



GRANITE FALLS WASHINGTON
GATEWAY TO THE MOUNTAIN LOOP

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The Granite Falls City Council will hold an in person and online meeting in the Civic Center at 7:00 PM on April 12, 2023. Information is above for joining the meeting by telephone. You can also join by computer at the Zoom meeting link:<https://us06web.zoom.us/j/83781636020>

CITY OF GRANITE FALLS

NOTICE OF WORK SESSION OF GRANITE FALLS CITY COUNCIL

NOTICE IS HEREBY GIVEN THAT a work session will be held by the City Council of the City of Granite Falls on **WEDNESDAY, APRIL 12, 2023, AT 7:00 PM**, in the City Hall, Council Chambers, 215 S. Granite Avenue, Granite Falls, WA, 98252.

AGENDA GRANITE FALLS CITY COUNCIL WORK SESSION MEETING

Work Session
April 12, 2023
7:00 PM

City Hall, Council Chambers,
215 S. Granite Avenue,
Granite Falls, WA, 98252

- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. NEW BUSINESS:**
 - A. City Water Usage Analysis**
 - B. Discussion of FCS Group Water and Wastewater Rate Study Draft Final Report**
- 4. CURRENT BUSINESS:**
- 5. ADJOURNMENT**

The City of Granite Falls strives to provide access and services to all members of the public.

**Notice - All Proceedings of this meeting are sound recorded
Except Executive Sessions.**



Agenda Bill # AB###-2023

CITY COUNCIL AGENDA BILL

Subject:

City Water Usage Analysis

Meeting Date: Wednesday, April 12, 2023

Date Submitted: April 7, 2023

Originating Department: City Treasurer

Action Required:

Discussion only

Clearances:

☒ Mayor

☒ Police

☒ Public Works

☒ Attorney

Exhibits:

[City Water Usage Analysis](#)

☒ Engineering

☒ Planning

☒ Other: Finance, City Manager, and Public Works

Budgeted Amount:

NA

Summary Statement:

City Water Rate Analysis

Background:

Recommended Motion:

Discussion Only



City Water Usage Analysis

April 1, 2023 – March 31, 2023

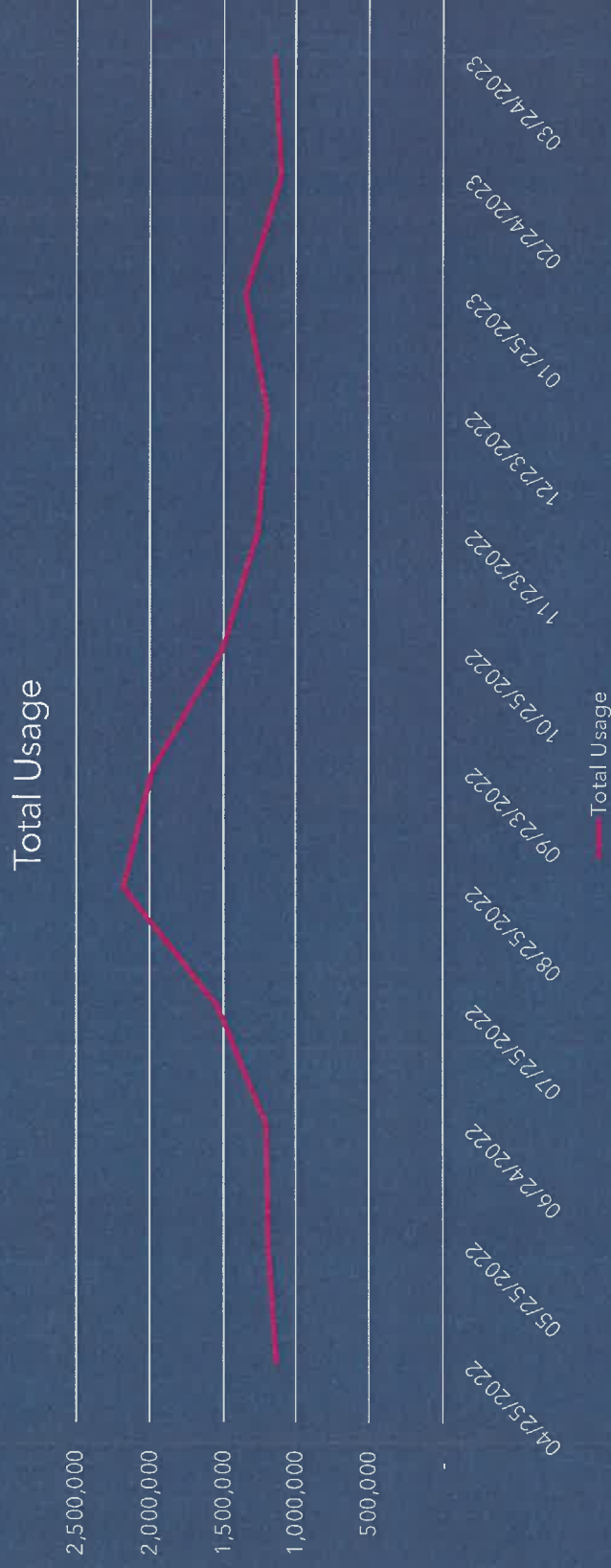
City Water Usage Analysis - Assumptions

- Reviewed all water usage March 25, 2022 - March 24, 2023
- Remove all accounts with zero usage
- Remove PUD Direct Reads - Insignificant
- Senior/Disability Accounts = 38
- Review Seasonality - Slide 4
- Review Category Distribution - Slide 5 - 6

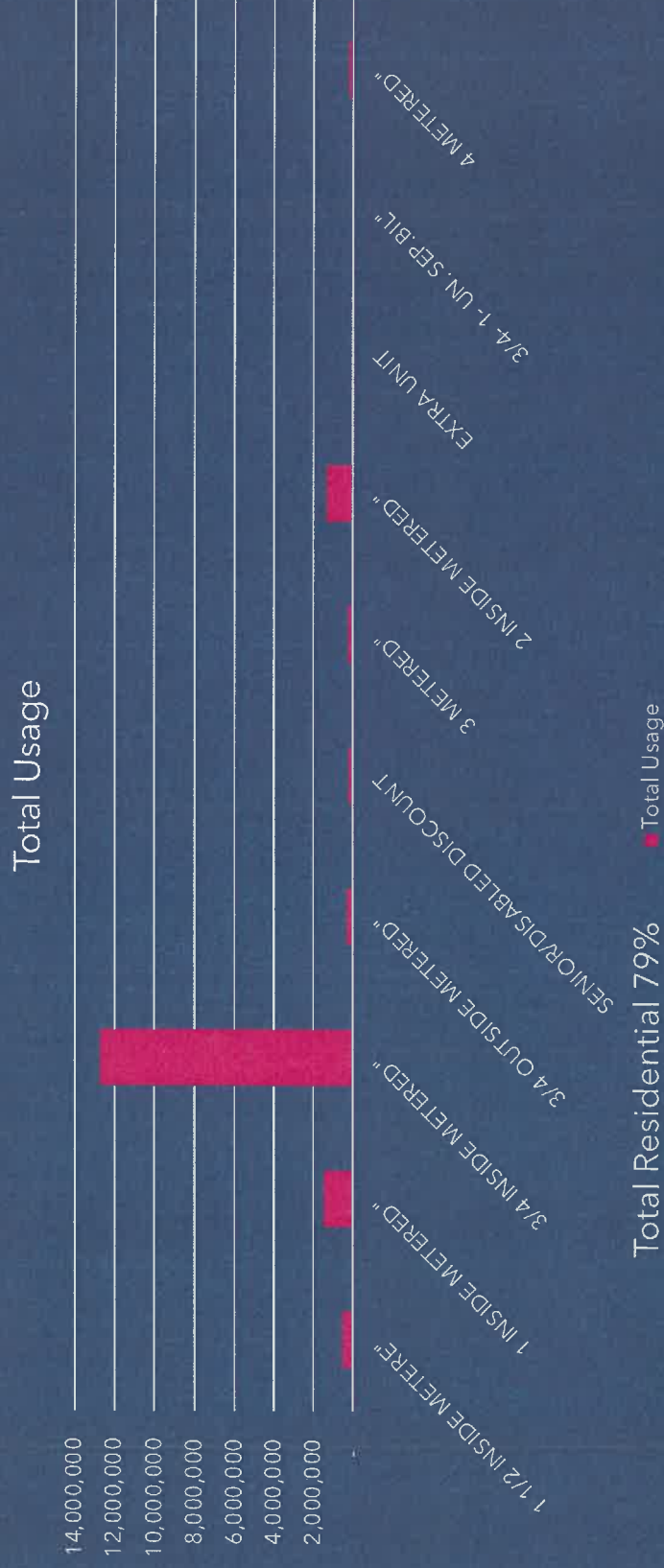
City Water Usage Analysis - Definitions

- PUD Direct Reads
- 1 1/2 INSIDE METER (Lift Station, Church, Business)
- 1 INSIDE METERED (Fire Station, Business, Church)
- 3/4 INSIDE METERED = 5/8" Meter (Residential, Business, City)
- 3/4 OUTSIDE METERED = 5/8" Meter (Residential)
- SENIOR/DISABLED DISCOUNT = 5/8" Meter (Residential, Business)
- 3 METERED" (Apartments, Telecommunications Business)
- 2 INSIDE METERED" (Apartments, Grocery Store, WWTP, School
- EXTRA UNIT (Auto Parts Business)
- 3/4- 1- UN. SEP.BIL" (Autobody Business)
- 4 METERED" (Highschool)

City Water Usage Analysis - Seasonality

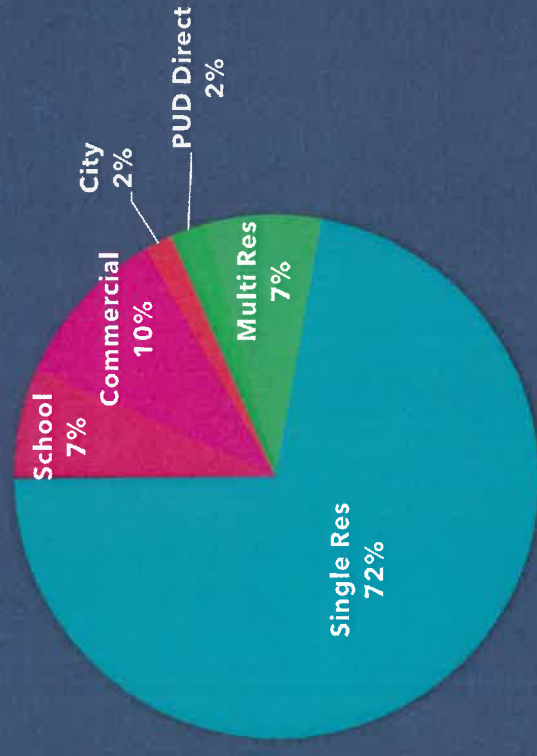


City Water Usage Analysis - Category Distribution



City Water Usage Analysis - Category Distribution

TOTAL USAGE



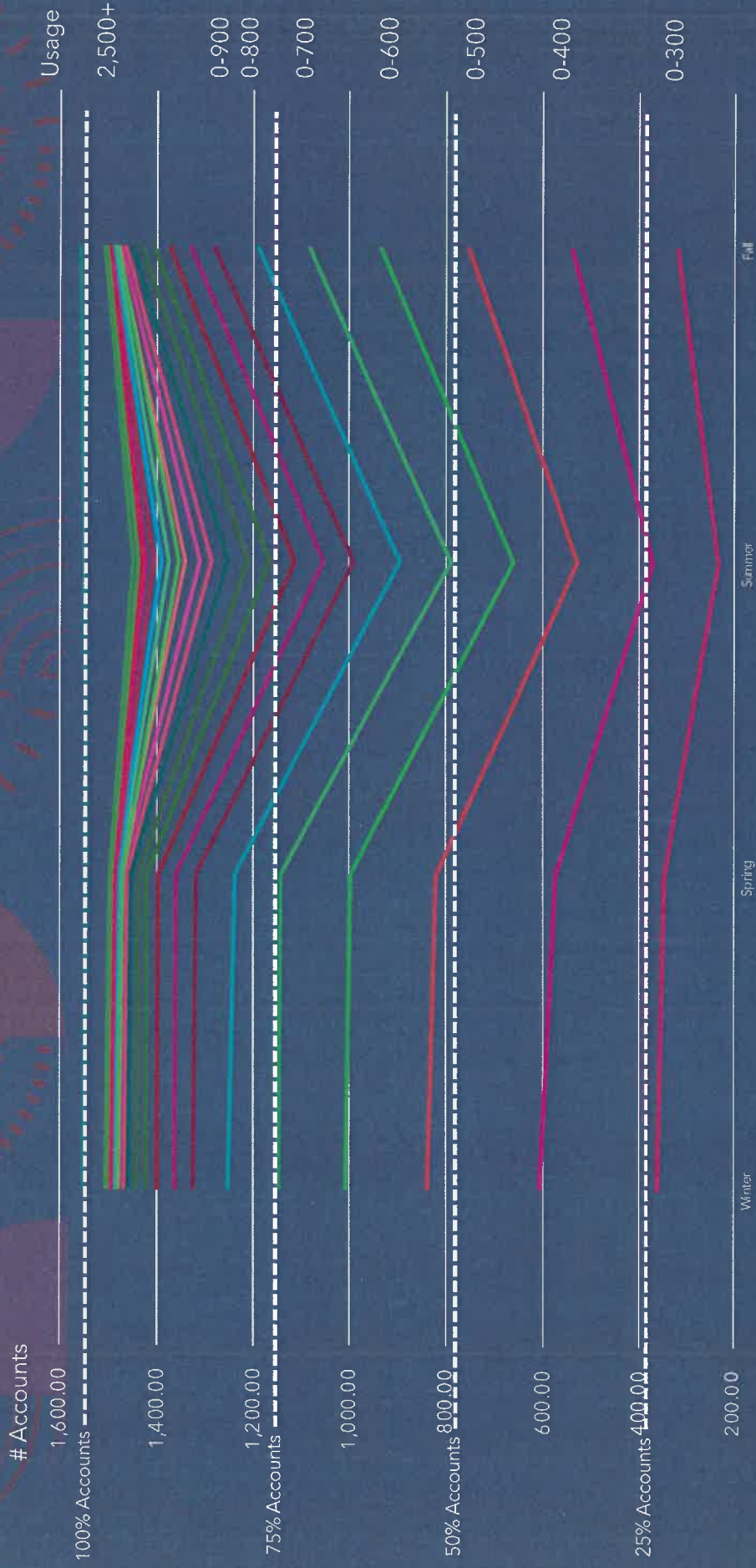
City Water Usage Analysis - Residential

- March 2023 5/8 Accounts = 1,524 (1,416 Residential)
- March 2023 Senior/Disabled Accounts = 38
- Seasonality by Usage Slide 8-9

City Water Usage Analysis - Seasonality



City Water Usage Analysis - Seasonality

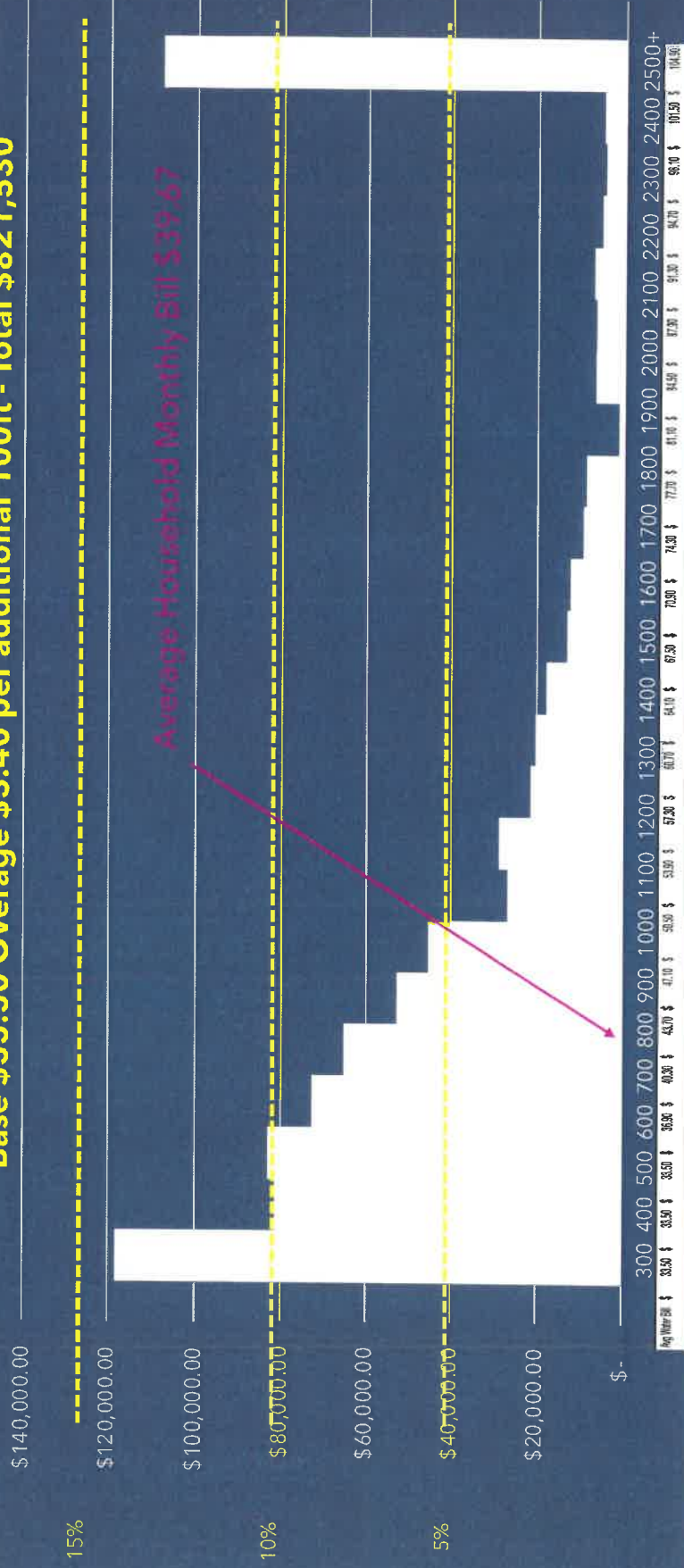


City Water Usage Analysis - Residential

- April 2022 - March 2023 Residential Accounts = \$821,530
- Water Sales @ 500 ft³ by Usage Slide 11
- Water Sales @ 400 ft³ by Usage Slide 12

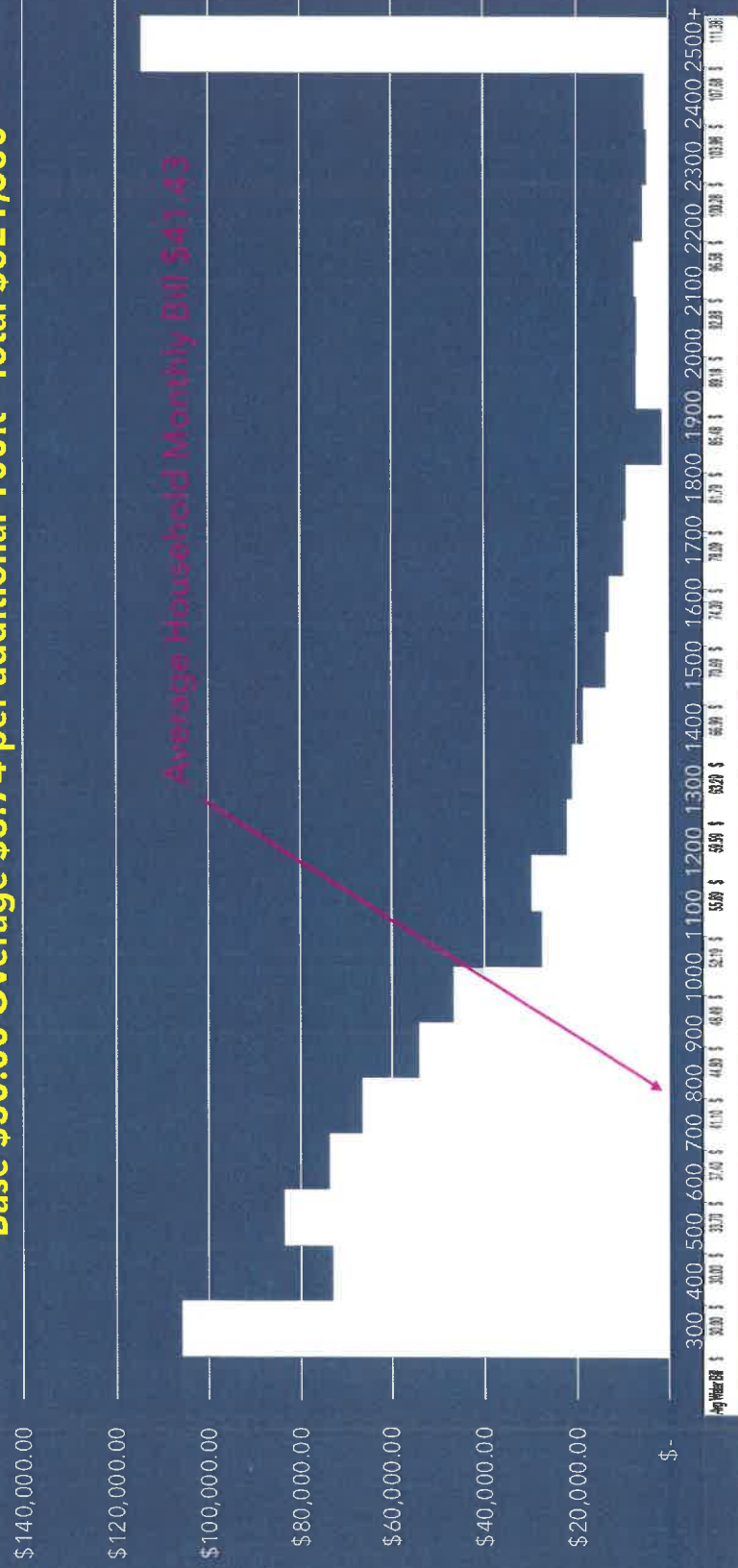
City Water Usage Analysis - Water Sales by Usage @ 500ft³

Base \$33.50 Overage \$3.40 per additional 100ft³ - Total \$821,530



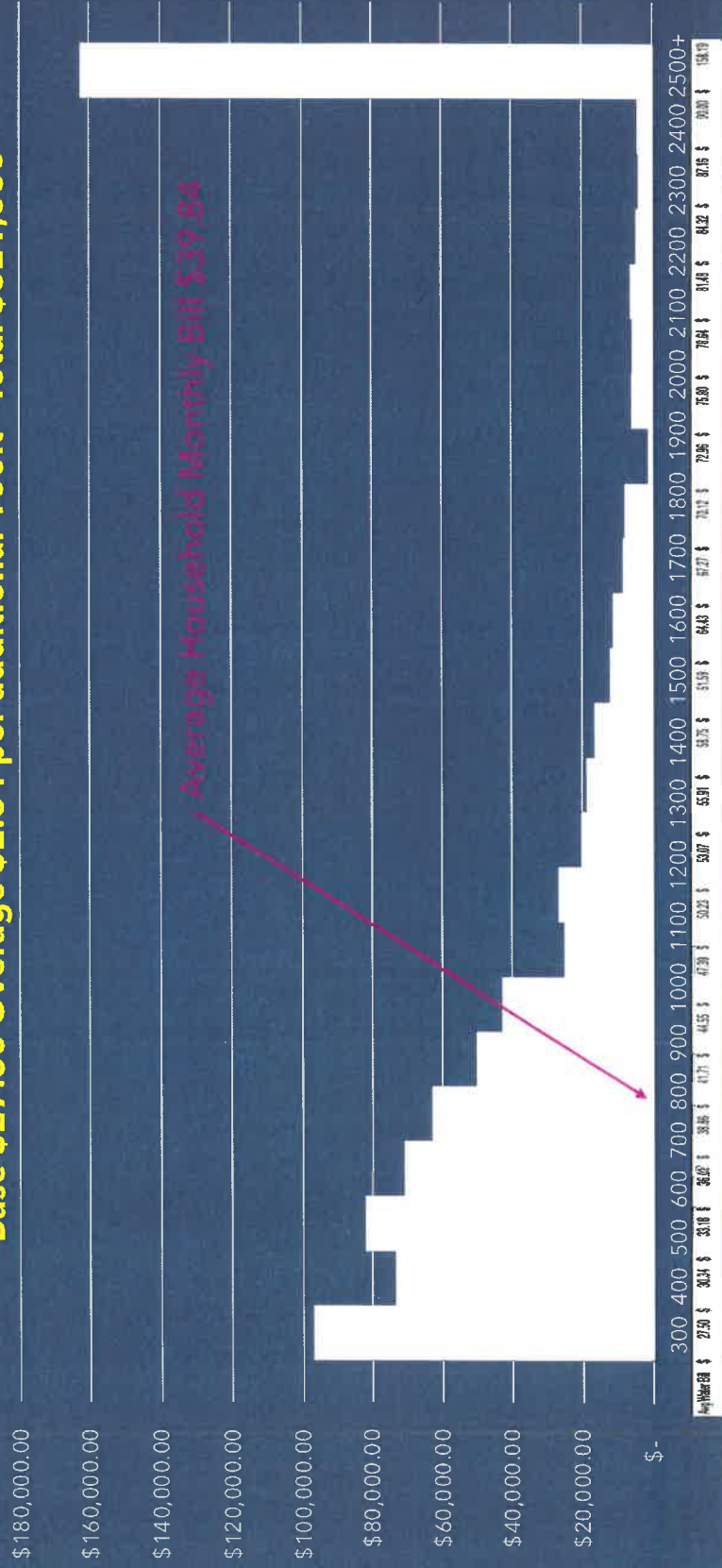
City Water Usage Analysis - Water Sales by Usage @ 400ft³

Base \$30.00 Overage \$3.74 per additional 100ft³ - Total \$821,530



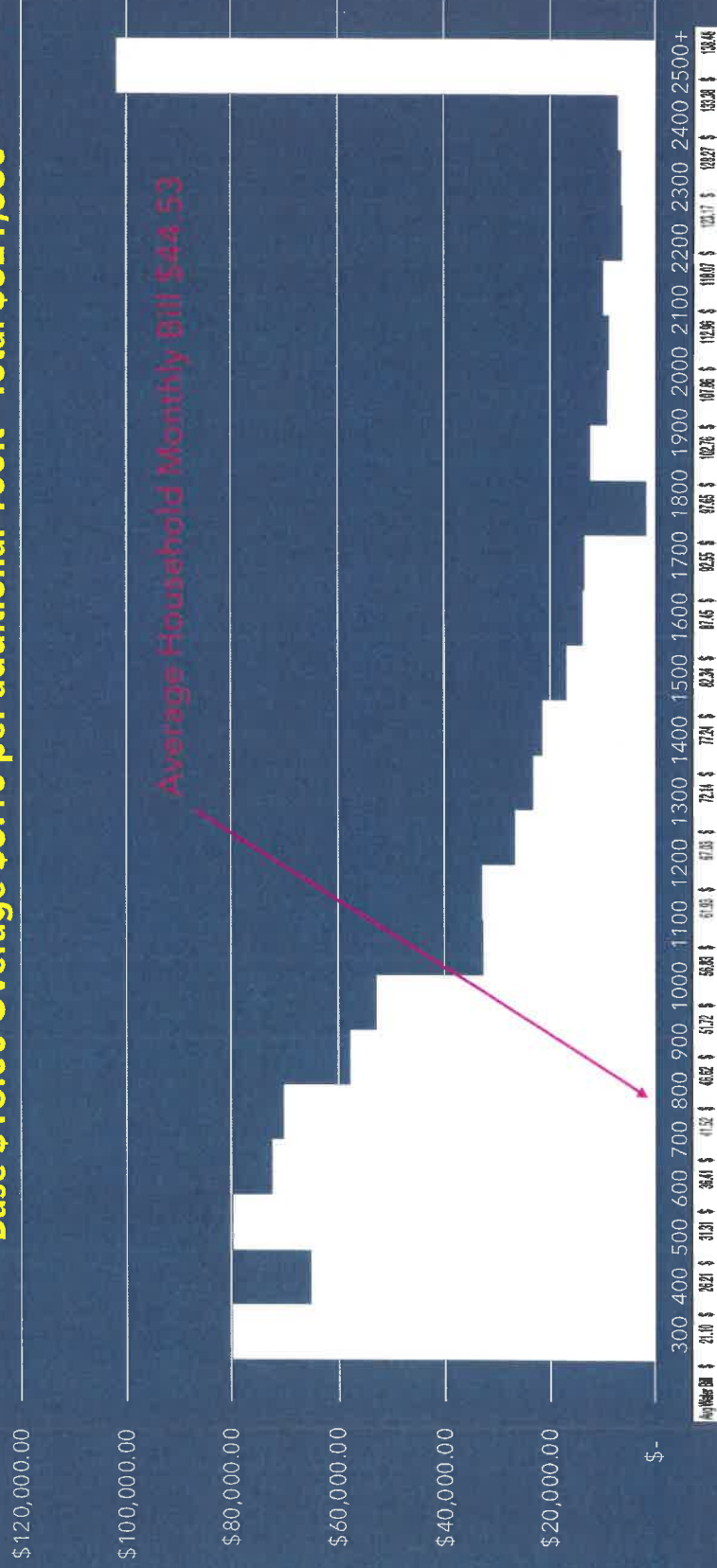
City Water Usage Analysis - Water Sales by Usage @ 300ft³

Base \$27.50 Overage \$2.84 per additional 100ft³ - Total \$821,530



City Water Usage Analysis - Water Sales by Usage @ 200ft³

Base \$16.00 Overage \$5.10 per additional 100ft³ - Total \$821,530



City Water Usage Analysis - Staff Recommendations

- Maintain Base Rate at 500 ft³
- Relook Senior/Disability/Low-Income Discount



Agenda Bill # _____

CITY COUNCIL AGENDA BILL

Subject:

Discussion of FCS Group Water and Wastewater Rate
Study Draft Final Report

Meeting Date: Wednesday, April 12, 2023

Date Submitted: 4/7/23

Originating Department: City Manager

Action Required:

Discussion of Draft Report from FCS Group on Water and
Wastewater Rates prior to finalizing report

Clearances:

☐ Mayor

☐ Police

☒ Public Works

☐ Attorney

Exhibits:

[FCS Group Water& Wastewater Rate Study - Draft](#)

☒ Engineering

☐ Planning

☐ Other: _____

Budgeted Amount:

N/A

Summary Statement:

The FCS Group has provide a draft of the final report with results from the Water and Wastewater Rate Study. Discussion should focus on how to treat existing infrastructure and facilities for the purposes of setting General Facility Charge Rates for Water and Sewer. (i.e. Should the City include donated facilities built by developers as part of the equation to develop the mitigation fees charged to new development to replace infrastructure over time). The majority of the findings in the report have been covered in previous meetings and the attached report is ready to be finalized. The only topic of discussion that was not resolved related to rate setting related to the maximum amount that could be charged for a sewer general facility charge for new construction. This discussion should provide staff with guidance on how to handle that fee before finalizing the report.

Background:**Recommended Motion:**

Discussion only

City of Granite Falls

WATER AND WASTEWATER RATE STUDY

DRAFT REPORT

February 2023

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FCS GROUP

Solutions-Oriented Consulting

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Section I. INTRODUCTION

PURPOSE

FCS GROUP was engaged by the City of Granite Falls (“City”) to conduct a rate study for the City’s water and wastewater utilities. The purpose of the study was to develop a rate forecast and financial plan targeting stability and revenue sufficiency for 2022 – 2041 with a particular focus on the 2022 – 2025 study period.

APPROACH

The methods used to complete the study are based on analytical principles that are generally accepted and widely followed throughout the industry – rates and charges should generate enough revenue to maintain self-supporting and financially viable utilities.

Throughout the study, we worked with the City to arrive at rate conclusions that meet forecasted utility financial obligations, achieve City goals and policies, comply with legal requirements, and adhere to industry best practices. Meetings were held with City staff to validate input parameters, review interim findings and receive policy direction.

SCOPE

The scope of the project included the following key elements:

- Project revenue based on historical usage behavior, growth, and anticipated changes in water demands.
- Develop a capital funding analysis that balances available funding from rate revenue, general facility charges (GFCs), reserve funds and use of debt.
- Establish a sustainable, multi-year financial management plan that meets the projected total financial needs of each utility through the generation of sufficient and sustainable revenue.
- Design a water rate that determines how the target level of revenue will be generated (fixed v. variable charges) from each customer class and considers both the level (amount of revenue that must be generated) and structure (how the revenue will be collected).
- Update the City’s water and wastewater utility general facility charges.

The methodology, key factors, conclusions and recommendations for each of the key task areas of the study are summarized in this executive level report. The full technical analysis can be found in the detailed rate model provided to the City.

Section II. RATE STUDY METHODOLOGY

RATE SETTING PRINCIPLES AND METHODOLOGY

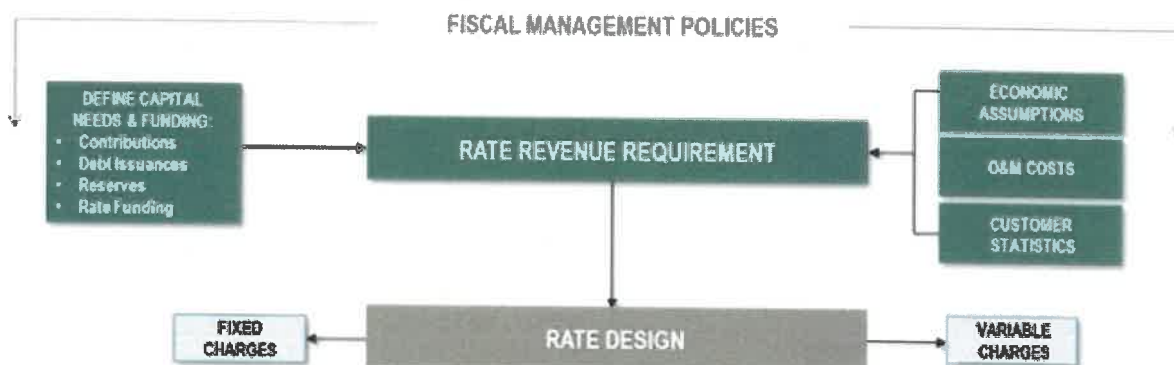
The methods used to establish user rates are based on principles that are generally accepted and widely followed throughout the industry. These principles are designed to produce rates that equitably recover costs from each class of customer by setting the appropriate level of revenue to be collected from ratepayers and establishing a rate structure to equitably collect those revenues.

Exhibit 2.1 illustrates the key components included as part of the rate study:

- **Revenue Requirement Analysis.** This analysis identifies the total revenue requirement to fully fund each system on a standalone basis, considering operating and maintenance expenditures, capital funding needs, debt requirements and fiscal policy objectives.
- **Rate Design Analysis.** This analysis includes the development of rates that generate sufficient revenue to meet each system's revenue requirement forecast and continue to address the City's pricing objectives (e.g. conservation and revenue stability).

Exhibit 2.1

Overview of the Rate Study Process



FISCAL POLICIES

The foundation for evaluating utility revenue needs consists of a set of fiscal policies. These policies, which can address a variety of topics including cash management, capital funding strategy, financial performance, and rate equity, are intended to promote long-term financial viability for the City's utilities.

Reserves

Reserves are a key component of any utility financial strategy, as they provide the flexibility to manage variations in costs and revenues that could otherwise have an adverse impact on ratepayers. 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. For the purpose of financial planning for the City's utilities, resources are separated into the following reserve categories:

- **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 the utility.

The City currently has a total cash target of 548 days of O&M expenses for the water utility and 730 days of O&M expenses for the sewer utility. This target is intended to cover both operating and capital requirements. While the analysis tracked operating and capital activities separately, the total combined cash was used for the measure of policy compliance.

- **Construction Reserve.** A construction reserve is an amount of cash set aside in case of an emergency should a piece of equipment or a portion of the utility's infrastructure fail unexpectedly. The reserve can also be used for other unanticipated capital needs including capital project cost overruns. Industry practices range from maintaining a balance equal to 1.00 to 2.00 percent of fixed assets, an amount equal to a 5-year rolling average of CIP costs, or an amount determined sufficient to fund equipment failure (other than catastrophic failure). The final target level should balance industry practice with the risk level of the City.

As discussed above, the City maintains a total cash target for each utility. The construction reserve was modeled to track capital activity only.

- **Debt Reserve.** Bond covenants often establish reserve requirements as a means of protecting against the risk of nonpayment. A common reserve requirement is one year's debt service payment. The balance held in reserve for a particular debt instrument may be used to make the final payment on that debt instrument. The City must continue to fully fund such reserves as required by bond covenant or loan agreement. Since the debt reserve provides a static reserve against inability to pay, it is unnecessary to maintain operating reserves against debt repayment.

A debt reserve equal to one year's debt service is assumed for any new revenue bonds projected as part of this study.

System Reinvestment (Rate Funded Capital)

A utility's infrastructure (e.g., lift stations, treatment plant, collection pipes, distribution pipes, etc.) is a critical element of serving the City's customers. Establishing a financial plan for the eventual replacement of these assets ensures system reliability and integrity over time. This practice is known as system reinvestment funding. In the absence of a formal asset management plan, target system reinvestment funding levels are commonly linked to annual depreciation expense. Depreciation expense is a measure of the decline in asset value associated with routine use of the system.

Particularly for utilities that do not already have an explicit system reinvestment policy in place, implementing a funding level based on full depreciation expense could significantly impact rates. A common alternative benchmark is annual depreciation expense net of debt principal payments on

outstanding debt. This approach recognizes that customers are still paying for certain assets through the debt component of their rate and intends to avoid simultaneously charging customers for an asset and its future replacement. The specific benchmark used to set system reinvestment funding targets is a matter of policy that must balance various objectives including managing rate impacts, keeping long-term costs down, and promoting “generational equity” (i.e. not excessively burdening current customers with paying for facilities that will serve a larger group of customers in the future).

The City does not have a formal policy regarding system reinvestment funding. This study utilizes cash flow after O&M and annual debt service to pay for capital in place of a formal system reinvestment policy.

Debt Management

Debt financing is a viable 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 improves intergenerational equity – also referred to as “pay-as-you-use” because future customers who use the assets are the ones paying for them. However, debt should not be relied on too heavily as 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 issued debt, the debt service needs to be paid in good times or bad. While debt is a useful part of the capital funding toolbox, it needs to be monitored to ensure that the system does not become too heavily dependent on it. A debt service coverage ratio was utilized to evaluate the City’s debt levels.

- **Debt Service Coverage.** Debt service coverage is typically a requirement associated with revenue bonds and some State loans and is a financial measure assessing the ability to repay debt.

A typical minimum coverage requirement for utility revenue bonds is 1.25. If the City issues debt, the coverage requirements essentially require that the City collect enough revenue to meet operating expenses and not only pay debt service but collect an additional 25 percent above the bonded debt service payment. The extra revenue is a cushion that assures bondholders that the City has the financial resources to meet its debt service obligations. This study assumes 1.25 as the minimum target for revenue bond debt service coverage. Achieving a bonded debt service coverage level greater than the minimum required level is a positive signal to bond rating agencies and can result in more favorable terms when the City enters the market for revenue bonds.

REVENUE REQUIREMENT ANALYSIS

A revenue requirement analysis forms the basis for a long-range financial plan and multi-year rate management strategy for each system. It also enables the City to set utility rate structures which fully recover the total cost of operating each system: capital improvement and replacement, operations, maintenance, general administration, fiscal policy attainment, cash reserve management, and debt repayment. Linking rate levels to a financial plan such as this helps to enable sound financial performance for the City’s utility enterprise funds, as well as a clear and reasonable relationship between the costs imposed on utility customers and the costs incurred to provide the service.

A revenue requirement analysis includes the following core elements to form a complete portrayal of the utility’s financial obligations.

- **Fiscal Policy Analysis.** Identifies formal and informal fiscal policies of the City to ensure that current policies are maintained, including reserve levels, capital/system replacement funding and debt service coverage.
- **Capital Funding Plan.** Defines a strategy for funding the City's capital improvement/equipment replacement program, including an analysis of available resources from rate revenues, debt financing, and any special resources that may be readily available (e.g., grants, outside contributions, etc.).
- **Operating Forecast.** Identifies future annual non-capital costs associated with the operation, maintenance, and administration of the system.
- **Sufficiency Testing.** Evaluates the sufficiency of revenues in meeting all financial obligations, including any coverage requirements associated with long-term debt.
- **Strategy Development.** Designs a forward-looking strategy for adjusting rates to fully fund all financial obligations on a periodic or annual basis over the projections period.

RATE DESIGN

The principal consideration of rate design is for the rate structure to generate sufficient revenues for the system which are reasonably commensurate with the cost of providing service. The pricing structure is largely dictated by the objectives of the system. Most rate designs consist of fixed and variable charges. Fixed charges generate a predictable revenue stream while variable charge revenues will fluctuate with a change in user demand.

Section III. WATER UTILITY

INTRODUCTION

The City of Granite Falls receives its water supply from Snohomish County PUD. From there, it provides water to customers through the Granite Falls water system to its population of approximately 4,300. The existing facilities in the City's water system include four master meters, approximately 32 miles of distribution system pipes, 195 fire hydrants, and 519 valves.

REVENUE REQUIREMENT

A revenue requirement analysis forms the basis for a long-range financial plan and multi-year rate management strategy. The analysis is developed by completing an operating forecast that identifies future annual operating costs and a capital funding plan that defines a strategy for funding the capital improvement needs of the City.

Operating Forecast

The purpose of the operating forecast is to determine whether the existing rates and charges are sufficient to recover the costs the City incurs to operate and maintain the water system. The 2021 actuals formed the baseline for this forecast. The operating forecast was developed for the 2022 through 2041 time period, with a rate setting implementation focus period of 2022 through 2025. The following list highlights some of the key assumptions used in the development of the water utility operating forecast.

Reserves

- **Total Cash Reserves.** As discussed in *Section II Rate Study Methodology* a minimum of 548 days of operating and maintenance (O&M) expenses (\$1.6M - \$1.7M) is maintained for the City's water utility.

Operating Revenue

- **Retail Rate Revenue.** Based on actual detailed customer accounts and usage statistics from the City's billing system. Usage data from 2021 was used to project 2022 and future periods.
- **Non-rate Revenue.** Non-rate revenue consists of interest earned on unused reserve balances, installations, reconnection fees, inspections, and late fees.
- **General Fund Transfers.** In 2022, the water utility is budgeted to receive a transfer from the City's General Fund equal to half of the amount of the City Utility Tax. Based on discussions with City staff, it was assumed that this practice will continue during each year of the study period.
- **Customer Growth.** Due to the current development moratorium associated with the construction of the City's wastewater treatment plant, no new growth was assumed from 2022 through 2024. Growth in 2025 was assumed at 2.50 percent, or 49 new connections.

- **Interest Earnings.** The rate used to calculate annual interest earnings on unused fund balances during the study period ranged from 0.15 percent to 0.90 percent per year, based on discussions with City staff.

O&M Expenses

- **General Cost Inflation.** 2.50 percent per year based on discussions with City staff.
- **Labor Cost Inflation.** 4.00 percent in 2023 & 2024 and 3.00 percent thereafter based on staff input.
- **Benefit Cost Inflation.** 1.00 percent in 2023 & 2024 and 2.50 percent thereafter based on discussions with City staff.
- **Professional Services.** 2.50 percent per year for all years, based on general cost inflation and staff input.
- **SPUD Purchased Water.** SPUD’s inflation was assumed to be based on the general cost inflation of 2.50 percent aside from 2022, in which SPUD’s rate was assumed to increase by 4.00 percent.
- **Construction Cost Inflation.** 3.00 percent per year based on discussions with City staff.
- **State Excise Taxes.** Public utility excise tax is 5.029 percent on all water rate revenue.
- **State B&O Tax.** 1.75 percent on all non-rate revenue and connection charge revenue.
- **City Utility Tax.** 20 percent on all rate revenue.

Debt Service

- **Existing Debt.** The water utility currently has one outstanding public works trust fund (PWTF) loan reaching maturity in 2026. Annual debt payments on the outstanding bond ranges from \$26,000 to \$27,500 throughout the forecast. Annual debt service averages \$26,900 throughout the four-year rate setting period.
- **New Debt.** No new debt is forecasted to fund the capital program over the study period.

System Reinvestment

System reinvestment funding ensures system integrity through reinvestment in the system. As discussed in *Section II Rate Study Methodology*, the City does not have a formal policy regarding system reinvestment. The study utilizes remaining cash flow after O&M and annual debt service to pay for capital in place of a dedicated funding component for annual system reinvestment.

Capital Funding Plan

The water utility is anticipating \$1.0 million in capital costs escalated to the year of construction from 2022 to 2025. The projects include well rehabilitation, pipe installation, pole building, and meter replacement. Once the capital is identified, a capital funding plan defines a strategy for funding the CIP considering available funding sources such as cash balances (including interest), general facility charge revenue, cash flow from operations, and new debt proceeds (if needed).

Exhibit 3.1 provides a summary of the funding sources for the capital expenditures. The full capital plan can be found in the detailed rate model provided to the City.

Exhibit 3.1
Water Capital Funding Summary

Capital Funding Summary	2022	2023	2024	2025	Total
Capital Project Costs	\$ 28,000	\$ 196,267	\$ 768,187	\$ 28,138	\$ 1,020,591
Funding Sources					
Cash/Reserves	\$ -	\$ 119,598	\$ 719,270	\$ -	\$ 838,868
Debt Proceeds	-	-	-	-	-
GFC Revenue	10,000	-	-	21,378	31,378
Capital Surcharge	15,615	70,185	39,360	-	125,160
Interest Earnings	2,385	6,483	9,558	6,760	25,186
Total Funding Sources	\$ 28,000	\$ 196,267	\$ 768,187	\$ 28,138	\$ 1,020,591

Summary of Revenue Requirement

The operating forecast components of O&M expenses, rate funded capital, and debt come together to form the multi-year revenue requirement. The revenue requirement compares the overall revenue available to the water system to the expenses to evaluate the sufficiency of rates on an annual basis.

Exhibits 3.2 and 3.3 provide a summary of the water system revenue requirement findings.

Exhibit 3.2
Water Utility Revenue Requirement Summary

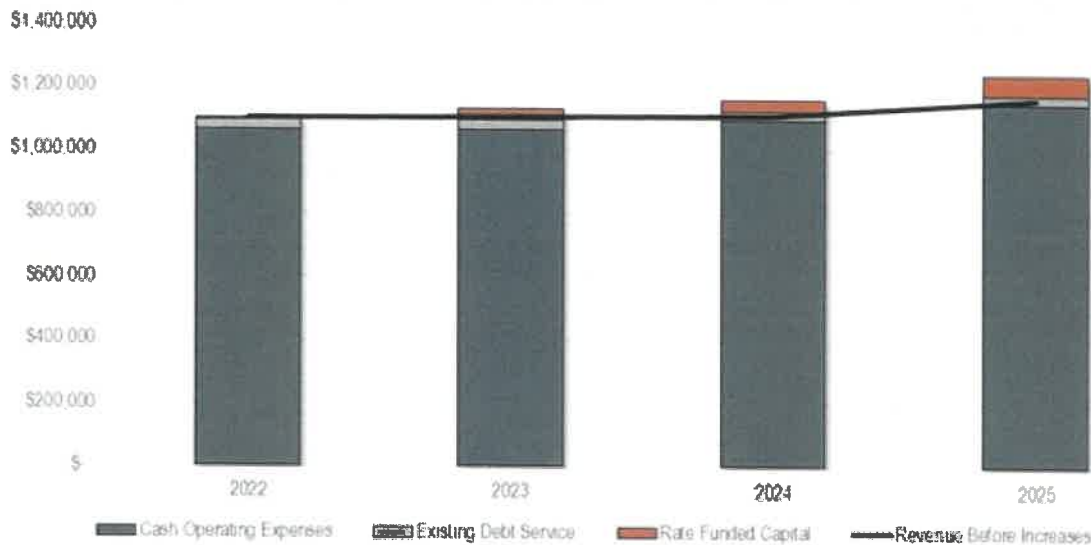
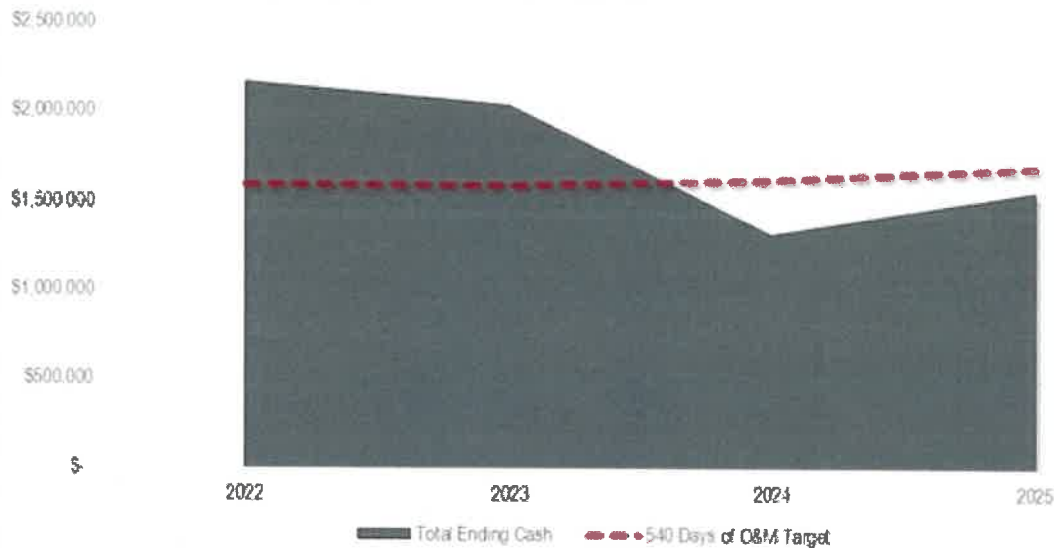


Exhibit 3.3
Water Utility Total Ending Cash Reserve Summary



Summary of water revenue requirement:

- Starting in 2025, rate revenues are insufficient in meeting annual debt service expenses. Without rate adjustments, projected ending cash reserves would fall to 437 days of O&M expenses in 2024.
- Based on discussion with City staff, two alternatives were developed for Council consideration in order to fund the ongoing obligations within the rate setting period.
 - » Alternative one focused on level annual increases of 2.50 percent from 2023 through 2025.
 - » Alternative two staggered the increases on a bi-annual basis starting with a 4.43 percent increase in 2023 followed by a 2.50 percent increase in 2025.
 - » No new debt issuances were assumed over the entire study period for either alternative.
- The Council selected to move forward with alternative two, biannual increases starting in 2023 through 2025.

RATE DESIGN

The principal objective of the rate design stage is to implement water rate structures that collect the appropriate level of revenue. Establishing rates is a blend of “Art” and “Science” and especially so when it comes to the rate levels and structures. Several variables must be balanced to arrive at optimal rates. The results of the revenue requirement analysis were used to develop new water rate alternatives to recover the projected revenue from customers.

Existing Water Rates

The existing water rates are composed of a fixed monthly charge, which includes an allowance of consumption, and a variable charge per hundred cubic feet (CCF) for all water usage above their

allowance, scaling with meter size. The base fee also escalates relative to meter size. Charges are the same for all customer classes of service. Other highlights of their existing rate schedule include:

- The City offers a low-income rate, which is based on 70 percent of residential fixed and variable charges.
- An additional fee per unit is applied to multi-unit properties.
- The City charges an outside city multiplier of approximately 1.29 times the inside city rate. This multiplier is applicable only to the base fee.

Exhibit 3.4 provides a summary of the existing monthly water utility rates.

Exhibit 3.4
Existing Monthly Water Rates

Rates	Allowance (ccf)	Base Fee (\$/mo./acct.)	Tier 2 Volume Fee (\$/ccf)
Inside City			
5/8" - Discount	5	\$ 22.40	\$ 2.28
5/8"	5	32.00	3.26
1"	9	42.13	3.26
1.5"	29	80.33	3.26
2"	54	150.87	3.26
2.5"	90	237.08	3.26
3"	125	323.29	3.26
3.5"	125	384.29	3.26
4"	125	445.04	3.26
Per Additional Unit	4	20.80	3.26
Outside City			
5/8"	5	\$ 41.14	\$ 3.26
Per Additional Unit	4	20.80	3.26

Proposed Water Rates

Several rate structure options were evaluated and presented to Council including modifications to the allowances. The options discussed were:

- Maintain existing rate structures, including allowances, and apply the increases on an “across-the-board” basis, equally for the fixed and variable charges.
- Reduce the base allowance from five hundred cubic feet to four hundred cubic feet. All other allowances would be reduced proportionally.
- Reduce the base allowance from five hundred cubic feet to three hundred cubic feet. All other allowances would be reduced proportionally.

The Council decided to move forward with the first option, maintaining the existing rate structure and allowances and applying the increase on an across-the-board basis. **Exhibit 3.5 & 3.6** provides a summary of the proposed base and variable charges for the study period.

Exhibit 3.5
Proposed Monthly Water Base Rates

Description	Allowance (ccf)	Existing	2023	2024	2025
Inside City					
5/8" - Discount	5	\$ 22.40	\$ 23.45	\$ 23.45	\$ 24.04
5/8"	5	32.00	33.50	33.50	34.34
1"	9	42.13	44.10	44.10	45.20
1.5"	29	80.33	84.10	84.10	86.20
2"	54	150.87	157.94	157.94	161.89
2.5"	90	237.08	248.19	248.19	254.39
3"	125	323.29	338.44	338.44	346.90
3.5"	125	384.29	402.30	402.30	412.36
4"	125	445.04	465.90	465.90	477.55
Outside City					
5/8"	5	\$ 41.14	\$ 43.07	\$ 43.07	\$ 44.15
Per Additional Unit					
5/8" - Discount	4	\$ 14.56	\$ 15.24	\$ 15.24	\$ 15.62
All Other Customers	4	20.80	21.78	21.78	22.32

Note: 2023 5/8" base rate has been rounded to the nearest \$0.10

Exhibit 3.6
Proposed Monthly Water Volumetric Charges

Description	Existing	\$ /ccf		
		2023	2024	2025
All Customer Except Discount				
Allowance	\$ -	\$ -	\$ -	\$ -
All usage above allowance	3.26	3.40	3.40	3.49
Discount Customers				
Allowance	\$ -	\$ -	\$ -	\$ -
All usage above allowance	2.28	2.38	2.38	2.44

Section IV. WASTEWATER UTILITY

INTRODUCTION

The City of Granite Falls operates a wastewater collection and interception system serving a total of approximately 1,100 acres in the City and UGA. All of the wastewater collected by the City wastewater system is treated at a City owned and operated wastewater treatment plant. This facility meets standards for secondary treatment and discharges into the Pilchuck River in compliance with a National Pollution Discharge Elimination System (NPDES) permit issued by the State Department of Ecology (DOE). Approximately 12.5 miles of pipelines (8" to 12") and two lift stations make up the collection system.

REVENUE REQUIREMENT

Similar to the water utility, a revenue requirement was completed for the wastewater utility and forms the basis for the long-range financial plan and multi-year financial management strategy.

Operating Forecast

The purpose of the operating forecast is to determine whether the existing rates and charges are sufficient to recover the costs the City incurs to operate and maintain the wastewater system. The combination of 2021 actuals and 2022 budget formed the baseline for this forecast. The operating forecast was developed for the 2022 through 2041 time period with a rate setting implementation focus period of 2022 through 2025. The following list highlights some of the key assumptions used in the development of the wastewater utility operating forecast.

Reserves

- **Total Cash Reserves.** As discussed in *Section II Rate Methodology* a minimum of 730 days of operating and maintenance expenses (\$2.6M - \$2.8M) of total cash excluding any debt reserves required from new debt issuances is maintained for the City's wastewater utility.

Operating Revenue

- **Retail Rate Revenue.** Based on 2022 budget and customer growth.
- **Non-rate Revenue.** Non-rate revenue consists of interest earned on unused reserve balances, wastewater inspections, and late fees.
- **General Fund Transfers.** Based on discussions with City staff, it was assumed the wastewater utility will receive a transfer from the City's General Fund equal to half of the amount of the City Utility Tax. The study assumes this transfer will begin in 2023 and continue each year thereafter.
- **Customer Growth.** Due to the current development moratorium associated with the construction of the City's wastewater treatment plant, no new growth was assumed from 2022 through 2024. Growth in 2025 was assumed at 2.50 percent, or 47 new connections.

- **Interest Earnings.** The rate used to calculate annual interest earnings on unused fund balances during the study period ranged from 0.15 percent to 0.90 percent per year, based on discussions with City staff.

O&M Expenses

- **General Cost Inflation.** 2.50 percent per year based on discussions with City staff.
- **Labor Cost Inflation.** 4.00 percent in 2023 & 2024 and 3.00 percent thereafter based on staff input.
- **Benefit Cost Inflation.** 1.00 percent in 2023 & 2024 and 2.50 percent thereafter based on discussions with City staff.
- **Professional Services.** 2.50 percent per year for all years, based on general cost inflation staff input.
- **Construction Cost Inflation.** 3.00 percent per year based on discussions with City staff.
- **State Excise Taxes.** Public utility excise tax is 3.852 percent on all wastewater rate revenue related to collection. Based on discussion with City staff, collection represents 13 percent of rate revenue with the remaining 87 percent associated with treatment and transmission.
- **State B&O Tax.** 1.75 percent on all non-rate revenue, connection charge revenue and treatment and transmission share of rate revenue.
- **City Utility Tax.** 20 percent on all rate revenue.

Debt Service

- **Existing Debt.** The wastewater utility currently has one outstanding PWTF loan reaching maturity in 2032. Annual debt payments on the outstanding bond ranges from \$47,900 to \$50,500 throughout the forecast. Annual debt service is approximately \$49,800 during the study period.
- **New Debt.** In order to fund the capital program, it is anticipated that the City will need to issue new debt. The term length on this debt is assumed to be either 20 years or 30 years with an interest rate of either 5.00 percent or 1.50 percent depending on if the debt is a revenue bond, PWTF loan, or Department of Ecology (DOE) loan. For revenue bond debt, it is also assumed that issuance cost is equal to 1.00 percent of the total debt issued and that the City would be required to hold one year of debt service in a debt reserve.

System Reinvestment

System reinvestment funding ensures system integrity through reinvestment in the system. As discussed in *Section II Rate Study Methodology*, the City does not have a formal policy regarding system reinvestment. The study utilizes remaining cash flow after O&M and annual debt service to pay for capital in place of a dedicated funding component for annual system reinvestment.

Capital Funding Plan

The wastewater utility is anticipating \$27.4 million in capital costs in 2022 through 2025 escalated to the year of construction. The majority of these costs are for the construction of a new wastewater treatment plant. Once the capital costs are identified, a capital funding plan defines a strategy for funding the CIP considering available funding sources such as cash balances (including interest), general facility charge revenue, cash flow from operations, and new debt proceeds.

Exhibit 4.1 provides a summary of the funding sources for the capital funding expenditures. The full capital plan can be found in the detailed rate model provided to the City.

Exhibit 4.1
Wastewater Capital Funding Summary

Capital Funding Summary	2022	2023	2024	2025	Total
Capital Project Costs	\$ 2,471,000	\$ 11,881,050	\$ 12,237,482	\$ 857,791	\$ 27,447,322
Funding Sources					
Cash/Reserves	\$ 2,436,382	\$ -	\$ -	\$ 161,362	\$ 2,597,744
Debt Proceeds	-	11,872,609	12,172,741	-	24,045,350
Connection Charge Revenue	27,798	-	-	649,083	676,881
Interest Earnings	6,820	8,441	64,740	47,345	127,347
Total Funding Sources	\$ 2,471,000	\$ 11,881,050	\$ 12,237,482	\$ 857,791	\$ 27,447,322

Summary of Revenue Requirement

The operating forecast components of O&M expenses, rate funded capital, existing debt service, and expected future debt service come together to form the multi-year revenue requirement. The revenue requirement compares the overall revenue available to the wastewater system to the expenses to evaluate the sufficiency of rates. **Exhibits 4.2** and **4.3** provide a summary of the wastewater system revenue requirement findings.

Exhibit 4.2
Wastewater Utility Revenue Requirement Summary

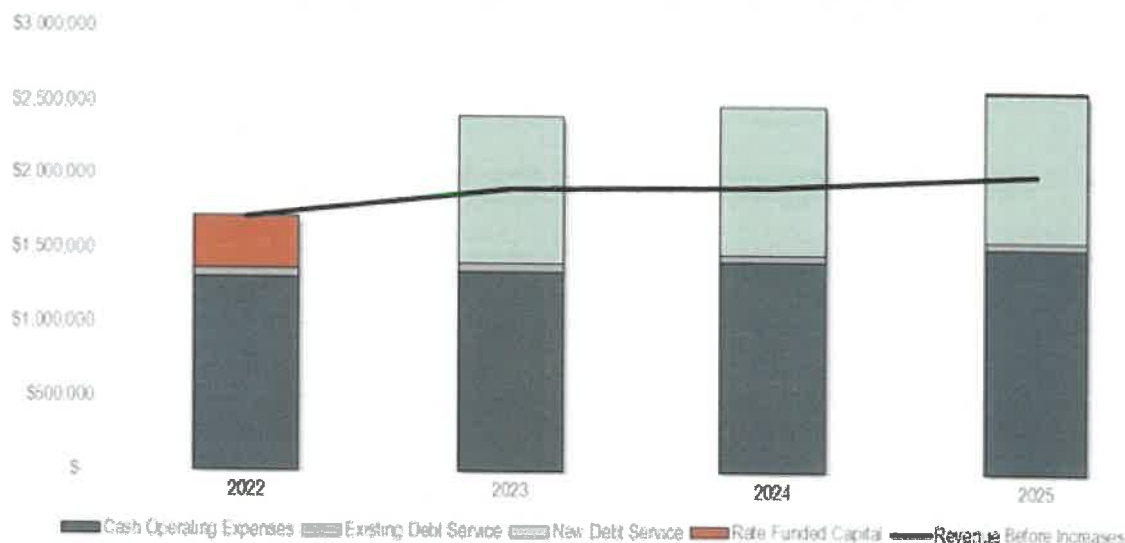
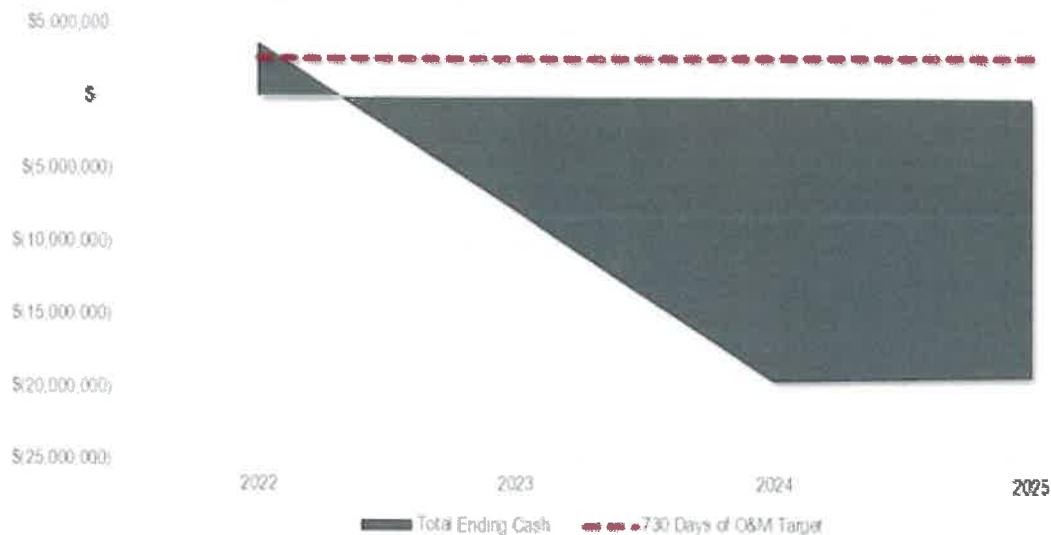


Exhibit 4.3
Wastewater Utility Total Ending Cash Reserve Summary



Summary of wastewater revenue requirement:

- While current revenue levels are sufficient to meet existing wastewater annual financial operating obligations, they are not able to fully fund the utility's capital program. Without rate increases or additional financial assistance, the utility's cash balances are expected to go negative in 2023.
- Based on discussions with City staff, four alternatives were developed for Council consideration. These scenarios differed in the proposed funding approach for the new wastewater treatment facility.
 - » The first alternative funded the treatment facility construction costs of \$24.0M with a department of ecology (DOE) loan. The term length of this debt was assumed at 30 years with interest cost of 1.50 percent. This alternative would require annual rate increases between 9.46 percent and 10.11 percent.
 - » The second alternative assumes 70 percent of the construction cost would be financed with a DOE loan with similar terms as in alternative one, with the remaining 30 percent being funded with grant proceeds. This alternative would require annual rate increases between 3.75 percent and 4.05 percent.
 - » The third alternative assumes 55 percent of the construction cost would be financed with a DOE loan, 30 percent with a PWTF loan, and the remaining 15 percent being funded with grant proceeds. The term length of PWTF debt was assumed at 20 years with an interest cost of 1.50 percent and DOE loan terms remaining the same as alternative one and two. This scenario would require annual rate increases between 9.76 percent and 10.81 percent.
 - » The fourth alternative funded the construction costs with revenue bond debt. The term length of this debt was assumed at 20 years with an interest cost of 5.00 percent. It was also assumed that issuance costs are equal to 1.00 percent of the total debt issued and that the utility would be required to create a reserve equal to one year of debt service. This scenario

requires an upfront rate increase of 167.57 percent followed by increase of approximately 2.00 percent per year thereafter.

- The Council selected to move forward with alternative one, which fully funds the wastewater treatment plant construction costs with DOE loans.

RATE DESIGN

The study proposes no structural changes to the existing wastewater rate schedule. It is proposed that all rates are increased on an across-the-board basis, equally to both fixed and variable consumption charges. **Exhibit 4.4** summarizes the existing and proposed rate schedule.

Exhibit 4.4

Existing & Proposed Rate Schedule

Description	Existing	Proposed		
		2023	2024	2025
Base Fee (\$/mo./ERU)	\$ 74.00	\$ 81.00	\$ 89.00	\$ 98.00
Discount Rate	51.80	56.70	62.30	68.60
Consumption Fee (\$/ccf)	\$ 3.83	\$ 4.19	\$ 4.60	\$ 5.07

Notes:

1. Consumption fee applies to non-residential customers only
2. Consumption fee applies to any monthly consumption above 10 ccf

Section V. GENERAL FACILITY CHARGES

In addition to the rate study, the City's general facility charges (GFCs) were updated. The following section discusses the various aspects of the process used to update the water and wastewater GFCs.

METHODOLOGY

GFCs are imposed on newly connecting customers and are intended to recover a proportionate share of utility infrastructure investment – both historical costs of existing capital assets and the planned cost of future capital improvements. The purpose of GFCs is two-fold: 1) to provide equity between existing and new customers, and 2) to provide a source of utility capital funding through rates. In the absence of GFCs, growth-related costs would be borne in large part by existing customers through rates. The cost of the system to be recovered by GFCs can be defined in two parts:

1. Existing cost basis, based on historical investments in existing infrastructure, and
2. Future cost basis, which recovers costs related to planned capital projects.

Revenue generated from the GFCs can be used to fund capital projects or debt service incurred to finance capital projects but may not be used to pay for operating and maintenance costs.

Section 35.92.025 of the Revised Code of Washington (RCW) authorizes Cities to impose GFCs (connection charges); however, it does not outline a specific methodology for calculating them. There are a variety of approaches that are used in the industry to establish a defensible GFC. While the City has some flexibility to define an equitable share of system costs, it is important that the City follow a rational approach to consistently determine and implement cost-based GFCs.

Since the calculated charges represent the maximum allowable charge, the City may choose to implement a charge at any level up to the calculated level. Revenues generated from the charge will vary depending upon whether or not the full charge is implemented (e.g., phase-in strategy). Delaying or otherwise limiting the GFC increase will generally reduce the amount of GFC revenue available, which could result in delays in completing the capital improvement program and / or increase in ongoing utility rates.

This study uses an “integrated” approach to compute the GFCs, which is summarized in **Exhibit 5.1**. The “integrated” approach allocates costs to customers based on who benefits from the related facilities. Because existing assets are built to meet existing demands and oversized to accommodate growth, the cost of the existing system is allocated to both existing and future customers. Costs that are associated with capacity-expanding projects that are necessary to serve growth are allocated exclusively to growth (future customers). The GFC also reflects an allocation of projects related to upgrading existing assets on the premise that existing and future customers both benefit from these projects.

Exhibit 5.1
GFC Methodology

$$\frac{\text{EXISTING COST}}{\text{CURRENT \& FUTURE CAPACITY}} + \frac{\text{FUTURE COST}}{\text{FUTURE CAPACITY}} = \text{GFC}$$

Existing Cost Basis

The existing cost basis portion of the charge developed in this study is based on facilities of general benefit, such as treatment plant components, lift stations, collection mains and distribution mains. It intends to recognize the current ratepayers' net investment in existing system assets. Section 35.92.025 of the RCW sets forth the requirements and basis for calculation of GFCs for cities in the State of Washington. The main provisions of the statute include:

"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 equitable share may include interest charges applied from the date of construction of the water or sewer system until the connection, or for a period not to exceed ten years, at a rate commensurate with the rate of interest applicable to the city or town at the time of construction or major rehabilitation of the water or sewer system, or at the time of installation of the water or sewer lines to which the property owner is seeking to connect but not to exceed ten percent per year: PROVIDED, That the aggregate amount of interest shall not exceed the equitable share of the cost of the system allocated to such property owners."

Future Cost Basis

Future cost basis portion of the charge is intended to recover a fair share of planned capital facilities. The statute enabling connection charges for cities and towns (RCW 35.92.025) does not specifically address a charge based on planned future improvements. Common practice and legal opinion reinforce that future facilities needed to serve growth, as well as to provide for regulatory system improvement, can be included in the connection charge.

The GFC includes the cost of future projects provided by the City, identified in the City's system planning documents and other recent Capital Improvement Plans (CIPs). Consistent with the Government Accounting Standards Board (GASB) Rule No. 51, the cost basis excludes projects that are not expected to produce a tangible asset (e.g., system plan updates).

WATER GFC CALCULATION

The following section summarizes the GFC calculation for the water utility using the methodology described above.

Existing Cost Basis

The existing cost basis is intended to recognize the current ratepayers' net investment in the original cost of the system assets. The existing cost basis includes the following components:

- **Plant in Service.** Excluding meters and services, City financial records and estimates from the City's engineering consultant indicate that as of the end of 2021, the water utility had \$25.2 million in fixed assets.
- **Less: Meters and Services.** The total plant in service cost is reduced by the original cost of meters and services. The adjustment is made to recognize that the costs associated with this function of the water utility are generally recouped through other fees. At the time of this analysis there were no meters and services assets included in the City's financial records.
- **Less: Contributed Assets.** The total original cost is reduced to recognize known and / or estimated third party contributions. The outside contributions provide a source of capital at no new cost to the City's ratepayers. Since the GFC is necessarily cost based, the net investment by the City excludes those contributions. This results in a \$18.5 million reduction to the cost basis.
- **Plus: Interest on Non-Contributed Plant in Service.** RCW 35.92.025 provides a guideline for connection charges which suggests that such charges can include interest on an asset at the rate applicable during 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 and cannot exceed the original cost of the asset or 10 percent for 10-years. Conceptually, this interest provision attempts to account for the existing customer's time-related cost of investing in system development and carrying capacity until a new customer connects rather than having it available for investment or other uses. Calculated interest for the water utility results in an addition of \$3.1 million.
- **Less: Outstanding Debt Principal.** Another adjustment to the existing system cost basis is to deduct the net liability of outstanding system debt, recognizing that new customers will bear a proportionate share of this debt related to existing assets through their utility rates. Therefore, the cost of those assets charged to new development is offset to some degree by the remaining debt liability. Since the utility typically has cash resources that are not included in the system cost basis, the net debt load is defined as total debt minus outstanding cash and investments. At the time of this analysis, the utility had more cash balances than outstanding debt, therefore, no adjustment was made to the existing cost basis.

After factoring in the above adjustments, the existing cost basis will be spread across the total system capacity (existing and incremental future capacity), as all existing infrastructure will continue to benefit all customers. The existing cost basis is shown below in **Exhibit 5.2**.

Exhibit 5.2
Existing Cost Basis

EXISTING COST BASIS		2021
Plant in Service	\$	25,234,400
less: Contributed Assets		(18,516,543)
plus: Net Interest		3,053,104
less: Debt Principal Outstanding		-
TOTAL EXISTING COST BASIS	\$	9,770,961

Future Cost Basis

The future cost basis portion of the water GFC is intended to recover a share of the costs associated with planned future capital projects. As provided by RCW 35.92.025, future facilities planned for construction can be included in the connection charge. Consistent with the legal requirement that the costs be borne by the City, funding by developers or special property assessments are not included in the calculation. The future cost basis includes the following components:

- **Utility Capital Improvement Plan.** The City has identified \$4.3 million in capital improvement projects through 2046.
- **Less: Ineligible Projects.** Projects related to meters and services are deducted from the future cost basis. Ineligible projects totaled approximately \$0.3 million.
- **Less: Renewal Projects.** These are projects related to the repair or replacement of existing infrastructure and are most often needed because existing facilities have deteriorated due to use by existing customers. The integrated approach removes these projects from the future cost basis on the grounds that: (a) these projects are attributable to existing customers; and (b) new customers will pay for their share of these projects through rates when they connect. Renewal projects totaled \$2.1 million.

Exhibit 5.3 provides a summary of the future cost basis.

Exhibit 5.3
Future Cost Basis

FUTURE COST BASIS		2021
Capital Improvement Program	\$	4,291,000
less: Ineligible Projects		(318,500)
less: Renewal & Replacement		(2,102,788)
TOTAL FUTURE COST BASIS	\$	1,869,712

System Capacity

A key component of the GFC calculation is determining the number of users the system can support. Given that the City's customers can impose different demands on the water system, the GFC calculation uses the concept of meter capacity equivalents (MCEs) to "standardize" the system capacity basis. An MCE will apply a weighting factor to meter sizes above the smallest meter to define the base capacity of the smallest meter. The purpose of an MCE is to maintain equitable proportions between existing and future capacity. System capacity is separated into two groups: existing subscribed capacity and future system capacity.

- **Existing Subscribed Capacity.** Customer statistics were used to establish the existing subscribed capacity. The MCE factors were applied to all meter sizes above the smallest meter size to determine the number of existing connections relative to the capacity of the smallest meter. The total existing MCEs were calculated at 1,972.
- **Future System Capacity.** The City's water system plan identified the capacity that would be served by the capital program included in the charge and was expressed in terms of equivalent residential units (ERUs). ERUs are similar to MCE, in terms of "standardizing" the customer base. Instead of using total flow capacity of a 5/8-inch meter in comparisons to all other meter sizes, an ERU uses the average demand of a typical residential customer. In order to calculate the MCE based capacity, ratios were developed using existing and capacity ERUs. The results indicated that the water utility can support an additional 625 MCEs, or a total of 2,597 MCEs.

Calculation of the Water General Facility Charge

As described previously, the existing cost basis is divided by the total system capacity available after all capital projects are constructed while the future cost basis is divided by the future available capacity only. The results are added together to determine the maximum allowable GFC. **Exhibit 5.4** provides a summary of the GFC calculation for the City's water system.

Exhibit 5.4
GFC Calculation

GENERAL FACILITY CHARGE CALCULATION		Total
Existing Cost Basis	\$	9,770,961
Allocable Customer Base		2,597
Existing Cost Charge	\$	3,762
Future Cost Basis	\$	1,869,712
Allocable Customer Base		625
Future Cost Charge	\$	2,991
TOTAL GENERAL FACILITY CHARGE	\$	6,753

The resulting maximum allowable GFC charge is \$6,753 per MCE. As discussed in the methodology section, since this calculated charge is the maximum allowable charge, the City may choose to implement a charge at any level up to the calculated amount. Revenues generated from the charge

will vary depending on whether or not the full amount is implemented. Delaying or otherwise limiting GFCs will generally reduce the amount of revenue available, which could result in delays in completing the capital improvement program and/or additional ongoing monthly rate pressure.

Water General Facility Charge Scenario

The City requested an alternative calculation of the GFCs, to include contributed assets in the existing cost basis. Our general practice is to deduct contributed assets, but “*Landmark Development, Inc. v. City of Roy, (1999)*” seems to indicate that the inclusion of contributed assets in the charge basis would be legal. **Exhibit 5.5** provides this alternative calculation including the contributed assets in the cost basis. We recommend that the City seek a legal opinion to confirm the validity of this approach.

Exhibit 5.5
GFC Calculation Including Contributed Assets

GENERAL FACILITY CHARGE CALCULATION		Total
Existing Cost Basis	\$	36,309,587
Allocable Customer Base		2,597
Existing Cost Charge	\$	13,980
Future Cost Basis	\$	1,869,712
Allocable Customer Base		625
Future Cost Charge	\$	2,991
TOTAL GENERAL FACILITY CHARGE	\$	16,971

WASTEWATER GFC CALCULATION

The following section will review the GFC calculation for the wastewater utility using the methodology described above.

Existing Cost Basis

The existing cost basis is intended to recognize the current ratepayers’ net investment in the original cost of the system assets. The existing cost basis includes the following components:

- **Plant in Service.** City financial records and estimates from the City’s engineering consultant indicate that as of the end of 2021, the wastewater utility had \$60.7 million in fixed assets.
- **Less: Contributed Assets.** The total original cost is reduced to recognize known third party contributions. The outside contributions provide a source of capital at no new cost to the City’s ratepayers. Since the GFC is necessarily cost based, the net investment by the City excludes those contributions. This results in a \$48.8 million reduction to the cost basis.
- **Plus: Interest on Non-Contributed Plant in Service.** RCW 35.92.025 provides a guideline for connection charges which suggests that such charges can include interest on an asset at the rate

applicable during 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 and cannot exceed the original cost of the asset or 10 percent for 10-years. Conceptually, this interest provision attempts to account for the existing customer's time-related cost of investing in system development and carrying capacity until a new customer connects rather than having it available for investment or other uses. Calculated interest for the wastewater utility results in an addition of \$10.8 million.

- **Less: Outstanding Debt Principal.** Another adjustment to the existing system cost basis is to deduct the net liability of outstanding system debt, recognizing that new customers will bear a proportionate share of this debt related to existing assets through their utility rates. Therefore, the cost of those assets charged to new development is offset to some degree by the remaining debt liability. Since the utility typically has cash resources that are not included in the system cost basis, the net debt load is defined as total debt minus outstanding cash and investments. At the time of this analysis, the utility had more cash balances than outstanding debt, therefore, no adjustment was made to the existing cost basis.

After factoring in the above adjustments, the existing cost basis will be spread across the total system capacity (existing and incremental future capacity), as all existing infrastructure will continue to benefit all customers. The existing cost basis is shown below in **Exhibit 5.6**.

Exhibit 5.6
Existing Cost Basis

EXISTING COST BASIS		2021
Plant in Service	\$	60,705,383
less: Contributed Assets		(48,800,913)
plus: Net Interest		10,792,027
less: Debt Principal Outstanding		-
TOTAL EXISTING COST BASIS	\$	22,696,497

Future Cost Basis

The future cost basis portion of the wastewater general facility charge is intended to recover a share of the costs associated with planned future capital projects. As provided by RCW 35.92.025, future facilities planned for construction can be included in the connection charge. Consistent with the legal requirement that the costs be borne by the City, funding by developers or special property assessments are not included in the calculation. The future cost basis includes the following components:

- **Utility Capital Improvement Plan.** The City has identified \$26.6 million in capital improvement projects through 2025.
- **Less: Renewal and Replacement Projects.** These are projects related to the repair or replacement of existing infrastructure and are most often needed because existing facilities have deteriorated due to use by existing customers. The integrated approach removes these projects from the future cost basis on the grounds that: (a) these projects are attributable to existing customers; and (b)

new customers will pay for their share of these projects through rates when they connect. Renewals projects totaled \$13.4 million.

Exhibit 5.7 provides a summary of the future cost basis.

Exhibit 5.7

Future Cost Basis

FUTURE COST BASIS		2021
Capital Improvement Program	\$	26,608,000
less: Renewal & Replacement		(13,428,912)
TOTAL FUTURE COST BASIS	\$	13,179,088

System Capacity

A key component of the GFC calculation is determining the number of users the system can support. Given that the City's customers can impose different demands on the wastewater system, the GFC calculation uses the concept of Equivalent Residential Units (ERUs) to "standardize" the system capacity basis. An ERU for the wastewater utility is defined as 167 gallons per day. The purpose of an ERU is to maintain equitable proportions between existing and future capacity. System capacity is separated into two groups: existing subscribed capacity and future system capacity.

- **Existing Subscribed Capacity.** The City's engineering consultant provided the current number of subscribed ERUs. Total existing subscribed capacity is 1,737 ERUs.
- **Future System Capacity.** The future system capacity was also provided by the City's engineering consultant. This is based on the capacity of the new wastewater treatment facility. Future system capacity is 3,327 ERUs.

Calculation of the Wastewater General Facility Charge

As described previously, the existing cost basis is divided by the total system capacity available after all capital projects are constructed while the future cost basis is divided by the future available capacity only. The results are added together to determine the maximum allowable GFC. **Exhibit 5.8** provides a summary of the GFC calculation for the City's wastewater system.

Exhibit 5.8
GFC Calculation

GENERAL FACILITY CHARGE CALCULATION		Total
Existing Cost Basis	\$	22,696,497
Allocable Customer Base		3,327
Existing Cost Charge	\$	6,822
Future Cost Basis	\$	13,179,088
Allocable Customer Base		1,590
Future Cost Charge	\$	8,289
TOTAL GENERAL FACILITY CHARGE	\$	15,111

The resulting maximum allowable GFC is \$15,111 per ERU. Since this calculated charge is the maximum allowable charge, the City may choose to implement a charge at any level up to the calculated amount. Revenues generated from the charge will vary depending on whether or not the full amount is implemented. Delaying or otherwise limiting general facility charges will generally reduce the amount of revenue available, which could result in delays in completing the capital improvement program and/or additional ongoing monthly rate pressure.

Wastewater General Facility Charge Scenario

The City requested an alternative calculation of the GFCs, to include contributed assets in the existing cost basis. Our general practice is to deduct contributed assets, but “*Landmark Development, Inc. v. City of Roy, (1999)*” seems to indicate that the inclusion of contributed assets in the charge basis would be legal. **Exhibit 5.9** provides this alternative calculation including the contributed assets in the cost basis. We recommend that the City seek a legal opinion to confirm the validity of this approach.

Exhibit 5.9
GFC Calculation Including Contributed Assets

GENERAL FACILITY CHARGE CALCULATION		Total
Existing Cost Basis	\$	86,186,349
Allocable Customer Base		3,327
Existing Cost Charge	\$	25,905
Future Cost Basis	\$	13,179,088
Allocable Customer Base		1,590
Future Cost Charge	\$	8,289
TOTAL GENERAL FACILITY CHARGE	\$	34,194

Section VI. SUMMARY

The analysis described above concludes the comprehensive water and wastewater utility system rate and GFC study. The study followed the methodology described in *Section II*, which included three key steps:

- **Revenue Requirement Analysis.** Determines the amount of revenue that utility rates must generate to meet the utility's various financial obligations. This analysis has two main purposes – it serves as a means of evaluating the water and wastewater utility's fiscal health and adequacy of current rate levels, and it sets the revenue basis for near-term and long-term rate planning. Multiple scenarios were developed for both utilities. Based on Council direction, the results of this analysis indicate that the water utility will need bi-annual increase – 4.45 percent in 2023 and 2.50 percent in 2025. The wastewater utility will need a 9.46 percent increase in 2023, 9.88 percent increase in 2024, and 10.11 percent increase in 2025. These revenue adjustments are designed to fund annual operating expenses, capital improvement program, operating reserve goals, and financial performance targets related to debt service coverage if applicable.
- **Rate Design.** The second step in the study process aligns the City's existing rate structure to generate sufficient revenue from each customer class based on the results of the revenue requirement. Based on Council direction, rate increases are applied on an across the board basis for both the water and wastewater utilities.
- **GFC Analysis.** GFCs are imposed on newly connecting customers and are intended to recover a proportionate share of utility's infrastructure investment. The calculations indicated a higher maximum allowable charge for both the water and wastewater utilities. As a result, the City has the legal flexibility to implement any charge up to that amount.

We recommend that the City revisit the study findings during the budget cycle 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, continuously comparing the study outcomes to actual revenue and expenses. Any significant or unexpected changes will require adjustments to the rate strategy proposed. It is also recommended that the City recalculate their general facility charge upon completion of major projects to maintain full representation of system investment value as assets are placed into service.