n/a
0 - 11 ccf	$3.32	$3.43	3.4%	$3.64	6.1%
12 - 17 ccf	$4.21	$4.35	3.4%	$4.62	6.1%
18 - 45 ccf	$5.53	$5.72	3.4%	$6.07	6.1%
Over 46 ccf	$7.89	$8.16	3.4%	$8.66	6.1%
Multi-Family					
Monthly Service Charge Per Unit	$0.00	$0.00	0.0%	$0.00	0.0%
Winter	$4.17	$4.31	3.4%	$4.57	6.1%
Summer	$5.70	$5.89	3.4%	$6.25	6.1%
Non-Residential					
Winter	$4.19	$4.33	3.4%	$4.59	6.1%
Summer	$5.73	$5.92	3.4%	$6.28	6.1%
Non-Residential					
Winter	$4.19	$4.33	3.4%	$4.59	6.1%
Summer	$5.73	$5.92	3.4%	$6.28	6.1%
Irrigation	$7.77	$8.03	3.4%	$8.52	6.1%

**** Minor differences may exist due to rounding.***

September 26, 2016

WATER UTILITY
2016-2018 MONTHLY BILL COMPARISONS
(Including City Taxes)
Adopted - Ordinance #_____

Customer Type	2016 Billing	2017 Billing	% Increase*	2018 Billing	% Increase*
Single Family					
0 ccf	$23.74	$24.54	3.4%	$26.04	6.1%
10 ccf	$42.37	$43.80	3.4%	$46.48	6.1%
17 ccf	$58.42	$60.42	3.4%	$64.13	6.1%
20 ccf	$67.73	$70.01	3.4%	$74.30	6.1%
30 ccf	$98.77	$102.12	3.4%	$108.38	6.1%
40 ccf	$129.82	$134.23	3.4%	$142.45	6.1%
50 ccf	$167.48	$173.19	3.4%	$183.80	6.1%
Multi-Family					
Small (5 units)					
Winter - (25ccf BiMonthly Usage)	$100.53	$103.92	3.4%	$110.22	6.1%
Summer - (30ccf BiMonthly Usage)	$138.00	$142.63	3.4%	$151.34	6.1%
Medium (25 units)					
Winter - (250ccf BiMonthly Usage, 10ccf Irr)	$884.04	$913.81	3.4%	$969.14	6.1%
Summer - (300ccf BiMonthly Usage, 100ccf Irr)	$1,571.31	$1,623.90	3.3%	$1,723.07	6.1%
Large (128 units)					
Winter - (1,000ccf BiMonthly Usage)	$2,777.72	$2,871.17	3.4%	$3,044.67	6.0%
Summer - (1,500ccf BiMonthly Usage)	$4,942.07	$5,107.11	3.3%	$5,419.20	6.1%
Non-Residential					
Small Business					
Winter - (5ccf BiMonthly Usage)	$35.50	$36.70	3.4%	$38.93	6.1%
Summer - (5ccf BiMonthly Usage)	$39.82	$41.16	3.4%	$43.67	6.1%
Medium Office					
Winter - (500ccf BiMonthly Usage)	$1,405.23	$1,452.33	3.4%	$1,539.76	6.0%
Summer - (500ccf BiMonthly Usage)	$1,837.48	$1,898.60	3.3%	$2,014.10	6.1%
Large Commercial					
Winter - (5,000ccf BiMonthly Usage)	$13,065.74	$13,503.04	3.3%	$14,315.12	6.0%
Summer - (5,500ccf BiMonthly Usage)	$18,996.44	$19,627.41	3.3%	$20,821.22	6.1%

**** Minor differences may exist due to rounding.***

September 26, 2016

SEWER UTILITY
2016-2018 RATE COMPARISONS
Bimonthly Basic Charges (Excluding City Tax)
Adopted - Ordinance #_____

Customer Type	2016 Rates	2017 Rates	% Increase*	2018 Rates	% Increase*
Single Family					
Metro Base Charge - (per unit)	$84.06	$88.44	5.2%	$88.44	0.0%
Volume Charge (per ccf)					
0 - 50 ccf	$3.92	$4.05	3.3%	$4.27	5.4%
Over 50 ccf	$5.06	$5.23	3.4%	$5.51	5.4%
Multi-Family					
Base Charge per unit (Includes 11 ccf)	$92.82	$96.92	4.4%	$99.03	2.2%
Volume Charge (per ccf) Over 11 ccf	$7.65	$7.99	4.4%	$8.16	2.2%
Non-Residential					
Minimum Charge	$142.70	$149.01	4.4%	$152.26	2.2%
Volume Charge (per ccf)	$9.17	$9.58	4.4%	$9.79	2.2%

**** Minor differences may exist due to rounding.***

September 26, 2016

SEWER UTILITY
2016-2018 MONTHLY BILL COMPARISONS
(Including City Tax)

Customer Type	2016 Billing	2017 Billing	% Increase*	2018 Billing	% Increase*
Single Family					
5 ccf	$54.68	$57.33	4.8%	$57.91	1.0%
10 ccf	$65.01	$68.01	4.6%	$69.17	1.7%
15 ccf	$75.35	$78.69	4.4%	$80.43	2.2%
20 ccf	$85.69	$89.37	4.3%	$91.69	2.6%
50 ccf	$47.71	$153.45	221.6%	$159.25	3.8%
Multi-Family (per unit)					
7 ccf	$48.96	$51.12	4.4%	$52.23	2.2%
10 ccf	$48.96	$51.12	4.4%	$52.23	2.2%
13 ccf	$57.03	$59.55	4.4%	$60.84	2.2%
16 ccf	$69.13	$72.19	4.4%	$73.75	2.2%
Non-Residential					
10 ccf	$48.37	$50.53	4.5%	$51.64	2.2%
15 ccf	$72.55	$75.79	4.5%	$77.46	2.2%
100 ccf	$483.65	$505.28	4.5%	$516.35	2.2%
1500 ccf	$7,254.77	$7,579.14	4.5%	$7,745.28	2.2%

STORM & SURFACE WATER UTILITY
2016-2018 RATE COMPARISONS
Bimonthly Basic Charges (Excluding City Tax)
Adopted - Ordinance #_____

Development Category	2016 Rates	2017 Rates	% Increase*	2018 Rates	% Increase*
BILLING CHARGE	$5.11	$5.33	4.3%	$5.58	4.6%
Square Footage Charge (per 2000 sq ft)					
Wetlands	$0.00	$0.00		$0.00	
Undeveloped (0%)	$0.85	$0.89	4.3%	$0.93	4.6%
Lightly Developed (To 20%)	$6.16	$6.42	4.3%	$6.72	4.6%
Moderately Developed (To 40%)	$7.69	$8.02	4.3%	$8.39	4.6%
Heavily Developed (To 70%)	$11.53	$12.03	4.3%	$12.58	4.6%
Very Heavily Developed (Over 70%)	$15.35	$16.01	4.3%	$16.75	4.6%

**** Minor differences may exist due to rounding.***

September 26, 2016

STORM & SURFACE WATER UTILITY
2016-2018 MONTHLY BILL COMPARISON
(Including City Tax)

Development Category		2016 Billing	2017 Billing	% Increase	2018 Billing	% Increase
Single Family		$22.96	$23.94	4.3%	$25.04	4.6%
Multi-Family						
Small (5 units)	Heavily Developed	$51.28	$53.50	4.3%	$55.95	4.6%
Medium (25 units)	Lightly Developed	$135.73	$141.46	4.2%	$148.07	4.7%
Large (100 units)	Heavily Developed	$1,089.81	$1,137.07	4.3%	$1,189.06	4.6%
Non-Residential						
Medium Office	Very Heavily Developed	$107.80	$112.44	4.3%	$117.64	4.6%
Medium/Large Office	Heavily Developed	$664.68	$693.51	4.3%	$725.22	4.6%
Large Retail	Very Heavily Developed	$5,379.50	$5,610.81	4.3%	$5,870.14	4.6%

September 26, 2016

1433-ORD
11/25/14

ORIGINAL

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 6201

AN ORDINANCE establishing revised cost-of-service based charges for water service, water consumption, and water standby capacity; repealing Ordinance No. 6085; providing for severability; and establishing an effective date.

WHEREAS, a cost-of-service study was prepared and completed identifying the cost of providing water service by customer class; and

WHEREAS, the water rate structure was redesigned to reflect the cost-of-service study findings; and

WHEREAS, the results of the cost of service study and new water rate design were reviewed by the Environmental Services Commission; and

WHEREAS, the Environmental Services Commission has reviewed the Water Utility budget and revised cost-of-service rate proposal, held a public hearing thereon and recommended approval of the proposal; and

WHEREAS, it is in the public interest to provide for the following schedule of revised charges for water service, water consumption and water standby capacity for the Water Utility of the City of Bellevue; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Charges Established. The charges set forth herein for water service, water consumption, and water standby capacity are hereby established and shall be collected from each user of water services provided by the Water Utility of the City of Bellevue.

Section 2. Meter Service Charges.

A. Meter Service Charges – General. The meter service charges per bimonthly billing period for each user of water service shall be as follows:

Domestic Meter Size	Bimonthly Service Charge Per Meter in Operation	
	2015	2016
5/8" or ¾"	$40.19	$42.28
1"	$71.13	$74.83
1½"	$120.34	$126.60
2"	$184.94	$194.56
3"	$404.04	$425.05
4"	$595.27	$626.22
6"	$1,114.24	$1,172.18
8"	$1,733.40	$1,823.54
10"	$2,434.58	$2,561.18

B. Residential Combo Meters - Oversized domestic meters required in designated residential structures to provide fire sprinkler capability.

Combo Meter Size	Bimonthly Service Charge Per Meter in Operation	
	2015	2016
1"	$43.12	$45.36
1½"	$47.44	$49.91
2"	$66.44	$69.89

C. Irrigation meters - City-owned meters that are used for measuring water used strictly for outside irrigation.

Irrigation Meter Size	Bimonthly Service Charge Per Meter in Operation	
	2015	2016
5/8" or ¾"	$40.19	$42.28
1"	$71.13	$74.83
1½"	$120.34	$126.60
2"	$184.94	$194.56
3"	$404.04	$425.05
4"	$595.27	$626.22
6"	$1,114.24	$1,172.18
8"	$1,733.40	$1,823.54
10"	$2,434.58	$2,561.18

Section 3. Water Consumption Charges. The water consumption charges per bimonthly billing period for each user of water service shall be as follows:

A. Single Family Residential

Cubic Feet Consumed	Charge Per Hundred Cubic Feet of Water	
	2015	2016
0 to 1,100	$3.16	$3.32
1,101 to 1,700	$4.00	$4.21
1,701 to 4,500	$5.26	$5.53
4,501 and over	$7.50	$7.89

B Multifamily Residential Structure or Facility

Consumption	Charge Per Hundred Cubic Feet of Water	
	2015	2016
All non-summer consumption	$3.96	$4.17
All summer consumption Where summer consumption is defined in Subsection 1 below.	$5.42	$5.70

1. For purposes of these charges, summer consumption shall mean that volume recorded on two normal bimonthly meter readings during the months of July through October or readings during this period for other billing purposes, such as, but not limited to, customer changes.

For purposes of these charges, a "multifamily residential structure or facility" shall mean any residential structure or facility containing two or more dwelling units, including, but not limited to, duplexes, triplexes, apartment buildings, condominiums, and parcels containing two or more separate dwelling units served through a single meter, but shall not include hotels, motels or trailer parks. Mixed use structures that include both multi-family dwelling units and commercial non-residential units and that are served by one water meter shall be billed as multi-family.

C. Non-Residential

Consumption	Charge Per Hundred Cubic Feet of Water	
	2015	2016
All non-summer consumption	$3.98	$4.19
All summer consumption Where summer consumption is defined in Subsection 1 below.	$5.45	$5.73

1. For purposes of these charges, summer consumption shall mean that volume recorded on two normal bimonthly meter readings during the months of July through October or readings during this period for other billing purposes, such as, but not limited to, customer changes.

D. Irrigation Water Consumption.

For volumes measured by irrigation meters or other meter arrangements that can be used for measuring water used strictly for outside irrigation.

Consumption	Charge Per Hundred Cubic Feet of Water	
	2015	2016
All irrigation consumption	$7.39	$7.77

Section 4. Service Charges for Water Standby Capacity for Private Fire Protection. The service charges for water standby capacity for private fire protection per bimonthly billing period shall be as follows:

Line Size	Bimonthly Service Charge	
	2015	2016
5/8" or ¾"	$22.01	$23.15
1"	$25.56	$26.89
1½"	$29.21	$30.73
2"	$39.19	$41.23
3"	$112.55	$118.40
4"	$139.72	$146.99
6"	$203.17	$213.73
8"	$275.60	$289.93
10"	$339.04	$356.67

Section 5. User Charges. The charges for each water service user shall be the sum of the meter service charge in Section 2 plus the appropriate water service charge or charges in Section 3 plus the water standby capacity charges in Section 4, all multiplied by the percentage indicated below for that city or town:

City or Town	Percentage
Bellevue	112.2708%
Clyde Hill	125.6380%
Hunts Point	121.6158%
Medina	117.8432%
Yarrow Point	119.3238%

City or Town	Percentage
Kirkland	112.2708%
Issaquah	112.2708%
Unincorporated King County	112.2708%

provided that the percentages set forth above may be administratively adjusted by the Utilities Department Director to reflect any increase or decrease in any franchise fee required to be paid to such city or town by the Utility.

Section 6. Severability. If any section of this ordinance or any portion of any section of this ordinance, or its application to any person or circumstances is held invalid, the remainder of the ordinance or the application of the provision to other persons and circumstances, shall not be affected.

Section 7. Repeal. Ordinance No. 6085 is repealed effective January 1, 2015 provided, however, that any charges made for water service under Ordinance No. 6085 is not invalidated by the repeal of that ordinance.

Section 8. Effective Date. Sections 1-7 of this ordinance shall take effect on January 1, 2015, shall apply to service provided on and after that date and shall supersede all existing schedules of charges as of that date. The specific water service charges for 2015 shall take effect on January 1, 2015 and shall remain in effect through and including December 31, 2015. The specific water charges for 2016, as hereinbefore indicated, shall take effect on January 1, 2016 and shall remain in effect until amended by the City Council.

Section 9. This ordinance shall take effect and be in force five days after its passage and legal publication.

1433-ORD
11/25/14

ORIGINAL

PASSED by the City Council this 1st day of December, 2014, and signed in authentication of its passage this 1st day of December, 2014.

(SEAL)

Claudia Balducci, Mayor

Approved as to form:
Lori Riordan, City Attorney

Lacey Hatch, ~~Assistant~~ City Attorney

Attest:

Myrna L. Basich, City Clerk

Published December 4, 2014.

ORIGINAL

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 6203

AN ORDINANCE establishing revised sewerage service charges; repealing Ordinance No. 6086; providing for severability; and establishing an effective date.

WHEREAS, the Environmental Services Commission has reviewed the Sewer Utility budget and rate proposal, held a public hearing thereon and recommended approval of the proposal; and

WHEREAS, it is in the public interest to establish the following amended schedule of rates and charges for the sewerage service area for the Sewer Utility of the City of Bellevue; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Charges Established. There are hereby established and shall be collected from each user in the sewerage service area for the Sewer Utility of the City of Bellevue sewerage service charges as hereinafter provided.

Section 2. Single Family Residential Structures.

A. The service charge for single-family residential units shall be $84.06 per bimonthly billing period in 2015 and $84.06 per bimonthly billing period in 2016, plus a volume charge based on the bimonthly winter-average water consumption for the structure, as follows:

Winter-Average Cubic Feet Consumed	Charge Per Hundred Cubic Feet of Water	
	2015	2016
0 to 5,000	$3.64	$3.92
Over 5,000	$4.70	$5.06

B. For purposes of these charges, winter-average consumption is the average bimonthly water volume recorded on three normal meter readings during the period of December 15 through June 15 of the preceding year. Winter-average consumption for each residence will be recomputed before the start of each year and that volume will be used to compute the bimonthly sewer volume charge for the residence for the entire calendar year.

C. For those residences that are not Bellevue water customers, actual meter reading data necessary to compute the residence's winter-average water

consumption will be obtained from the customer's water district, whenever possible. Where that data is unavailable and for new structures where water consumption data necessary to compute actual winter-average consumption has not been recorded, bimonthly sewer volume charges for the residence will be based on Bellevue's system-wide winter-average residential consumption of 1,500 cubic feet for a two-month period.

Section 3. Multifamily Residential Structures or Facilities.

The service charge for each multifamily residential structure or facility shall be $90.12 for 2015, and $92.82 for 2016 per bimonthly billing period for each dwelling unit, plus $7.43 for 2015 and $7.65 for 2016 per 100 cubic feet of water consumed by such structure or facility in excess of 1,100 cubic feet per dwelling unit during each bimonthly billing period.

For the purposes of this Section 3, "multifamily residential structure or facility" shall mean any residential structure or facility containing two or more dwelling units, including but not limited to duplexes, triplexes, apartment buildings, condominiums, and parcels containing two or more separate dwelling units, but shall not include hotels, motels or trailer parks. Mixed-use structures that include both multi-family dwelling units and commercial non-residential units and that are served by one water meter shall be billed as multi-family.

Section 4. Non-residential Structures or Facilities.

A. The service charge for non-residential structures or facilities shall be based on water consumption by each structure or facility and shall be computed as follows:

$8.90 for 2015, and $9.17 for 2016 per 100 cubic feet of water consumption per bimonthly billing period.

Provided, there shall be a minimum charge of $138.54 for 2015 and $142.70 for 2016 per bimonthly billing period.

For purposes of this Section 4, "non-residential structure or facilities" shall mean any structure or facility not governed by Section 2 or Section 3 of this ordinance and shall include, but not be limited to, any commercial, industrial, business, trade, school or municipal structure or facility.

Section 5. King County/METRO Charges. In addition to these rates and charges for sewerage service established in this ordinance, or otherwise established by the City, the following King County/METRO charges are imposed to ensure compliance with Section 204 of Public Law 92-500 (22 U.S.C. 1251) CFR Part 35, Subpart E:

A. A "surcharge" in an amount to be determined as provided in King County/METRO Resolution Nos. 2315 and 2557 (now incorporated into Title 28 of the King County Code, Chapter 28.84.060), as now constituted or hereafter amended, said charge to be added to the customer's regular bill.

B. An "Industrial Cost Recovery (ICR)" charge in an amount to be determined as provided in King County/METRO Resolution Nos. 2556 and 3374 (now incorporated into Title 28 of the King County Code, Chapter 28.84.060), as now constituted or hereafter amended, said charge to be billed separately to qualifying industrial customers on an annual basis.

C. An administrative charge of $17.11 shall be added to each customer bill that contains a King County/METRO "surcharge" or "ICR charge."

D. The City of Bellevue, in cooperation with King County/METRO, shall maintain such records as are necessary to document that its sewerage charges comply with the above-cited federal laws and regulations and King County/METRO regulations.

Section 6. User Charges. The charges for each user shall be the sum of any applicable charges under Sections 2, 3, 4 and 5 multiplied by the percentage indicated below for that city or town:

Bellevue	105.4856%
Clyde Hill	110.3273%
Hunts Point	107.2506%
Medina	104.3408%
Yarrow Point	105.4856%
All Other	100.0000%

provided that the percentages set forth above may be administratively adjusted by the Utilities Department Director to reflect any increase or decrease in any franchise fee required to be paid to such city or town by the Utility.

Section 7. The Utilities Department Director shall have authority under this ordinance to adopt procedures necessary for the efficient and equitable administration of the sewer rate structure.

Section 8. Severability. If any section of this ordinance, or any portion of any section of this ordinance, or its application to any person or circumstance, is held invalid, the remainder of the ordinance or the application of the provision to other persons or circumstances, shall not be affected.

Section 9. Repeal. Ordinance No. 6086 is repealed as of January 1, 2015; provided, however, that any charges made for sewerage service under Ordinance No. 6086 are not invalidated by the repeal of that ordinance.

Section 10. Effective Date. Sections 1-9 of this ordinance shall take effect on January 1, 2015, shall apply to service provided on and after that date and shall supercede all existing schedules of charges as of that date. The specific sewerage service charges for 2015, as hereinbefore indicated, shall take effect on January 1,

ORIGINAL

2015 and shall remain in effect through and including December 31, 2015. The specific sewage service charges for 2016, as hereinbefore indicated, shall take effect on January 1, 2016, and shall remain in effect until amended by the City Council.

Section 11. This ordinance shall take effect and be in force five (5) days after its passage and legal publication.

PASSED by the City Council this 1st day of December, 2014, and signed in authentication of its passage this 1st day of December, 2014.

(SEAL)

Claudia Balducci, Mayor

Approved as to form:

Lori Riordan, City Attorney

Lacey Hatch, Assistant City Attorney

Attest:

Myrna L. Basich, City Clerk

Published December 4, 2014.

1432-ORD
11/25/14

ORIGINAL

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 6204

AN ORDINANCE establishing revised storm and surface water drainage rates and charges for the Storm & Surface Water Utility of the City of Bellevue; repealing Ordinance No. 6087; providing for severability; and establishing an effective date.

WHEREAS, the Environmental Services Commission has reviewed the Storm & Surface Water Utility budget and rate proposal, held a public hearing thereon and recommended approval of the proposal, and

WHEREAS, it is in the public interest to establish the following amended schedule of rates and charges for the Storm and Surface Water Utility of the City of Bellevue; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Definitions. The following words when used herein shall have the meanings indicated, unless the context clearly indicates otherwise:

a. Hydrologic Response – The manner and means by which storm water collects upon real property and is conveyed from real property, and which is a function dependent upon a number of interacting factors, including, but not limited to, topography, vegetation, surficial geologic conditions, antecedent soil moisture conditions and ground water conditions. The principle measures of the hydrological system may be stated in terms of total runoff volume, as a percentage of total precipitation which runs off, or in terms of the peak rate of flow generated in the event of a storm of given duration and intensity, or statistical interval of return (frequency).

b. Total Flow – The accumulative volume of water discharged from a property, basin, or water shed. The total flow is quantified in measures such as cubic feet or gallons of water.

c. Peak Flow – The highest momentary rate of water flow, measured or estimated in cubic feet of water per second or gallons of water per minute. It is differentiated from total flow volume by the introduction of a unit of time measure during which the maximum rate of flow is measured, calculated, or estimated.

d. Contributors of Drainage Waters – Shall include all real properties within the City from which flows storm or surface waters, or waters supplied by Municipal or private sources which exit the property as surface flows

and/or enter the storm and surface water utility system of the City of Bellevue.

e. Beneficiaries of Drainage Service – Shall include all real properties within the City of Bellevue which benefit by the provision, maintenance, operation and improvement of the storm and surface water control system by the City of Bellevue, regardless of how that system may be constituted. Such benefits may include, but are not limited to, the provision of adequate systems of collection, conveyance, detention, treatment and release of storm water, the reduction of hazard to property and life resulting from storm water runoff, improvement in the general health and welfare through the reduction of undesirable storm water conditions, improvements in the water quality in the storm and surface water system and its receiving waters, and the limitation of potentially harmful land uses and land alteration activities which might otherwise negatively impact the storm and surface water system.

f. Impervious Surfaces – Those hard surfaced areas which either prevent or retard the entry of water into the soil mantle, as it entered under natural conditions pre-existent to development, and/or cause water to run off the surface in greater quantities or at an increased rate of flow from that present under natural conditions pre-existent to development. Common impervious surfaces include, but are not limited to, rooftops, concrete or asphalt sidewalks and paving, walkways, patio areas, driveways, parking lots or storage areas and gravel, oiled, macadam or other surfaces which similarly impact the natural infiltration or runoff patterns which existed prior to development.

Section 2. Classification of Property. All real property in the City of Bellevue shall be classified by the Storm and Surface Water Utility according to the square footage of area of the property and the intensity of the development set forth below:

a. Wetlands – Real property or a portion of real property that has been designated as "wetlands" pursuant to City of Bellevue Land Use Code (LUC) Ch. 20.25H. Such property shall continue to be charged under its existing classification until it has been specifically designated as "wetlands" pursuant to LUC Ch. 20.25H, now or as hereafter amended.

b. Undeveloped – Real property which is undeveloped and unaltered by buildings, roads, or impervious surfaces which significantly change the hydrology of the property from its natural state.

c. Light Development – Developed real property which has impervious surfaces of less than 20% of the total square footage area of the property.

d. Moderate Development – Developed real property which has impervious surfaces of less than 40% of the total square footage area of the property.

e. Heavy Development – Developed real property which has impervious surfaces between 40% and 70% of the total square footage area of the property.

f. Very Heavy Development – Developed real property which has impervious surfaces of more than 70% of the total square footage area of the property.

Section 3. Reclassification and Combined Classification. The Storm and Surface Water Utility may reclassify an individual parcel of property to the next lower classification of intensity than would be indicated by its percentage of impervious surfaces based on hydrological data to be submitted by the property owner or his agent to the Utility, which demonstrates a hydrological response substantially similar to that of a parcel of property of such lower classification of intensity.

The City Council finds that, in the case of some parcels of property of more than 35,000 square feet in size, in addition to the conditions set forth in paragraph 1 of this section, there may be intensities of development on portions of such parcels of property which differ significantly from other portions of such property in terms of hydrologic response. To provide for consideration of the variation in intensity of development which may be present on such parcels of property, the Storm and Surface Water Utility may classify portions of such parcels of property in any of the classifications defined in Section 2 on the basis of hydrological response. Provided, however, that at least 35,000 square feet shall be classified in the most intense classification appropriate to a portion of the parcel of property.

The City Council further finds that the total area subject to the "combined" calculation for large lots may, at the option of the property owner, be capped at 66,000 square feet (excluding wetlands) for properties with no more than 35,000 square feet of developed area in the "light" or "moderate" intensity categories. The charges for the remaining undeveloped land may be deferred, at the option of the property owner, to the date of development of the property or to the date of closing on the sale of the property, whichever is earlier, and collected by the Utility, with interest accruing from the initial date of deferral at the prevailing interest rate for City bonded indebtedness. The Utilities Department Director is authorized to develop and adopt procedures for the implementation of the capping option and deferred charges, including recording of a notice of such deferred charges on the title of such property.

The City Council further finds that those properties that qualify under this section may have a lesser impact on storm water quantity. Where the owner demonstrates that the hydrological response of the property is further mitigated through natural conditions, on-site facilities or actions of the property owner that reduce the City's costs in providing surface water quantity or quality services, the property owner may apply for a credit against the surface water charge otherwise

applying to the property. The Utilities Department Director is authorized to develop and adopt procedures for the implementation of the provision of such credits.

Section 4. Charges Established. There is hereby levied upon all real property within the City of Bellevue which contributes drainage water to or which benefits from the function of the Storm and Surface Water Utility of the City of Bellevue, and there shall be collected from the owners thereof, bimonthly service charges based on the square footage of the properties and on the appropriate intensity of development classification(s) of such properties, such that for each 2,000 square feet of area or increments thereof, the property shall be charged a bimonthly amount for 2015 and 2016 as follows:

Year	Wetland	Undeveloped	Light Development	Moderate Development	Heavy Development	Very Heavy Development
2015	$0.00	$0.82	$5.92	$7.39	$11.08	$14.75
2016	$0.00	$0.85	$6.16	$7.69	$11.53	$15.35

and each account shall be charged an additional bimonthly customer charge in the amount of $4.91 per billing in 2015 and $5.11 per billing in 2016.

Section 5. User Charges. The charges for each user inside the city limits of Bellevue shall be the sum of the charges in Section 4, all multiplied by 105.3648%.

Section 6. Severability. If any section of this ordinance, or any portion of any section of this ordinance, or its application to any person or circumstance, is held invalid, the remainder of the ordinance or the application of the provision to other persons or circumstances, shall not be affected.

Section 7. Repeal. Ordinance No. 6087 is repealed as of January 1, 2015; provided, however, that any charges made under Ordinance No. 6087 are not invalidated by the repeal of those ordinances.

Section 8. Effective Date. The revised bimonthly service charges and bimonthly customer charges established in Section 4 of this ordinance and the user charges established in Section 5 of this ordinance shall take effect on January 1, 2015, shall apply to service provided on and after that date, and shall supercede all existing schedules of charges as of that date. The specific charges for 2015, as hereinbefore indicated, shall take effect on January 1, 2015 and shall remain in effect through and including December 31, 2015. The specific charges for 2016, as hereinbefore indicated, shall take effect on January 1, 2016 and remain in effect until amended by the City Council.

Section 9. This ordinance shall take effect and be in force five (5) days after its passage and legal publication.

1432-ORD
11/25/14

ORIGINAL

PASSED by the City Council this 1st day of December, 2014, and signed in authentication of its passage this 1st day of December, 2014.

(SEAL)

Claudia Balducci, Mayor

Approved as to form:
Lori Riordan, City Attorney

Lacey Hatch, Assistant City Attorney

Attest:

Myrna L. Basich, City Clerk

Published December 4, 2014.

0030-ORD
12/05/96

ORIGINAL

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 4951

AN ORDINANCE establishing capital recovery charges for the Water, Sewer and Storm & Surface Water Utilities; amending Sections 24.02.050, 24.02.260, 24.04.050, 24.04.260, 24.06.050 and 24.06.260 of the Bellevue City Code; adding new Sections 24.02.275, 24.04.275 and 24.06.275 to the Bellevue City Code; and establishing an effective date.

WHEREAS, a study of the basis for and the amount of development fees and General Facilities Charges for the Water, Sewer and Storm & Surface Water Utilities was conducted by an independent consultant; and

WHEREAS, the study recommended a new basis and methodology for recovering the costs currently recovered through the General Facilities Charges; and

WHEREAS, a Development Charges Task Force composed of representatives of the community was appointed by the City Manager to review the independent consultant's study of Utility development fees and Utility General Facilities Charges; and

WHEREAS, the Development Charges Task Force recommended replacing the General Facilities Charges with Capital Recovery Charges to be paid by the property owner as monthly charges for a period of ten years; and

WHEREAS, the Development Charges Task Force and the independent consultant through their analysis identified and evaluated the historical costs paid by customers to construct the Utility systems and calculated reasonable capital recovery charges based upon those costs and the number of connections; and

WHEREAS, the rate schedule, as proposed by the Development Charges Task Force, considers the use of the Utility systems by "old customers" and by "new customers" such that "new customers" are charged for the historical cost of the system as it exists today, while "old customers" have either paid a connection fee or have paid for system improvements through historical payment of the respective Utility service charges; and

WHEREAS, the proposed capital recovery charges comply with the uniformity requirement of the state Constitution and state law; and

WHEREAS, such charges are authorized under the Utilities' general rate making authority and by RCW 35.92.025 which authorizes the City to impose such charges "in order that ... property owners shall bear their equitable share of the cost of such system"; and

WHEREAS, the Environmental Services Commission has recommended approval of the Capital Recovery Charges as recommended by the Development Charges Task Force; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Sections 24.02.050, 24.04.050 and 24.06.050 of the Bellevue City Code are amended by the addition of new paragraphs 24.02.050(CC), 24.04.050(BB), and 24.06.050(FF), respectively, to add a new definition "Capital recovery charge" to read as follows:

"Capital recovery charge" means a monthly charge imposed on improvements, developments, redevelopments or existing structures that place additional demand on each Utility system after January 1, 1997. The capital recovery charge shall be based on an allocation of the Utility plant-in-service costs plus interest and the number of single family equivalents served by each Utility.

Section 2. Section 24.02.050(D) of the Bellevue City Code is amended to read as follows:

D. "Connection charges" means charges imposed as a condition of providing utility service so that each connecting property bears its equitable share of the costs of the public water system and of the costs of facilities that benefit the property. Connection charges include latecomer charges and direct facilities charges.

Section 3. Section 24.04.050(B) of the Bellevue City Code is amended to read as follows:

B. "Connection charges" means charges imposed as a condition of providing utility service so that each connecting property bears its equitable share of the costs of the public sewer system and of the costs of facilities that benefit the property. Connection charges include latecomer charges and direct facilities charges.

Section 4. Section 24.06.050(E) of the Bellevue City Code is amended to read as follows:

E. "Connection charges" means charges imposed as a condition of connecting to the utility system so that each connecting property bears its equitable share of the costs of the public drainage system and of the costs of facilities that benefit the property. Connection charges include latecomer charges and direct facilities charges.

Section 5. Section 24.02.260 of the Bellevue City Code is amended to read as follows:

24.02.260 Connection Charges

A. General.

1. The Utility shall collect connection charges in order that each connecting property shall bear its equitable share of the cost of the public water system.

2. Connection charges shall be paid:

a. Before a property is allowed to connect to the public water system.

b. At the time of re-development of the property, if connection charges apply that have not yet been paid such as charges for new facilities that directly benefit the property.

3. Connection charges that have been paid as a result of prior development activities or through participation in an L.I.D. or U.L.I.D. will not be re-assessed.

4. The Utility may enter into contracts with the owners of existing single-family residences and with the owners of redevelopment projects that meet criteria specified by the Utility for payment of connection charges over time instead of as a lump sum. The Utility will charge interest at a rate set by the City treasurer on any outstanding debt covered by a payment contract. A contract shall be payable in full at the time of closing upon sale of the property.

B. Direct Facilities Charges.

1. The Utility shall collect direct facilities charges from property owners that directly benefit from Utility-built or privately-built water service facilities, except property owners who previously paid their fair share through an L.I.D. or U.L.I.D. Facilities that may be covered in a direct facilities charge include, but are not limited to, lines built from the water main to the property line, fire hydrant assemblies, pump stations, reservoirs and distribution and transmission mains.

2. The direct facilities charge is the property owner's equitable share of the established costs of the facilities he/she benefits from. The equitable share shall include interest charges applied from the date of construction acceptance of the facility until the property connects, or for a period not to exceed ten years, whichever is less, at a rate commensurate with the rate of interest applicable at the time of construction of the facility to which the property owner is seeking to connect but not to exceed ten percent per year: provided, that the aggregate amount of interest shall not exceed the equitable share of the cost of the facility allocated to such property owner.

3. The facilities' costs shall be allocated to benefitting property owners based on the number of single family equivalents. The Director may, however, make such allocation based on front footage or other reasonably based methodology if the Director determines that such alternate basis or methodology better assures equitable sharing of cost by all properties benefitting from the facilities.

C. Administrative Procedures. The Director is authorized to adopt administrative procedures for the purpose of administering the provisions of this Section 24.02.260.

Section 6. Section 24.04.260 of the Bellevue City Code is amended to read as follows:

24.04.260 Connection Charges

A. General.

1. The Utility shall collect connection charges, in order that each connecting property shall bear its equitable share of the cost of the public sewer system.

2. Connection charges shall be paid before a property is allowed to connect to the public sewer system. Connection charges not previously paid, such as charges for new facilities that directly benefit the property, shall be paid when the property undergoes, either at one time or cumulatively through more than one project, a substantial remodeling as defined in Section 20.50.040 of the Land Use Code or more substantial improvement or if an improvement or cumulative improvements significantly impact downstream system capacity.

3. Connection charges that have been paid as a result of development activities on the property or through participation in a L.I.D. or U.L.I.D. will not be re-assessed.

4. The Utility may enter into contracts with the owners of existing single-family residences and with the owners of redevelopment projects that meet criteria specified by the Utility for payment of connection charges over time instead of as a lump sum. The Utility will charge interest, at a rate set by the City treasurer on any outstanding debt covered by a payment contract. A contract shall be payable in full at the time of closing upon sale of the property.

B. Direct Facilities Charges.

1. The Utility shall assess and collect direct facilities charges from property owners that directly benefit from Utility-built or privately-built sewer facilities, except property owners who previously paid their fair share through an L.I.D. or U.L.I.D.

Facilities that may be covered in a direct facilities charge include, but are not limited to, stubs built from the sewer main to the property line, pump stations and mains.

2. The direct facilities charge is the property owner's equitable share of the established costs of the facilities he/she benefits from. The equitable share shall include interest charges applied from the date of construction acceptance of the facility until the property connects, or for a period not to exceed ten years, whichever is less, at a rate commensurate with the rate of interest applicable at the time of construction of the facility to which the property owner is seeking to connect but not to exceed ten percent per year: provided, that the aggregate amount of interest shall not exceed the equitable share of the cost of the facility allocated to such property owner.

3. The facilities' costs shall be allocated to benefitting property owners based on the number of single family equivalents. The Director may, however, make such allocation based on front footage or other reasonably based methodology if the Director determines that such alternate basis or methodology better assures equitable sharing of cost by all properties benefitting from the facilities.

C, Administrative Procedures. The Director is authorized to adopt administrative procedures for the purpose of administering the provisions of this Section 24.04.260.

Section 7. Section 24.06.260 of the Bellevue City Code is amended to read as follows:

24.06.260 Connection Charges

A. General

1. The Utility shall collect connection charges so that each developed property bears its equitable share of the cost of the public drainage system.

2. Connection charges shall be paid:

a. When property is changed from an undeveloped to a developed condition.

b. At the time of redevelopment of the property, if a direct facilities charge applies that has not yet been paid, such as a charge for a new facility that directly benefits the property.

3. Connection charges that have been paid as a result of prior development activities on the property or through participation in an L.I.D. or U.L.I.D. will not be re-assessed.

4. The Utility may enter into contracts with the owners of existing single-family homes and with the owners of redevelopment projects that meet criteria specified by the Utility for payment of connection charges over time instead of as a lump sum. The Utility will charge interest, at a rate set by the City Treasurer, on any outstanding debt covered by a payment contract. A contract shall be payable in full at the time of closing upon sale of the property.

B. Direct Facilities Charges.

1. The Utility shall collect direct facilities charges from property owners that directly benefit from Utility-built or privately-built public drainage facilities, except property owners who previously paid their fair share through an L.I.D. or U.L.I.D.

2. The direct facilities charge is the property owner's equitable share of the established costs of the facilities he/she benefits from. The equitable share shall include interest charges applied from the date of construction acceptance of the facility until the property connects, or for a period not to exceed ten years, whichever is less, at a rate commensurate with the rate of interest applicable at the time of construction of the facility to which the property owner is seeking to connect but not to exceed ten percent per year: provided, that the aggregate amount of interest shall not exceed the equitable share of the cost of the facility allocated to such property owner.

3. The facilities' costs shall be allocated to benefitting property owners based on the number of single family equivalents. The Director may, however, make such allocation based on front footage or other reasonably based methodology if the Director determines that such alternate basis or methodology better assures equitable sharing of cost by all properties benefitting from the facilities.

4. Properties within the Meydenbauer Drainage Basin and properties within the Central Business District (CBD), lying between N.E. 2nd Street and N.E. 12th Street, are subject to a facilities charge in an amount and to the extent provided in Sections 4 and 5 of Ordinance No. 3372, as now or hereafter amended.

C. Administrative Procedures. The Director is authorized to adopt administrative procedures for the purpose of administering the provisions of this Section 24.06.260.

Section 8. A new Section 24.02.275 is added to Chapter 24.02 of the Bellevue City Code to read as follows:

24.02.275 Capital Recovery Charges.

Capital Recovery Charge. The Utility shall establish and collect a monthly capital recovery charge so that each new improvement, development, redevelopment or existing structure that places an additional demand on the water system bears its equitable share

of the cost of the public Utility system. Right-of-way and unirrigated non-building tracts shall be exempt from the capital recovery charge. The capital recovery charge shall be based on the cost of the Water Utility Plant-in-Service, less the cost of donated facilities, less the cost of City-built local facilities for which direct facilities charges are imposed, plus recoverable interest divided by the customer base as quantified by single family equivalent units. The capital recovery charge shall be placed on affected properties as a monthly charge for a period of ten years. The Director is authorized to adjust the capital recovery charge value based upon updated values of the above described elements.

Section 9. A new Section 24.04.275 is added to Chapter 24.04 of the Bellevue City Code to read as follows:

24.04.275 Capital Recovery Charges.

Capital Recovery Charge. The Utility shall establish and collect a monthly capital recovery charge so that each new improvement, development, redevelopment or existing structure that places an additional demand on the sewer system bears its equitable share of the cost of the public Utility system. Right-of-way and non-building tracts shall be exempt from the capital recovery charge. The capital recovery charge shall be based on the cost of the Sewer Utility Plant-in-Service, less the cost of donated facilities, less the cost of City-built local facilities for which direct facilities charges are imposed, plus recoverable interest divided by the customer base as quantified by single family equivalent units. The capital recovery charge shall be placed on affected properties as monthly charge for a period of ten years. The Director is authorized to adjust the capital recovery charge value based upon updated values of the above described elements.

Section 10. A new Section 24.06.275 is added to Chapter 24.06 of the Bellevue City Code to read as follows:

24.06.275 Capital Recovery Charges.

Capital Recovery Charge. The Utility shall establish and collect a monthly capital recovery charge so that each new improvement, development, redevelopment or existing structure that places an additional demand on the Storm and Surface Water system bears its equitable share of the cost of the public Utility system. The capital recovery charge shall be based on the cost of the Storm and Surface Water Utility Plant-in-Service, less the cost of donated facilities, less the cost of City-built local facilities for which direct facilities charges are imposed, plus recoverable interest divided by the customer base as quantified by single family equivalent units. The capital recovery charge shall be placed on affected properties as a monthly charge for a period of ten years. The Director is authorized to adjust the capital recovery charge value based upon updated values of the above described elements.

ORIGINAL

0030-ORD
12/05/96

Section 11. The following Capital Recovery Charges are hereby established:

Section 24.02.275: Water Capital Recovery Charges are $11.07 per month.

Section 24.04.275: Sewer Capital Recovery Charges are $5.75 per month.

Section 24.06.275: Storm & Surface Water Capital Recovery Charges are $4.65 per month.

Section 12. Sections 1-11 of this ordinance shall take effect on January 1, 1997. No general facilities charge imposed prior to January 1, 1997 shall be invalidated or otherwise affected by the adoption of this ordinance.

Section 13. This ordinance shall take effect and be in force five days after its passage and legal publication.

PASSED by the City Council this 9th day of December, 1996, and signed in authentication of its passage this 9th day of December, 1996.

(SEAL)

Ronald E. Smith, Mayor

Approved as to form:

Richard L. Andrews, City Attorney

Richard L. Kirkby, Assistant City Attorney

Attest:

Myrna L. Basich, City Clerk

Published December 13, 1996

Customer Information Supplement
Bellevue Utility Department
Capital Recovery Charges (CRC)

CRC Rates by Utility
Effective January 1, 2015

Water Utility

$29.06per SFE* per month
for 10 years

Sewer Utility

$13.49 per SFE* per month
for 10 years

Storm & Surface Water Utility

$5.55 per 2, 000 sq. ft. of
chargeable area per month
for 10 years

*Single Family Equivalent

Waterworks Utility

Financial Policies

TABLE OF CONTENTS

INTRODUCTION

The Waterworks Utility is the financial consolidation of the Sewer, Storm & Surface Water and Water Utilities of the City of Bellevue for debt rating and coverage purposes as established in Ordinance No.'s 2169, 2845, 3158 and 4568. It pledges the strengths and revenues of the three separate Utilities for the common financial good while keeping each Utility financially separate for budgeting, rate-setting, revenues, expenditures, debt and accounting.

These "Financial Policies" apply uniformly to the Sewer, Storm & Surface Water and Water Utilities with few, unique exceptions which are identified separately. This update reflects changes consistent with current long-range financial planning, particularly with regard to renewal and replacement funding, the use of debt and rate policies. They supersede the Financial Policies, which were adopted under Resolution No. 5967 in 1995.

These policies do not stand-alone. They must be taken in context with the other major City and Utilities documents and processes. For instance, each Utility has its own System Plan, which documents its unique objectives, planning, operations and capital needs. These System Plans have historically had a 20-year planning horizon. Future System Plans will need to evaluate long term renewal and replacement of aging facilities, much of which were constructed in the 1950's and 1960's during periods of high growth rates and are approaching the end of their useful life. Life cycle costs should be considered in planning the future capital facilities and infrastructure needs.

The City has a seven-year City-wide Capital Investment Program (CIP) Plan which is updated with each biennial budget cycle. All major City capital projects are included. Generally, they are described as over $25,000; involving new physical construction, reconstruction or replacement; and involving City funding. The CIP identifies the level and source of funding for each project. The CIP includes specific sections for each Utility which identify near-term capital projects consistent with each current Utility System Plan and several projects of general scope including renewal and rehabilitation, capital upgrades, response to growth and other system needs.

I. GENERAL POLICIES

A. *Fiscal Stewardship*

The Waterworks Utility funds and resources shall be managed in a professional manner in accordance with applicable laws, standards, City financial practices and these Financial Policies.

Discussion:

It is incumbent on Utility management to provide professional fiscal management of utility funds and resources. This requires thorough knowledge of and conformance with the City financial management processes and systems as well as applicable laws and standards. It also requires on-going monitoring of revenues and expenses in order to make decisions and report to City officials, as needed, regarding the status of Utilities financing. Independent financial review, analysis and recommendations should be undertaken as needed.

B. *Self-sufficient Funding*

Each Utility shall remain a self-supporting enterprise fund.

Discussion:

The revenues to each Utility primarily come from customer charges dependent on established rates. State law requires that utility funds be used only for utility purposes. Since each Utility has somewhat differing service areas, it is essential for ratepayer equity that they be kept financially separate and accountable. The City's General Fund can legally contribute to the Utility funds but does not. The City budgeting process includes a balanced and controlled biennial Utility budget. This requires careful preparation of expense and revenue projections that will be reviewed by City management, the Environmental Services Commission, the general public and the City Council prior to approval of any change in Utility rates.

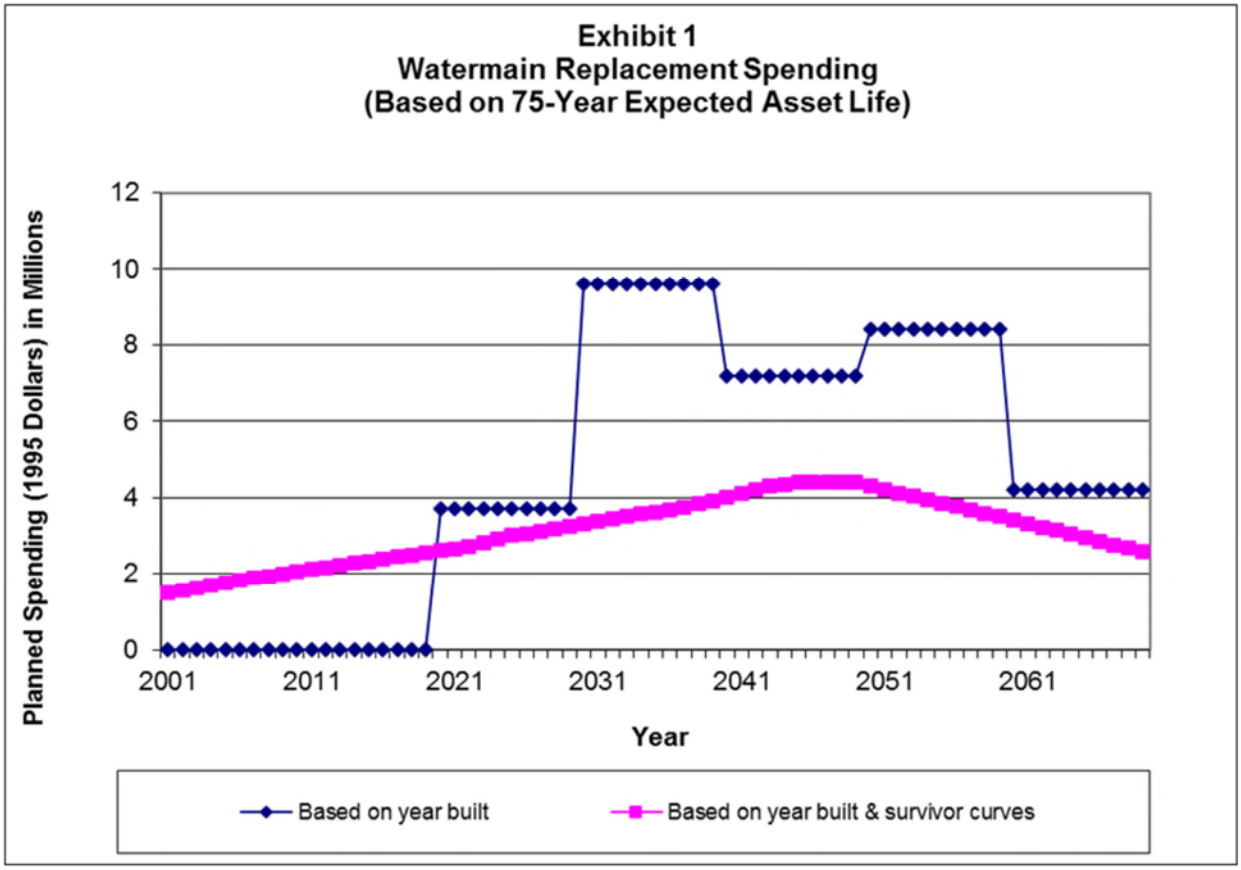
C. *Comprehensive Planning Policies*

The Water Utility System Plan shall be updated every six years as required by state statute; the Wastewater and Storm & Surface Water System Plans shall be updated as required by changed conditions or state statute, between every six to ten years. All Utility system plans shall use a 20-year planning horizon or greater, and shall consider life cycle costs to identify funding needs. Studies to analyze specific geographic areas or issues, such as Storm & Surface Water sub-basin plans, Wastewater capacity and flow studies, or Water pressure zone studies will be completed as required using similar criteria for planning infrastructure needs.

Substantial portions of the City utility systems were constructed in the 1950's and 1960's. These systems are approaching the end of their useful life as illustrated on the following Exhibit 1 - Watermain Replacement Spending and Exhibit 2 - Sewermain Replacement Spending. The storm & surface water infrastructure is of similar age but has not been graphed. It most likely has a relatively shorter expected life span. The object is to determine and follow a survivor curve replacement schedule rather than the replacement schedule based on age alone. Assumptions for survivor curves and useful lives are revisited periodically. These were assessed in 2004 and updated for the most recent engineering and financial findings. Significant changes include the adjustment of replacement costs to current price levels, categorization of pipe assets based on expected useful lives, and replacement of major non-pipe Utility assets such as pump stations and reservoirs. The Exhibits illustrate an example survival replacement curve based on preliminary estimates only. As real needs are determined, they will replace the estimated curves. Renewal and/or replacement will require substantial reinvestment in the future and have major rate impacts if large portions of the systems have to be replaced in relatively short periods of time. The actual useful life of underground utilities is difficult to determine and the best available data is needed to be able to plan for the orderly and timely renewal and/or replacement. For this purpose, the comprehensive plans need to have at least 20 year planning horizons and must address the aging of the Utility systems.

Long term system planning for the Utility systems is required in order to assure that future financial needs are anticipated and equitable funding plans can be developed. In order to keep funding plans current, utility system plans need to be updated between six and ten years. State law requires six years for water system plans. Wastewater system plans are not mandated to be updated on a six year cycle, however updating them between six and ten years is the common standard of practice. Stormwater system plans similarly have no state or federal mandate for

updating, however with the implementation of the NPDES General Permit, it is reasonable to expect significant changes within two 5-year permit terms to warrant a system plan update. Depending on the significance of the changes, the Storm system plan may require updating sooner than after two 5-year permit cycles. These Financial Policies will be reviewed and updated as needed.



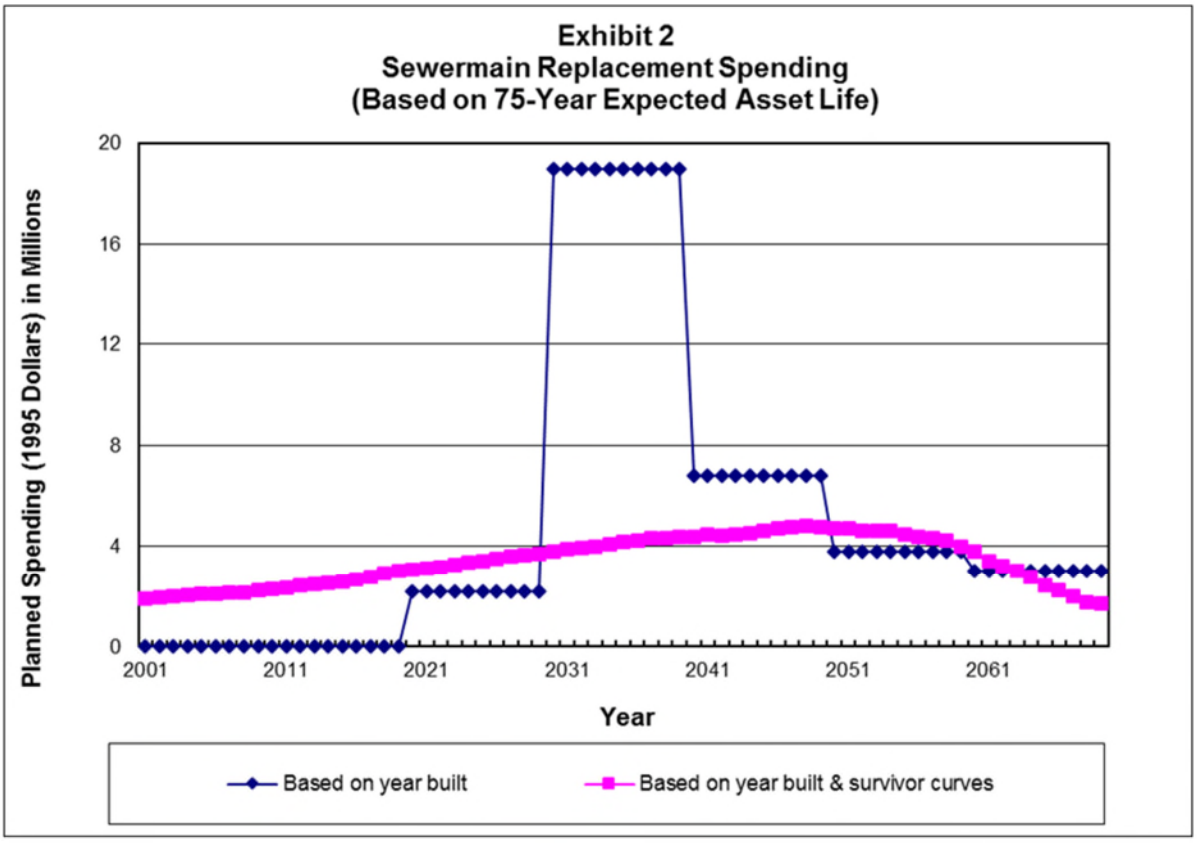


Exhibit 2
Sewermain Replacement Spending
(Based on 75-Year Expected Asset Life)
Planned Spending (1995 Dollars) in Millions
20
16
12
8
4
0
2001
2011
2021
2031
2041
2051
2061
Year
Based on year built
Based on year built & survivor curves

II. CAPITAL INVESTMENT PROGRAM POLICIES

A. *General Scope*

The Utilities Capital Investment Program (CIP) will provide sufficient funds from a variety of sources for implementation of both short- and long-term capital projects identified in each Utility System Plan and the City-wide Capital Investment Program as approved by the City Council.

Financial planning for long-term capital investment shall be based on principles that result in smooth rate transitions, maintain high credit ratings, provide for financial flexibility and achieve inter-generational equity.

Discussion:

These near-term capital projects are usually identified in each Utility system plan which also provides the criteria and prioritization for determining which projects will be constructed. Several projects of general scope are also included to allow for on-going projects that are less specifically identified due to their more inclusive nature.

In addition to these near-term projects, funding should be provided for long-term capital reinvestment in the system to help minimize large rate impacts as the systems near the end of their useful life and have to be renewed or replaced. Ordinance No. 4783 established a Capital Facilities Renewal & Replacement (R&R) Account for each Utility to provide a funding source for this purpose. Other policies describe how this Account is to be funded and expended.

A reinvestment policy by itself, without some form of planned and needed expenditure, could lead to excessive or unneeded expenditures, or conversely unnecessary accumulations of cash reserves. The reinvestment policy needs to tie the planned expenditures over time with a solid, long-term financial plan that is consistent with these policies.

The actual needs for the renewal/replacement expenditures should relate to the on-going need to minimize system maintenance and operating costs consistent with providing safe and reliable service, the age and condition of the system components, and any regulatory or technical obsolescence. In essence, plant should be replaced when it is needed and before it fails. As such, the goal setting measure of how much is an appropriate annual or periodic reinvestment in renewals and replacement of existing assets should be compatible with the age and condition of the infrastructure and its particular circumstances.

WP0459C-ORD
06/27/95

ORIGINAL

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 4783

AN ORDINANCE creating utility capital replacement accounts for the Water, Sewer and Storm and Surface Water Utilities within the Utility Capital Investment Fund for the purpose of accumulating funding for long term replacement of utility facilities.

WHEREAS, the Utilities 1995 Cost Containment Study prepared by Financial Consulting Solutions Group, Inc. (FCSG) recommends that current utility rates recover from the ratepayers amounts which at a minimum are equal to the depreciated value of the original cost of utility facilities and at a maximum are amounts equal to the replacement value of utility infrastructure; and

WHEREAS, FCSG recommends that utility funds not needed for current expenditure be placed in a replacement account to be used in the future in combination with current revenues and/or debt financing to replace capital facilities nearing the end of their useful life; and

WHEREAS, implementation of FCSG's recommendations would promote intergenerational rate equity and provide more stable rates to customers over the long term; and

WHEREAS, the Council desires to make an initial, 1995 deposit of $600,000 in savings from the Water Fund into the new capital replacement account for the Water Utility; now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. The purpose of this ordinance is to establish capital facilities replacement accounts within the Utility Capital Investment Fund in order to assure a future funding source for replacement of utility facilities nearing the end of their useful life. The City Council will determine each year, as part of the adoption of the utilities operating budgets, how much, if any, utility revenue during the upcoming year shall be designated for transfer to a replacement account. The City Council may also authorize the receipt of other funds directly into these capital facility replacement accounts. Once deposited the funds will accumulate with interest. The decision regarding when and how to utilize such accumulated funds for the replacement of utility facilities will be made as part of the Utility Comprehensive Plans and Utility Capital Investment Program approval process.

ORIGINAL

WP0459C-ORD
06/27/95

Section 2. The following new accounts are established in the Utility Capital Investment Fund:

Capital Facilities Replacement Account - Sewer
Capital Facilities Replacement Account - Water
Capital Facilities Replacement Account - Storm and Surface Water

Section 3. There is hereby authorized the 1995 transfer from the Water Utility Operating Fund to the Capital Facilities Replacement Account - Water the amount of $600,000.

Section 4. This ordinance shall take effect and be in force five days after its passage and legal publication.

PASSED by the City Council this 24th day of July, 1995, and signed in authentication of its passage this 24th day of July, 1995.

(SEAL)

Donald S. Davidson, DDS, Mayor

Approved as to form:

Richard L. Andrews, City Attorney

Richard L. Kirkby, Assistant City Attorney

Attest:

Myrna L. Basich, City Clerk

Published July 28, 1995

B. *Funding Levels*

Funding for capital investments shall be sustained at a level sufficient to meet the projected 20 year (or longer) capital program costs.

Funding from rate revenues shall fund current construction and engineering costs, contributions to the Capital Facilities Renewal and Replacement (R&R) Account, and debt service, if any.

Inter-generational equity will be assured by making contributions to and withdrawals from the R&R Account in a manner which produces smooth rate transitions over a 20 year (or longer) planning period.

On an annual basis, funding should not fall below the current depreciation of assets expressed in terms of historical costs less any debt principal payments.

Discussion:

These policies are based on the experience gained by developing a long-term Capital Replacement Funding Plan. In absence of such a plan, the range of capital investment funding should fall between the following minimum and maximum levels:

The minimum annual rate funding level would be based on the current depreciation of assets expressed in terms of historical costs, less any debt principal payments.

The maximum annual rate funding level would be based on the current depreciation of assets expressed in terms of today's replacement costs, less any debt principal payments.

The minimum level based on historical cost depreciation approximates the depletion of asset value. Some of the cost may already be in the rates in the form of debt service. Depreciation less debt principal repayment provides a minimum estimate of the cost of assets used. Any funding level below this amount defers costs to future rate payers and erodes the Utility's equity position, which puts the Utility's financial strength and viability at risk.

The maximum level based on replacement cost depreciation represents full compensation to the utility, in terms of today's value, for the depletion of assets. The replacement cost depreciation, again less debt principal repayment, provides a ceiling to an equitable definition of "cost of service".

The purpose of long-term capital reinvestment planning is to establish a target funding level which is based on need and to assure that funds will be available for projected capital costs in an equitable manner. The best projection of the needed capital reinvestment is based on a "survival curve" approach, approximating the timing and cost of replacing the entire system. This defines the projected financial needs and allows determination of equitable rate levels, funding levels for current capital construction and engineering, contributions to and withdrawals from the R&R Account, and the use of debt, if any. It also provides a means to project depreciation on both historical cost and replacement cost basis which are used to calculate minimum and maximum funding levels, debt to fixed asset ratios, and debt coverage levels, if debt is used. These later measures can be used to assure that the financial plan meets conventional standards.

C. *Use of Debt*

The Utilities should fund capital investment from rates and other revenue sources and should not plan to use debt except to provide rate stability in the event of significantly changed circumstances, such as disasters or external mandates.

Resolution No. 5759 states that the City Council will establish utility rates/charges and appropriations in a manner intended to achieve a debt service coverage ratio (adjusted by including City taxes as an expense item) of approximately 2.00". Please note that the Moody's Investor Services rating should be Aa2 (not Aa as stated in Resolution No. 5759).

Discussion:

The Utilities are in a strong financial position and have been funding the Utility Capital Investment Program from current revenues for a number of years. The current 20 year and 75 year capital funding plans conclude that the entire long-term renewal and replacement program can be funded without the use of debt if rates are planned and implemented uniformly over a sufficient period. Customers will pay less over the long-term if debt is avoided, unless it becomes truly necessary due to unforeseen circumstances such as a disaster or due to changes in external mandates. Having long-term rate stability also assures inter-generational equity without the use of debt because the rate pattern is similar to that achieved by debt service.

Use of low interest rate debt such as the Public Works Trust Fund loans, by offering repayment terms below market rates, investment earnings or even inflation, should be viewed as a form of grant funding. When available or approved, such sources should be preferred over other forms of rate or debt funding, including use of available resources. Since such reserves would generate more interest earnings than the cost of the loan, the City's customers would be assured to benefit from incurring such debt.

WP0254C-RES
03/03/94

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 5759

A RESOLUTION relating to financial policy for the Waterworks Utility and adopting a debt service coverage policy for the Waterworks Utility

WHEREAS, the City of Bellevue is consistently recognized for its prudent financial management; and

WHEREAS, the City of Bellevue's Water and Sewer Bonds are currently rated Aa by Moody's Investor Services and AA- by Standard & Poor's Corporation, which are considered to be excellent ratings; and

WHEREAS, these excellent ratings result in lower interest costs on the City's Water and Sewer bonds, which, in turn, may result in lower water, sewer and storm drainage costs; and

WHEREAS, it is important to the rating agencies and to the financial community that the City articulate its financial goals for its Waterworks Utility; and

WHEREAS, a desirable debt service coverage ratio, the ratio of revenues available for debt service to the annual debt service requirement, positively affects the Utility's bond ratings; and

WHEREAS, the City Council deems it in the City's best interest to establish a debt service coverage policy target for the purpose of protecting its current bond rating and to allow for the development of financial projections, NOW, THEREFORE,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. The City Council hereby adopts the following debt service coverage policy for the bonds issued by the City's Waterworks Utility.

The City Council will establish utility rates/charges and appropriations in a manner intended to achieve a debt service coverage ratio (adjusted by including City taxes as an expense item) of approximately 2.00. The City Council authorizes the Waterworks Utility to utilize this policy in development of pro

forma projections which will be disseminated to the bond rating agencies and to the financial community generally.

PASSED by the City Council this 7th day of March, 1994, and signed in authentication of its passage this 8th day of March, 1994.

(SEAL)

Donald S. Davidson, DDS, Mayor

Attest:

Myrna L. Basich, City Clerk

D. *Capital Facilities Renewal & Replacement (R&R) Account*

1. Sources of Funds

Revenues to the R&R Account may include planned and one-time transfers from the operating funds, transfers from the CIP Funds above current capital needs, unplanned revenues from other sources, Capital Recovery Charges, Direct Facility Connection Charges and interest earned on the R&R Account.

2. Use of Funds

Funds from the R&R Account shall be used for system renewal and replacement as identified in the CIP. Because these funds are invested, they may be loaned for other purposes provided repayment is made consistent with the need for these funds and at appropriate interest rates. Under favorable conditions, these funds may be loaned to call or decrease outstanding debt.

3. Accumulation of Funds

The R&R Account will accumulate high levels of funds in advance of major expenses. These funds will provide rate stability over the long-term when used for this purpose and *should not be used for rate relief.*

Discussion:

Revenues from Capital Recovery Charges, Direct Facility Connection Charges and interest earned on the R&R Account are deposited directly into the R&R Account. Other transfers are dependent on the long-term financial forecast, current revenues and expenses, and CIP cash flows. The long-term financial forecast projects a certain funding level for the transfers to the CIP and the R&R Accounts. Rates should be established consistent with this long-term financial plan and will generate the funds for such transfers. Setting rates at lower levels may result in current rate payers contributing less than their fair share for long-term equity.

R&R Account funds must only be used for the purpose intended; that is, the long-term renewal and replacement of the utility systems. They may be used for other purposes if it is treated as a loan, which is repaid with appropriate interest in time for actual R&R needs for those funds.

These accounts are each projected to accumulate tens of millions of dollars in order to meet the anticipated costs for the actual projects at the time of construction. It is the intent of these policies that these reserve funds will not be used for other purposes or to provide rate relief because that would defeat the long-term equity and could lead to the need for the use of debt to fund the actual needs when they occur.

III. SYSTEM EXPANSION AND CONNECTION POLICIES

A. *Responsibilities*

Those seeking or who are required to have Utility service are responsible for extending and/or upgrading the existing Utility systems prior to connecting.

Discussion:

It is the responsibility of the party seeking Utility service to make and pay for any extensions and/or upgrades to the Utility systems that are needed to provide service to their property. The extensions or upgrades must be constructed to City standards and requirements. This is typically accomplished through a Developer Extension Agreement with the City wherein requirements are documented, standards are established, plans are reviewed and construction is inspected and approved. Service will not be provided until these requirements are met.

The philosophical underpinning of this policy is that "growth pays for growth". Historically, developers constructed much of the City's utility infrastructure. If the infrastructure eventually would benefit more than the initial developer, the Utility signed a Latecomer Agreement to reimburse the original financier from charges to those connecting and receiving benefit at a later point in time. When the cost to extend and/or upgrade the system to accommodate development or redevelopment is beyond the means of a single developer, the Utility has employed a variety of methods to assist in the construction of the necessary infrastructure. Local Improvement Districts (LID's) historically have been used to provide financing for infrastructure for new development, with the debt paid over time by the property owners. Most of the older Utilities infrastructure was financed by this method.

The Utility has in some cases up-fronted the infrastructure construction for new development or redevelopment from rate revenues which are later reimbursed with interest, in whole or in part, by subsequent development through direct facility connection charges (see Cost Recovery Policy). Examples are the water and sewer infrastructure for Cougar Mountain housing development and Central Business District (CBD) redevelopment. Another example is the use of the Utility's debt capacity to provide for development infrastructure whereby the City sells bonds at lower interest rates than can private development, constructs the infrastructure, and collects a rate surcharge from the benefited area to pay off the bonds. Examples of this type of financing include the Lakemont development drainage infrastructure and the Meydenbauer Drainage Pipeline in the CBD.

B. *Cost Recovery*

The Utility shall establish fees and charges to recover Utility costs related to: (1) development services, and (2) capital facilities that provide services to the property.

The Utility may enter into Latecomer Agreements with developers for recovery of their costs for capital improvements, which benefit other properties in accordance with State law. The Utility will add an administrative charge for this service.

Discussion:

In general, Utility costs related to development services are recovered through a variety of fees and charges. There are fixed rates for some routine services based on historical costs and inflation. There are fixed plus direct cost charges and applicable overhead for developer

extension projects to cover the lengthy but variable level of development review and inspection typically required to implement these projects. These rates are reviewed periodically to ensure that the cost recovery is appropriate.

When the means of providing the infrastructure to serve a new development or redevelopment are beyond the means of a single developer, the Utility may elect to assist the developer by using: LID's, Latecomer Agreements, special debt (to be paid by special rate surcharges), up-fronting the costs from Utility rate revenues (to be reimbursed by future developers with interest through direct facility connection charges), or other lawful means. It is the intent of this policy to fully recover these costs, including interest, so as to reimburse the general rate payer.

Latecomer charges allow cost recovery for developers and private parties, for facilities constructed at their own expense and transferred to the Utility for general operation. Properties subsequently connecting to those systems will pay a connection charge that will be forwarded to the original individual or developer or the current owner depending on the terms of the Latecomer Agreement. The Utility collects an overhead fee on this charge for processing the agreements and repayments.

C. *Use of Revenues*

All capital-related revenues such as Capital Recovery Charges and Direct Facility Connection Charges should be deposited in the Capital Facilities Renewal & Replacement Accounts.

Discussion:

Capital Recovery Charges are collected from all newly developed properties in the form of monthly rate surcharges over a ten year period to reimburse the Utility for historical costs that have been incurred by the general rate base to provide the necessary facilities throughout the service area. These Capital Recovery Charges should be deposited in the Capital Facilities Renewal & Replacement Accounts.

Direct Facility Connection Charges are collected for capital improvements funded by the City as described above in Section 2 under Cost Recovery. The total cost of the improvement is allocated to the area of benefit and distributed on an equitable basis such as per residential equivalent unit. Interest is collected in accordance with State law.

D. *Affordable Housing Consideration*

The Utility shall base connection charges on the number of units allowed under the basic zoning. Only incremental cost increases will be charged to affordable housing units.

Discussion:

The City has adopted bonus density incentives for developers to build units specifically for affordable housing. Under historical practices these additional units would have been charged the same connection fee as all other units, resulting in a lower cost per unit for all units. While this is fair, it does not create any incentive to develop affordable housing. By charging only the incremental increased facility cost to the affordable housing units, all developers who include an affordable housing component will experience no increase in cost because of the affordable bonus density units. The cost per unit for affordable units is thereby reduced. The cost per unit for all other units, based on underlying land use zoning, remains unchanged.

IV. RATE POLICIES

A. *Rate Levels*

Rates shall be set at a level sufficient to cover current and future expenses and maintain reserves consistent with these policies and long-term financial forecasts.

Changes in rate levels should be gradual and uniform to the extent that costs (including CIP and R&R transfers) can be forecast.

Cost increases or decreases for wholesale services shall be passed directly through to Bellevue customers.

Local and/or national inflation indices such as the Consumer Price Index (CPI) shall be used as a basis for evaluating rate increases.

At the end of the budget cycle, fund balances that are greater than anticipated and other one-time revenues should be transferred to the R&R account until it is shown that projected R&R account funds will be adequate to meet long-term needs, and only then used for rate relief.

Discussion:

A variety of factors including rate stability, revenue stability, the encouragement of practices consistent with Utility objectives and these Waterworks Utility Financial Policies are considered in developing Utility rates. The general goal is to set rates as low as possible to accomplish the on-going operations, maintenance, repair, long-term renewal and replacement, capital improvements, debt obligations, reserves and the general business of the Utility.

Long-range financial forecast models have been developed for each of the Utilities, which include estimated operating, capital and renewal/replacement costs for a 75 year period in order to plan for funding long-term costs. Operating costs are assumed to remain at the same level of service and don't include impacts of potential changes due to internal, regional or federal requirements. Capital costs, including renewal/replacement, are projected based on existing CIP costs and approximated survival curves for the infrastructure. The models are used to project rate levels that will support the long-term costs and to spread rate increases uniformly over the period. This is consistent with the above policy that changes in rate levels should be gradual and uniform. Uniform rate increases help ensure that each generation of customers bears their fair share of costs for the long-term use and renewal/replacement of the systems.

The biennial budget process provides an opportunity to add to or cut current service levels and programs. The final budget, with the total authorized expenses including transfers to the CIP Fund and the R&R Account, establishes the amount of revenue required to balance the expenses. A balanced budget is required. The budgeted customer service revenue determines the level of new rates. For example, if the current rates do not provide sufficient revenues to meet the projected expenses, the costs have to be reduced or the rates are increased to make up the shortfall.

For purposes of these policies, wholesale costs are defined as costs to the Utilities from other regional agencies such as the Seattle Public Utilities and/or the Cascade Water Alliance (CWA), and King County Department of Natural Resources for sewer treatment and any agreed upon Storm & Surface Water programs. Costs which are directly based on the Utilities' revenues or budgets such as taxes, franchise fees and reserve levels that increase proportionally to the

wholesale increases are included within the definition of wholesale costs.

B. ***Debt Coverage Requirements***

Utility rates shall be maintained at a level necessary to meet minimum debt coverage levels established in the bond covenants and to comply with Resolution No. 5759 which establishes a target coverage ratio of 2.00.

Discussion:

Existing revenue bond covenants legally require the City's combined Waterworks Utility, which includes the Water, Sewer and Storm & Surface Water Utilities, to maintain a minimum debt coverage ratio of 1.25 on a combined basis. In 1994, Council also adopted Resolution No. 5759 that established a policy, which mandates the Utilities to maintain a target combined debt coverage ratio of approximately 2.00, to further protect the City's historically favorable Utility revenue bond ratings. Water and Sewer Utility resources are counted in the official coverage calculation though Storm & Surface Water is responsible for the major portion of current outstanding Utility debt. Requiring Storm & Surface Water to separately maintain the minimum 1.25 legal debt coverage level and to move toward the 2.00 level will help ensure that necessary coverage requirements are met, and that customers of the other Utilities will not be unfairly burdened with the cost of meeting this obligation. It also ensures that sufficient coverage is available to the Water and Sewer Utilities if they need to incur debt.

C. ***Frequency of Rate Increases***

Utility rates shall be evaluated annually and adjusted as necessary to meet budgeted expenses including wholesale cost increases and to achieve financial policy objectives.

Discussion:

In 1996, the City changed to a biennial budget process and adopted a two-year Utilities budget including separate rates for 1997 and 1998. This practice will continue on a biennial basis. However, Utility rates will be evaluated on an annual basis and adjusted as necessary to ensure that they are effectively managed to achieve current and future financial policy objectives. Annual rate reviews will include preparation of forecasts covering a twenty-year period for Utility revenues, expenditures, reserve balances and analysis of the impact of various budgetary elements (i.e. CIP transfers, R&R Account transfers, debt service costs, debt coverage levels, operating expenses, and reserves) on both current and future rate requirements.

D. ***Rate Structure - Sewer***

The Sewer Utility rate structure will be based on a financial analysis considering cost-of-service and other policy objectives, and will provide for equity between customers based on use of the system and services provided.

Discussion:

In 1993, a Sewer Rate Study was performed that resulted in Council approval of a two-step, volume-based rate structure for single-family customers based on winter average metered water volumes instead of the traditional flat rate structure. Flat rate structures were seen as inequitable to low-volume customers who paid the same amount as high volume customers. Rates are based on the level of service used, rather than the availability of service.

The revenue requirements are based on the "average" single-family winter average volume calculated annually from the billing database. The charge for an individual customer is based on their winter average and then charged at that level each bill for the entire year to avoid charging for irrigation use. The customer's winter average is based upon the prior year's three winter bills because the current year's bills include winter months, which would result in the average constantly changing. Customers without prior winter averages to use for a basis are charged at the "average" volume until they establish a “winter-average” or sufficient evidence that their use is significantly different than the "average".

E. ***Rate Structure - Storm & Surface Water***

The Storm & Surface Water Utility rate structure will be based on a financial analysis considering cost-of-service and other policy objectives, and will provide adjustments for actions taken under approved City standards to reduce related service impacts.

Discussion:

In the existing Storm & Surface Water rate structure, customer classes are defined by categories of development intensity, i.e., *undeveloped, lightly developed, moderately developed, heavily developed* and *very heavily developed*. Based on theoretical run-off coefficients for each of these categories, higher rates are charged for increasing degrees of development to reflect higher run-off resulting from that development. Under this structure, billings for both residential and non-residential customers are determined by total property area and rates assigned to applicable categories of development intensity. Customers providing on-site detention to mitigate the quantity of run-off from their property receive a credit equal to a reduction of one rate level from their actual development intensity. Property classified as "wetlands" is exempt from Storm & Surface Water service charges.

Large properties, over 35,000 square feet, with significantly different levels of intensity of development may be subdivided for rate purposes in accordance with Ordinance No. 4947. In addition, properties with no more than 35,000 square feet of developed area in the light and moderate intensity categories may, at the option of the owner, defer charges for that portion of the property in excess of 66,000 square feet. The property owner may apply for a credit against the Storm & Surface Water charge when they can demonstrate that the hydrologic response of the property is further mitigated through natural conditions, on-site facilities, or actions of the property owner that reduce the City’s costs in providing Storm & Surface Water quantity or quality services.

Future design of a water quality rate component will also use cost-of-service principles to assign defined water quality costs to customer classes, according to their proportionate contribution to Utility service demand. It is anticipated that these rate structure revisions will also provide financial incentives to customers taking approved actions to mitigate related water quality impacts.

F. ***Rate Structures - Water***

The water rate structure will be based on a financial analysis considering cost-of service and other policy objectives, and shall support water conservation and wise use of water resources.

Discussion:

The water rate structure consists of fixed monthly charges based on the size of the customer’s

water meter and volume charges, which vary according to customer class and the actual amount of water that the customer uses. There are three different meter rate classifications: domestic, irrigation and fire standby. The different charges are based on a cost-of-service study.

State law and the wholesale water supply contract require the Utility to encourage water conservation and wise use of water resources. Seattle first established a seasonal water volume rate structure for this purpose in 1989 with higher rates in the summer than in the winter. In 1990, based on a water rate study and the desire to provide a conservation-pricing signal to our customers, the City adopted an increasing block rate structure for local volume rates. The rate structure was revised in 1991 to pass through an increase in wholesale water costs, which also included a higher seasonal water rate for summer periods. The block water rate structure was revised again in 1997, to incorporate new cost-of-service results from a 1996 water rate study.

An increasing block rate structure, charges higher unit rates for successively higher water volumes used by the customer. The current rate structure has four rate steps for single-family and three rate steps for multi-family customers, based on metered water volumes. All irrigation-metered water is charged at a separate, higher rate. Because non-residential classes do not fit well in an increasing block rate approach due to wide variations in their size and typical water use requirements, seasonal rates, with and without irrigation, were established for these customers. This rate structure will be thoroughly reviewed, as more historical information is available on the effect of the increasing block and seasonal rate structure.

In 1997, an additional category of fire protection charges was added for structures and facilities that benefit from the City water system but are not otherwise being charged for water service. For example, a number of homes are on private wells but are near a City-provided fire hydrant and enjoy the additional benefit of fire protection yet didn't pay for the benefit on a water bill. The charge is based on an equivalent meter size that would normally serve the facility. It also applies to facilities that have terminated water service but still stand and require fire protection, such as homes or buildings that are not occupied.

G. *Rate Equity*

The rate structure shall fairly allocate costs between the different customer classes. Funding of the long-term Capital Investment Program also provides for rates that fairly spread costs over current and future customers.

Discussion:

As required under State law, Utility rates will provide equity in the rates charged to different customer classes. In general, rates by customer class are designed to reflect the contribution by a customer group to system-wide service demand, as determined by cost-of-service analysis. The RCW also authorizes utility rates to be designed to accomplish "any other matters, which present a reasonable difference as a ground for distinction". For example, increasing water rates for irrigation and higher levels of use is allowed to encourage the wise use and conservation of a valuable resource. Formal rate studies are periodically conducted to assure ongoing rate equity between customer classes and guide any future rate modifications necessary to support changing Utility program or policy objectives.

Contributions from current rates to the R&R Account also provide equity between generations of rate payers by assuring that each user pays their fair share of capital improvements, including renewal and replacement, over the long-term. (See sections B and D under the Capital Investment Program Policies).

H. *Rate Uniformity*

Rates shall be uniform for all utility customers of the same class and level of service throughout the service area. However, special rates or surcharges may be established for specific areas, which require extraordinary capital investments and/or maintenance costs. Revenues from such special rates or surcharges and expenses from capital investments and/or extraordinary maintenance shall be accounted for in a manner to assure that they are used for the intended purposes.

Discussion:

The City Water and Sewer Utilities originally formed by assuming ownership of three separate operating water districts and two sewer districts. In the assumption agreements, each included a provision that requires the Utility to uniformly charge all customers of the same class throughout the entire service area. The basic rates are set for all customers, inside and outside of the City, except for local utility taxes in Bellevue, and franchise fees in Clyde Hill, Hunts Point, Medina, and Yarrow Point. Unlike the Water and Sewer Utilities, the Storm & Surface Water Utility only serves areas within the City limits.

Under state law, Utilities are required to charge uniform rates to all customers in a given customer class, regardless of property location within the service area. The only exception permitted is for certain low-income customers (see below).

However, when conditions in particular service areas require extraordinary capital improvement or maintenance costs to be incurred, special rates or surcharges may be adopted to recover those costs directly from properties contributing to the specific service demand, instead of assigning that cost burden to the general Utility rate base. This will only apply for costs above and beyond normal operations, maintenance and capital improvements. For example, rate surcharges are being used to recover debt service costs for capital facilities in Lakemont and the CBD. An additional rate surcharge for Lakemont properties is being collected for extraordinary maintenance costs of the storm water treatment facility.

I. *Rate Assistance*

Rate assistance programs shall be provided for specific low-income customers as permitted by State law.

Discussion:

Continual increases in all utility rates have had a significant impact on low-income customers. The City has adopted a rate discount or rebate program for disabled customers and senior citizens over 62 years old and with income below certain levels as permitted under State law and defined in Ordinance No. 4458. It has two levels, one discounting Utility rates by 40 percent and the other level by 75 percent, based on the customer's income level. Customers that indirectly pay for Utility charges through their rent can obtain a rebate for the prior year's Utility charges on the same criteria. The City also rebates 100 percent of the Utility Tax for these customers. The cost of this program is absorbed in the overall Utility expenses and is recovered through the rate base. The General Fund provides for the Utility tax relief.

There are other low-income customers who are less than 62 years old and currently receive no Utility rate relief. However, the City has instituted a separate rebate of Utility taxes for qualified low-income citizens.

V. OPERATING RESERVE POLICIES

A. *Operating Reserve Levels*

The Utilities' biennial budget and rate recommendations shall provide funding for working capital, operating contingency, and plant emergency reserve components on a consolidated basis in accordance with the attached Summary of Recommended Consolidated Reserve Levels table and as subsequently updated.

Discussion:

Utility resources not spent for operations remain in the fund and are referred to as reserves. At the end of each year, these funds are carried forward to the next year's budget and become a revenue source for funding future programs and operations. Under the terms of this policy, the Utility budget is targeted to include a balance of funds for the specific purposes stated above. While included in the total operating budget, these reserves will only be available for use pursuant to these reserve policies. Setting aside these budget resources in the reserve balance will help to ensure continued financial rate stability in future Utility operations and protect Utility customers from service disruptions that might otherwise result from unforeseen economic or emergency events.

The working capital reserve is maintained to accommodate normal cyclical fluctuations within the two month billing cycle and during the budget year. These are higher for Water than for Sewer and Storm & Surface Water due to more variable revenues and expenditures. They are described in terms of a number of days of working capital as a percentage of a full-year's budget.

The operating contingency reserve protects against adverse financial performance or budget performance due to variations in revenues or expenses. Again, the Water Utility is most susceptible to year-to-year variations in water demand. They are described in terms of percentages of budgeted wholesale costs and operations and maintenance (O&M) costs.

The plant emergency contingency reserve provides protection against a system failure at some reasonable level. The Storm & Surface Water Utility requires the largest reserve due to the risk of major flood damage to Utility facilities. Water and Sewer Utilities protect against the cost of a major main break or failure. These do not protect against the loss of facilities that are covered by the City's Self-Insurance to which the Utilities pay annual premiums nor are they sufficient to respond to a major disaster, such as a major earthquake.

The reserves of the three utilities have historically been treated separately. This protects against cross-subsidy, thereby retaining rate equity for each utility, each of which has different customers. However, it results in higher reserve targets, with more funds retained than otherwise may be needed. Sharing risks among utilities can reduce reserves. This does not require that reserves actually be consolidated into a single fund, but simply that individual reserve targets reflect the strength provided by the availability of cross-utility support. Under the "consolidated" scenario, cash shortfalls in one reserve could be funded through inter-utility loans, to be repaid from future rates. The likelihood that a serious shortfall would occur in more than one fund at the same time is slight and the benefits of lower overall reserve levels will benefit rate payers. Also, the rate policies and the debt coverage policy will ensure that there will be a strong financial response to any significant shortfall. The risk is considered a prudent financial policy.

City of Bellevue

Summary of Recommended Consolidated Reserve Levels*

	Water		Wastewater		Storm Drainage	
Type of Reserve	**Basis**	**Level**	**Basis**	**Level**	**Basis**	**Level**
Working Capital – Reserves against revenue and expense fluctuations within the 2 month billing cycle and during the budget year.	48 days of budgeted O&M costs (excludes debt service, capital funding).	$5,574,900	30 days of Metro costs and 20 days of City O&M costs (excludes debt service, capital funding).	$3,598,100	29 days of budgeted O&M costs (excludes debt service, capital funding).	$1,021,500
Operating Contingency – Reserves against annual budget shortfalls due to poor financial performance.	7.5% of water purchase costs and 11.0% of other water O&M costs.	$3,984,400	2.0% of Metro costs and 5.0% of other wastewater O&M costs.	$1,433,200	2.5% of O&M costs.	$321,400
Plant Emergency Contingency – Reserves against failure of a major facility or piece of equipment.	Cost for repair of water main break.	$100,000	Cost of repair for wastewater main break.	$100,000	Based on potential net cost of flood damage.	$500,000
Less: Allowance for duplicating or offsetting reserves	None.	$0	Working Capital and Operating Contingency include offsetting reserves equal to 2.0% of all O&M.	($977,000)	None.	$0
Less: Allowance for consolidating reserves	2.5% of O&M expenses for interfund charges between utilities.	($575,000)	1.0% City O&M for interfund charges between utilities.	($152,100)	1.0% of City O&M for interfund charges between utilities.	($128,600)
	Share of reduced plant emergency reserve.	($15,000)	Share of reduced plant emergency reserve.	($15,000)	Share of reduced plant emergency reserve.	($70,000)
	Lesser of min. working capital or plant emergency reserves.	($85,000)	Lesser of min. working capital or plant emergency reserves.	($85,000)	Lesser of min. working capital or plant emergency reserves.	($220,000)
Total		**$8,984,300**		**$3,902,200**		**$1,424,300**

* - Reserve levels based on proposed 2017 Utility budgets.

For this purpose, O&M costs are the entire annual operating budget of the Utility less the annual debt service, Capital Investment Program transfers and R&R Account transfers. Independent reserve levels are the levels that would be required by an individual Utility Fund (Water, Sewer and Storm & Surface Water) at any point in time to cover financial obligations if any one of the three reserve components where called for; i.e., working capital, operating contingency or plant emergency. At any single time, the full independent reserve levels should be available for the individual stated purpose, again because it is unlikely that all three components would be called for at once. For example, the Water Utility needs $100,000 available for an emergency repair but it is not likely that the Sewer Utility will need $100,000 and the Storm & Surface Water Utility will need $500,000 all at the same point in time.

The consolidated basis is for budget and rate setting purposes only, to reduce the total revenue requirement by considering the reserve risk shared between the three utilities. The dual reserve levels should be considered as circumstances evolve.

In 2004, the Financial Consulting Solution Group (FCSG) performed an analysis of recommended changes to the Water Utility's working capital and operating contingency reserves to reflect the new wholesale water contract with CWA and to update reserve levels for current conditions. Under the new contract, billing practices for wholesale costs have changed as follows:

1. CWA payment occurs before the associated revenues are collected, resulting in a greater lag between wholesale expense and when revenues are collected.

2. CWA payments are distributed over the whole year based on predetermined percentages and not based on actual consumption during the year. Due to seasonal revenue variation, there is an accumulative deficit in revenues prior to the peak revenue period.

In addition, the total costs to Bellevue are now largely fixed for the year due to the "take or pay" nature of the contract between CWA and Seattle Public Utilities. This shifts the risk during a poor water sales year to the City since there will not be a corresponding reduction in water purchase costs when water sales are down.

Changes in both billing practices as well as the fixed nature of the wholesale costs will result in an increase in required reserves for working capital and operating contingency for the Water Fund.

As part of their 2004 analysis, FCSG recommended increasing working capital operating reserve requirements for the Water fund from 48 days of budgeted O&M costs (excluding debt service and capital funding) to 70 days. The change was primarily related to an expected increase in seasonal revenue variation resulting from Cascade's fixed monthly billing percentages. However, our experience has been that since implementing the change in 2005 there has been essentially no increase in seasonal revenue variation. As a result, beginning in 2011, working capital operating reserve requirements for the Water fund will be reduced from 70 days of budgeted O&M costs (excluding debt service and capital funding) to the original level of 48 days.

B. ***Management of Operating Reserves***

Related to the recommended target reserve levels, a working range of reserves is established with minimum and target levels. Management of reserves will be based on the level of reserves with respect to these thresholds, as follows:

Above target - Reserve levels will be reduced back to the target level by transferring excess funds to the R&R Accounts in a manner consistent with the long-range financial plan.

Between Minimum and Target - Rate increases would be imposed sufficient to ensure that: 1) reserves would not fall below the minimum in an adverse year; and 2) reserves would recover 50% of the shortfall from target levels in a normal year. Depending on the specific circumstances, either of these may be the constraint, which defines the rate increase needed.

Below Minimum - Rate increases would be imposed sufficient to ensure that even with adverse financial performance, reserves would return at least to the minimum at the end of the following year. To meet this "worst case" standard, a year of normal performance would be likely to recover reserve levels rapidly toward target levels.

Negative Balance - Reserves would be borrowed from another utility to meet working capital needs. Similar to the "below minimum" scenario, rate increases would be imposed sufficient to ensure that even with adverse financial performance, reserves would return from the negative balance to at least the minimum target at the end of the following year, which would allow for loan repayment within that time frame.

Discussion:

"Adverse financial performance" or "worst case" are defined by the 95% confidence interval based on historical patterns. The worst case year is currently defined as a year with sales volumes 15% below the sales volume for a normal year. This was determined by using statistical measurements of sales volumes for 18 years with a 95% confidence interval. That is, in any given year there is only a 5% chance that the worst case year would be more than 15% below the normal year. Another way to say the same thing is that in 19 out of 20 years the worst case year would not be more than 15% below the normal year.

Maintaining the 95% confidence interval, as more and more data becomes available, a worst case year could change upward or downward from the 15% variation from a normal year.

The recommended reserve policies are premised on the vital expectation that reserves are to be used and reserve-levels will fluctuate. Although budget and rate planning are expected to use the target reserve number, reserve levels planned to remain static are by definition unnecessary. It is therefore important to plan for managing the reserves within a working range between the minimum and target levels as stated in the above policies. There may be situations in short-range financial planning where reserves are maintained above target levels to overcome peaks in actual expenses.

In the event of an inter-utility loan, the balance for the borrowing utility would essentially be any cash balance less the amount owed. The lending utility would count the note as a part of its reserves, so that it does not unnecessarily increase rates to replenish reserves that are loaned.

In this management approach, there is still a risk that a major plant emergency could exceed the amount reserved. Such a major shortfall would require rate action to assure a certain level of replenishment in one year. To avoid rate spikes due to this type of action, they should be considered on a case-by-case basis. This will provide the flexibility to use debt or capital reserves in lieu of operating reserves to cover the cost and allow a moderated approach to replenishing reserves out of rates.

C. *Asset Replacement Reserves*

Utility funds will maintain separate Asset Replacement Accounts to provide a source of funding for future replacement of operating equipment and systems.

Anticipated replacement costs by year for the upcoming 20-year period, for all Utility asset and equipment items, will be developed as a part of each biennial budget preparation process. Budgeted contribution to the Asset Replacement Account will be based on the annual amount needed to maintain a positive cash flow balance in the Asset Replacement Account over the 20-year forecast period. At a minimum, the ending Asset Replacement Account balance in each Utility will equal, on average, the next year's projected replacement costs for that fund.

The Utilities Department will observe adopted Equipment Rental Fund (ERF) and Information Services budget policies and procedures in formulating recommendations regarding specific equipment items to be replaced.

Discussion:

Providing reserves for equipment and information technology systems replacement allows monies to be set aside over the service life of these items to pay for their eventual replacement and alleviate one-time rate impacts that these purchases might otherwise require. Annual revenues set aside for this purpose will be based on aggregate Utility asset replacement cash flow needs over the long-term forecast period, instead of individual asset replacement amounts. This strategy will allow Utilities to minimize the progressive build-up of excess Asset Replacement Account balances that would result from creating and funding separate reserve accounts for individual Utility asset and equipment items.