

Presentation of Draft Results

Water and Sewer Rates Study



CITY OF OWEN SOUND

Monday, May 11, 2020



Background and Study Objectives

- The City has maintained water rates for the past 4 years while increasing wastewater surcharge to fund capital and debt requirements.
- Significant wastewater system debt exists, although, some debt will come offline over the planning period
- Currently, some funds are available to fund system costs but likely insufficient should major repair or replacement be required
 - To start 2020, reserves are \$1.51 million for Water and \$948,800 for Wastewater

Background and Study Objectives

- The City has identified a fairly significant 10-year capital plan for the Water and the Wastewater systems
- Hemson to calculate full cost recovery rates that balance capital needs, asset repair and replacement and affordability
- No change to the City's rate structure is proposed
- Given the current economic climate and existing COVID situation, Hemson has also undertaken some additional sensitivity testing for council consideration

2019/2020 Monthly Water and Sewer Rates:

1. Water Fixed Charge

Description	Rate (monthly)
15mm	\$24.77
18mm	\$30.16
25mm	\$39.06
38mm	\$56.98
50mm	\$111.04
75mm	\$182.46
100mm	\$272.06
150mm	\$361.65
200mm	\$540.86

2. Water Consumption Charge

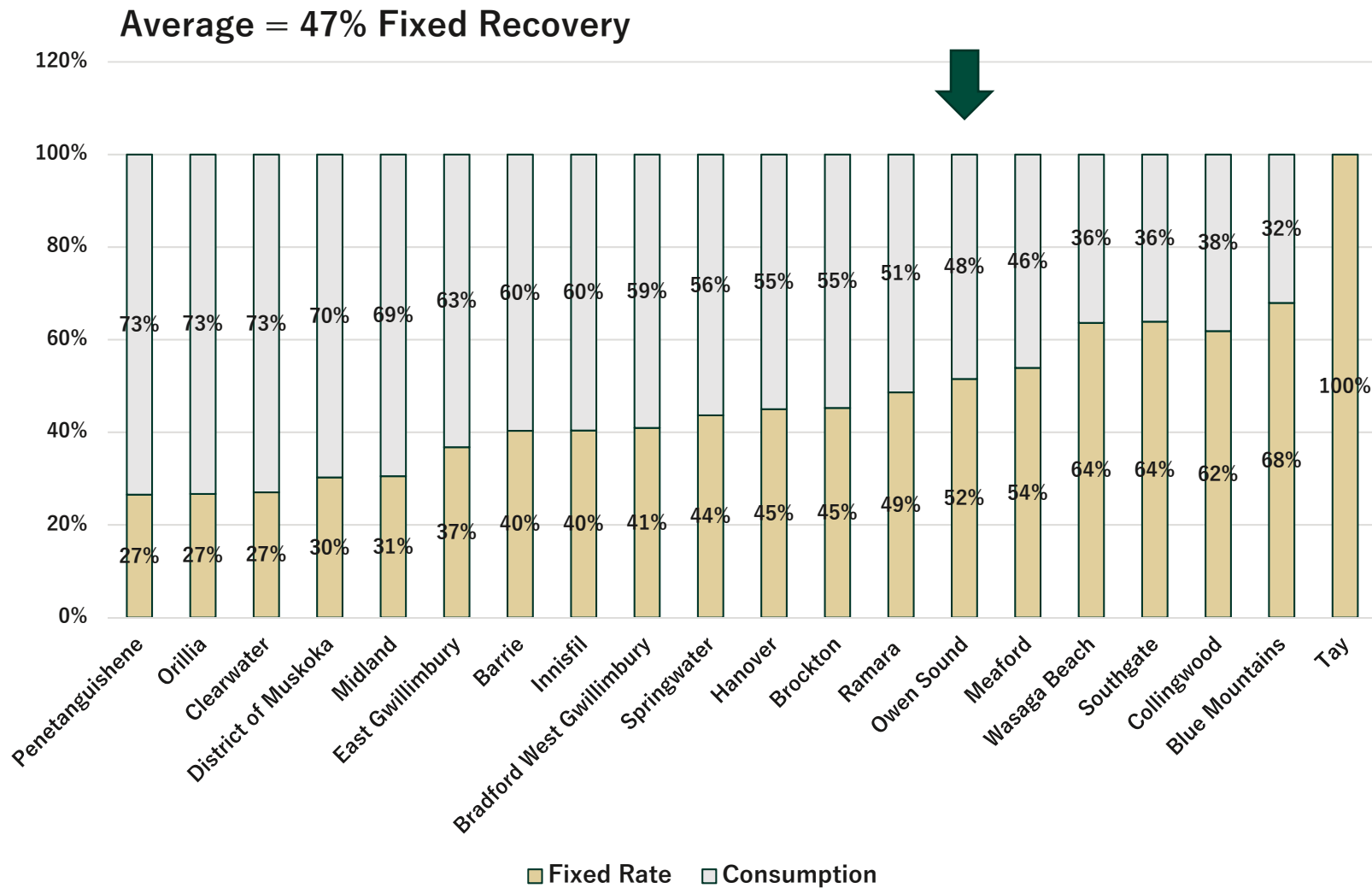
Description	Rate (per m ³)
Block 1 (0-110 m ³ per month)	\$1.399
Block 2 (110 m ³ and up)	\$1.572

1. Sewer (as % of Water Bill)

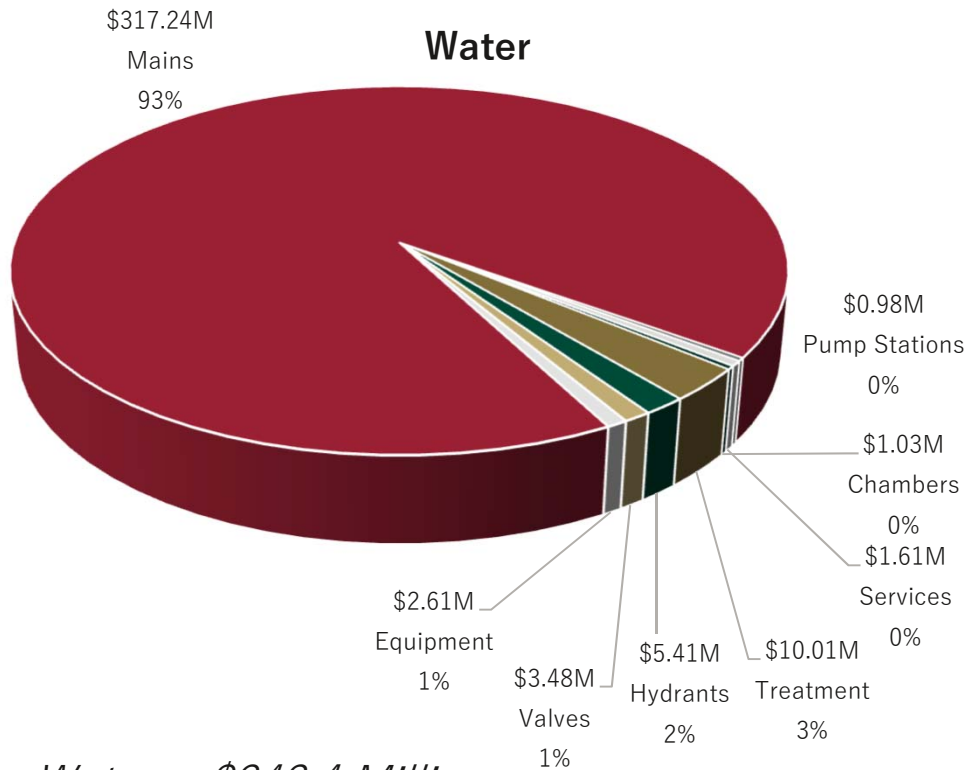
Description	Surcharge
Rate as % of Water Bill	124%

Note: Rural customers outside the City boundaries pay double the fixed and consumption rates.

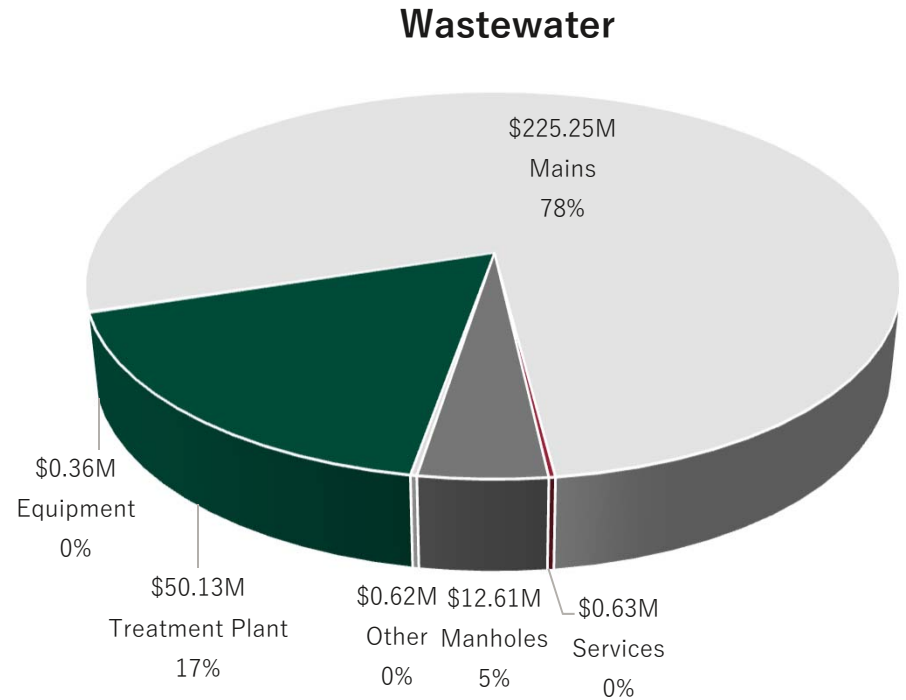
Benchmarking: Fixed vs. Variable Rate Cost Recovery



Summary of Water and Wastewater Infrastructure



Water = \$342.4 Million

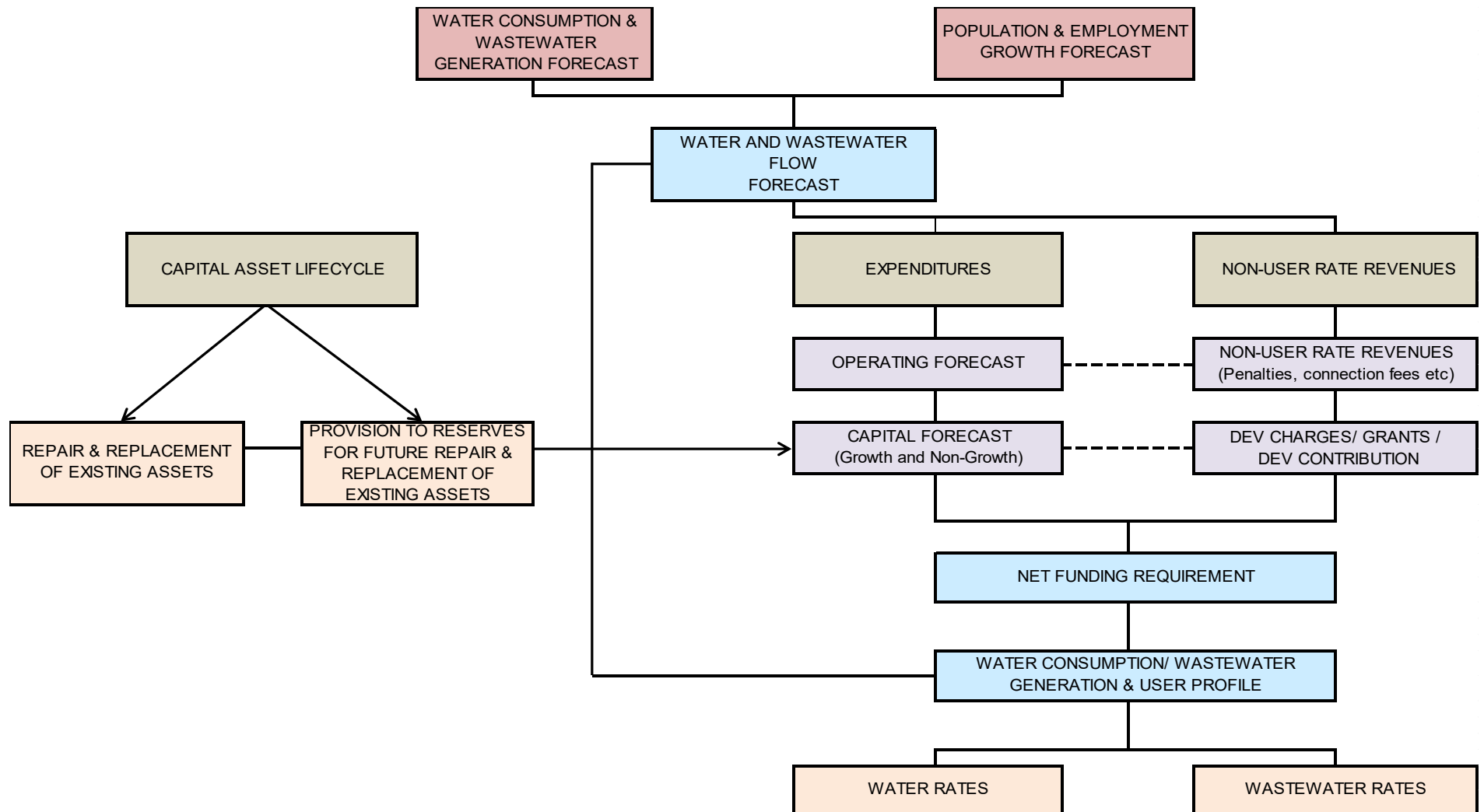


Wastewater = \$289.6 Million

Note: Replacement values based on TCA data provided by the City, inflated by Hemson to \$2020

RATE SETTING AND FINANCIAL ANALYSIS

Rate Setting Approach



Rate Setting Approach

- Rates calculated based on the following:
 1. Full recovery of operating costs
 - Based on the City's 2020 budget
 - Costs have been adjusted to account for inflation
 - Adjustments at cost centre level
 2. Full recovery of annual capital needs
 - In-year capital requirements identified by the 10-year capital plan, the approved 2020 capital budget, and discussions with staff
 - Only non-growth related costs have been included. DC shares have been netted out
 - Debt Financing is required to carry out water capital program (2021 and 2023)
 - Grants are assumed only for key projects contingent on funding
 3. Provision for future asset replacement

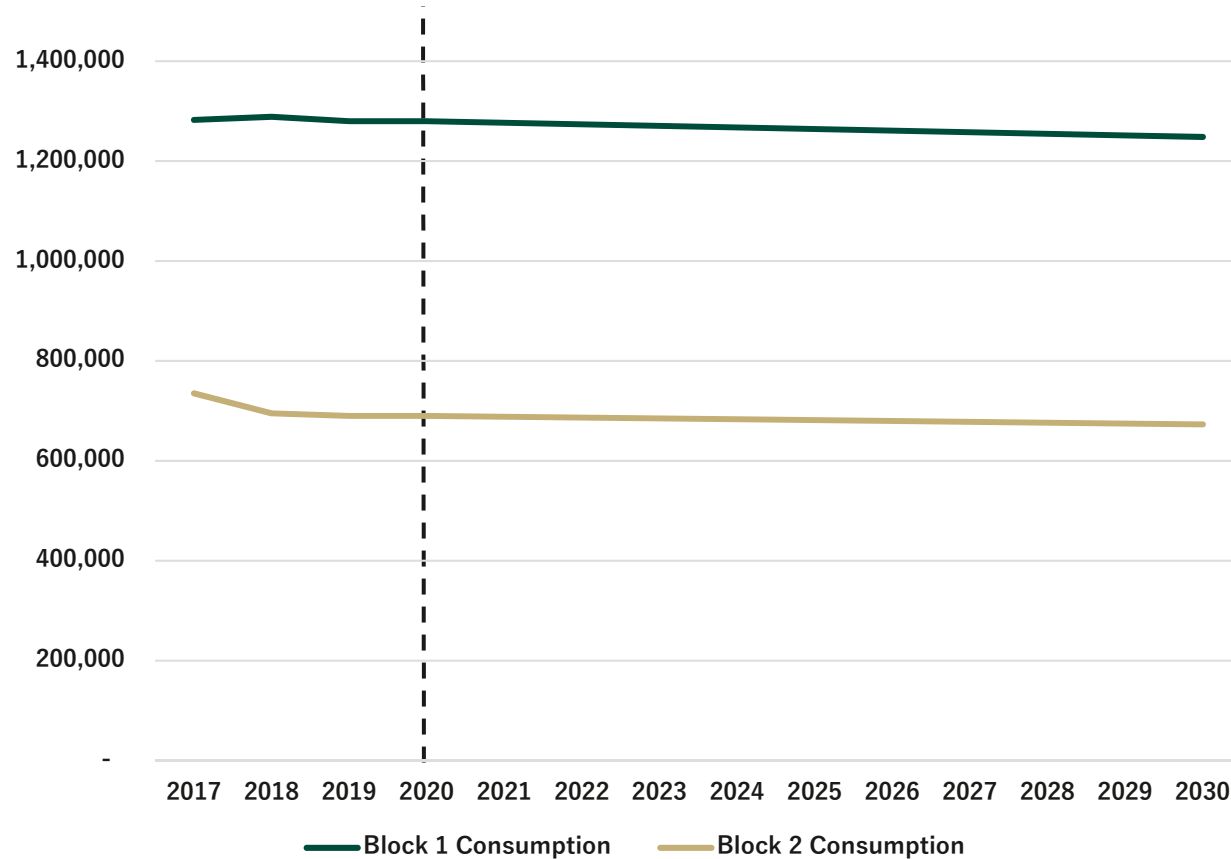
Future Demand

- Forecast of new connections primarily based on the 2019 DC Background Study household growth assumptions, historical assumptions and data from staff
- About 500 new equivalent connections over the planning period. Rural properties outside the City are anticipated to remain steady

	2020 Actual	2030 Projected
Total # Equivalent Water Connections	8,359	8,859
Total # Rural Water Connections	410	410

Includes both new residential and non-residential connections

Projected Water Consumption



- Analysis assumes consumption continues to decline over the period
- Only water billed to the end-user is considered (not plant production)

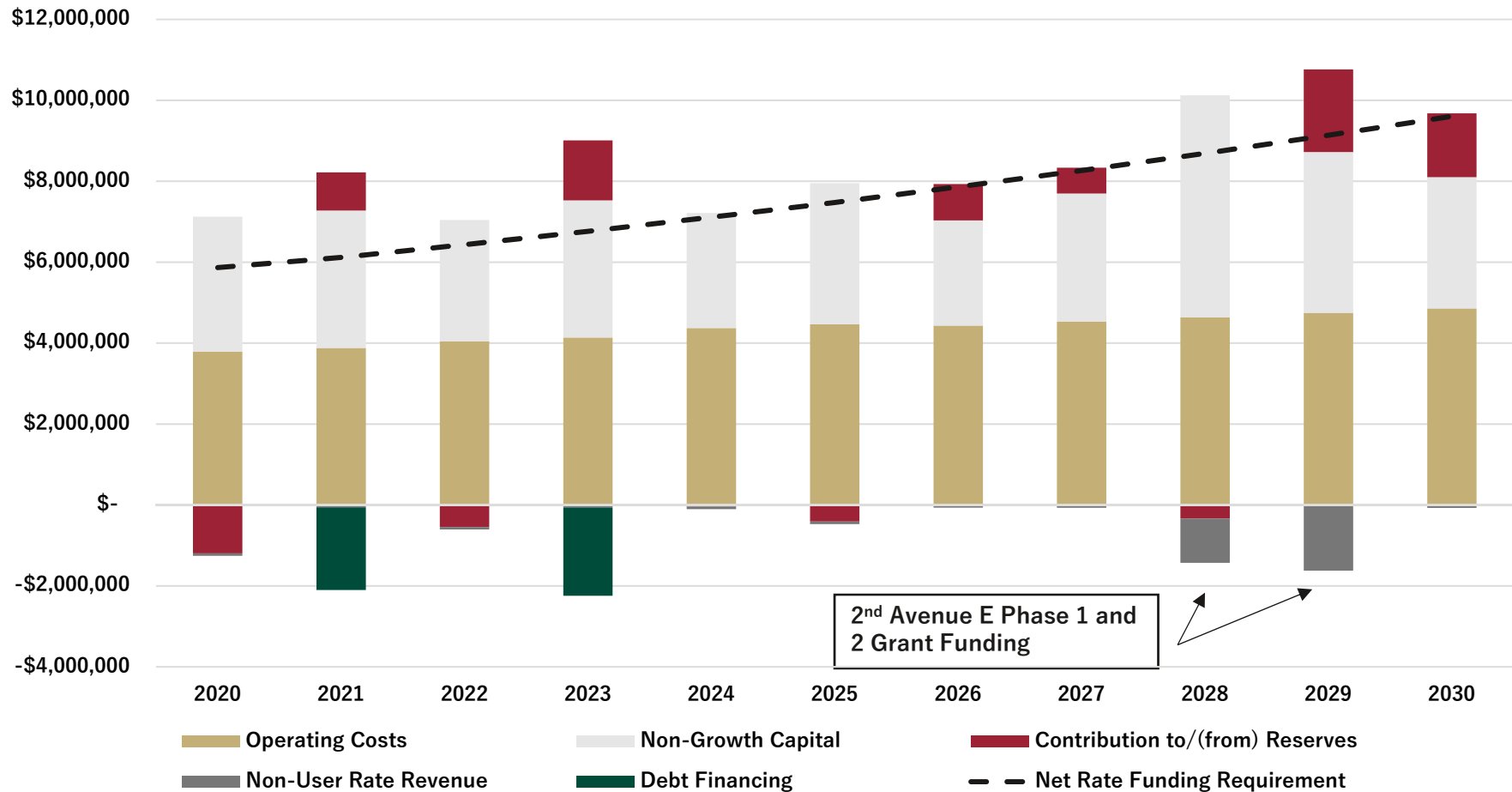
Note 1: Based on municipal consumption data

Water & Sewer Rate Structure Analysis

Accounts Water/Sewer*	Charge	Basis of Fee
Fixed Fee:	\$/per month	<p>Fee levied <i>regardless</i> of the amount of water consumed</p> <p>Levied as a fixed fee relative to the meter size</p> <p><i>Rates for rural properties outside the City are double those levied for properties in the City</i></p>
Variable Rate:	\$/per m ³ Inclining Block Rate Structure	<p>Fee levied on the amount of water consumed</p> <p>Levied as a cost per cubic metre consumed, in which the cost per m³ increases for any consumption greater than 110m³/month</p> <p><i>Rates for rural properties outside the City are double those levied for properties in the City</i></p>

***Sewer – levied as a % surcharge on the total water bill**

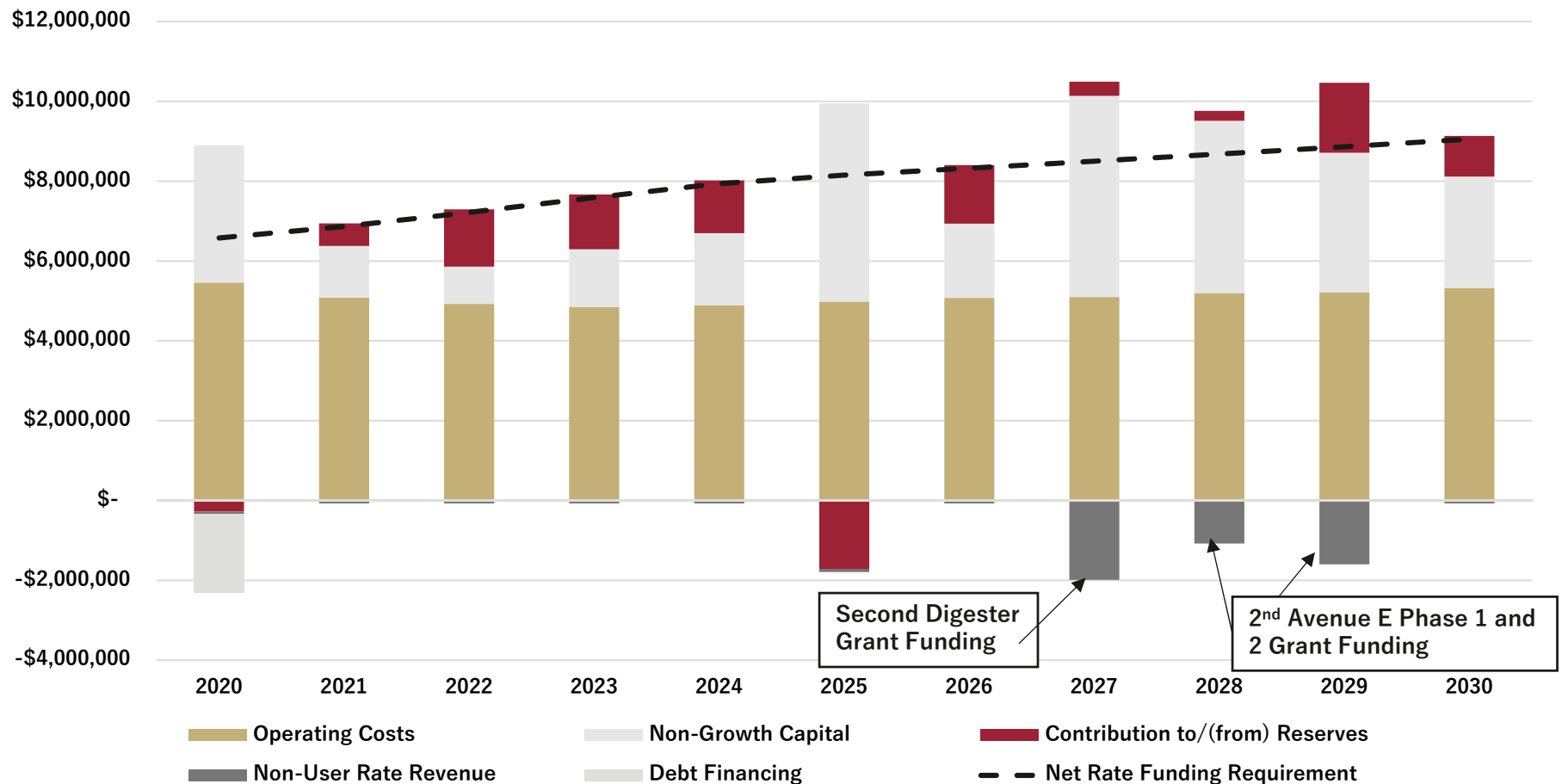
How much Revenue Needs to be Collected from Water Rates?



Note 1: The net rate funding requirement represents the amount of funds that must be funded through the water rates

Note 2: Non-user rate revenues are budget items which decrease the net operating budget but are not recovered through the user rates (i.e. interest and penalties, leases, etc.) Grant funding is also included as a non-rate revenue

How much Revenue Needs to be Collected from Wastewater Rates?

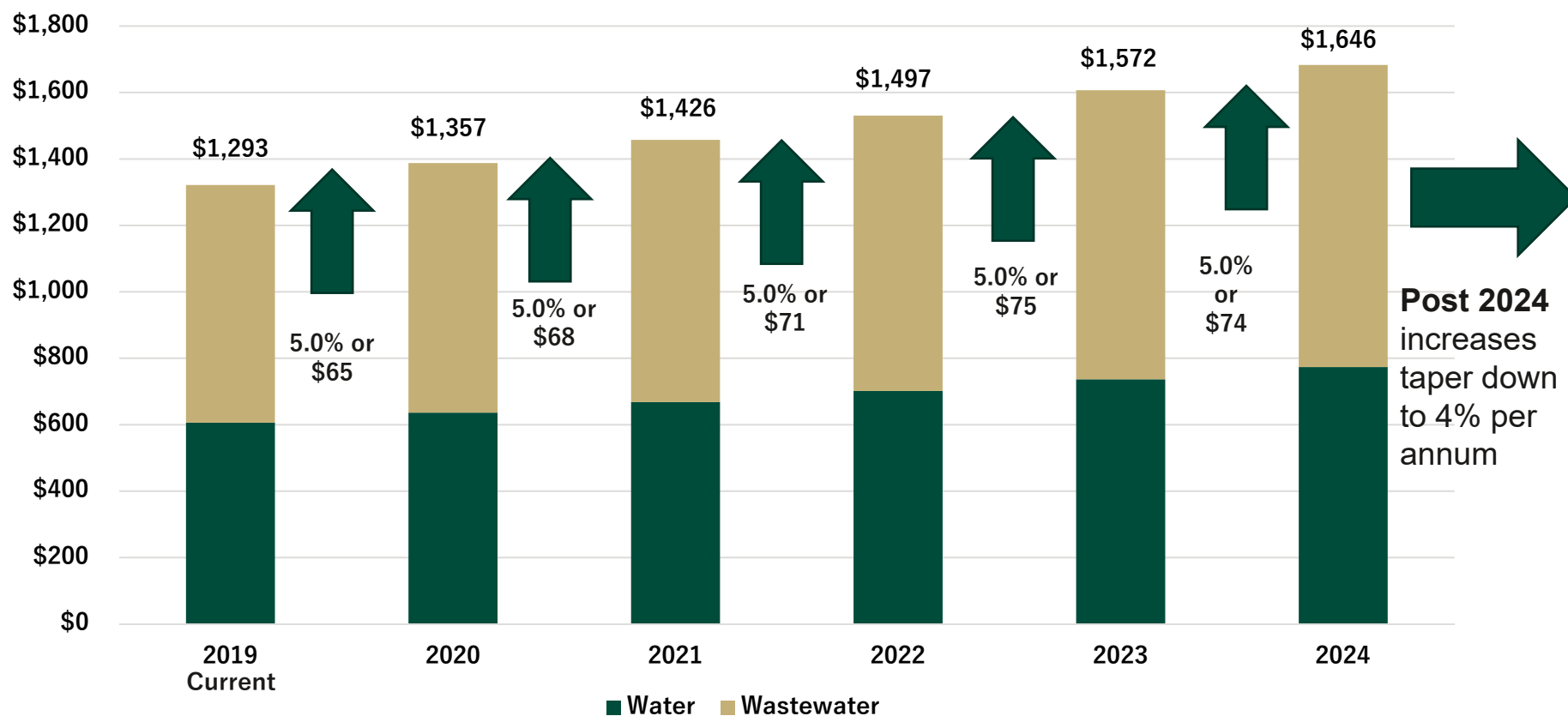


Note 1: The net rate funding requirement represents the amount of funds that must be funded through the water rates

Note 2: Non-user rate revenues are budget items which decrease the net operating budget but are not recovered through the user rates (i.e. interest and penalties, leases, etc.) Grant funding is also included as a non-rate revenue

RATE RESULTS AND IMPACT PER USER

Typical Annual Household Charge: Consumption of 200m³/year



1: Water Rates calculated to increase at a rate of 5% per annum (fixed and variable). Sewer charges are calculated to be 124% of water rates in 2020, and decrease to 123% in 2024 and 110% in 2030

2: Rates calculated based on calendar year (Jan-Dec) costs but take into account a mid-year rate cycle.

3: Typical household figures are for reference purposes only and households consumption patters in the City may vary.

Calculated Water and Wastewater Rates

Water:

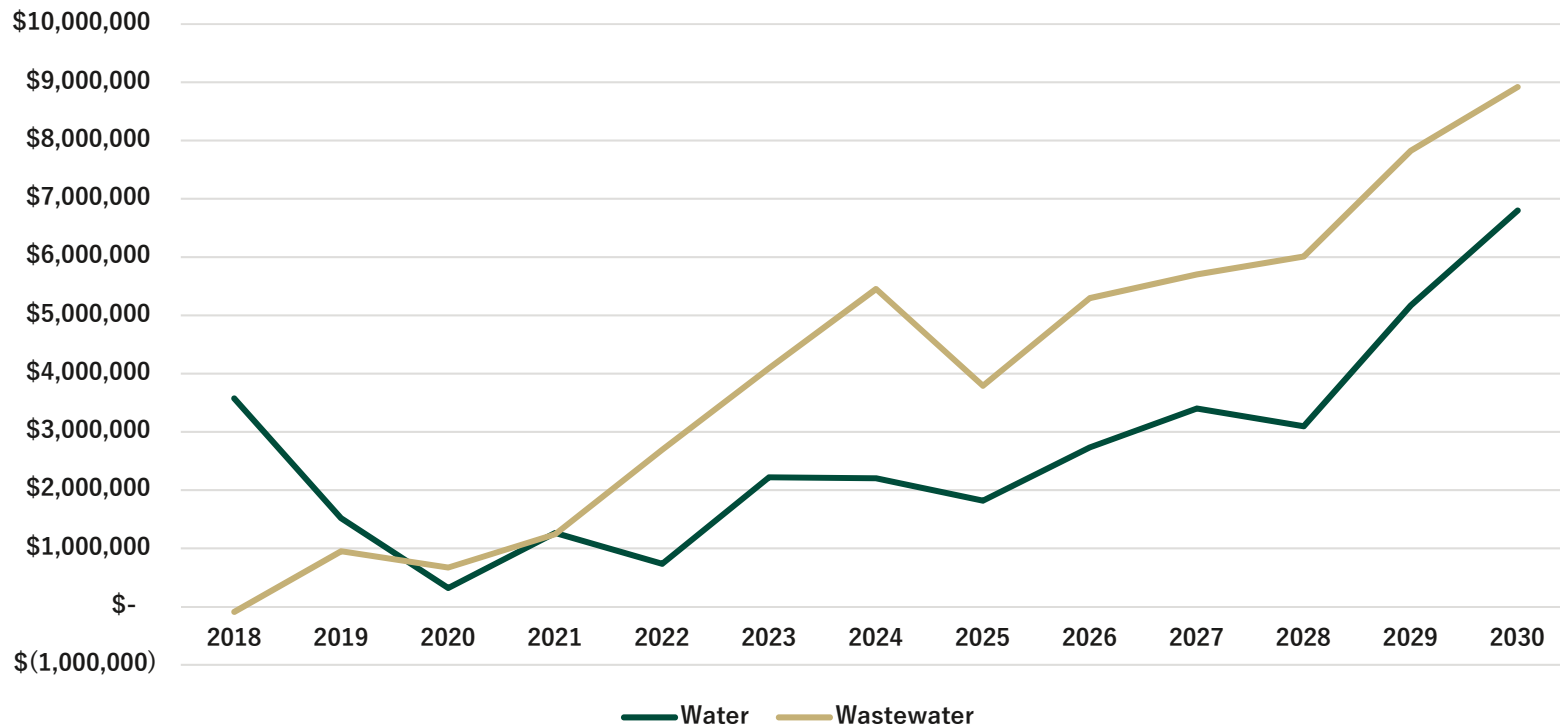
Fixed Charge – 5% per annum from 2020 – 2030

Consumption Charge – 5% per annum from 2020 – 2030

Wastewater:

124% surcharge maintained to 2023 before retreating down to 110% by 2030

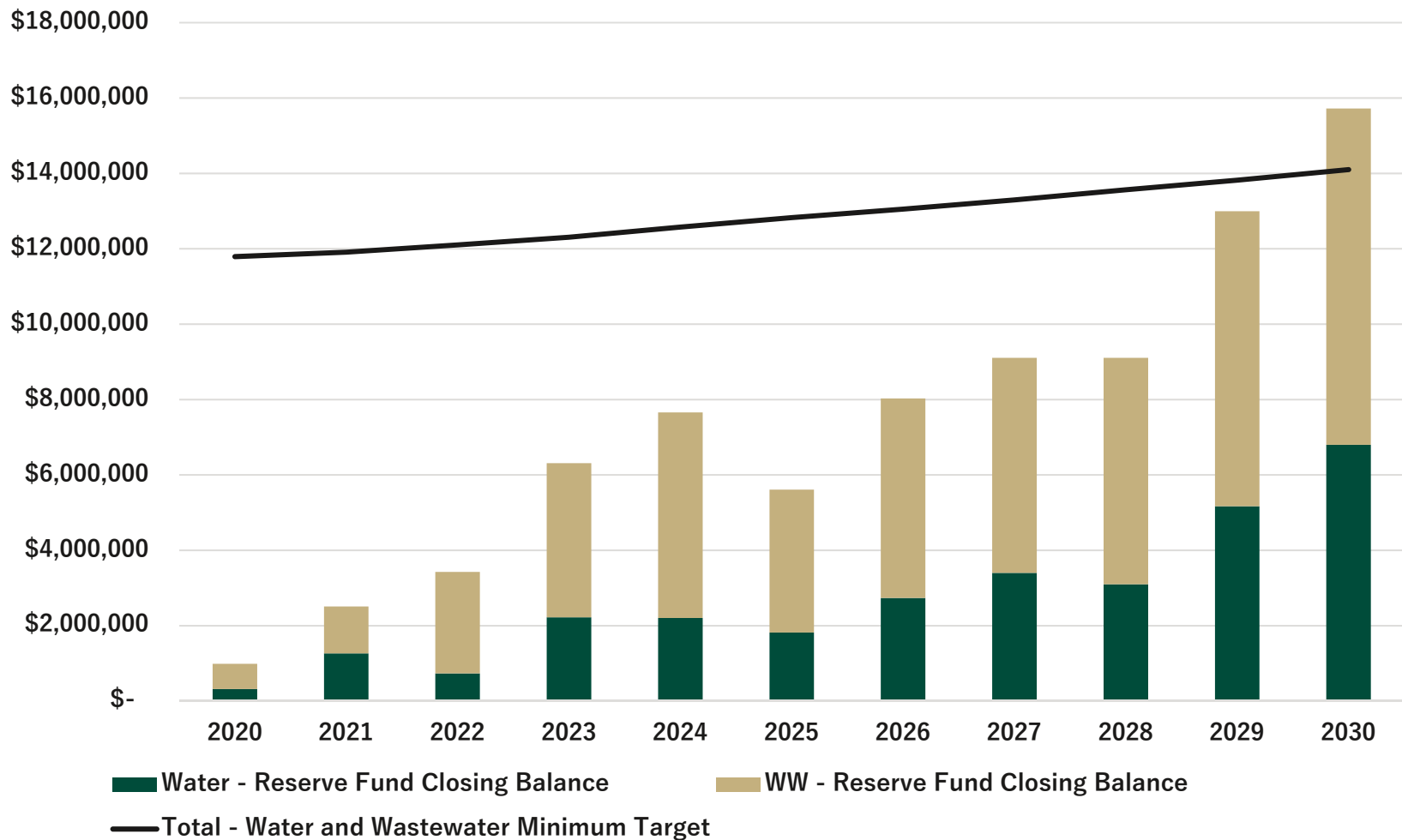
Summary of Projected Year-end Reserve Fund Balances



	2019 Closing Balance	2024 Projected Closing Balance	2030 Projected Closing Balance
Water Reserve	\$1.51 million	\$2.20 million	\$6.80 million
Wastewater Reserve	\$948,800	\$5.45 million	\$8.92 million

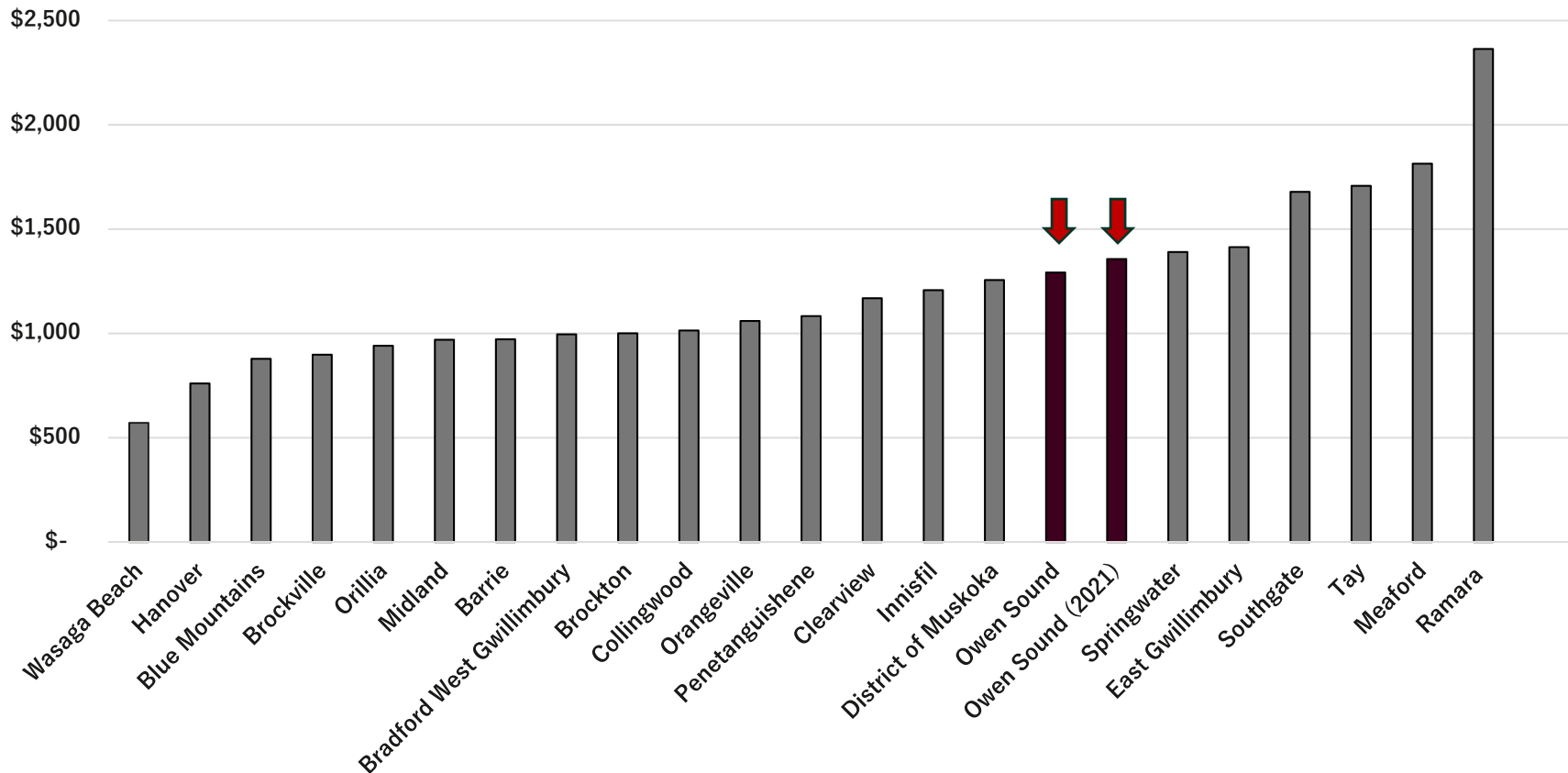
17 *Note: Reserve fund balances are estimated and will change relative to the capital program adopted by council each year and other unplanned costs incurred.*

RF Minimum Balance: 3 Months Operating + 1.5% Asset Replacement Value



Minimum Balance used a reference point and can be formally established by City staff and Council moving forward.

Benchmarking Analysis: Cost per Typical Household (200 m³)



Note: All rates as of May 2020 and includes water and wastewater services. Muskoka rates exclude property tax assessment share of rates.

ALTERNATIVE SCENARIOS

Alternative Water and Wastewater Rate Scenarios

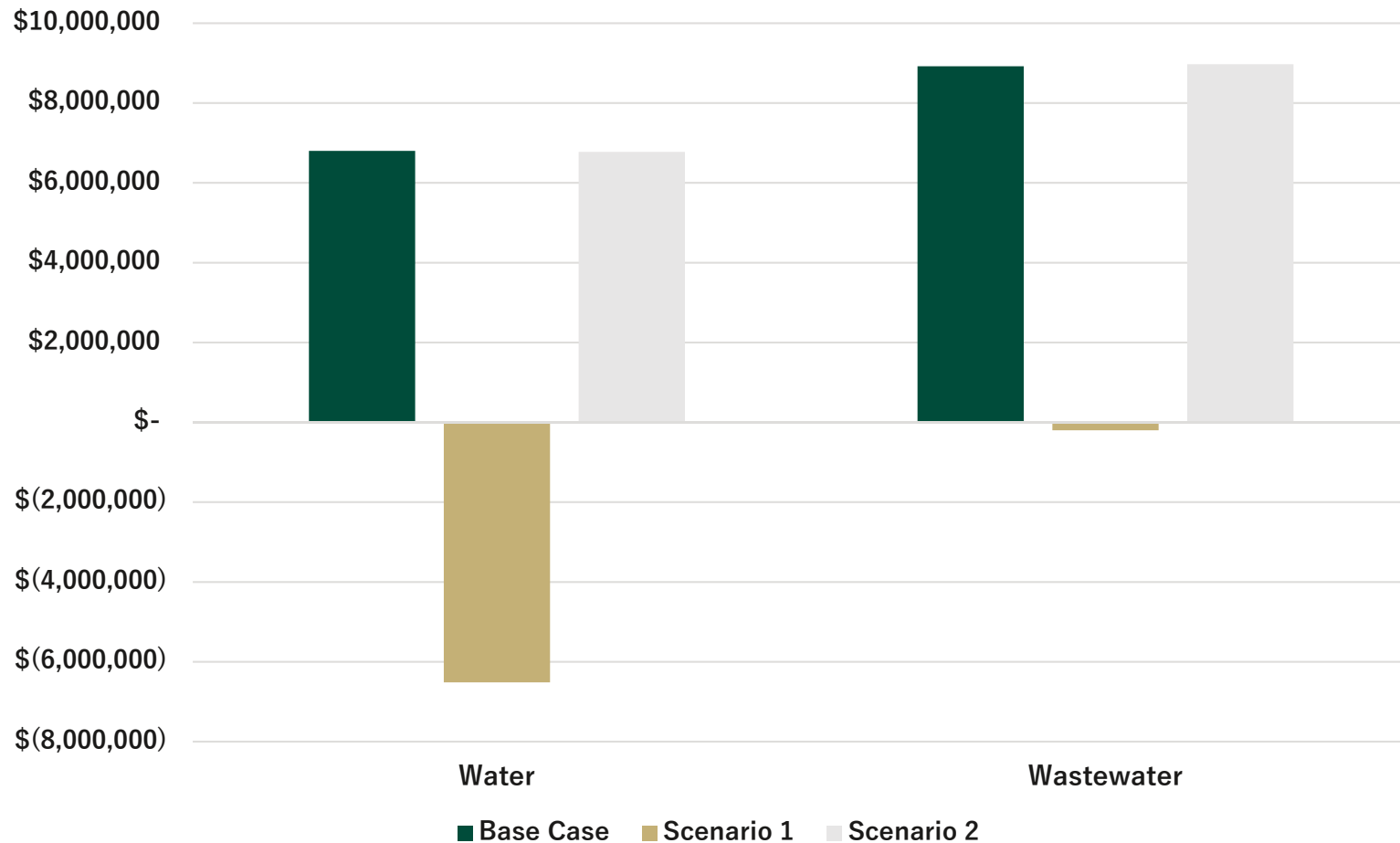
Scenario 1:

- Water rates increase by 2% per annum
- Wastewater 124% surcharge maintained throughout the 10-year period

Scenario 2:

- No rate increase in July 2020, and then 5.95% per annum in subsequent years starting in July 2021
- Wastewater 124% surcharge maintained to 2024 then decreased throughout the 10-year period to 104% in 2030
- Aims to replicate the 2030 reserve fund balances of the base case scenario

Estimated Year-end 2030 Reserve Fund Balance Comparison



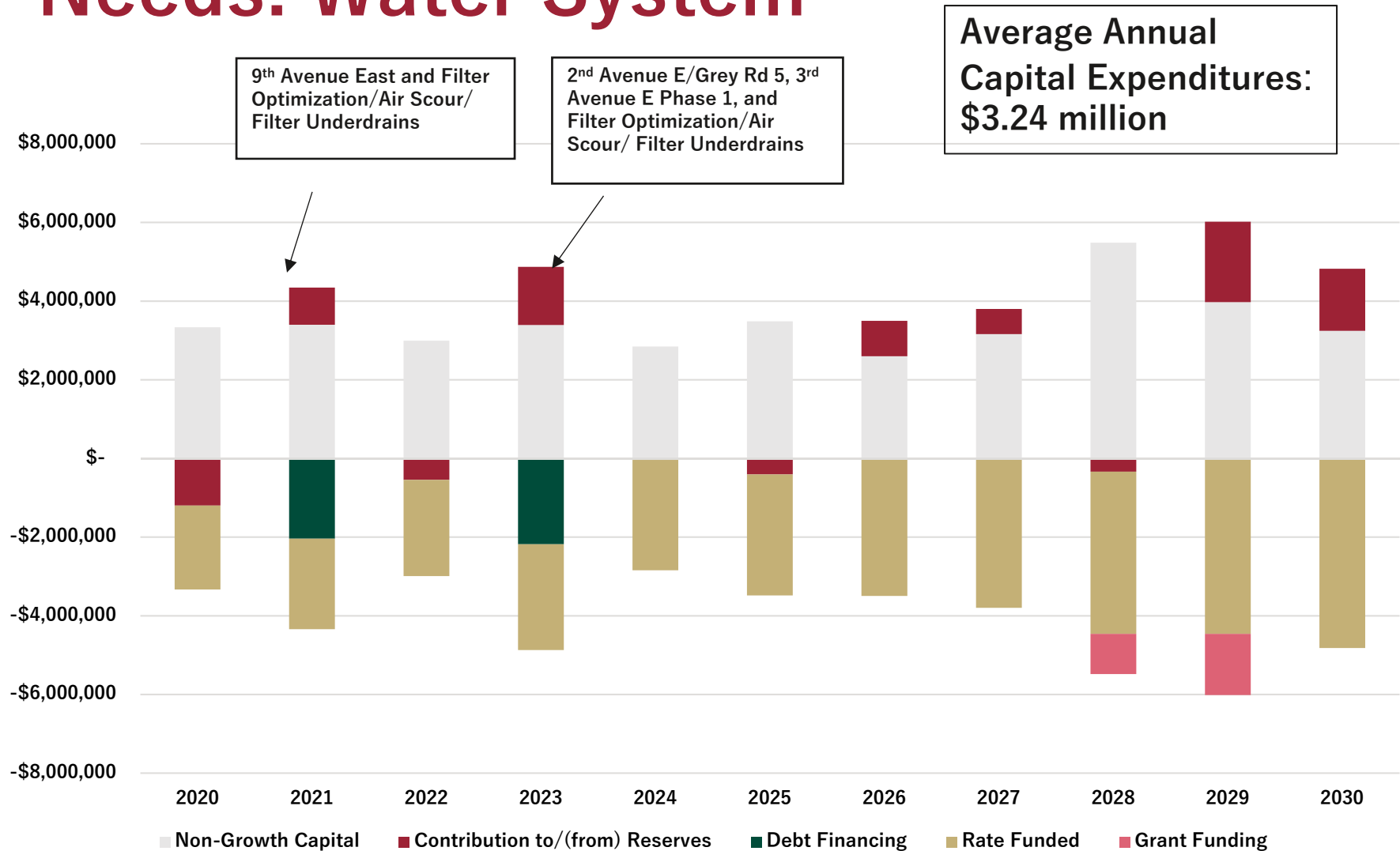
Note: Scenario 1 is to increase rates at 2% per annum

Note: Scenario 2: is to introduce no rate change for July 2020/2021 period

Next Steps

- Hemson to finalize results and scenarios based on discussions with Council
- Refine analysis as required
- Prepare Report

Summary of 10-Year Capital Needs: Water System



Summary of 10-Year Capital Needs: Wastewater System

