



**CITY OF EDGEWOOD
COUNCIL STUDY SESSION AGENDA**

Tuesday, May 21, 2024 – 7:00 PM ♦ City Hall – 2224 104th Avenue East ♦ Edgewood, WA
Meeting Link: <https://cityofedgewood-org.zoom.us/j/86916509308>

1. CALL TO ORDER

Roll Call, Pledge of Allegiance

2. INTERVIEW

A. Salary Commission Applicant

3. COUNCIL BUSINESS

A. Equity, Diversity, and Inclusion (Trainings, Planning, etc.)

B. Development Review

C. Discussion - Surface Water Rate Code Update

D. Budget Recap from Retreat

4. OTHER COUNCIL ITEMS

5. ADJOURN

Study Sessions are meetings for Council to review upcoming and pertinent business of the City, no action is taken by the City Council. Study Sessions are open to the public, but public input is reserved for the regular Council meetings



City Of Edgewood Council Agenda Summary Sheet

Subject: Salary Commission Applicant	Agenda Item #: 2.A
	For Agenda of: 5/21/2024
	Prepared by: Hardeep Goraya
Attachments (list): 1. SalaryCommission Roaster	
Approval of Materials: Hardeep Goraya Rachel Pitzel, Assistant City Administrator 5/13/2024 Dave Olson 5/13/2024	Expenditure Required: N/A
	Amount Budgeted: N/A
	Timeline: 05/21/2024 SS Interview 05/28/2024 RCM Approval

Summary Statement:

The city has received an application to fill an open position on the Salary Commission. Per the council rules, once the applications are received, the city shall review and rank application packets. Should there be four or fewer applicants for any one position, however, all candidates shall be interviewed by the council.

As Salary Commission terms expire annually on Dec 31st, we currently have one open position. Tonight, council will conduct an interview with Mr. Patrick Rhoades, who has volunteered to serve on the open Salary Commission Position No. 3. As done in the past, council each takes a turn asking the applicant a question regarding their interest in serving. Mayor Olson will present his recommendation at the next regular council meeting for approval and appointment.

Item History:

NA

Recommended Action:

Hold a discussion, interview regarding the candidate seeking appointment to Position No. 3 on the Salary Commission.

Fiscal Note/Consideration:

NA



SALARY COMMISSION BOARD

Position	Title	First Name	Last Name	Term Expires	Email
1		Shelly	Osmonson	12/31/2025	
2		Joseph	Coyle	12/31/2026	
3	PROPOSED	Patrick	Rhoades	12/31/2026	pgrhoades@comcast.net
4	Chair	Jason	Neil	12/31/2025	
5		Gary	Lent	12/31/2025	



City Of Edgewood Council Agenda Summary Sheet

Subject: Equity, Diversity, and Inclusion (Trainings, Planning, etc.)	Agenda Item #: 3.A
	For Agenda of: 5/21/2024
	Prepared by: Jill Schwerzler-Herrera
Attachments (list):	
Approval of Materials: Jill Schwerzler-Herrera Rachel Pitzel, Assistant City Administrator 5/16/2024 Dave Olson 5/16/2024	Expenditure Required:
	Amount Budgeted:
	Timeline: Topic to be added to all future Study Sessions (see item history below)

Summary Statement:

Item History:

The council has asked that this topic be discussed at all study sessions for the foreseeable future. As such, this has been a reoccurring agenda item since September of 2020.

Recommended Action:

N/A

Fiscal Note/Consideration:

N/A



**City Of Edgewood
Council Agenda Summary Sheet**

Subject: Development Review	Agenda Item #: 3.B
	For Agenda of: 5/21/2024
	Prepared by: Jeremy Metzler
Attachments (list):	
Approval of Materials: Jeremy Metzler Rachel Pitzel, Assistant City Administrator 5/16/2024 Dave Olson 5/16/2024	Expenditure Required: N/A
	Amount Budgeted: N/A
	Timeline: Recurring monthly during the second Study Session.

Summary Statement:

This item is a monthly review of current permitting and inspection volumes, but the reports are not available this month due to recent changes in staffing. At this time, we propose delaying the next update to the second study session in July, when we anticipate having a "First Half of 2024" review available.

NOTE: There was an error with the "Permit Count by Type" portion of the report, so it is excluded until we can correct the error.

Item History:

N/A

Recommended Action:

Hold a discussion on Development Review.

Fiscal Note/Consideration:

N/A



City Of Edgewood Council Agenda Summary Sheet

Subject: Discussion - Surface Water Rate Code Update	Agenda Item #: 3.C
	For Agenda of: 5/21/2024
	Prepared by: Jeremy Metzler
Attachments (list): 1. 2018 SWMP - Financial Analysis 2. DRAFT Ordinance 24-0xxx	
Approval of Materials: Jeremy Metzler	Expenditure Required: N/A
	Amount Budgeted: N/A
	Timeline: 05/07/2024 SS 05/21/2024 SS 05/28/2024 RCM PH 06/04/2024 SS 06/11/2024 RCM

Summary Statement: The Edgewood City Council establishes storm water rates charged for various land use classifications according to factors set forth in RCW 35.67.020(2) and (3), which are then adopted in the Edgewood Municipal Code. The city is required to impose uniform charges for the same class of customers or service and facilities furnished [RCW 35.67.020(2)]. In classifying customers served or service and facilities furnished by the storm water utility, the city may consider *“the difference in cost of maintenance, operation, repair and replacement of various parts of the system,”* and *“any other matters which present a reasonable difference as a ground for distinction.”*

A detailed financial analysis was prepared by the FCS Group (FCS) in 2018, as a part of the Comprehensive Surface Water Management Plan Update adopted by the Edgewood City Council under Ordinance 18-0527, which provided recommendations for annual service charge increases to support the Surface Water Utility. In summary, council increased the annual service charges following the recommendations of the financial analysis for Fiscal Year (FY) 2020, but due to a number of factors, rates have not been increased since then.

Following a review of the 2018 FCS financial analysis, staff recently updated the FCS model to reflect current conditions and updates to capital improvement plans. In an effort to maintain existing levels of service, which requires an annual service charge that is not eroded by the effects of inflation, staff recommends updating Edgewood municipal Code (EMC) 13.10.070 to facilitate an annual update based on the regional Consumer Price Index (CPI). Staff gathered additional information for council's consideration, in response to questions at the May 7, 2024, study session:

- Rate Structure: Edgewood's rate structure mirrors that of Pierce County, and Pierce County collects

this annual service charge on Edgewood's behalf. Reviewing other local agency codes, there are several models being used, but most charges are based on impervious surface area, with an average impervious surface area assumed for individual residences to establish a flat rate for those properties. The City of Milton handles residential charges differently, establishing a three-tiered structure charging more for properties with greater impervious surface area coverage.

- Rate Exemptions: Again, Edgewood's exemptions are based on Pierce County Code, but Pierce County has several exemptions that are not currently included in Edgewood Municipal Code and may be worth considering:
 - Parcels which are: (1) used for church, community center, community hall, or grange purposes; and (2) owned by an organization with a nonprofit public benefit status as defined by RCW 24.03.490.
 - Tribal lands held in trust by the Federal Government.
 - Parcels qualifying for a property tax exemption under RCW 84.36.260 where the primary purpose of the qualifying nonprofit corporation or association is to conduct or facilitate scientific research or to conserve natural resources or open space for the general public.
 - Parcels qualifying for a property tax exemption under RCW 84.36.060 where the qualifying organization is a nonprofit miscellaneous scientific or historical society.
 - Low income senior exemptions:
 - If eligible under RCW 84.36.381(5)(a), property is 40% exempt
 - If eligible under RCW 84.36.381(5)(b)(i), property is 60% exempt
 - If eligible under RCW 84.36.381(5)(b)(ii), property is 80% exempt
- Rate Credits: Edgewood currently offers a 10% credit for properties that have rainwater harvesting systems, pursuant to EMC 13.10.070(B). Pierce County offers a similar credit, or up to a 30% credit for compliant and maintained onsite detention and/or retention systems.
- Current Rates: Here is a summary of current surface water utility rates for individual residential properties in Edgewood and other local agencies, annualized:
 - Milton - \$186 to \$426
 - Fircrest - \$422.28
 - Tacoma - \$374.64
 - Orting - \$315.48
 - Fife - \$276.72
 - **Edgewood - \$257.58**
 - University Place - \$222.17
 - Olympia - \$218.76
 - Auburn - \$217.08
 - Sumner - \$207.84
 - Puyallup - \$206.22
 - Renton - \$204.48
 - Bonney Lake - \$193.80
 - Kent - \$185.04
 - Federal Way - \$182.00
 - Pierce County - \$167.14
 - Lakewood - \$131.36

Attached are a copy of the 2018 FCS financial analysis for review, and a draft ordinance for council's consideration. This item is scheduled for a public hearing at the May 28, 2024 regular meeting, with further discussion and potential action at subsequent meetings.

Item History:

N/A

Recommended Action:

Hold a discussion and provide staff guidance regarding Discussion - Surface Water Rate Code Update

Fiscal Note/Consideration:

The Surface Water Utility's annual service charges have remained unchanged since 2020, when they were set to \$257.58 per residential unit under Ordinance 19-0561 on October 22, 2019. In order to continue the current level of service for operations and maintenance, develop and construct the capital projects currently programmed, and fulfill the obligations of the City's Municipal Stormwater Permit, staff anticipates the need to increase rates approximately 2.5% annually, effective January 1, 2025. Since this rate is similar to the historical increase in the Consumer Price Index (CPI), staff is recommending the attached proposed code modification.

City of Edgewood



Surface Water Utility Financial Analysis

FINAL REPORT
August 2018
(Including October 2018 Addendum)

Washington

7525 166th Avenue NE, Ste. D215
Redmond, WA 98052
425.867.1802

Oregon

4000 Kruse Way Pl., Bldg. 1, Ste. 220
Lake Oswego, OR 97035
503.841.6543

Colorado

PO Box 19114
Boulder, CO 80301-9998
719.284.9168

www.fcsgroup.com

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FCS GROUP
Solutions-Oriented Consulting

October 31, 2018

Jeremy Metzler, P.E.
Public Works Director
City of Edgewood
2224 104th Avenue East
Edgewood, WA 98372

Subject: Surface Water Utility Financial Analysis

Dear Jeremy:

FCS GROUP is pleased to submit this draft report summarizing the results of the utility rate analysis for the City's surface water management utility. The summary-level rate increases are shown below. The methodology used to arrive at these results is covered in the report. The rate increases are projected to meet the utility's annual operating and maintenance expenditures, fund approximately \$3.8 million in new capital investment, and generate funding for the utility's operating and capital financial reserves.

Summary of Results	Existing 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023
Systemwide Revenue Increase Needs		40.00%	15.00%	2.50%	2.50%	2.50%
Projected Monthly Single-Family Charge	\$13.25	\$18.55	\$21.33	\$21.87	\$22.41	\$22.97
Increase from Prior Year		\$5.30	\$2.78	\$0.53	\$0.55	\$0.56
Projected Annual Single-Family Charge	\$159.00	\$222.60	\$255.99	\$262.39	\$268.95	\$275.67
Increase from Prior Year		\$63.60	\$33.39	\$6.40	\$6.56	\$6.72

Section IV of the report also provides the results and documentation for the utility's system development charge. This information has been modified and documented in the addendum on the following page.

It has been a pleasure to work with you and other City staff on this effort. Please let me know if you have any questions or need additional information on this report. I can be reached at (425) 867-1802 ext 225.

Yours very truly,



John Ghilarducci
Principal



Tage Aaker
Project Manager



Matt Hobson
Project Consultant

OCTOBER 2018 ADDENDUM TO REPORT REVISED SYSTEM DEVELOPMENT CHARGE (SDC)

Summary

This addendum to the Surface Water Utility Financial Analysis replaces the results of the system development charge section of the report (Section IV). The City in coordination with its consulting engineer revised the 2019 – 2024 capital improvement program that was originally used to determine the SDC included in the report and requested that FCS GROUP update the surface water SDC calculation.

As a result of the changes to the capital improvement program, the SDC is estimated at **\$810 per equivalent service unit (ESU)**, instead of \$1,244.

Revisions to System Development Charge Assumptions

As discussed in Section IV of the report, the SDC is based on allocable shares of the existing surface water system cost and the future surface water system cost, which is then divided by the estimated surface water customer base that could be served by the system. The changes to the capital improvement plan impacted the allocable share of future system costs that can recovered by the SDC. **Exhibit 1** details the revised future system cost basis.

Exhibit 1
Revised Future System Cost Basis for SDC

Future System Cost Basis	
Capital Improvement Plan (2018-2024)	\$ 7,990,000
plus: new Skid-Steer Loader	68,000
Total Future Capital Assets	8,058,000
less: Grants/Ineligible Projects	(3,535,000)
less: Provision for Capital Retirement	(561,972)
Total Future System Cost Basis	\$ 3,961,028

The changes to the capital improvement plan did not impact the existing surface water system cost basis (\$2,554,246) or the estimated future capacity of the surface water system (8,047 equivalent service units).

Revised System Development Charge

The existing system cost basis is \$2.55 million plus \$3.96 million in future system cost, for a total cost basis of \$6.51 million.

This is then divided by the estimated total future customer base of 8,047 equivalent service units.

This results in a charge of \$810 per ESU.

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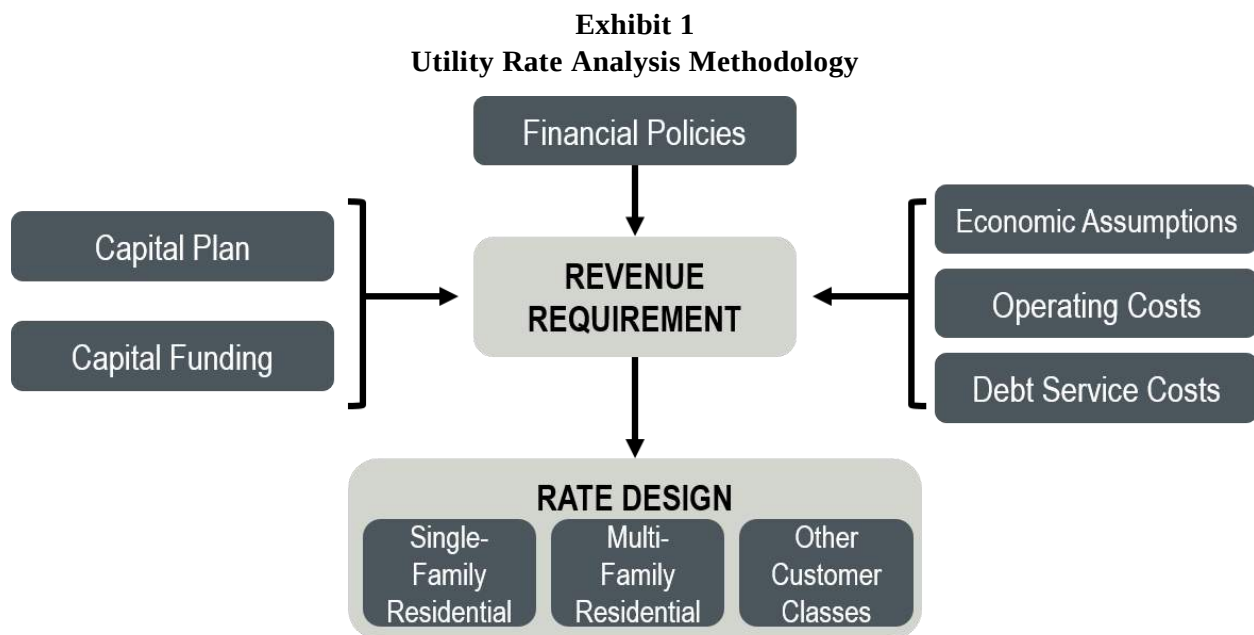
Section I. INTRODUCTION

BACKGROUND

The City of Edgewood contracted with FCS GROUP through Herrera Environmental Consultants to perform a rate and system development charge study for its surface water management (stormwater) utility.

METHODOLOGY

The basis for the utility rate study is a revenue requirement evaluation to establish a long-range financial plan and multi-year rate management strategy. **Exhibit 1** illustrates the key components for the utility rate analysis.



In simple terms, the revenue requirement forecast tells us the level of rate revenue needed to fund the utility's financial obligations and goals. The rate design element tells us the rates that need to be assessed to the utility's customer classes to equitably meet the revenue requirement on an annual basis.

Section II. POLICY FRAMEWORK

FISCAL POLICIES

The financial plan is based on a framework of fiscal policies that promotes the financial integrity and stability of the surface water utility. The ensuing discussion provides a brief summary of the key policies addressed by the City and incorporated in this analysis in the following areas: Financial Reserves (Operating Reserve and Capital Reserve), Capital Funding, and Debt Management.

FINANCIAL RESERVES

Like a business, a municipal utility requires certain minimum levels of cash reserves to efficiently operate. These reserves address the variability and timing of revenues and expenses as well as occasional disturbances in activities. Given the City's responsibility to provide essential services to its customers at a certain standard, protection against financial disruption is even more important than it would be for private-sector or non-essential counterparts. A defined reserve structure serves to both maintain appropriate segregation of funds and promote the use of resources for their intended purposes.

When evaluating fund reserve levels and objectives, it is important to recognize that the value of reserves lies in their potential use. A reserve strategy that deliberately avoids any use of reserves negates their purpose. Fluctuation of reserve levels may indicate that the system is working, while lack of variation over many years strongly suggests that the reserves are, in fact, unnecessary.

Operating Reserve

An operating reserve is designed to provide a liquidity cushion; it protects the utility from the risk of short-term variation in the timing of revenue collection or payment of expenses. Like other types of reserves, operating reserves also serve another purpose: they can help smooth rate increases over time. Target funding levels for an operating reserve are generally expressed as a certain number of days of operating and maintenance (O&M) expenses, with the minimum day requirement varying with the expected revenue volatility of each utility.

Industry practice for utility operating reserves typically range from 30 days (8%) to 120 days (33%) of O&M expenses, with the lower end more appropriate for utilities with stable revenue streams and the higher end of the range more appropriate for utilities with significant seasonal or consumption-based fluctuations. This study assumes a minimum operating reserve target of 120 days, or approximately \$315,000 in 2018.

Surface water utility customers are charged once per year, on their property tax bill from Pierce County. This billing method creates a cash flow surplus after the April and October payment

deadlines and corresponding cash flow deficits in other months. For this reason, the operating reserve target for the City's surface water program is set at a high level relative to other public utilities.

Recommended Policy: Achieve a year-end minimum balance target of 120 days (33%) of total annual operating expenditures. The City's surface water charges are annual and revenue is infrequent, so a higher minimum target balance is used. This equates to a capital reserve of approximately \$315,000, based on the 2018 operating budget of nearly \$1.0 million.

Capital Reserve

In addition to protecting against variations in the timing of operating costs and revenues, it is prudent to maintain a capital contingency reserve to meet unexpected emergency capital outlays. There are several methods used in the industry to set the level of these types of reserves, including:

- Most costly piece of equipment or infrastructure: A utility may predict the cost of replacing its most expensive piece of equipment or infrastructure.
- Average annual cost of capital program: A utility may use a percentage of its projected capital program, or set the reserve equal to the average annual cost of its capital program.
- Percentage of fixed assets: The most common method is for a capital contingency to be a percentage of the cost of fixed assets, usually 1-2% of the original cost of total assets. Alternatively, a percentage of replacement value can also be used, with the percentage adjusted downward to reflect the fact that replacement value is higher than original cost.

This analysis establishes a capital reserve following the third method described above (percentage of utility plant) and assumes a minimum capital reserve of 0.5 percent of the replacement cost of the utility's fixed assets, or approximately \$92,000 in 2018.

Recommended Policy: Achieve a minimum year-end target of 0.5 percent of the replacement cost of the utility's fixed assets. This equates to a capital reserve of approximately \$92,000 in 2018 and is based on the estimated replacement cost of assets in service of \$18 million.

CAPITAL FUNDING

Utilities typically fund capital improvement projects from a variety of sources, such as grants, developer extensions (e.g., privately-funded improvements), facility charges, utility rates, and debt. While grants and developer contributions would logically be applied to project costs first, the next choice in the funding "hierarchy" is not necessarily apparent.

Rate-Funded System Reinvestment

In order to avoid excessive reliance on debt, it is prudent to have a policy that commits a certain amount of annual rate revenue to the replacement of system assets. A common approach is to establish a planning target for rate-funded capital funding. This planning target, in combination with excess operating reserves swept into the capital account, mitigates the system's reliance on debt.

The level of planned rate-funded capital reinvestment is often set as a percentage of depreciation expense each year, where depreciation data is available. Conceptually, basing rate-funded capital funding on total depreciation expense addresses the following criteria for reasonable rates:

- Financial integrity: Funding depreciation expense from current rates avoids a decline in system asset value; and
- Adequacy of capital funding: Funding depreciation expense from current rates provides a stable funding source for capital expenditures, especially those related to the repair and replacement of existing infrastructure.

This analysis evaluated a series of rate-funded and debt-funded capital funding options along with the corresponding revenue requirement impact for each option. Based on this evaluation and discussions with the Public Works Department, this analysis does not include a rate-funded system reinvestment target. Instead, future annual fund balances in excess of the operating reserve target are transferred to the utility's capital fund. A more detailed description of this transfer is included in the Capital Forecast in the following section.

Recommended Policy: Transfer funds in excess of the operating reserve target to the utility's capital fund.

DEBT MANAGEMENT

Debt financing is one appropriate tool for capital funding. Compared with pay-as-you-go funding, debt smooths out the rate impact of a capital program by spreading costs over time. It also creates intergenerational equity—it is sometimes called “pay-as-you-use” because future customers who use the assets are the ones paying for them. However, debt cannot be relied on too much because it carries the risk of default. Debt also reduces budget flexibility—cash-funded capital projects can be delayed if there is a revenue shortfall, but once the utility has sold debt, the debt service needs to be paid in good times or bad. So while debt is a useful option in the toolbox, it needs to be monitored to ensure that the system does not become too heavily dependent on it. To evaluate the City's debt level, we will discuss a measurement called debt service coverage.

Debt Service Coverage

Debt service coverage is a requirement typically associated with revenue bonds and some State loans, and it is an important benchmark to measure the riskiness of the utility's capital funding plans. A typical minimum coverage requirement for utility revenue bonds is 1.25. The coverage requirement is a ratio of available revenues for debt service and debt service. For example, if the City were to sell bonds, it agrees to collect enough revenue to meet operating expenses and not only pay debt service, but collect an additional 25% increment above bonded debt service. The extra revenue is a cushion that makes bondholders more confident that debt service will be paid on time. To provide a conservative financial estimate of debt coverage costs, this analysis assumes a coverage requirement ratio of 1.50. The extra revenue can be used for capital expenditures, to build system reinvestment reserves, or for debt service on subordinate debt. Achieving a bonded debt service coverage level greater than the minimum required level is a positive signal that bond rating agencies notice, and it can result in more favorable terms if the City goes to the market for revenue bonds.

Recommended Policy: Policy should be dictated by terms outlined in contracts for debt obligations. For planning purposes, the debt service coverage requirement is estimated at 1.50 times bonded debt service.

Section III. REVENUE REQUIREMENT ANALYSIS

BACKGROUND

The revenue requirement is the amount of revenue that a utility's rates must generate to enable it to meet its various financial obligations. This analysis has two main purposes – it serves as a means of evaluating the utility's fiscal health and adequacy of current rate levels, and it sets the revenue basis for near-term and long-term rate planning. The rate revenue requirement is defined as the net difference between total revenue needs and the revenue generated through non-rate sources. Hence, the revenue requirement analysis involves defining and forecasting both needs and resources.

BEGINNING FUND BALANCES

The 2018 beginning fund balance for the surface water utility (Fund #410) is \$235,000.

ECONOMIC ASSUMPTIONS

Operating costs are initially based on the 2018 budget, with adjustments for inflation and any anticipated future changes such as changes to programs or staffing levels. Additionally, actual financial expenses were analyzed over the three year period from 2015 to 2017 to identify any adjustments to the 2018 budget based on historical expense patterns. The key assumptions and inputs used to develop the operating expense forecast are described in further detail below.

- General Cost Inflation – assumed to be 2.50% per year based on historical data from the Consumer Price Index Urban Consumers - Seattle / Tacoma / Bremerton (CPI - U).
- Construction Cost Inflation – assumed to be 3.00% per year based on historical data from the ENR Construction Cost Index (CCI) - 20 City Average index.
- B&O State Taxes – assumed at 1.50 percent of all operating revenue
- Personnel Cost Inflation
 - Labor Cost Inflation: assumed to be 3.00% per year as provided by City staff
 - Benefits Cost Inflation: assumed to be 7.00% in 2019 and 5.00% per year after 2019 as provided by City staff
- Fund Earnings – 1.00% per year based on the Local Government Investment Pool (LGIP) yields in 2017, at the time of analysis.

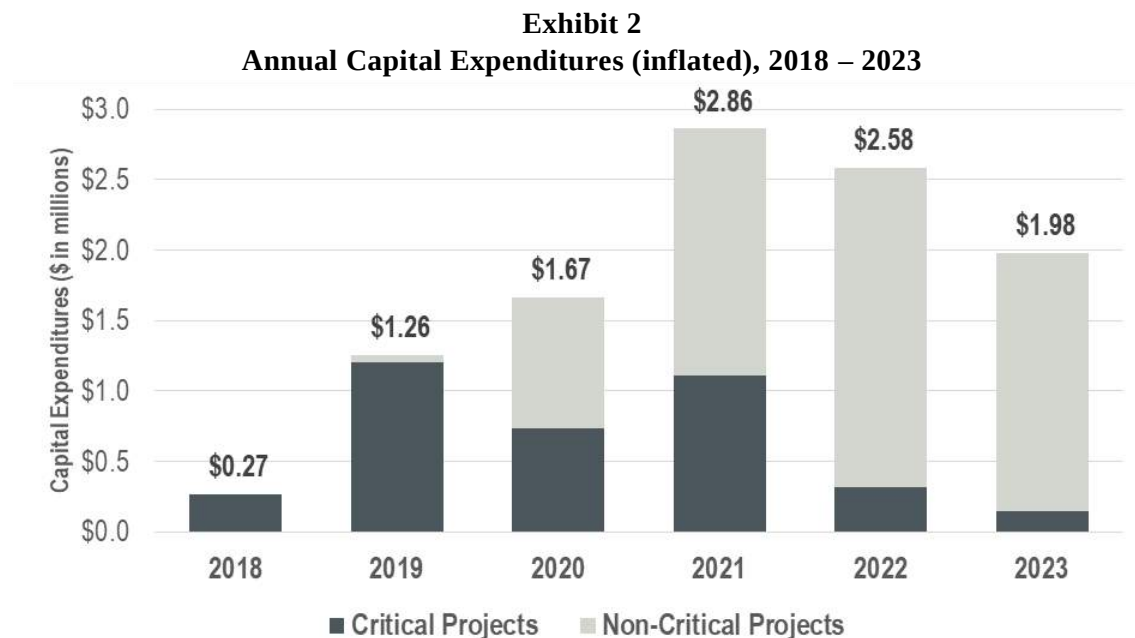
- Customer Growth – Based on a review of projected growth within the service area with City staff, the following was assumed:
 - Residential Customer Account Growth: 10.00% in 2018, 5.00% in 2019, and 2.00% annually thereafter. Residential customer classes include single-family residential, duplexes, and condominium units in the city. The projected growth rates in 2018 and 2019 are attributed to recent and anticipated residential development.
 - All Other Customer Account Growth: 0.25% annually.
- Revenue Bonds: 20 year maturity, 4.00% interest, 1.00% issuance cost, 1.50 legal minimum for debt service coverage. The interest rate assumption is based upon relevant Bond Buyer Indices.

EXISTING DEBT OBLIGATIONS

The City does not have any existing debt obligations related to the surface water utility.

CAPITAL EXPENDITURE FORECAST

The capital forecast involves projecting annual capital expenditures and then developing a strategy to fund those expenditures. The 2018-23 capital spending plan was provided by the City, as described in the updated Surface Water Management Plan. Costs were provided by project, by year, and are in 2017 dollars. The City also categorized the capital projects based on priority by identifying each project as critical or non-critical. To estimate the actual spending by year, costs are inflated to the year of construction. **Exhibit 2** shows the planned annual capital spending, with inflation.



A few summary notes related to the capital plan are provided below:

- The uninflated 2018-2023 capital costs total \$9.4 million; with inflation the total cost is \$10.6 million

- The largest capital project in the six-year schedule is an infiltration pilot project. The design and construction costs of the project are contingent on the results of a pending feasibility analysis. The total project cost is estimated at \$2.2 million (inflated).
- Critical projects comprise 36 percent of total costs or \$3.8 million from 2018-2023. Over the first three years of the capital plan, critical projects make up approximately 70 percent of all capital spending.

Exhibit 3 lists the projects and the cost estimates provided by the City and its consulting engineer along with the estimated year(s) of construction for each project. Cost estimates are inflated to the planned year of construction.

Exhibit 3
2018 – 2023 Capital Projects from the updated Surface Water Management Plan

Capital Projects (inflated)	2018	2019	2020	2021	2022	2023	Total
Critical Projects							
Surface Water Management Plan Update (including stormwater comprehensive plan update)	\$ 77,250	\$ 26,523	\$ 27,318	\$ 28,138	\$ 28,982	\$ 29,851	\$ 218,062
City Drainage Infrastructure Program/Spot Improvements	103,000	106,090	109,273	112,551	115,927	119,405	666,246
Edgewood Pothole Pilot Project Feasibility Assessment	72,100	328,879	87,418	-	-	-	488,397
Lake Chalet Pothole Flood Reduction Project (Pump to Ex-Gravity opt)	-	530,450	-	-	-	-	530,450
24th/112th Seasonal Ponding	15,450	169,744	-	-	-	-	185,194
108th Avenue East Neighborhood (8th to 16th)	-	42,436	273,182	67,531	-	-	383,148
108th Avenue E./36th St. E. Road Flooding	-	-	54,636	900,407	173,891	-	1,128,935
Flood Reduction Plan for Edgewood Pothole	-	-	185,764	-	-	-	185,764
Total Critical Projects	\$ 267,800	\$ 1,204,122	\$ 737,591	\$ 1,108,626	\$ 318,800	\$ 149,257	\$ 3,786,195
Non-Critical Projects							
Infiltration Pilot Project Design and Construction	-	-	109,273	844,132	1,217,238	-	2,170,642
Flood Reduction Plan for Pinedale Pothole	-	-	-	-	197,077	-	197,077
Flood Reduction Plan for 122nd Avenue Pothole	-	-	-	95,668	98,538	-	194,207
Flood Reduction Plan for 108th Avenue Pothole	-	-	-	-	197,077	-	197,077
Flood Reduction Plan for Surprise Lake Pothole	-	-	-	-	-	202,989	202,989
Jovita Boulevard Rehabilitation	-	-	-	56,275	347,782	179,108	583,166
Edgewood Drive East Drainage Improvements	-	-	-	-	-	1,026,885	1,026,885
Meridian Ave. Corridor Study	-	-	54,636	-	-	-	54,636
Jovita Creek Regional Improvement Feasibility Study	-	-	-	196,964	202,873	179,108	578,945
Mortenson Farm Regional Stormwater Improvements	-	53,045	764,909	562,754	-	-	1,380,708
25th St. E. Drainage Improvements	-	-	-	-	-	238,810	238,810
Total Non-Critical Projects	-	53,045	928,818	1,755,794	2,260,584	1,826,900	6,825,141
Total Projects	\$ 267,800	\$ 1,257,167	\$ 1,666,409	\$ 2,864,420	\$ 2,579,385	\$ 1,976,157	\$ 10,611,336

REVENUE REQUIREMENT FORECAST

Methodology

The revenue requirement analysis evaluates the sufficiency of the utility's revenues against its financial obligations, in the context of two sufficiency tests, detailed below. In determining the annual revenue requirement, the test with the greatest deficiency generally drives the rate adjustment in any given year. It is worth noting that the City can temporarily waive the requirements of the cash flow sufficiency test as part of a conscious decision to phase in rate increases, as long as its operating reserve balance is sufficient to absorb the resulting cash flow deficit. If the City has revenue bonds outstanding, the coverage test must always be met, as failure to do so may result in a downgrading of the City's credit rating.

- **Cash Flow Sufficiency Test.** The cash flow test determines whether or not the utility's annual revenues are sufficient to cover the known cash requirements for each year of the planning period. These cash requirements typically include O&M expenses, debt service payments, rate-funded capital outlays, and any additions to reserve balances.
- **Coverage Test.** The coverage test evaluates the utility's ability to meet applicable bond coverage requirements, as specified by typical bond covenants. For any debt issues assumed in the forecast, this analysis assumes a bond coverage requirement of 1.50 times annual debt service. In other words, the City must have enough revenue to cover all expenses plus 1.50 times debt service as a minimum legal level. As this test focuses on annual financial performance, it precludes the use of reserves to cover shortfalls.

Capital Funding Strategy

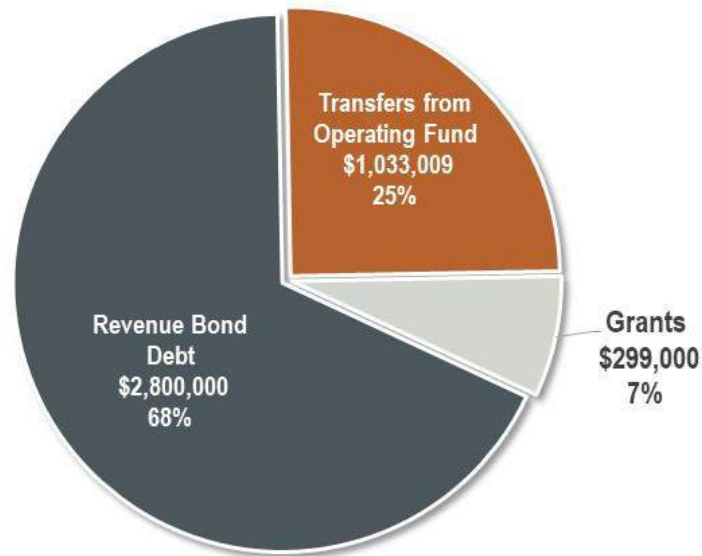
As mentioned previously, uninflated 2018-23 capital spending totals \$9.4 million. After applying inflation, the spending through 2023 totals \$10.6 million. Critical projects comprise approximately \$3.4 million of total uninflated capital spending over the six-year period — \$3.8 million when adjusted for inflation. The capital funding strategy and revenue requirement results are based on funding only the critical projects in the capital plan. The financial and customer rate impacts of funding the entire capital plan are summarized in the "Other Capital Funding Options" section of this chapter.

The anticipated funding sources for the critical projects and the capital contingency reserve include the following items, as summarized in **Exhibit 4**.

- Revenue bond debt: \$2.8 million;
- Transfers from operating fund (above operating reserve target): \$1.0 million; and
- Grants: \$0.3 million (including a \$149,000 feasibility study grant and \$150,000 in Department of Ecology capacity grants)

Capital funding totals \$4.1 million which exceeds the inflated cost of the capital projects (\$3.8 million). The remaining \$0.3 million provides initial funding for the utility's capital reserve.

Exhibit 4
Funding Sources for Capital Funding Strategy



Revenue Requirement Forecast

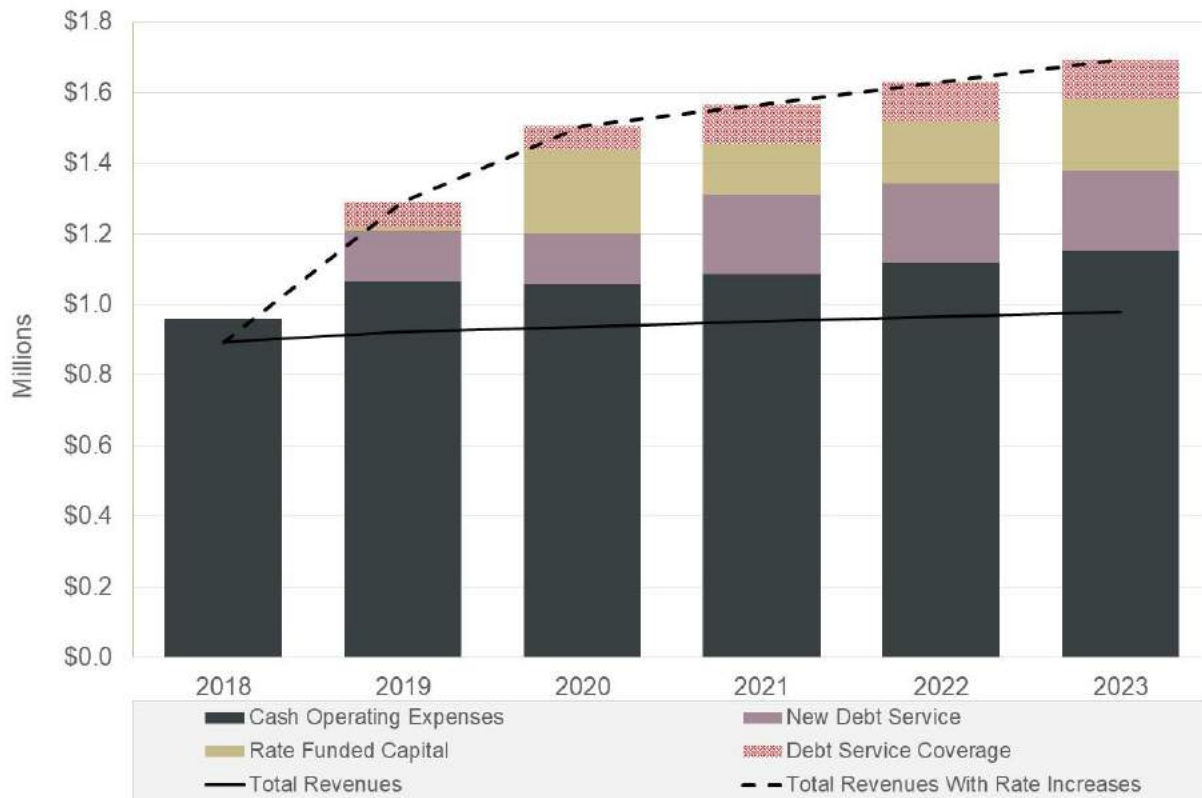
Exhibit 5 summarizes the annual rate increases needed to cover the forecasted obligations of the utility.

Exhibit 5
Annual Rate Increase Needs

Summary of Results	Existing 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023
Systemwide Revenue Increase Needs		40.00%	15.00%	2.50%	2.50%	2.50%
Projected Monthly Single-Family Charge Increase from Prior Year	\$13.25	\$18.55 \$5.30	\$21.33 \$2.78	\$21.87 \$0.53	\$22.41 \$0.55	\$22.97 \$0.56
Projected Annual Single-Family Charge Increase from Prior Year	\$159.00	\$222.60 \$63.60	\$255.99 \$33.39	\$262.39 \$6.40	\$268.95 \$6.56	\$275.67 \$6.72

Exhibit 6 graphically represents the operating forecast through 2023. The bars represent costs of the utility: operating expenses, new debt service and debt coverage related to the revenue bonds, and rate-funded capital costs. The solid black line represents revenue at the existing 2018 rates—without future rate increases. The existing rate revenue includes the rate adjustment to the “All Other” customer class that was approved by City Council in 2017. The dashed black line shows the revenue corresponding to the recommended rate increases of the study.

Exhibit 6
Annual Revenue Requirement Forecast for the Surface Water Utility, 2018-2023



Observations about the revenue requirement forecast are provided below:

- Dark blue bar: Existing cash operating expenses exceed revenue at existing rates.
 - Operating expenses are projected to outpace current revenues by \$65,000 in 2018. The annual financial gap between operating expenses and revenue is projected to grow to \$162,000 by 2023.
 - An additional 0.68 FTE is planned in 2019 for an Engineering Technician to support the capital improvement program. The compensation cost for the additional staffing is estimated at \$71,000 in 2019. Beginning in 2020, the position would be reduced to 0.29 FTE.
- Purple bar: New annual debt service projected to increase to \$225,000 by 2023.
 - The capital forecast assumes two revenue bonds: \$1.8 million in 2019 and \$1.0 million in 2021 to offset a portion of the \$3.8 million needed for the critical capital projects.
- Gold bar: Rate increases allow the utility to cash fund a portion of the capital plan.
 - As mentioned in the Policy Framework chapter, a rate-funded system reinvestment target was not included in the study. Instead, future annual fund balances in excess of the operating reserve are transferred to the utility's capital fund.
 - This strategy allows the utility to fund approximately \$1.0 million of the 2018-2023 capital plan with rate revenue. Without these rate increases, the utility would need to reduce the scope of the capital plan or increase revenue bond debt.

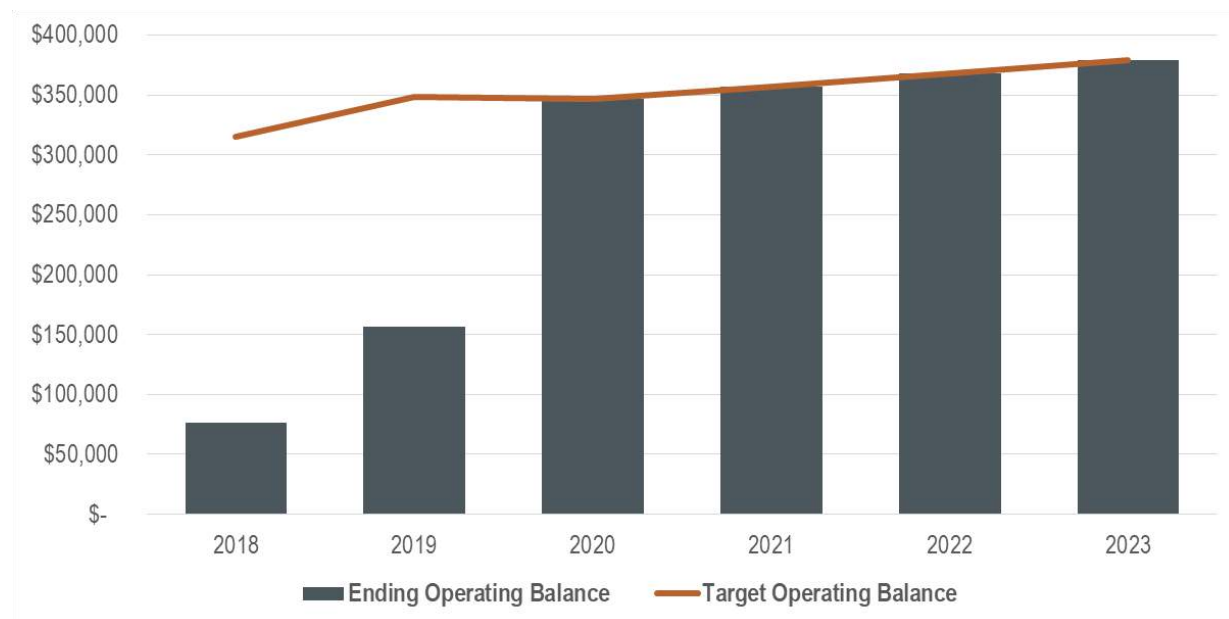
- Red bar: Debt service coverage costs projected at \$0.1 million by 2023. Debt service coverage on bonded debt is forecasted at 1.56 in 2019 and increases to 2.41 in 2023 (compared to the minimum requirement of 1.50). As mentioned in the Policy Framework chapter, the extra revenue generated to meet debt service coverage requirements can be used for capital expenditures, to build system reinvestment reserves, or for debt service on subordinate debt.

Forecasted Reserve Levels

Operating Reserve: As mentioned previously, the target operating reserve is 120 days of operating expenditures. The operating reserve in 2018 is estimated at \$76,000 or approximately 29 days. The annual rate increases allow the utility to increase the operating reserve each year, achieving the 120 day target by 2020. After 2020, annual ending balances that exceed the operating reserve requirement are assumed to be available for capital projects.

Exhibit 7 illustrates the projected operating reserves from 2018 to 2023 compared to the 120 day target reserve policy.

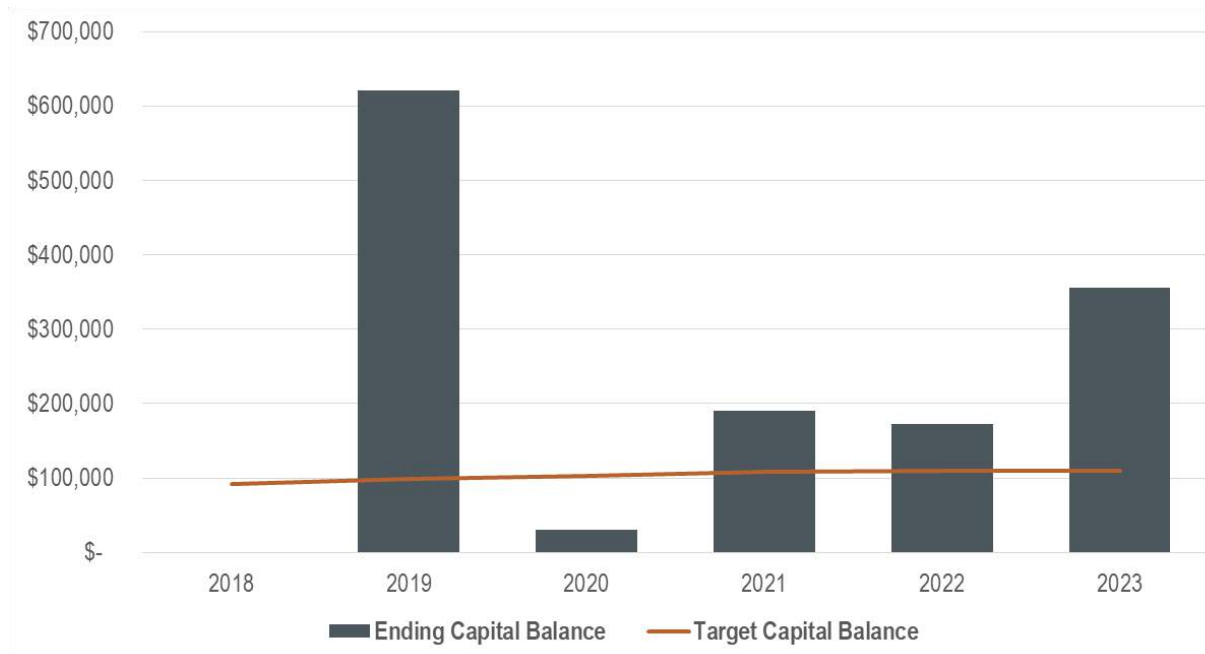
Exhibit 7
Operating Reserve Forecast



Capital Reserve: The recommended policy for the capital reserve is to achieve a minimum year-end target of 0.5% of the replacement cost of fixed assets or \$92,000 in 2018. As discussed earlier, one purpose of a financial reserve is to provide a funding source for fluctuating expenses. This purpose is illustrated in the utility's capital reserve strategy in 2020: the capital reserve is projected to be drawn down in 2020 as capital spending is projected to exceed funding sources. By 2023, the ending capital reserve is forecasted to be roughly \$356,000, which exceeds the minimum target balance of \$110,000 in that same year.

Exhibit 8 summarizes the projected capital reserve from 2018 to 2023 compared to the target reserve policy.

Exhibit 8 Capital Reserve Forecast



Projected Rate Schedule

Exhibit 9 shows the projected rates resulting from across-the-board rate increases. “Across-the-board” (ATB) means that all stated rates increase by the same percentage (both the account and impervious square feet charges), which maintains the existing rate structure. Rates for customer classes like Residential-Single Family and Duplex are assessed on a per parcel basis. For other classes like Multifamily and All Other, rates are based on square feet of impervious surface area (abbreviated as ISF). The rate increases for the All Other customer class are based on the revised rate schedule adopted by the City Council in 2017.

Exhibit 9 Rate Schedule Forecast

Recommended Rate Schedule	Existing 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023
Annual System-Wide Rate Increase		40.00%	15.00%	2.50%	2.50%	2.50%
Residential - Single Family	\$159.00	\$222.60	\$255.99	\$262.39	\$268.95	\$275.67
Duplex	\$205.10	\$287.14	\$330.21	\$338.47	\$346.93	\$355.60
Multifamily per ISF	\$0.06022	\$0.08431	\$0.09695	\$0.09938	\$0.10186	\$0.10441
Mobile Homes	\$87.45	\$122.43	\$140.79	\$144.31	\$147.92	\$151.62
Vacant/Undeveloped per parcel	\$40.00	\$56.00	\$64.40	\$66.01	\$67.66	\$69.35
Each acre above 50 acres	\$0.80000	\$1.12000	\$1.28800	\$1.32020	\$1.35321	\$1.38704
Forest and Timber Land per parcel	\$40.00	\$56.00	\$64.40	\$66.01	\$67.66	\$69.35
State, county and federal public highways per ISF	\$0.01805	\$0.02527	\$0.02906	\$0.02979	\$0.03053	\$0.03129
All Other Parcels per ISF	\$0.06022	\$0.08431	\$0.09695	\$0.09938	\$0.10186	\$0.10441
<i>info: Residential - Single Family (\$ per month)</i>	\$13.25	\$18.55	\$21.33	\$21.87	\$22.41	\$22.97

Other Capital Funding Options

Revenue requirement analyses for two additional capital funding options were tested to determine the relative impact to customer rates and new debt. These two options include:

- Scenario B: Critical capital projects and the infiltration pilot project: \$6.0 million (inflated)
- Scenario C: All capital projects: \$10.6 million (inflated)

Exhibit 10 compares the projected rate increases, single-family residential monthly rate, capital costs (inflated), and revenue bonds for these two scenarios and the baseline scenario (critical projects only).

Exhibit 10
Comparison of Capital Funding Scenarios

	2018	2019	2020	2021	2022	2023	Total
Scenario A: Critical Projects Only							
Annual Rate Increase	0.00%	40.00%	15.00%	2.50%	2.50%	2.50%	
Single-Family Monthly Bill	\$13.25	\$18.55	\$21.33	\$21.87	\$22.41	\$22.97	
Capital Spending (inflated)	\$267,800	\$1,204,122	\$737,591	\$1,108,626	\$318,800	\$149,257	\$3,786,195
New Debt	\$0	\$1,800,000	\$0	\$1,000,000	\$0	\$0	\$2,800,000
Scenario B: Critical Projects + Infiltration Pilot							
Annual Rate Increase	0.00%	40.00%	25.00%	2.50%	2.50%	2.50%	
Single-Family Monthly Bill	\$13.25	\$18.55	\$23.19	\$23.77	\$24.36	\$24.97	
Capital Spending (inflated)	\$267,800	\$1,204,122	\$846,863	\$1,952,758	\$1,536,038	\$149,257	\$5,956,837
New Debt	\$0	\$1,800,000	\$1,000,000	\$2,200,000	\$0	\$0	\$5,000,000
Scenario C: All Projects							
Annual Rate Increase	0.00%	55.00%	15.00%	15.00%	2.50%	2.50%	
Single-Family Monthly Bill	\$13.25	\$20.54	\$23.62	\$27.16	\$27.84	\$28.54	
Capital Spending (inflated)	\$267,800	\$1,257,167	\$1,666,409	\$2,864,420	\$2,579,385	\$1,976,157	\$10,611,336
New Debt	\$0	\$2,250,000	\$0	\$3,700,000	\$0	\$1,300,000	\$7,250,000

A few observations of the comparative results are summarized below:

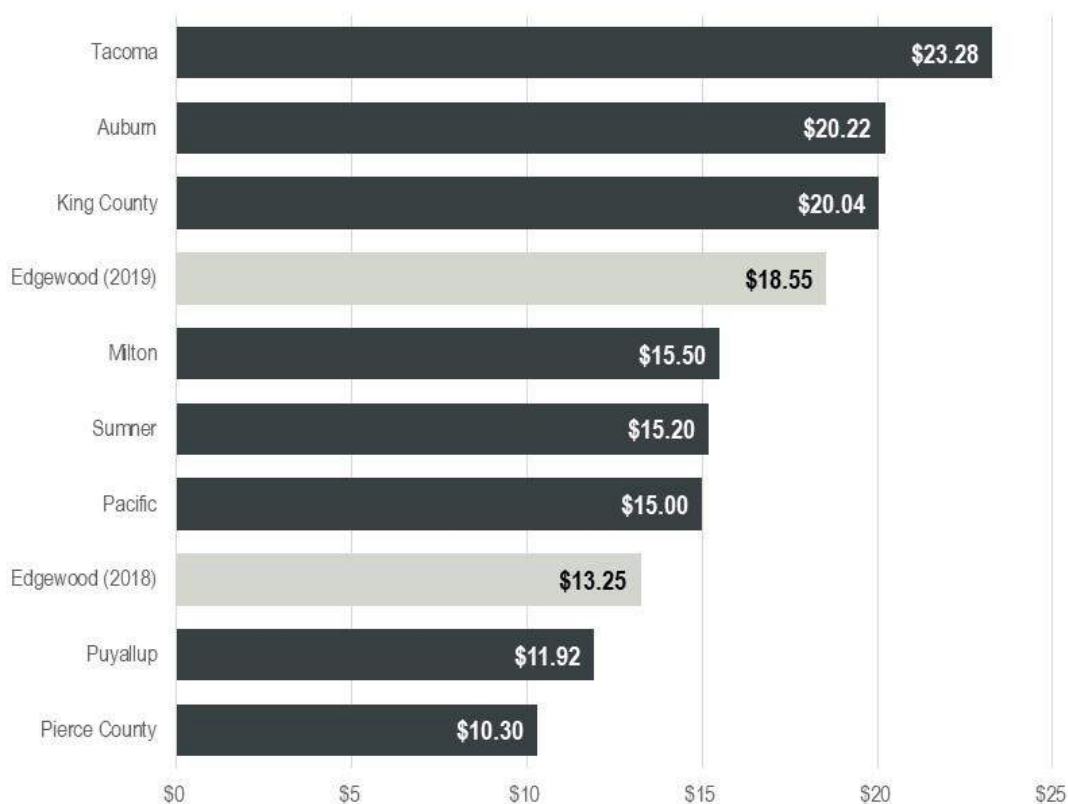
- **Rate Increases:**
 - Scenario B would require a 25% rate increase in 2020 compared to the 15% rate increase required in 2019 for Scenario A. The rate increases for all other years would be the same for Scenarios A and B.
 - Scenario C (all projects) would require a 55% increase in 2019 — compared to a 40% increase for Scenarios A and B. Additionally, a 15% rate increase in 2021 would be needed for Scenario C compared to a 2.5% increase for the other two scenarios in 2021.
- **Single-Family Residential Monthly Bill:** The monthly residential bill is projected to be \$22.97 in 2023 for Scenario A (critical projects only). The projected monthly residential bill in 2023 would increase to \$24.97 and \$28.54 for Scenario B and Scenario C respectively.
- **New Debt:**
 - Scenario B (critical projects and infiltration pilot project) would require \$5.0 million in revenue bonds or \$2.2 million more than Scenario A.

- Scenario C (all projects) would require \$7.25 million in revenue bonds or \$4.45 million more than Scenario A. The revenue bond needs for this scenario are net of the \$1.9 million in grant funding assumed for the capital projects in Scenario C.

Rate Survey

Exhibit 11 compares the City's 2018 and 2019 (projected) monthly rates with the 2017 or 2018 rates of other jurisdictions (year based on data available on websites). Note that each jurisdiction has a unique set of geographic traits, customers, and system characteristics, each of which can have a significant impact on rates.

Exhibit 11
Single-Family Monthly Surface Water Survey



Section IV. SYSTEM DEVELOPMENT CHARGE ANALYSIS

INTRODUCTION

System Development Charges (SDCs) are imposed on newly connecting customers and are intended to recover a proportionate share of the utility's investment in capital capacity — both the historical cost of existing capital assets and the planned cost of future capital improvements. SDCs serve two main purposes: to provide equity between existing and new customers, and to provide a source of utility capital funding. In addition, SDCs help ensure that growth helps pay for the cost of growth. The charge is imposed on both new development and redevelopment that increases demand for system capacity (net of any existing developed area).

LEGAL BASIS FOR SDC

There are a variety of approaches that are used in the industry to establish a defensible SDC. The development of such charges always occurs in the context of state law. The City is authorized to assess such charges under Section 35.92.025 of the Revised Code of Washington (RCW).

"Cities and towns are authorized to charge property owners seeking to connect to the water or sewerage system of the city or town as a condition to granting the right to so connect, in addition to the cost of such connection, such reasonable connection charge as the legislative body of the city or town shall determine proper in order that such property owners shall bear their equitable share of the cost of such system..."

The statute also authorizes an SDC to include an equitable share of interest on the existing system for up to ten years from the date of construction at a maximum rate of ten percent per year.

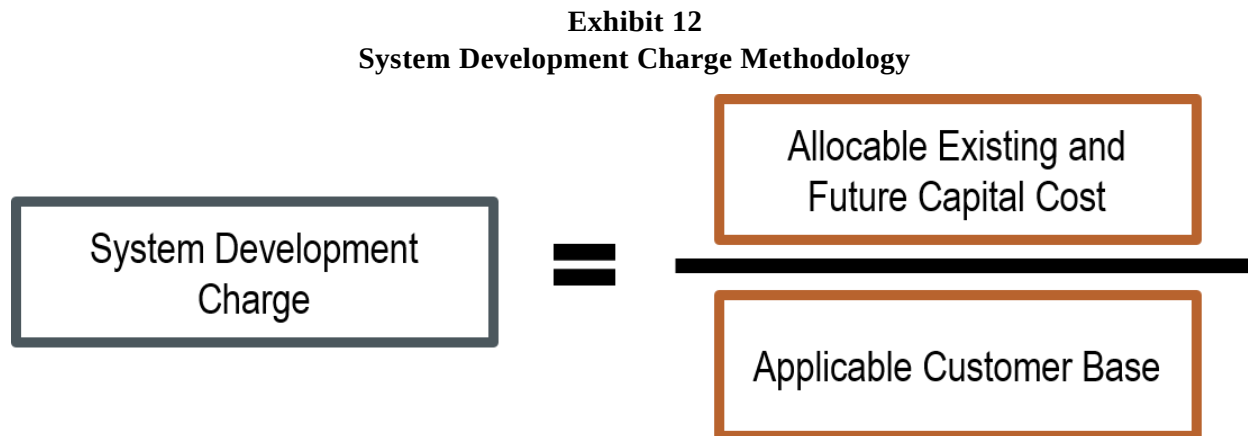
Under RCW 35.67.010, "system of sewerage" is defined as including surface water facilities.

It is important that the City's methodology to determine cost-based connection charges is consistent with RCW 35.92.025 and applicable case law. Since the calculated charges represent the maximum allowable charge, the City may choose to implement a charge at any level up to the calculated charge.

METHODOLOGY

General Overview

The basic approach to the SDC calculation is shown in **Exhibit 12**.



The capital costs used in the SDC calculation can be separated into two major categories:

- Existing system: These costs represent the net investment in assets that currently provide service to customers (and that presumably have some amount of capacity to serve growth).
- Future capital projects: These costs refer to capital improvement projects that the utility plans to undertake within a period of time specified in the system planning documents, but not more than twenty years. A provision for capital retirement – a calculation to account for the original value of the assets any new capital projects are repairing or replacing – is deducted from the total future capital projects.

The applicable customer base is measured in equivalent services units (ESUs) for surface water utilities. One ESU is equal to 2,640 square feet of impervious surface area (see City municipal code 13.10.020 and Pierce County code 11.02.030).

Assumptions

Using the methodology described above, all capital costs (existing assets and future projects net of provisions for retirement) are divided by the total customer base, including customer growth. The main policy emphasis here is on intergenerational equity — there is no cost advantage for either existing or new customers. This calculation is like a simple buy-in charge (which consists of existing costs divided by existing customers), except that it is projected into a future year, after the planned capital projects are completed. The resulting SDC is generally stable over time, and we recommend this methodology for the City.

Defining Existing System Costs

The existing cost basis is intended to recognize the current ratepayers' net investment in the original cost of system assets. The main provisions of the calculation include:

- Utility Plant-In-Service: The existing cost basis is typically comprised of the original cost of plant-in-service, as documented in the fixed asset schedules of the utility. However, original cost

data was not available for the City's fixed assets. As an alternative, City staff provided replacement cost data for utility assets. Based on discussions with staff, it was estimated that much of the system's assets were between 30 to 50 years old. To be the most conservative, it was assumed that all assets in the system were 50 years old. Original costs were then estimated based on Engineering News-Record's construction cost index. Using this methodology, the original cost of the utility's assets is estimated at \$1.8 million as outlined in **Exhibit 13**.

- **Plus: Construction Work In Progress:** The cost of construction work in progress is added to the existing cost basis to recognize investments that a utility has made in capital projects that are currently underway, despite the fact that these projects have not yet been placed into service. The City did not have any construction in progress as of the end of 2017.
- **Less: Contributed Capital:** Assets funded by developers or grants are excluded from the cost basis on the premise that the SDC should only recover costs actually incurred by the City. As of the end of 2017, no utility assets were provided by developers or grants.
- **Plus: Interest on Utility-Funded Assets:** RCW 35.92.025 and subsequent legal interpretations provide such charges can include interest on an asset at the rate applicable at the time of construction. Using the historical Bond Buyer Index for 20-year term bonds, interest can accumulate for a maximum of ten years from the date of construction for any particular asset. Conceptually, this interest provision attempts to account for the opportunity costs that the City's customers incurred by supporting investments in infrastructure rather than having it available for other needs. The interest that the City would have earned from the original cost of utility assets is estimated at \$722,000 as described in **Exhibit 13**.
- **Less: Net Debt Principal Outstanding:** Another adjustment to the existing system cost basis is to deduct the net liability of outstanding utility debt, recognizing that new customers will bear a proportionate share of annual debt service through ongoing utility rates. Outstanding debt represents assets that have been placed into service but that today's ratepayers have not yet paid for. However, cash reserves represent money that today's ratepayers *have* paid for, and that cash could be substituted for indebtedness if needed. So in calculating the amount that should be subtracted from the SDC cost basis, we first deduct cash reserves from the outstanding debt. If the amount of cash reserves is greater than the amount of outstanding debt, the deduction for net debt principal outstanding is zero — it cannot be positive (The term "cash reserves" includes both cash and investments). As referenced in the Revenue Requirement Analysis chapter, the utility does not have any existing debt.

Exhibit 13 summarizes the existing system costs included in the system development charge.

Exhibit 13 Existing System Costs

Original Cost of Existing Assets Calculation	
Estimated Replacement Cost of Existing Assets (2017 dollars)	\$ 18,221,300
Age of Assets, in years (conservative estimate)	50
Assumed Year of Construction	1967
ENR Construction Cost Index for 1967	1,074
ENR Construction Cost Index for 2017	10,680
Original Cost as Percent of Replacement Cost	10%
Estimated Original Cost of Existing Assets	\$ 1,832,314
Interest on Utility Funded Assets Calculation	
Estimated Original Cost of Existing Assets	\$ 1,832,314
Interest Rate from 20-Year Bond Buyer Index (1967)	3.94%
Assumed Years of Interest to Include in SDC	10
Estimated Interest on Utility Funded Assets	\$ 721,932
Summary of Existing System Cost Basis	
Original Cost of Utility Assets	\$ 1,832,314
less: Contributed Capital	-
plus: Interest on Utility Funded Assets	721,932
plus: Construction Work-in-Progress	-
less: Net Debt Principal Outstanding	-
Total Existing System Cost Basis	\$ 2,554,246

Defining Future System Costs

A utility capital improvement program (CIP) includes projects that address many needs, including system expansion, upgrades and the repair and replacement of infrastructure. In some cases, a single CIP project can serve more than one of these purposes.

- **Future Capital Assets:** The basis for future system costs is the utility's 2018-2023 capital improvement plan for all projects with the assumption that the capital improvement plan would support 20 years of customer growth. The SDC calculation covers a longer planning period than the rate analysis (twenty years compared to five years) and assumes that while only critical projects would be funded in the first five years, all of the projects in the capital plan would be completed within the next twenty years. As such, SDC revenue would offset a portion of those capital costs related to expanding system capacity. The uninflated cost of the plan totals \$9.4 million with an additional \$68,000 for the purchase of a skid-steer loader. Total future system costs are estimated at \$9.5 million.
- **Less: Developer Contributions/Grants:** Similar to the methodology for establishing the existing cost basis, future system costs anticipated to be recovered by developer contributions or grants are not included in the system development charge. City staff anticipate \$1.9 million in grant funding for the capital improvement plan, including: \$149,000 for the feasibility study for the pothole pilot project, \$150,000 from Department of Ecology capacity grants, \$450,000 for the Jovita Creek Regional Improvement Feasibility Study, and \$1,175,000 for the Mortenson Farm Regional Stormwater Improvements.

- **Less: Provision for Capital Retirement:** Many capital projects are repairing or replacing existing assets. To avoid including the value of these projects twice – in the existing assets and the capital plan – a provision for capital retirement is used on projects that are deemed repair and replacement (R&R). The provision for capital retirement determines the approximate original cost of the asset the R&R project is replacing, using the useful life of the new project and the historic ENR Construction Cost Index. The sum of the provision for capital retirement calculations are then removed from the future capital project total. In simple terms, if a retention pond expected to last 50 years is being installed in 2018, the provision for retirement determines how much that asset cost in 1968 and removes that portion of the project cost from the calculation. The estimated provision for capital retirement is estimated at \$85,000 and is based on original cost estimates for spot improvements for repair and replacement included in the 2018-2023 capital improvement plan.

Exhibit 14 summarizes the future system costs included in the system development charge. All costs included in the calculations are in estimated 2017 dollars.

**Exhibit 14
Future System Costs**

Future System Cost Basis	
Capital Improvement Plan (2018-2023)	\$ 9,395,000
plus: new Skid-Steer Loader	68,000
Total Future Capital Assets	9,463,000
less: Developer Contribution/Grants	(1,924,000)
less: Provision for Capital Retirement	(84,586)
Total Future System Cost Basis	\$ 7,454,414

Defining the Customer Base

A key objective in defining the customer base is to determine the number of “customer units” the system can support. In other words, “How many customer equivalents can the system serve, once the capital plan has been fully executed?”

Based on discussions with City staff, it was estimated that the 2018-2023 year CIP would support twenty years of customer growth.

There are a total of 6,010 ESUs in the existing system (2018). To determine the future customer base, the customer growth rates described in the Revenue Requirement Analysis chapter are applied, for a 20-year growth of 2,037 additional ESUs. The total future customer base is 8,047 ESUs.

Exhibit 15 details the applicable customer base for the system development charge calculation.

Exhibit 15
Applicable Customer Base for SDC

Applicable Customer Base	
Residential Single-Family Units (2018)	3,416
Multiplied by Impervious Surface Area per ESU	2,640
Residential Single-Family Impervious Surface Area	9,018,240
plus: Impervious Surface Area from Other Classes	6,847,322
Total Impervious Surface Area	15,865,562
Divided by Impervious Surface Area per ESU	2,640
Existing Customer Base (ESUs)	6,010
plus: New ESUs from Customer Growth (2019-2037)	2,037
Applicable Customer Base	8,047

SDC Calculation

Exhibit 16 shows the summary calculation for the surface water SDC. The total existing cost basis is \$2.6 million plus \$7.5 million in net capital projects, for a total cost basis of approximately \$10 million.

This is then divided by the estimated total future customer base of 8,047 ESUs.

This results in a charge of \$1,244 per ESU, as of 2018.

Exhibit 16
System Development Charge

\$1,244 System Development Charge	=	\$2,554,246 Allocable Existing Capital Cost	+	\$7,454,414 Allocable Future Capital Cost
		8,047 Applicable Customer Base (2037)		

Section V. CONCLUSION

To cover the forecasted financial obligations of the surface water utility, customer rate increases of 40.00% in 2019 and 15.00% in 2020 are needed. After those years, inflationary level increases of 2.50% per year are forecasted to be sufficient through 2023. The rate increase strategy is shown in **Exhibit 17**.

Exhibit 17
Annual Rate Increase Needs

Summary of Results	Existing 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023
Systemwide Revenue Increase Needs		40.00%	15.00%	2.50%	2.50%	2.50%
Projected Monthly Single-Family Charge	\$13.25	\$18.55	\$21.33	\$21.87	\$22.41	\$22.97
Increase from Prior Year		\$5.30	\$2.78	\$0.53	\$0.55	\$0.56
Projected Annual Single-Family Charge	\$159.00	\$222.60	\$255.99	\$262.39	\$268.95	\$275.67
Increase from Prior Year		\$63.60	\$33.39	\$6.40	\$6.56	\$6.72

These rate increases will allow the utility to cover the following obligations:

- All operating and maintenance expenditures, including cost increases related to inflation
- Critical capital projects as identified by the City (totaling \$3.8 million from 2018 to 2023)
- Reaching and maintaining a 120-day operating reserve by 2020
- Achieving a minimum capital reserve equivalent to 0.5 percent of the utility's fixed assets by 2021 (approximately \$100,000)
- Funding debt service and debt coverage requirements for \$2.8 million in new debt.
- Generating approximately \$115,000 in rate revenue for future capital projects beginning in 2020. By 2023, rate revenue would support approximately \$300,000 for capital projects.

It is recommended that the City revisit the study findings during the forecast period to check that the assumptions used are still appropriate and no significant changes have occurred that would alter the results of the study. The City should use the study findings as a living document, routinely comparing the study outcomes to actual revenues and expenses. Any significant or unexpected changes will require adjustments to the rate strategy proposed in this report.

Section VI. RATE MODEL SUMMARY

Combined Operating and Capital Activity	2018	2019	2020	2021	2022	2023
Annual Rate Increases: Above Currently Adopted Rates	0.00%	40.00%	15.00%	2.50%	2.50%	2.50%
Single-Family Residential Bill (\$ per month)	\$13.25	\$18.55	\$21.33	\$21.87	\$22.41	\$22.97
Combined Beginning Fund Balance	\$ 235,176	\$ 76,342	\$ 777,584	\$ 376,207	\$ 547,593	\$ 540,857
Rate Revenues (Before Rate Increases)	891,126	920,605	933,448	946,535	959,869	973,455
System Development Charge Revenue	-	-	-	-	-	-
Other Revenues	2,352	763	9,221	5,207	7,724	7,657
Rate Revenues: Additional from Rate Increases	-	368,242	569,404	615,484	663,755	714,316
Grants	174,000	25,000	25,000	25,000	25,000	25,000
Other Debt Proceeds	-	-	-	-	-	-
Revenue Bond Net Proceeds	-	1,800,000	-	1,000,000	-	-
Total Resources	1,302,654	3,190,952	2,314,657	2,968,433	2,203,941	2,261,285
Baseline Operating Expenditures	(958,512)	(1,064,720)	(1,056,332)	(1,087,395)	(1,119,463)	(1,152,574)
Existing Debt Service	-	-	-	-	-	-
New Debt Service	-	(144,527)	(144,527)	(224,820)	(224,820)	(224,820)
Additions to Reserve Requirement	-	-	-	-	-	-
Capital Projects	(267,800)	(1,204,122)	(737,591)	(1,108,626)	(318,800)	(149,257)
Total Expenditures	(1,226,312)	(2,413,368)	(1,938,450)	(2,420,841)	(1,663,083)	(1,526,651)
Ending Fund Balance	\$ 76,342	\$ 777,584	\$ 376,207	\$ 547,593	\$ 540,857	\$ 734,635
Combined Minimum Target Balance	407,573	446,695	448,449	464,970	477,096	488,717
Ending Total Days of Operating Expenditures	29	267	130	184	176	233

Capital Projects (inflated)	2018	2019	2020	2021	2022	2023
Surface Water Management Plan Update (including stormwater comprehensive plan update)	\$ 77,250	\$ 26,523	\$ 27,318	\$ 28,138	\$ 28,982	\$ 29,851
City Drainage Infrastructure Program/Spot Improvements	103,000	106,090	109,273	112,551	115,927	119,405
Edgewood Pothole Pilot Project Feasibility Assessment	72,100	328,879	87,418	-	-	-
Lake Chalet Pothole Flood Reduction Project (Pump to Ex-Gravity opt)	-	530,450	-	-	-	-
24th/112th Seasonal Ponding	15,450	169,744	-	-	-	-
108th Avenue East Neighborhood (8th to 16th)	-	42,436	273,182	67,531	-	-
108th Avenue E./36th St. E. Road Flooding	-	-	54,636	900,407	173,891	-
Flood Reduction Plan for Edgewood Pothole	-	-	185,764	-	-	-
Total	\$ 267,800	\$ 1,204,122	\$ 737,591	\$ 1,108,626	\$ 318,800	\$ 149,257

Notes:

- Highlighted rows in the table above are for emphasis only

Funds	2018	2019	2020	2021	2022	2023
OPERATING RESERVE						
Beginning Balance	\$ 235,176	\$ 76,342	\$ 156,705	\$ 346,295	\$ 357,272	\$ 367,805
plus: Net Cash Flow after Rate Increase	(65,034)	80,364	305,005	254,713	285,162	316,303
less: Transfer of Surplus to Capital Fund	(93,800)	-	(115,415)	(243,736)	(274,629)	(305,429)
Ending Balance	\$ 76,342	\$ 156,705	\$ 346,295	\$ 357,272	\$ 367,805	\$ 378,679
Minimum Target Balance: 120 days	\$ 315,127	\$ 348,229	\$ 346,295	\$ 357,272	\$ 367,805	\$ 378,679
Maximum Funds to be Kept as Operating Reserves: 120 days	\$ 315,127	\$ 348,229	\$ 346,295	\$ 357,272	\$ 367,805	\$ 378,679
Actual Days of Cash Operating Expenses Achieved	29 days	54 days	120 days	120 days	120 days	120 days
CAPITAL RESERVE						
Beginning Balance	\$ -	\$ -	\$ 620,879	\$ 29,912	\$ 190,320	\$ 173,053
plus: System Reinvestment Funding	-	-	-	-	-	-
plus: Transfers from Operating Fund	93,800	-	115,415	243,736	274,629	305,429
plus: Capital Grants / Contributions / Other Resources	174,000	25,000	25,000	25,000	25,000	25,000
plus: SDC Revenue Towards Capital	-	-	-	-	-	-
plus: Revenue Bond Proceeds	-	1,800,000	-	1,000,000	-	-
plus: Other Loans 1 Proceeds	-	-	-	-	-	-
plus: Other Loans 2 Proceeds	-	-	-	-	-	-
plus: DWSRF Loan Proceeds	-	-	-	-	-	-
plus: Interest Earnings	-	-	6,209	299	1,903	1,731
Total Funding Sources	\$ 267,800	\$ 1,825,000	\$ 767,503	\$ 1,298,947	\$ 491,853	\$ 505,212
less: Capital Expenditures	(267,800)	(1,204,122)	(737,591)	(1,108,626)	(318,800)	(149,257)
Ending Capital Fund Balance	\$ -	\$ 620,879	\$ 29,912	\$ 190,320	\$ 173,053	\$ 355,955
Minimum Target Balance	\$ 92,445	\$ 98,466	\$ 102,154	\$ 107,697	\$ 109,291	\$ 110,037
DEBT RESERVE						
Beginning Balance	\$ -	\$ -	\$ 144,527	\$ 144,527	\$ 224,820	\$ 224,820
plus: Reserve Funding from Operations	-	-	-	-	-	-
plus: Reserve Funding from New Debt	-	144,527	-	80,293	-	-
less: Use of Reserves for Debt Service	-	-	-	-	-	-
Ending Balance	\$ -	\$ 144,527	\$ 144,527	\$ 224,820	\$ 224,820	\$ 224,820
Minimum Target Balance	\$ -	\$ 144,527	\$ 144,527	\$ 224,820	\$ 224,820	\$ 224,820
SUMMARY						
Combined Beginning Balance	\$ 235,176	\$ 76,342	\$ 922,111	\$ 520,734	\$ 772,412	\$ 765,677
Plus: Inflows	\$ 202,766	\$ 2,049,891	\$ 451,629	\$ 1,604,040	\$ 586,694	\$ 648,462
Less: Outflows	\$ (361,600)	\$ (1,204,122)	\$ (853,006)	\$ (1,352,362)	\$ (593,430)	\$ (454,685)
Combined Ending Balance	\$ 76,342	\$ 922,111	\$ 520,734	\$ 772,412	\$ 765,677	\$ 959,454
Net Change in Reserves	\$ (158,834)	\$ 845,769	\$ (401,377)	\$ 251,678	\$ (6,735)	\$ 193,777
TOTAL AVAILABLE CASH TEST: DAYS OF O&M						
Actual Operating & Capital Ending Balance	\$ 76,342	\$ 777,584	\$ 376,207	\$ 547,593	\$ 540,857	\$ 734,635
Actual Ending Total Days of O&M	29 days	267 days	130 days	184 days	176 days	233 days
Target: 150 Days of O&M	\$ 393,909	\$ 437,556	\$ 434,109	\$ 446,874	\$ 460,053	\$ 473,661

Notes:

- Cells highlighted in red denote ending fund balances that are below financial policy targets

ORDINANCE NO. 24-0xxx

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF EDGEWOOD, PIERCE COUNTY, WASHINGTON, RELATING TO ANNUAL SERVICE CHARGES FOR THE SURFACE WATER UTILITY; AMENDING EMC 13.10.070; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE

WHEREAS, the City of Edgewood has established a storm drainage and surface water management utility under Chapter 13.10 Edgewood Municipal Code (EMC), and has codified regulations governing the calculation, assessment, collection, credit, and administration of such charges therein; and

WHEREAS, following review of the financial analysis prepared by FCS Group for the 2018 Comprehensive Surface Water Management Plan, staff has updated the rate model to reflect current conditions and capital plans; and

WHEREAS, in an effort to maintain an annual service charge that is not eroded by the effects of inflation, staff recommends updating EMC 13.10.070 to facilitate an annual update based on the regional Consumer Price Index (CPI); and

WHEREAS, the City Council reviewed the proposed code amendment at their study sessions held on May 7, 2024, May 21, 2024, and June 4, 2024; and

WHEREAS, a public hearing was held on May 28, 2024 regarding annual service charges for the Surface Water Utility, where all interested persons were given an opportunity to be heard, and any written comments were received and considered; and

WHEREAS, the City Council considered the proposed code amendment at their regular meetings held on May 28, 2024 and June 11, 2024;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EDGEWOOD, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. Findings. The recitals above are hereby adopted as legislative findings in support of this ordinance. The City Council further adopts by reference the previously held study session agenda bill of May 7, 2024 as an additional finding.

Section 2. EMC Section 13.10.070(A), Amended. EMC Section 13.10.070(A) is hereby amended as follows:

- A. Annual service charges for all parcels shall be as set forth in the city of Edgewood fee schedule. Said annual service charges shall be automatically updated for inflation annually using the following procedures:

1. The Public Works Director shall use the Seattle-Tacoma-Bellevue Consumer Price Index for all urban consumers (CPI-U) for the last 12 months (June-June) published by the United States Bureau of Labor Statistics to calculate annual inflation adjustments in the annual service charge. The charge shall not be adjusted for inflation if the index remains unchanged.
2. The indexed annual service charge shall be effective January 1 beginning in 2025, and on January 1 of each year thereafter. A copy of the indexed annual service charge shall be provided to the City Council each September, but the indexed annual service charge shall become effective without further Council action.

Section 3. Severability. If any section, sentence, clause or phrase of this ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this ordinance.

Section 4. Effective Date. A summary of this Ordinance consisting of its title shall be published in the official newspaper of the City and shall take effect and be in full force five (5) days after the date of final passage.

PASSED BY THE CITY COUNCIL ON THE 11TH DAY OF JUNE, 2024

Dave Olson, Mayor

ATTEST/AUTHENTICATED:

Rachel Pitzel, CMC
City Clerk

APPROVED AS TO FORM:

NAME, City Attorney

Date of Publication: June 13, 2024
Effective Date: June 18, 2024