

To: Jori Burnett, City Administrator, City of Ferndale
Danielle Ingham, Finance Director, City of Ferndale

Date: March 19, 2024

From: Brooke Tacia, Project Manager

CC: Angie Sanchez-Virnoche, Principal
Chase Bozett, Project Consultant

RE: Water, Sewer, and Stormwater Utility Rate Increases – 2024 through 2029

This memorandum summarizes the findings and forecasted utility obligations as a result of the adopted Water, Sewer, and Stormwater utility rates.

EXECUTIVE SUMMARY

On November 20th, 2023, the Ferndale City council voted to adopt the following rate adjustments through 2029 as shown in **Exhibit 1**.

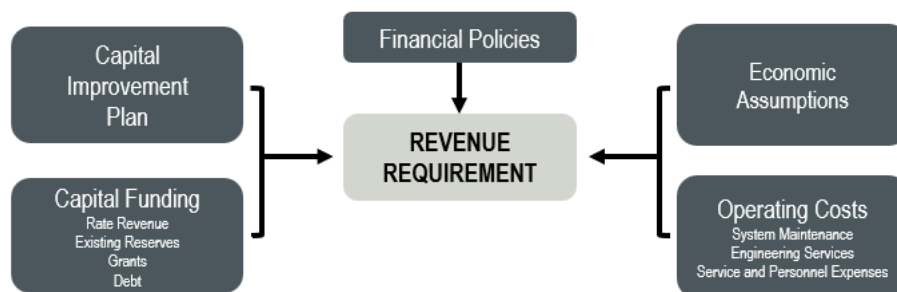
Exhibit 1: Adopted Rate Increases

Utility	2024	2025	2026	2027	2028	2029
Water	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Sewer	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Stormwater	14.00%	14.00%	14.00%	14.00%	10.00%	10.00%

RATE STUDY OVERVIEW

The main purpose of this rate study is to develop a funding plan (“revenue requirement”) for the study period as defined by the utility’s capital plan. The revenue requirement typically identifies the total revenue needed to fully fund each utility on a standalone basis considering operating and maintenance expenditures, fiscal policy achievement, and the capital project needs of the utility. This study approach is shown in **Exhibit 2**.

Exhibit 2: Revenue Requirement Overview



FISCAL POLICIES

The basic framework for evaluating utility revenue needs includes sound fiscal policies. Several policy topics are important to consider further as part of managing the finances of the City, including operating reserves, capital reserves, and debt related policies. These policies are summarized in **Exhibit 3**.

Exhibit 3: Fiscal Policies

Fiscal Policy	Purpose	Policy
Operating Reserve	Provide a liquidity cushion to protect the utility from the risk of short-term variations in the timing of revenue collection and the payment of expenses	60 days of operations and maintenance
Capital Reserve	Provide a source of emergency funding for unexpected asset failures or capital cost overruns	30-60 days of average annual capital
Debt Service Coverage	Provide assurance to bondholders that the utility can generate sufficient revenues to repay debt obligations	Legal minimum: 1.25 Target: 1.5-2.0

KEY ASSUMPTIONS

The following list of key assumptions were used to forecast revenues and expenditures through the forecast period.

- **General Cost Inflation:** 6.0 percent in 2024 followed by 3.0 percent per year (as applied to the City's 2023 budget) based on both the Washington State Economic & Revenue Forecast Council projection for the Consumer Price Index West.
- **Construction Cost Inflation:** 6.0 percent in 2024 followed by 3.0 percent per year thereafter based on the Engineering News-Record's Construction Cost Index (20-City Average), discussions with City staff, and current trends within the industry.
- **Personnel Cost Inflation:**
 - » **Labor Cost Inflation:** 4.0 percent per year based on historical trends.
 - » **Benefits Cost Inflation:** 5.0 percent per year based on historical trends.
- **Taxes:**
 - » **State Business and Occupation (B&O) Tax:** rate of 1.75 percent (taxable revenue exceeds the \$1.0 million threshold) for all non-rate utility revenues.
 - » **State Excise Tax:** applied to rate revenues
 - **Water:** 5.029 percent.
 - **Sewer:** Effective tax rate of 2.03 percent (86.9 percent of rate revenues related to treatment and taxed at 3.852 percent with the remaining 13.1 percent of revenues related to collection and taxed at the B&O rate).
 - » **City Utility Tax:** 9.0 percent in 2023 followed by 8.0 percent in all years of the forecast of utility rate revenue as adopted by City Council during the rate study process.
- **Customer Account Growth:** Assumed to be 1.0 percent in 2024 followed by 0.5 percent per year thereafter based on discussions with staff.

- **Fund Earnings:** 4.0 percent in 2023 followed by 3.0 percent in 2024, 2.0 percent in 2025, and 1.0 percent in 2026-2028 based on recent earnings reports from the State's Local Government Investment Pool (LGIP).
- **Revenue Bond Terms:** 20-year loans with 1.0 percent issuance costs. Interest rates on the loans are forecast at 4.5 percent through 2025 followed by 4.0 percent for the rest of the forecast period.

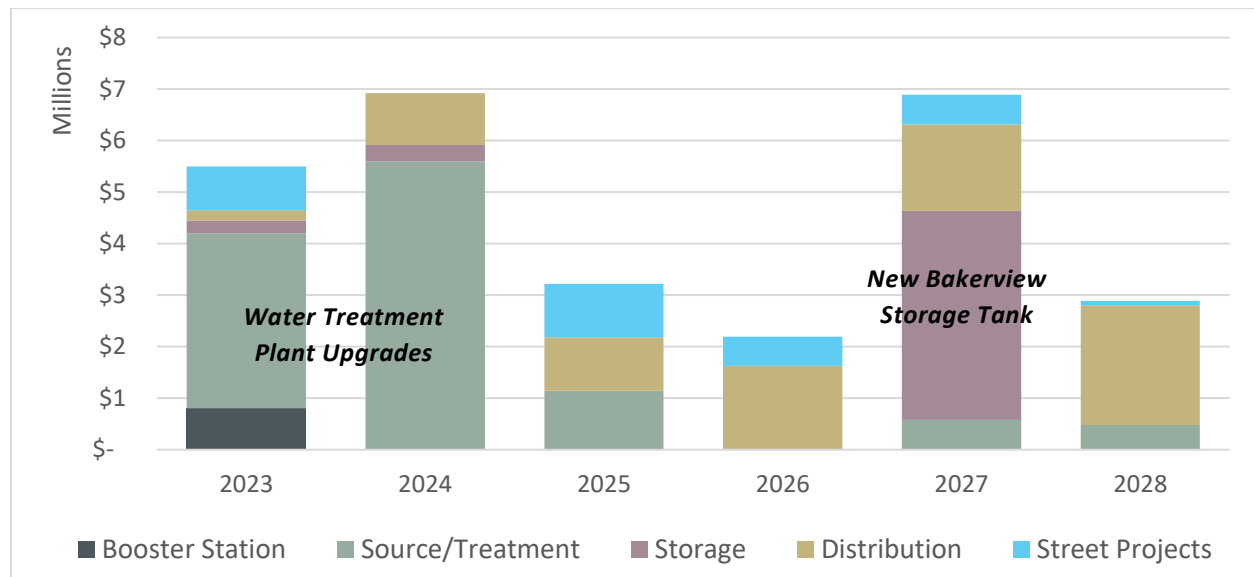
SUMMARY OF FINDINGS

The following sections outline the findings and forecasted obligations based on the adopted rate increases for each utility.

Water Utility

Based on the Capital Improvement Plan (CIP) provided by the City, the water utility has an estimated escalated total capital spending of \$27.7 million from 2023 through 2028. **Exhibit 4** outlines capital spending by year and type of project.

Exhibit 4: Water 2023-2028 CIP



Of the \$27.7 million in capital costs, \$1.1 million is projected to be funded through EDI grants and low interest loans, \$2.7 million is to come from City connection charges, \$11.6 million is to come from cash reserves or through rates and the remaining \$12.3 million (44 percent) is forecasted to be funded through revenue bonds. **Exhibit 5** shows the annual ending fund balances compared to the minimum fiscal policy target.

Exhibit 5: Water Ending Capital Fund Balance

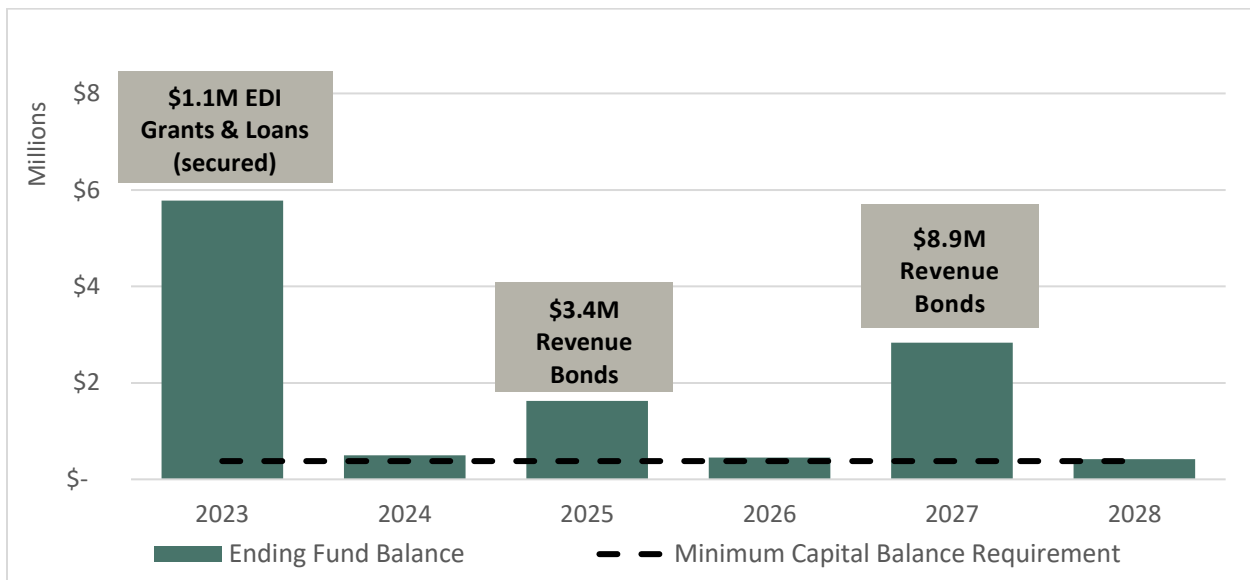
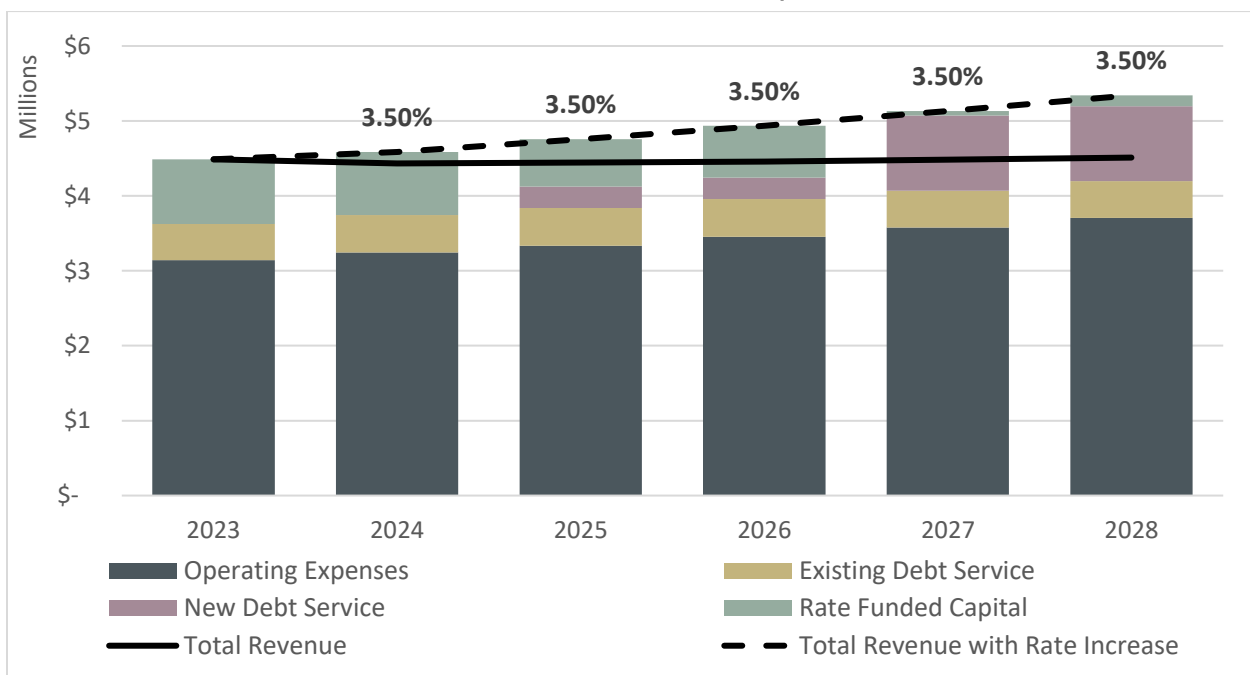


Exhibit 6 graphically represents the results of the annual rate adjustment adopted by the City Council. The stacked columns represent costs to the utility such as operating, debt service, and rate funded capital while the lines represent the utility revenues at current rates and after the rate adjustments.

Exhibit 6: Water Revenue Requirement



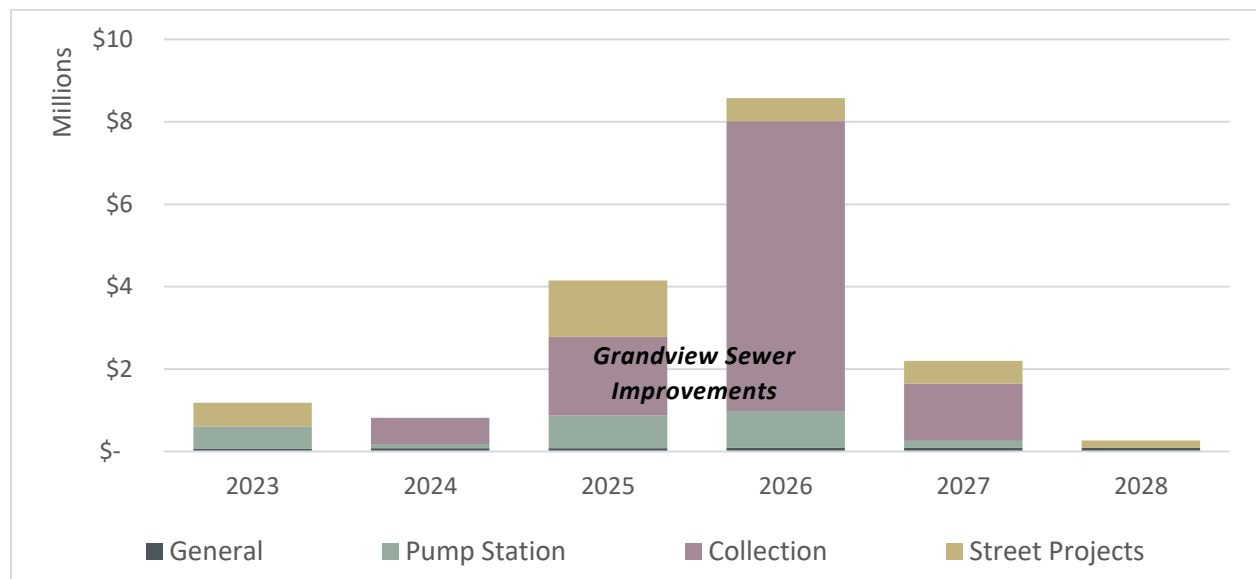
- **Dark blue bar:** Operating Expenses
 - » Operating expenses are based on the 2023 budget and increase with the annual cost escalation assumptions previously discussed. Expenses begin at \$3.1 million in 2023 and increase to \$3.7 million by 2028 with cost inflation and additional taxes from new revenue.

- **Gold bar:** Existing Debt
 - » \$480,000 in 2023 and increasing to \$500,000 for 2024-2028 with of the EDI.
- **Purple bar:** New Debt
 - » \$285,000 starting in 2025 with the \$3.6 million debt issuance and then to \$1 million in 2027 with the \$9.0 million debt issuance.
- **Green bar:** Rate Funded Capital
 - » \$865,000 in 2023 but decreases over the forecast period as the utility takes on additional debt to fund larger capital projects.
- **Solid black line:** Revenue at current rates
 - » Rate revenue is expected to be \$4.3 million in 2023 and increase with customer growth to \$4.4 million by 2028.
 - » Non-rate revenue averages \$100,000 per year.
- **Dashed black line:** Revenues with rate increases
 - » Revenue must increase 3.5 percent per year to cover forecasted operating and capital obligations. By the end of the forecast period, rate revenues are expected to be approximately \$5.3 million.

Sewer Utility

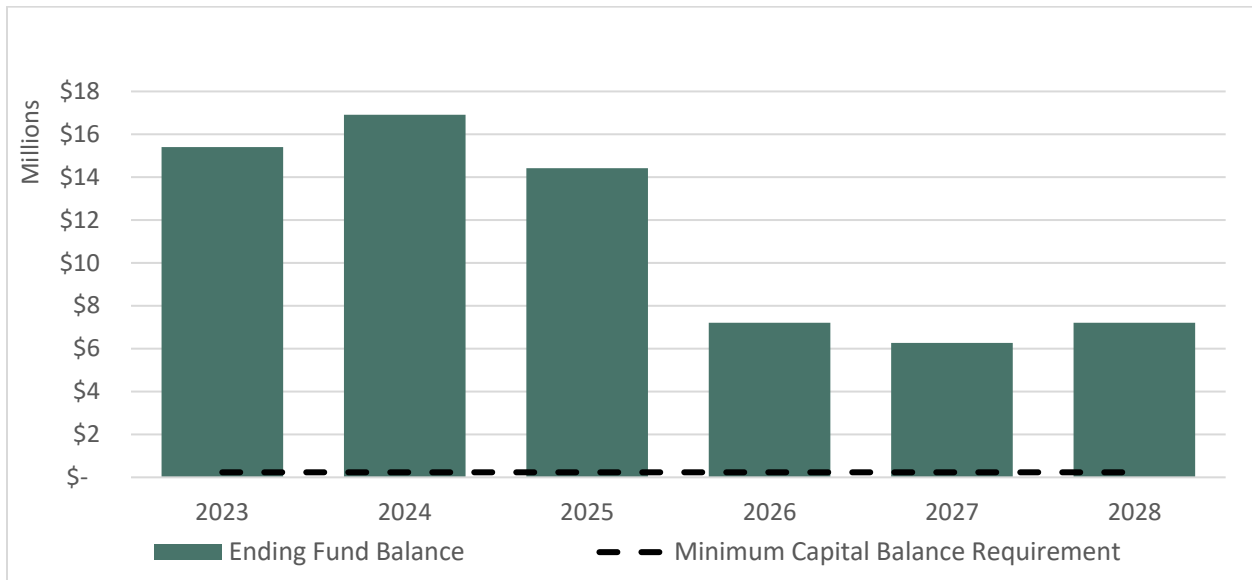
The CIP provided by the City forecasts an escalated total capital spending of \$17.2 million from 2023 through 2028. **Exhibit 7** outlines capital spending by year and type of project.

Exhibit 7: Sewer 2023-2028 CIP



Of the \$17.2 million in capital costs, the entire capital plan is forecasted to be cash funded either through City connection charges or rate funded capital. **Exhibit 8** shows the annual ending fund balances compared to the minimum fiscal policy target.

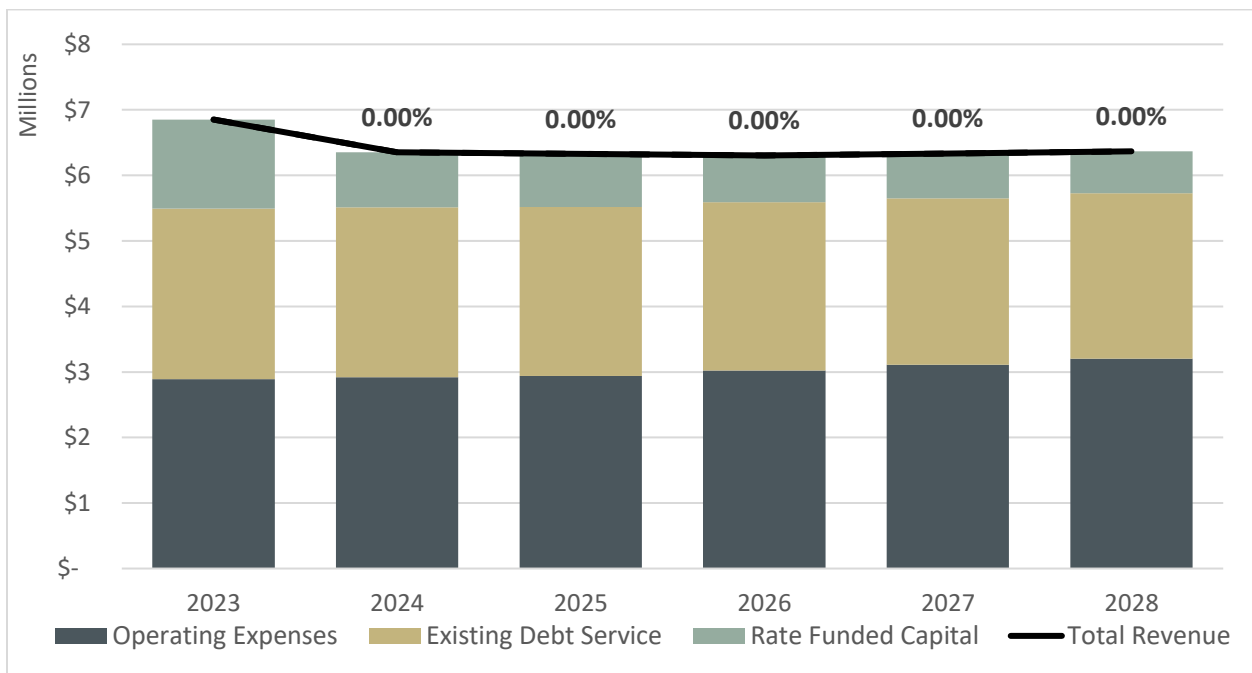
Exhibit 8: Sewer Ending Capital Fund Balance



Over the forecast period, the sewer utility annual ending capital fund balance remains \$6 million above the minimum target allowing the utility to cash fund additional projects as identified or prepare for additional capital needs beyond the current planning horizon.

Exhibit 9 graphically represents the results of the annual rate adjustment adopted by the City Council. The stacked columns represent costs to the utility such as operating, debt service, and rate funded capital while the lines represent the utility revenues at current rates and after the rate adjustments

Exhibit 9: Sewer Revenue Requirement

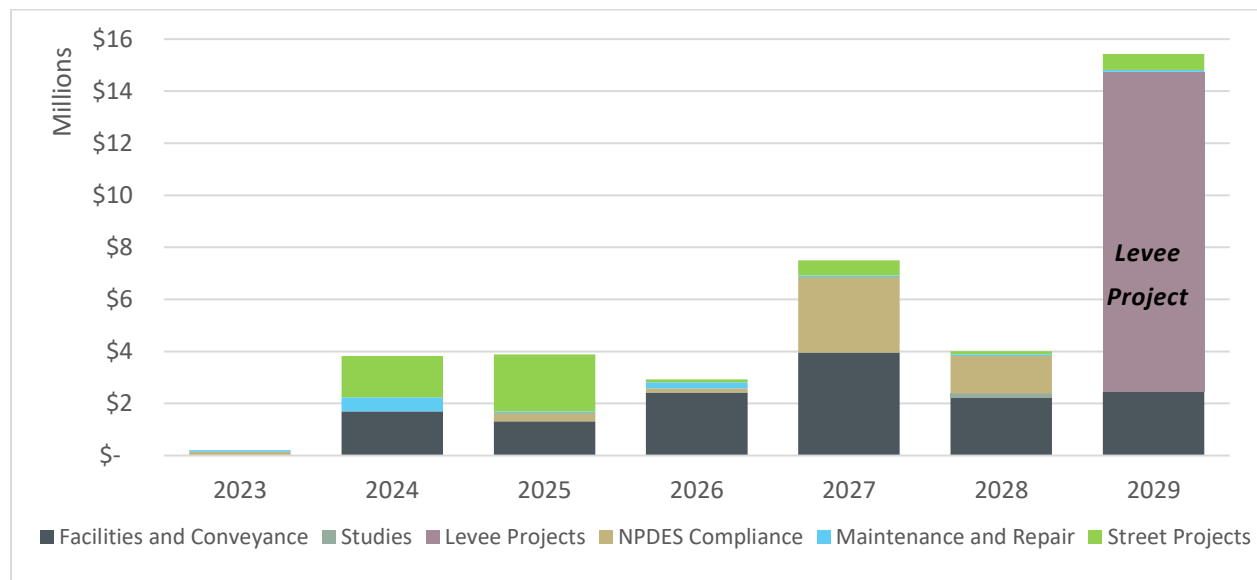


- **Dark blue bar:** Operating Expenses
 - » Operating expenses are based on the 2023 budget and increase with the annual cost escalation assumptions previously discussed. Expenses begin at \$2.9 million in 2023 and increase to \$3.2 million by 2028 with cost inflation.
- **Gold bar:** Existing Debt
 - » \$2.6 million in 2023 and decreasing to \$2.5 million as loan principal is repaid resulting in lower annual interest costs.
- **Green bar:** Rate Funded Capital
 - » \$1.4 million in 2023 and decreasing to \$600,000 by 2028 after investment interest earnings decrease and operating costs increase due to inflation.
- **Solid black line:** Revenue at current rates
 - » Rate revenue is expected to be \$6.1 million in 2023 and increase with customer growth to \$6.3 million by 2028. No rate increases are planned for the sewer utility from 2024-2029. Non-rate revenue is approximately \$750,000 in 2023 largely due to investment interest and decreases to approximately \$50,000 as fund balances decrease and the investment interest rate is forecasted to decline.

Stormwater Utility

During the study period, the City revisited the stormwater capital plan providing an additional year of forecasted capital expenditures. Stormwater escalated capital expenditures are expected to be \$37.8 million from 2023 to 2029. **Exhibit 10** outlines capital spending by year and type of project.

Exhibit 10: Stormwater 2023-2029 CIP



Of the \$37.8 million in capital costs, approximately \$100,000 is to come from City connection charges, \$5.0 million is to come from cash reserves or through rates, \$15.0 million (\$9.8 million, \$3.9 million, and \$1.3 million for Levee, NPDES, and Street projects respectively) through grants and the remaining \$17.7 million (47 percent) is forecasted to be funded through revenue bonds.

Exhibit 11 shows the annual ending fund balances compared to the minimum fiscal policy target.

Exhibit 11: Stormwater Ending Capital Fund Balance

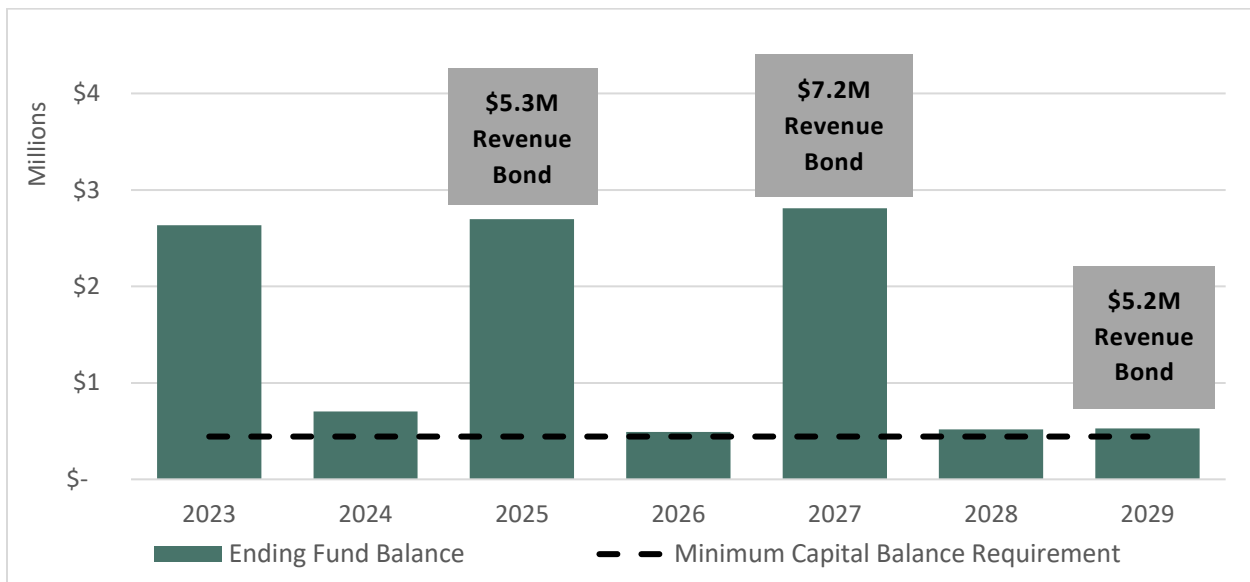
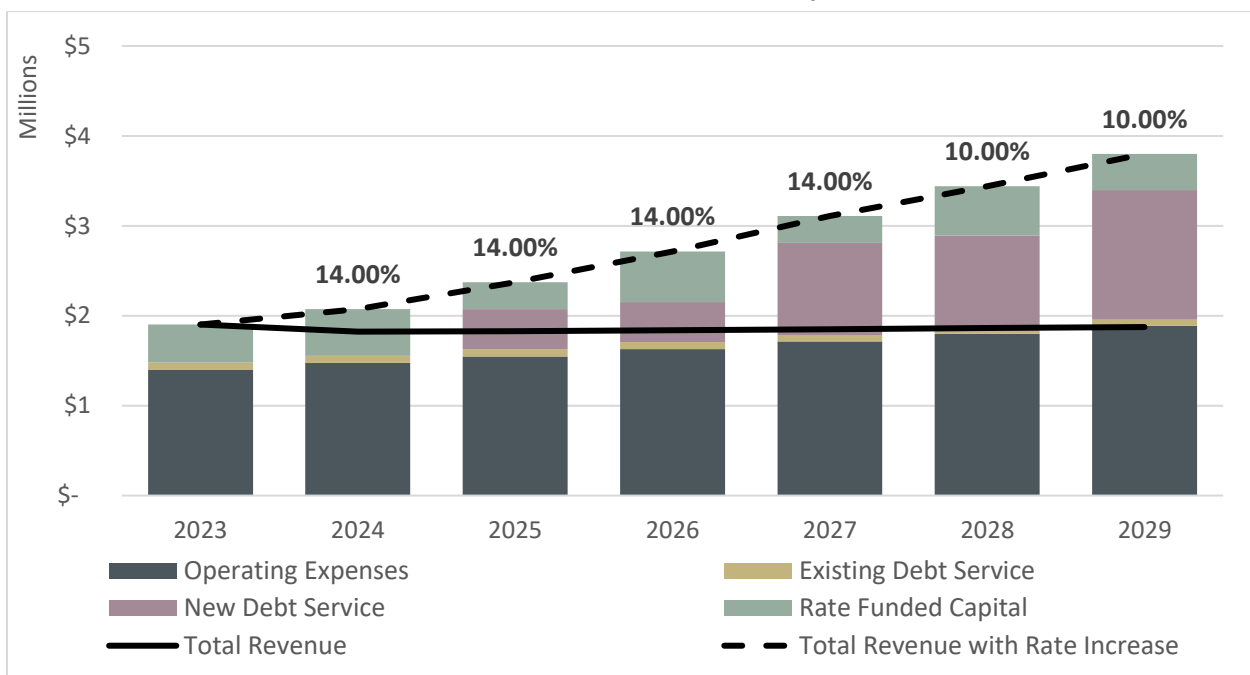


Exhibit 12 graphically represents the results of the annual rate adjustment adopted by the City Council. The stacked columns represent costs to the utility such as operating, debt service, and rate funded capital while the lines represent the utility revenues at current rates and after the rate adjustments.

Exhibit 12: Stormwater Revenue Requirement



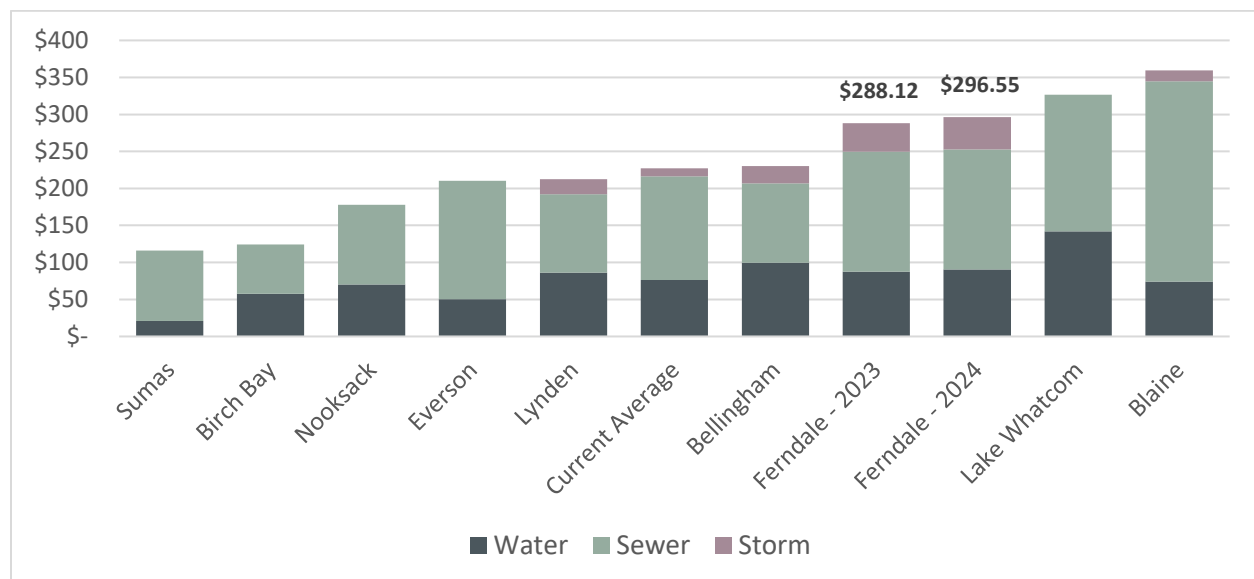
- **Dark blue bar:** Operating Expenses
 - » Operating expenses are based on the 2023 budget and increase with the annual cost escalation assumptions previously discussed. Expenses begin at \$1.4 million in 2023 and increase to \$1.9 million by 2029 with cost inflation and additional taxes from new revenue.

- **Gold bar:** Existing Debt
 - » Forecasted to remain at approximately \$70,000 throughout the study period.
- **Purple bar:** New Debt
 - » Begins at \$450,000 in 2025 with the \$5.3 million debt issuance. Increases to \$1.0 million with the \$7.2 million debt issuance in 2027 and then to \$1.4 million in 2029 with the \$5.2 million debt issuance.
- **Green bar:** Rate Funded Capital
 - » Fluctuates between \$300,000 and \$550,000 from 2024 to 2029 based on the issuance of new debt.
- **Solid black line:** Revenue at current rates
 - » Rate revenue is expected to be \$1.8 million in 2023 and increase with customer growth to \$1.85 million by 2029.
 - » Non rate revenues total \$100,000 in 2023 including investment interest earnings then average approximately \$25,000 annually from 2024-2029.
- **Dashed black line:** Revenues with rate increases
 - » Revenue must increase 14 percent annually from 2024 – 2027 and 10% annually for 2028 and 2029 to cover forecasted operating and capital obligations. By 2029, rate revenues are expected to be approximately \$3.8 million.

OVERALL FINDINGS

Based on the City's current rates as well as those adopted for 2024, a survey of similar jurisdictions was completed. **Exhibit 13** outlines the bi-monthly bills for a Single Family customer using 1,100 cubic feet (11 ccf).

Exhibit 13: Single Family Bi-Monthly Bill Comparison

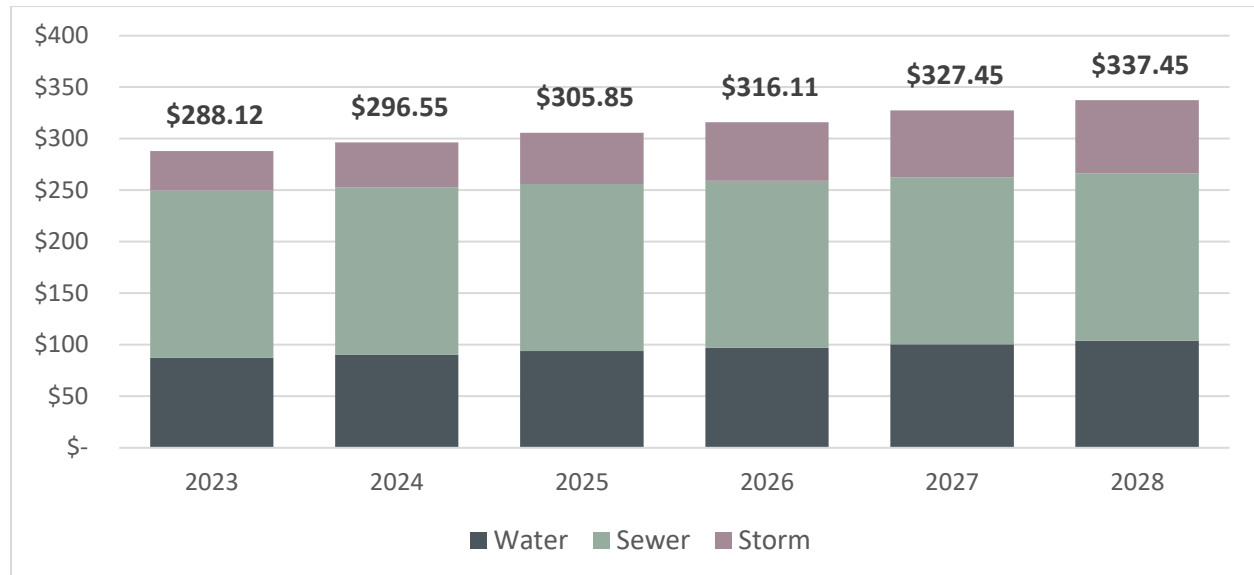


An important caveat with this type of comparison is that each jurisdiction has a unique set of geographic traits, customer base, and system characteristics that can have a significant impact on

rates. Utilities tend to go through waves of capital investment (like seen amongst the City's utilities), and often the relative rates depend on where a given utility is in its investment cycle.

Additionally, **Exhibit 14** shows the same sample customer bill during each year of the forecast period.

Exhibit 14: Single Family Bi-Monthly Bill (11 ccf)



Over the forecast period, a customer's combined bill is forecast to increase at a rate slower than the assumed rate for inflation used in the forecast.

CONCLUSION

The adopted 3.5 percent annual rate increases for the water utility are required to keep up with inflationary operating costs as well as fund the capital plan through a mix of cash funding and debt.

The sewer utility does not require rate increases through 2028 assuming there are no major changes to the annual operating costs or capital projects planned during the forecast period.

The stormwater utility requires four years of 14 percent increases followed by two years of 10 percent rate increases to fund the recently completed stormwater capital improvement plan.

These forecasted rate plans are intended to be used as guidance for the rate setting period. City staff should regularly compare the utilities' actual financial performance to the plans documented in this memorandum and adjust accordingly.