

Water, Sewer, and Storm & Surface Water Funds

Executive Summary:

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

- This forecast supports a prudent, balanced, and responsible budget to maintain high-quality utility service delivery to the community through continued responsible management of infrastructure assets, leveraging efficiencies, and cost containment.
- Significant rate drivers in the 2019-2020 biennium include anticipated wholesale cost increases for drinking water supply and wastewater treatment services, and infrastructure maintenance and renewal/replacement needs.
- Since all Utility functions are primarily supported by rates, this forecast includes funding for operations, asset replacements (e.g., vehicles), capital investment programs (CIP), and the long-term infrastructure Renewal and Replacement (R&R) requirements.

Council Discussion:

Staff will provide an overview of Utilities financial and rate policies, review the Early Outlook Utility Rates Forecast, and respond to Council questions.

Key Challenges

In addition to general inflationary increases, below is a summation of the key budget challenges for the Utilities Department.

Wholesale Costs

Approximately 40 percent of water rate revenues and 60 percent of the sewer rate revenues support costs related to the purchase of water supply from Cascade Water Alliance (Cascade), and payments to King County for wastewater treatment, respectively. Rate increases are needed to fund anticipated wholesale cost increases. To ensure sufficient funding to maintain the integrity of utility operations and capital programs, Council-adopted financial policy directs that wholesale cost increases be passed through to the customer. This is to ensure the City can continue to maintain current levels of service delivery to customers.

Ongoing Impact of Aging Infrastructure on Operating and Capital Programs

Maintaining and replacing the City's aging utility infrastructure continues to be a key rate driver for all three utilities. Most of Utilities' system infrastructure is well past mid-life. As a result, the drinking water, wastewater, and storm and surface water systems are experiencing more failures and increasing costs for system repairs and replacement needs. Each utility system is in a different stage of replacement. The water system is in active replacement. The water CIP includes a program to ramp up the replacement of aging water mains to a



sustainable level by 2018. Systematic replacement of the wastewater system began in 2014 and will continue to ramp up over the next decade. Replacement needs of the storm and surface water system are currently being identified and a long-term replacement program will be developed once condition assessment efforts are complete.

Consistent with Utilities financial policies, rate increases for the water, sewer, and storm and surface water utilities are needed to fund current capital infrastructure investments and future infrastructure renewal and replacement needs to ensure system integrity and each generation of customers pay their equitable share of system costs.

Projected Rate Increases

With the projected rate increases for the next biennium, the typical residential monthly customer bill for water, sewer, and stormwater management services will increase by 4.9 percent or \$8.36, from \$169.55 to \$177.91, in 2019 and by 3.8 percent or \$6.75 to \$184.66 in 2020. See Attachment A (2019-2020 Utilities Early Outlook Budget - Typical Residential Monthly Utility Bill Rate Drivers) for additional information.

The following section provides a brief review of each Utility fund forecast and key rate drivers.



WATER UTILITY FUND

2019 - 2024 Early Outlook Rate Forecast



	Impact to Monthly Bill for a Typical Residential Customer								
	2019	2020	2021	2022	2023	2024			
Prior Year Bill	\$64.08	\$67.28	\$70.64	\$73.75	\$76.99	\$80.37			
Increase:									
Cascade Wholesale									
Purchased Water	1.47	1.82	1.34	1.40	1.46	1.45			
Local	<u>1.73</u>	<u>1.54</u>	<u>1.77</u>	<u>1.84</u>	<u>1.92</u>	<u>2.09</u>			
Total	<u>\$3.20</u>	<u>\$3.36</u>	<u>\$3.11</u>	<u>\$3.24</u>	<u>\$3.38</u>	<u>\$3.54</u>			
Projected Bill	\$67.28	\$70.64	\$73.75	\$76.99	\$80.37	\$83.91			

Minor differences may exist due to rounding

Key Rate Drivers

Wholesale Costs

Drinking water for the City of Bellevue is purchased from the Cascade Water Alliance (Cascade). Cascade costs are increasing primarily due to water purchase costs from Seattle. Per City financial policy, increases in the cost of purchased water are passed directly through to the ratepayer. Retail rate impacts of the projected increases in Cascade's wholesale costs to Bellevue are 2.3% for 2019 and 2.7% for 2020. Beyond that, the anticipated retail rate impacts due to Cascade's projected cost increases to the City of Bellevue average 1.9% per year for 2021 through 2024.

Capital Program

The projected 2019-2025 water capital investment program (CIP) includes \$135.2M to proactively construct, maintain, and replace system assets. The water utility is in active system replacement and the majority of the projected capital program (\$118.1M) will be invested to replace existing aging infrastructure. Significant aging infrastructure water CIP projects include small diameter water main replacement and water pump station repair and replacements. The water CIP also includes \$10.3M for the water utility's share of funding for Advanced Metering Infrastructure (AMI). The funding for this project is from renewal and replacement reserves and is not a rate driver. Total costs for current and future infrastructure needs will require rate increases of 1.0% in 2019 and 1.5% in 2020, and an average of about 1.4% per year thereafter.

• Taxes/Intergovernmental

Taxes and interfund payments to other City departments for support services will require rate increases of 1.0% in 2019 and 0.5% in 2020. Increases for the remainder of the forecast period will average 0.6%.

• Operations

Projected operating costs will require rate increases of about 0.7% in 2019 and 0.3% in 2020, and an average of about 0.6% per year thereafter.



SEWER UTILITY FUND

2019 - 2024 Early Outlook Rate Forecast





	Impact to Monthly Bill for a Typical Residential Customer							
	2019	2020	2021	2022	2023	2024		
Prior Year Bill	\$80.43	\$84.21	\$89.25	\$89.25 \$92.73				
Increase:								
KC Wastewater								
Treatment	2.09	0.00	1.03	1.52	1.21	1.06		
Local	<u>1.69</u>	<u>1.94</u>	<u>2.07</u>	<u>1.96</u>	<u>2.13</u>	<u>2.21</u>		
Total	<u>\$3.78</u>	<u>\$1.94</u>	<u>\$3.10</u>	<u>\$3.48</u>	\$3.34	<u>\$3.27</u>		
Projected Bill	\$84.21	\$86.15	\$89.25	\$92.73	\$96.07	\$99.34		

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 in 2019, and per City financial policy, is passed directly through to the ratepayer. The retail rate impacts of the projected increases in wastewater treatment costs to Bellevue are 2.6% in 2019, 0.0% in 2020, and average 1.3% for 2021-2024.

Capital Program

The proposed 2019-2025 Sewer Capital program includes \$42.8M in investments. Unlike the water utility, the sewer utility is just beginning systematic asset replacement. Most of the proposed capital program (\$35.3M) will be invested to replace existing aging infrastructure. Significant aging infrastructure projects include sewer system pipeline major repairs, sewer pump station improvements, and sewer system pipeline replacements. The sewer CIP also includes \$4.4M for the sewer utility's share of funding for Advanced Metering Infrastructure (AMI). The funding for this project is from sewer renewal and replacement reserves and is not a rate driver. Total costs for current and future infrastructure needs will require rate increases of about 1.4% in 2019, 1.2% in 2020, and an average of 1.2% per year thereafter.

• Taxes/Intergovernmental

Taxes and interfund payments to other City departments for support services will require a rate increase of about 0.3% in 2019 and 0.4% 2020, and an average of 0.3% per year thereafter.

• Operations

Operating costs will require a rate increase of about 0.4% in 2019 and 0.7% 2020, and an average of 0.8% per year for the remainder of the forecast period.



STORM AND SURFACE WATER UTILITY FUND 2019 - 2024 Early Outlook Rate Forecast



Impact to Monthly Bill for a Typical Residential Customer							
	2019	2020	2021	2022	2023	2024	
Prior Year Bill	\$25.04	\$26.42	\$27.87	\$29.40	\$30.87	\$32.41	
Increase	<u>\$1.38</u>	<u>\$1.45</u>	<u>\$1.53</u>	<u>\$1.47</u>	<u>\$1.54</u>	<u>\$1.62</u>	
Projected Bill	\$26.42	\$27.87	\$29.40	\$30.87	\$32.41	\$34.03	

Minor differences may exist due to rounding

Key Rate Drivers

Capital Program

The projected 2019-2025 Stormwater Capital program includes \$30.8M in investments. Of this amount, \$17.9M is for environmental preservation investments, and include mitigating flood hazards and constructing fish passage and stream improvement projects. The remaining \$12.9M of the stormwater utility capital investments are for aging infrastructure rehabilitiation and replacements. Significant projects include stormwater system conveyance infrastructure rehabilitation and minor stormwater capital improvement projects. Total costs for current and future infrastructure needs will require rate increases of 3.1% in 2019 and 2020 and an average of about 2.2% per year thereafter.

• Taxes/Intergovernmental

Taxes and interfund payments to other City departments for support services will require a rate increase of about 0.6% in 2019, 0.7% in 2020 and increases averaging about 0.7% per year thereafter.

• Operations

Operating costs will require rate increases of about 1.8% in 2019, 1.7% in 2020, and about 2.2% per year thereafter.

Attachment A

2019-2020 Utilities Early Outlook Rates Forecast Typical Residential Monthly Utility Bill Rate Drivers

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2018 Monthly Bill		\$	64.08		\$	80.43		\$	25.04		\$	169.55
2019 Rate Drivers												
Wholesale	2.3%	\$	1.47	2.6%	\$	2.09	0.0%	\$	-	2.1%	\$	3.56
Local												
CIP/R&R	1.0%	\$	0.64	1.4%	\$	1.13	3.1%	\$	0.78	1.5%	\$	2.55
Taxes/Interfunds	1.0%	\$	0.64	0.3%	\$	0.24	0.6%	\$	0.15	0.6%	\$	1.03
Operations	0.7%	\$	0.45	0.4%	\$	0.32	1.8%	\$	0.45	0.7%	\$	1.22
Local	2.7%	\$	1.73	2.1%	\$	1.69	5.5%	\$	1.38	2.8%	\$	4.80
Total Increase		\$	3.20		\$	3.78		\$	1.38		\$	8.36
2019 Monthly Bill	5.0%	\$	67.28	4.7%	\$	84.21	5.5%	\$	26.42	4.9%	\$	177.91
2020 Rate Drivers												
Wholesale	2.7%	\$	1.82	0.0%	\$	-	0.0%	\$	-	1.0%	\$	1.82
Local												
CIP/R&R	1.5%	\$	1.00	1.2%	\$	1.01	3.1%	\$	0.82	1.7%	\$	2.83
Taxes/Interfunds	0.5%	\$	0.34	0.4%	\$	0.34	0.7%	\$	0.18	0.5%	\$	0.86
Operations	0.3%	\$	0.20	0.7%	\$	0.59	1.7%	\$	0.45	0.6%	\$	1.24
Local	2.3%	\$	1.54	2.3%	\$	1.94	5.5%	\$	1.45	2.8%	\$	4.93
Total Increase		\$	3.36		\$	1.94		\$	1.45		\$	6.75
2020 Monthly Bill	5.0%	\$	70.64	2.3%	\$	86.15	5.5%	\$	27.87	3.8%	\$	184.66

Minor differences may exist due to rounding



DATE:	March 26, 2018
TO:	Mayor Chelminiak and City Councilmembers
FROM:	Nav Otal, Utilities Director, Utilities Department
SUBJECT:	Utilities Financial Policies

Following are the key sections of the Waterworks Utility Financial Policies (attached) that guide the Utilities Department's capital investments, rate management, and rate design. Staff will review these policies in more detail with Council at the March 26, 2018 Council Budget Workshop.

Section II - Capital Investment Program Policies

- A. General Scope
- B. Funding Levels
- C. Use of Debt
- D. Capital Facilities Renewal & Replacement (R&R) Account

Section IV – Rate Policies

- A. Rate Levels
- B. Debt Coverage Requirements
- C. Frequency of Rate Increases
- D. Rate Structure Sewer
- E. Rate Structure Storm & Surface Water
- F. Rate Structure Water
- G. Rate Equity
- H. Rate Uniformity
- I. Rate Assistance

A complete set of the Waterworks Utility Financial Policies can be found in the Appendices/Reference Materials.

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 $\underline{a44}^{H}$ day of \underline{Guly} , 1995, and signed in authentication of its passage this $\underline{a444}^{H}$ day of \underline{Guly} , 1995.

(SEAL)

Donald S. Davidson, DDS, Mayor

Approved as to form:

Richard L. Andrews, City Attorney

Richard L. Kirkby, Assistant City Attorney

Attest:

Myrna & Basich 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 longterm 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

WP0254C-RES 03/03/94

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

PASSED by the City Council this <u>74</u> day of <u>march</u>, 1994, and signed in authentication of its passage this <u> \mathcal{B} + \mathcal{F} </u> day of <u>march</u>, 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 <u>should not be used for rate relief</u>.

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 longterm equity.

R&R Account funds must only be used for the purpose intended; that is, the longterm 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.

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 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 nonresidential 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 lowincome 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.