

Draft Results for Discussion Purposes

# Water and Wastewater Rate Study & Financial Plan



TOWN OF GEORGINA

October 28th, 2020



# Summary of Key Messages and Findings

- Town's existing rates represent one of the lowest in the Region as well as other communities with similar service delivery structures
- Wastewater rates have been insufficient to fully fund services and has required reserves to help fund operations
  - Higher rate requirement for wastewater in the short-term
- Fairly substantial capital outlay is required over the planning period (and beyond) as well as new operational expenditures to ensure optimal service delivery
- Regional costs have historically been driving factor behind Town rate increases – this relationship is anticipated to change moving forward
- The Town's fixed charges represent a small share of total annual user rate revenues generated
  - Fixed charge is recommended to increase over time to represent a larger share of total revenues

# Study Background

- The Town has been fiscally prudent in the management of water and wastewater services.
  - Regular utility rate reviews have been undertaken to ensure sufficient revenues are generated to cover costs.
- The last Water and Wastewater Rate Study was completed in 2016.
- A Water Financial Plan is required to maintain the Town's drinking water licence
- A 10-year projection of water and wastewater rates will underpin the Financial Plans.

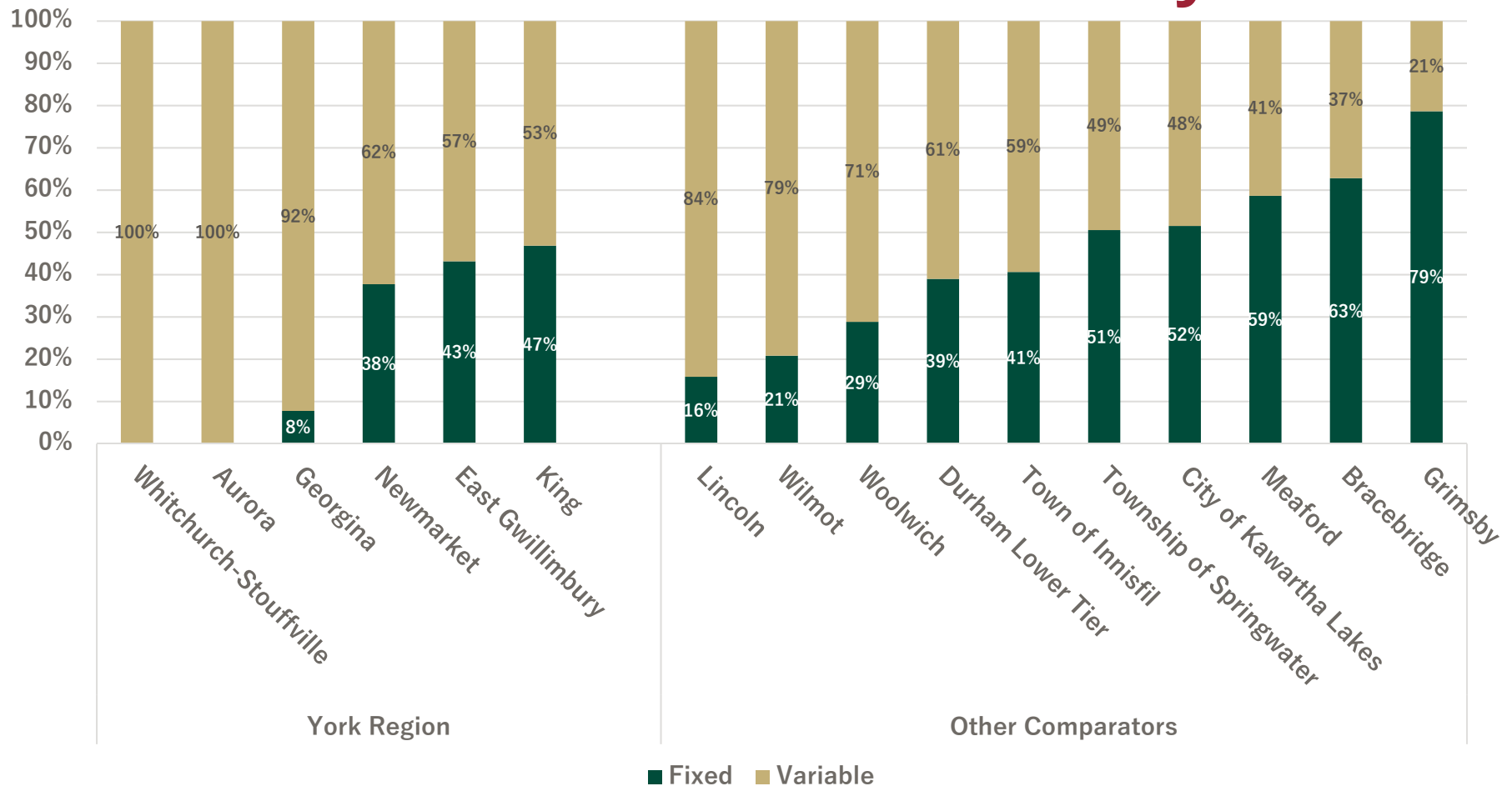
# 2020 Water and Wastewater Rates

2020 Water Rates	
Capital Charge per Quarter	\$9.75 per quarter
Variable Rate (Residential & Non-Residential)	\$2.60 per m <sup>3</sup>

2020 Wastewater Rates	
Capital Charge per Quarter	\$8.82 per quarter
Variable Rate (Residential & Non-Residential)	\$2.76 per m <sup>3</sup> per quarter

*Note: Rate schedule reflects the current in-force rates which are the 2019 rates as they have been reduced to provide financial relief as a result of the impacts of COVID-19.*

# Rate Structure Comparison: Fixed vs. Variable Rate Recovery



*Note: Based on a Typical User of 165m<sup>3</sup> per annum  
Bracebridge Fixed Charge includes the urban area tax levy. Grimsby sewer is levied through a tax rate.*



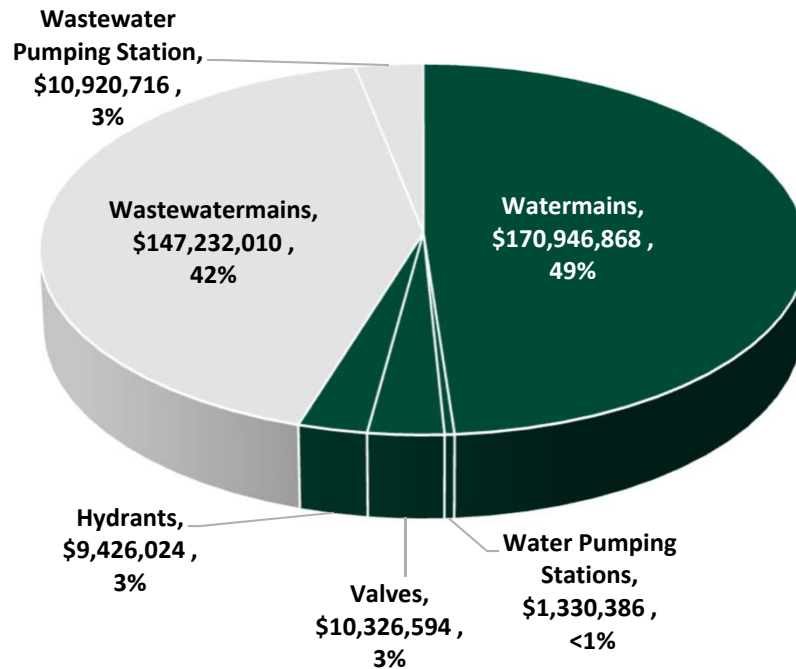
# Rate Setting Approach

- Rates calculated based on the following:
  1. Full recovery of operating costs
    - Based on the Town’s 2020 budget and adjusted to account for the effects of inflation
    - A series of “enhanced services” have been included in the calculations
  2. Full recovery of annual capital needs
    - In-year capital requirements identified by the 10-year capital plan
    - Debenture financing is required in several years in order to carry out the capital program. Principal and interest are incorporated into the cost analysis<sup>(1)</sup>
    - Capital plan has been amended by staff which defers a significant amount of capital (beyond 2030) in an effort to reduce rates. Will be revisited with asset management requirements
  3. Provision for future asset replacement

*Note 1: Approximately \$8.5 Million in debt financing required to carry out the program (Water: \$5 Million and Wastewater: \$3.5 Million)*

# Asset Replacement Value

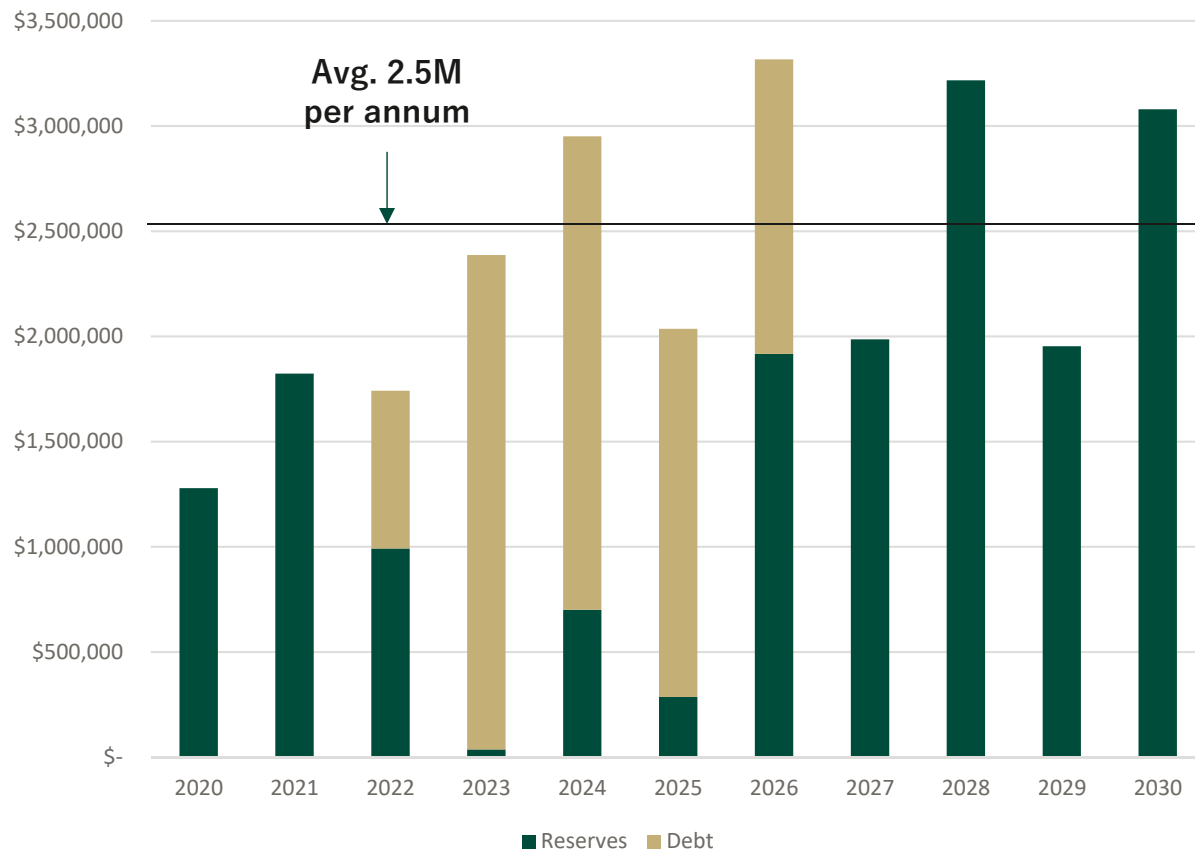
Total Water and Wastewater Replacement Value:  
\$350 Million



- Water Replacement Value = \$172 Million
- Sewer Replacement Value = \$158 Million
- Annual Capital Asset Replacement provision estimated at **\$6.9 million** per year



# Summary of Total Combined 10-Year Non-Growth-Related Capital Requirements by Funding Source

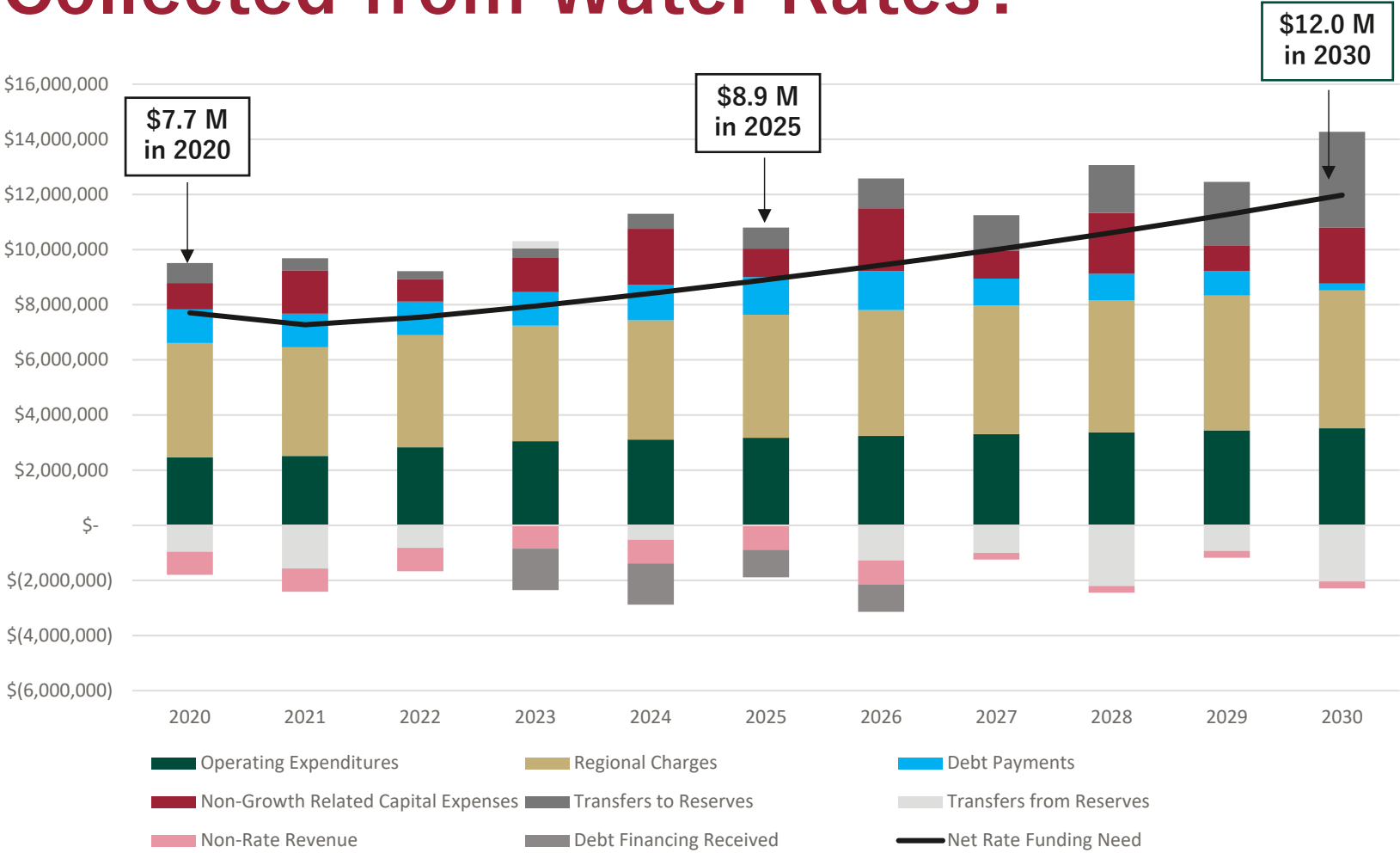


- Based on the Town's 10-year capital program
- Over 60% of program is water related
- Average annual capital spend is higher than recent trends

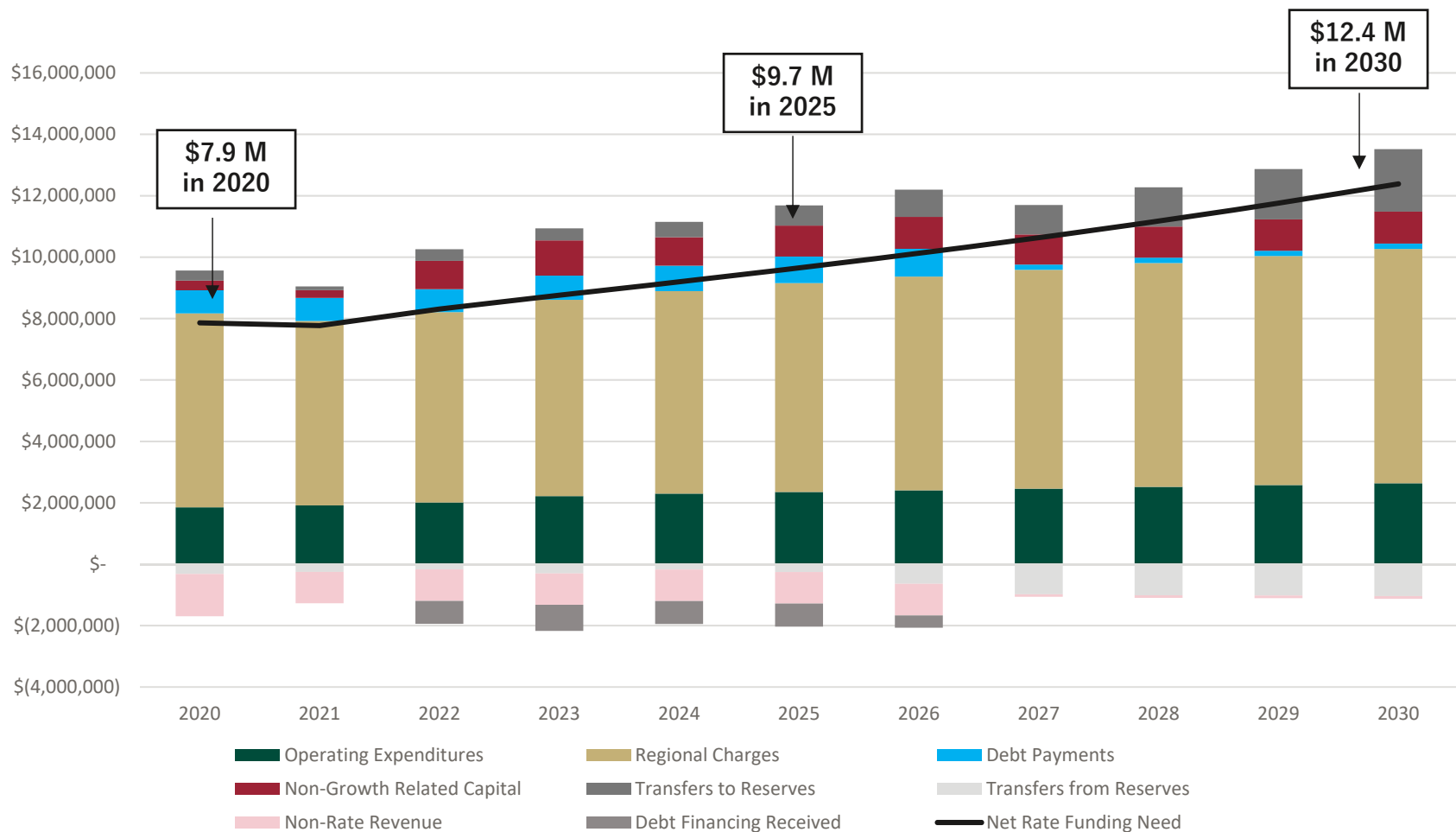
Note: Costs are inflated to the year in which the expenditure is assumed.



# How Much Revenue Needs to be Collected from Water Rates?



# How Much Revenue Needs to be Collected from Wastewater Rates?

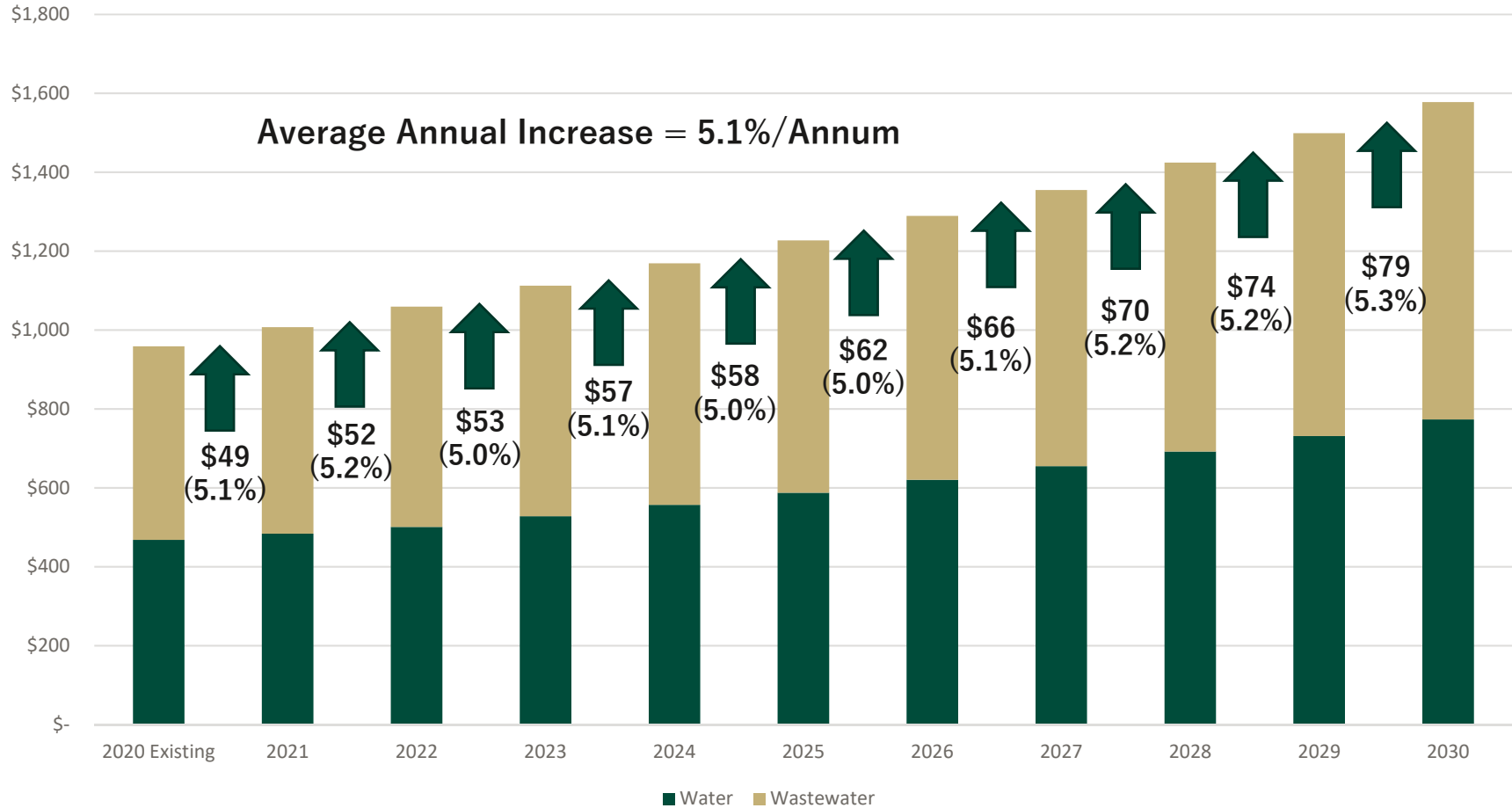


# Calculated Quarterly Water and Wastewater Rates (Base Case)

- Fixed vs. Variable Rate Recovery relationship realigned over the period. Target **15% fixed recovery** by 2030:
  - Fixed charge increases fiscal stability and revenue predictability
  - Offsets Town risk with declining consumption trends
  - Still provides end user control of utility bills

Water Rates	2020 Rate Per Quarter	2021 Rate Per Quarter	2022-2030 Annual Rate Increase
Fixed Capital Charge (Quarterly)	\$9.75	\$11.07 (or 13.5%)	13.5% increase in 2022 11.5% increases thereafter
Variable Rate (Residential & Non-Residential)	\$2.60 per m <sup>3</sup>	\$2.67 per m <sup>3</sup> (or 2.5%)	2.5% increase in 2022 4.75% increases thereafter
Wastewater Rates	2020 Rate Per Quarter	2021 Rate Per Quarter	2022-2030 Annual Rate Increase
Fixed Capital Charge (Quarterly)	\$8.82	\$10.14 (15.0%)	15.0% increase to 2024 11.75% increases thereafter
Variable Rate (Residential & Non-Residential)	\$2.76 per m <sup>3</sup>	\$2.93 per m <sup>3</sup> (or 6.0%)	6.0% increase in 2022 3.70% increases thereafter

# Total Annual Charge per Typical Household (165 m<sup>3</sup>/year)



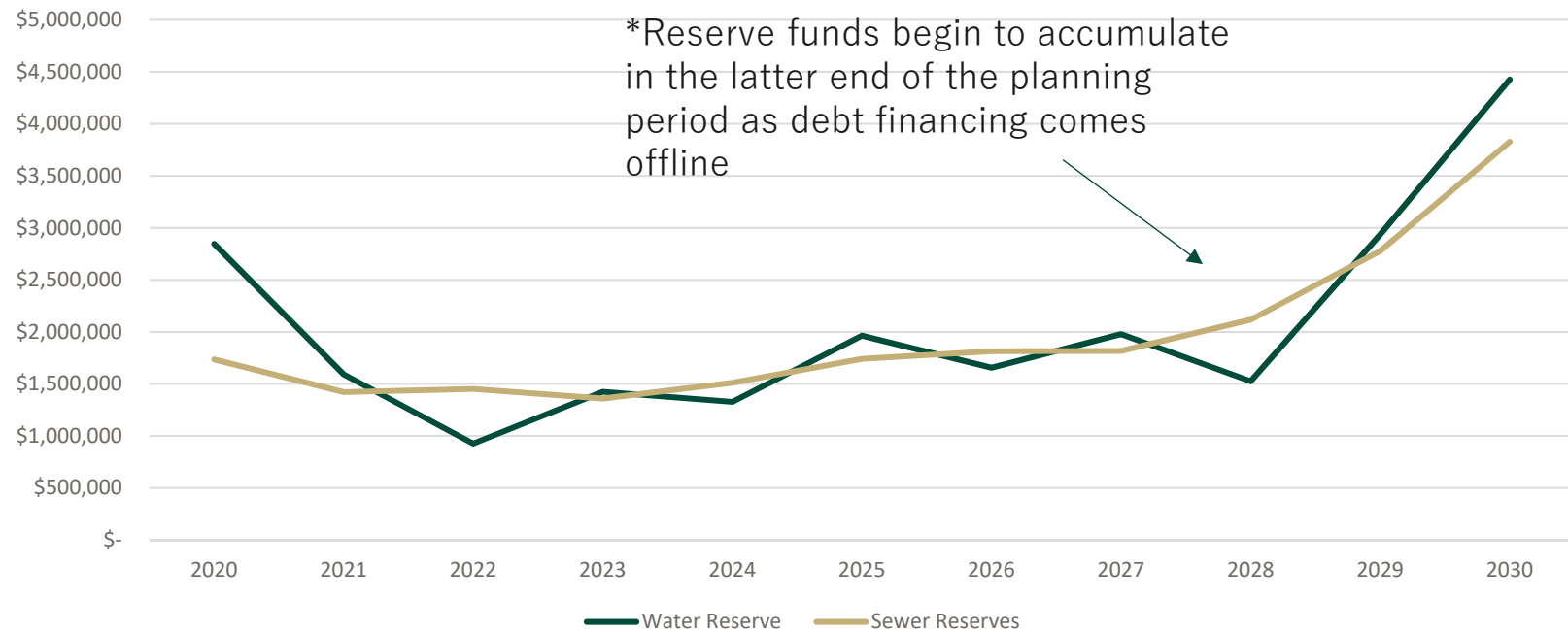
# Implications of Adjusting the Cost Recovery Structure (Base Case)

- As a result of adjusting the cost recovery structure (fixed vs. variable), specific change in bills will be directly tied to usage
- Difference of +/-: 1% – 2% from a typical user
  - Total \$ change for lower users is nominal

Users	2020 Existing Bill	2021 Bill Calculated	Difference (\$ and %)
<b>Low User:</b> 50m <sup>3</sup> /annum	\$342	\$364	\$22 (or 6.5%)
<b>Low – Medium User:</b> 100m <sup>3</sup> /annum	\$476	\$504	\$28 (or 5.8%)
<b>Typical User:</b> 165m <sup>3</sup> /annum	\$959	\$1,007	\$49 (or 5.1%)
<b>Medium – High User:</b> 250m <sup>3</sup> /annum	\$1,414	\$1,482	\$68 (or 4.8%)
<b>High User :</b> 600 m <sup>3</sup> /annum	\$3,290	\$3,439	\$149 (or 4.5%)



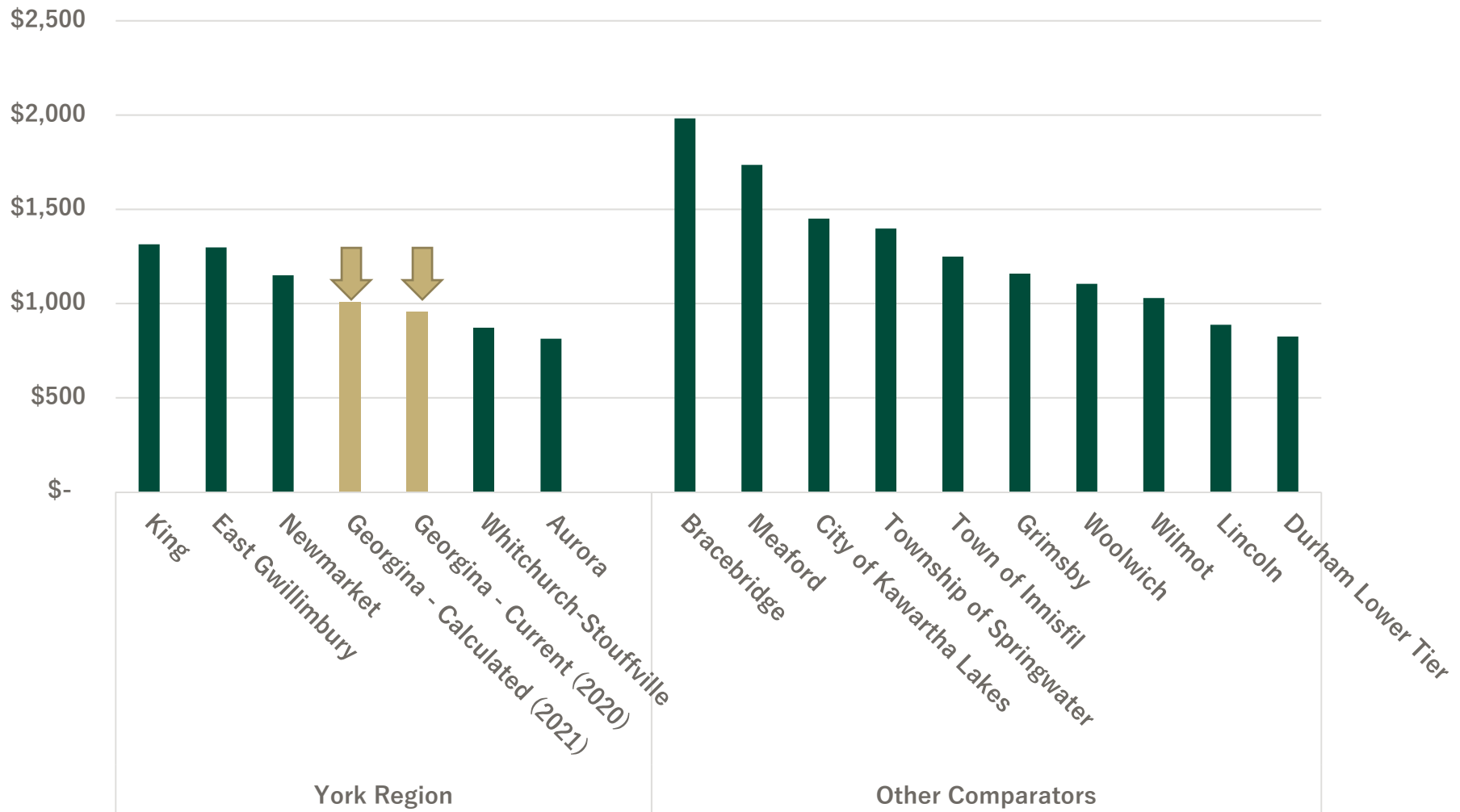
# Summary of Projected Year-end Reserve Fund Balances (Base Case)



	2020 Projected Closing Balance	2025 Projected Closing Balance	2030 Projected Closing Balance
Water Reserve	\$2.85 million	\$1.96 million	\$4.43 million
Wastewater Reserve	\$1.74 million	\$1.74 million	\$3.83 million

*Note: Incorporates interest earned on reserve funds. Includes infrastructure, vehicle & equipment replacement and rate stabilization reserves  
Excludes the Willow Beach Debenture Reserves*

# Benchmarking Analysis: Total Charge per Typical HH (1)(2)



Note 1: Based on a Typical User of 165m<sup>3</sup> per annum for water and wastewater services

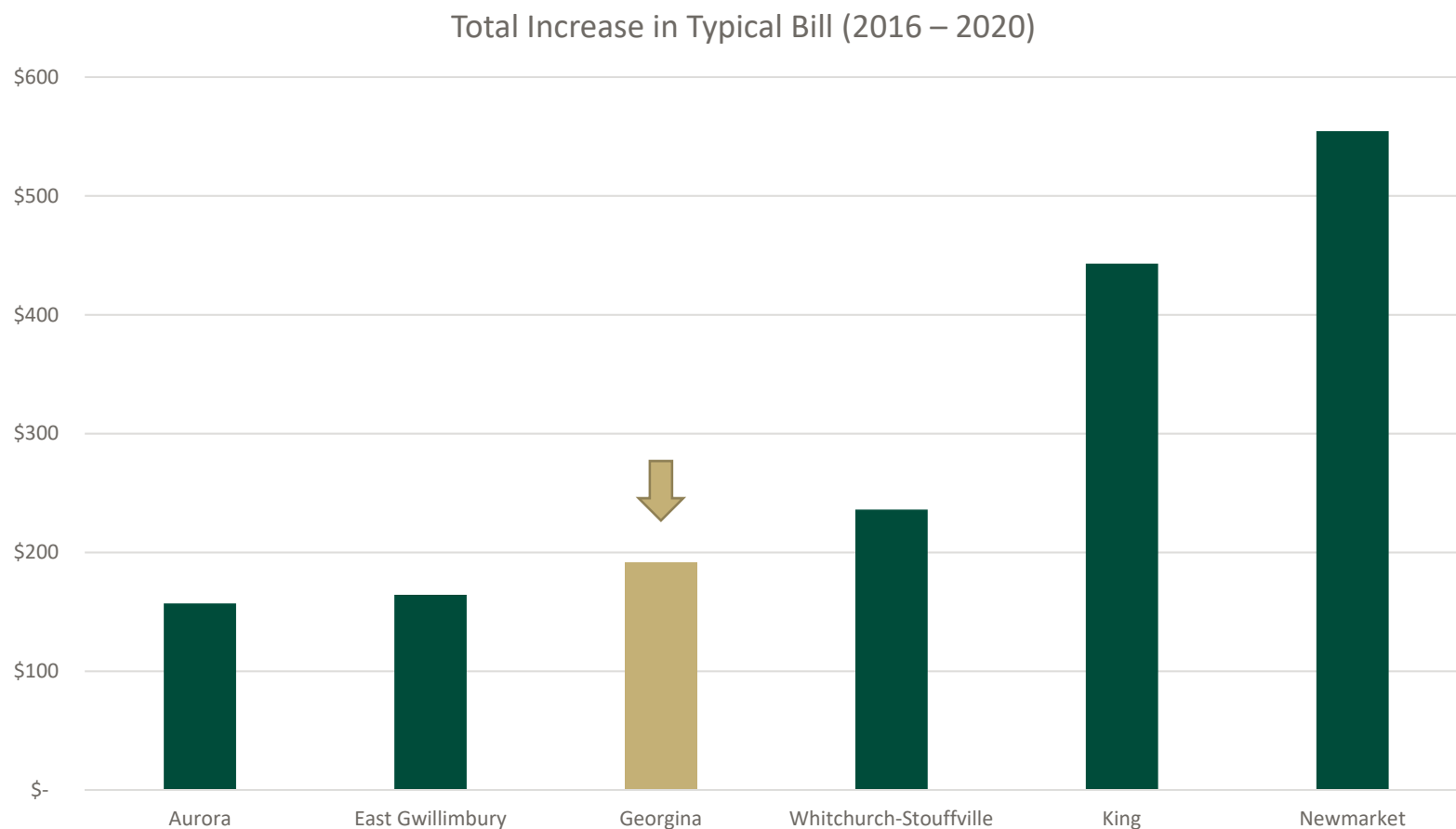
Note 2: Most rates in other jurisdictions have been indexed by 2% to reflect \$2021

Does not include stormwater user fees which are levied in addition to water/ww charges in some jurisdictions (i.e. aurora)





# Benchmarking Analysis: History of Rate Increases



*Note 1: Based on a Typical User of 165m<sup>3</sup> per annum for water and wastewater services*

*Note 2: Most other Municipality rates have been indexed by 2% to reflect \$2021*

# ALTERNATIVE OPTIONS

# Alternative Water and Wastewater Rate Scenarios

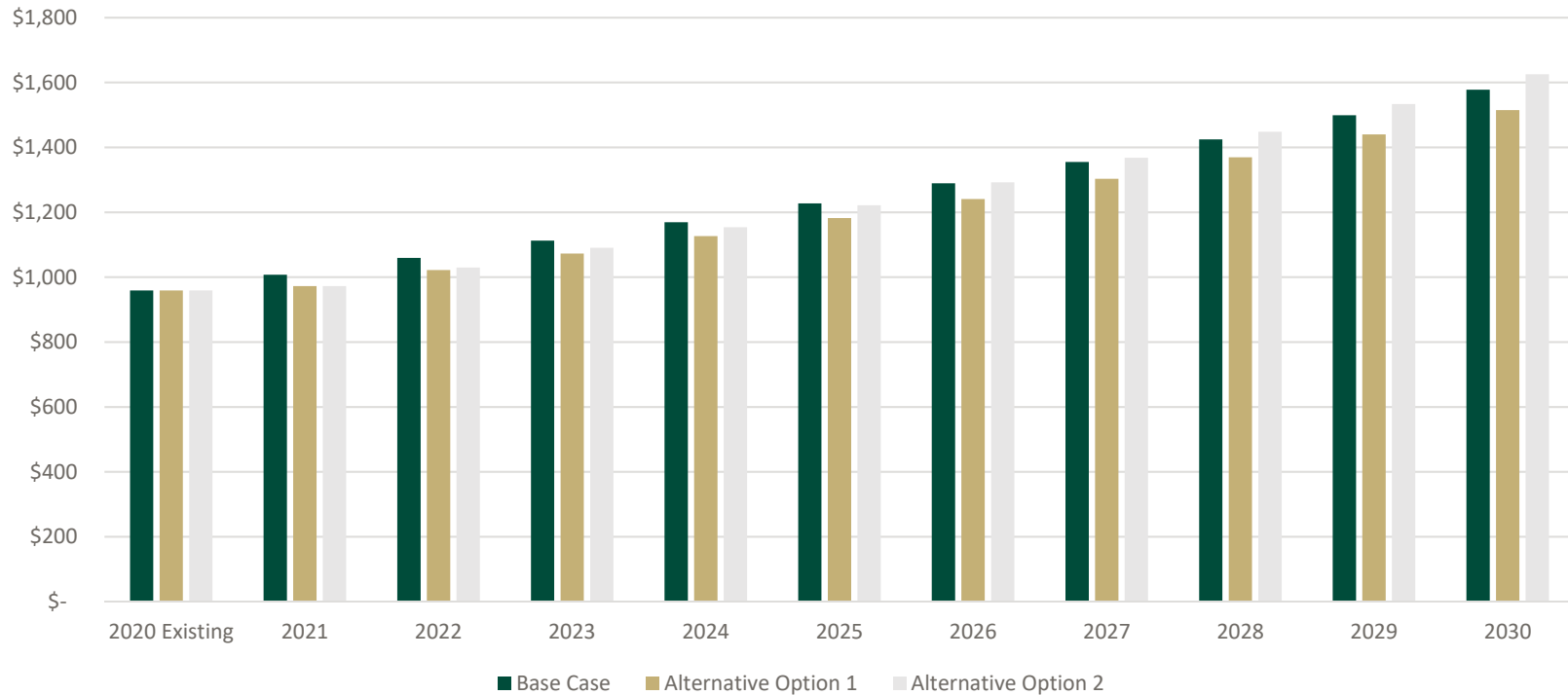
## Alternative Option 1:

- Water and Wastewater rates increase by 1.45% in 2021
- Post 2021: Rates increase at similar annual increases (%) as the Base Case Option

## Alternative Option 2:

- Water and Wastewater rates increase by 1.45% in 2021
- Post 2021: Rates increase at a higher rate than the *Base Case Option* to recover lost revenue provided by 2021 rate relief
- Aims to replicate the 2030 reserve fund balances of the *Base Case Option*
- Annual rate increase per typical household to be **less than 6.0%/year** after 2021

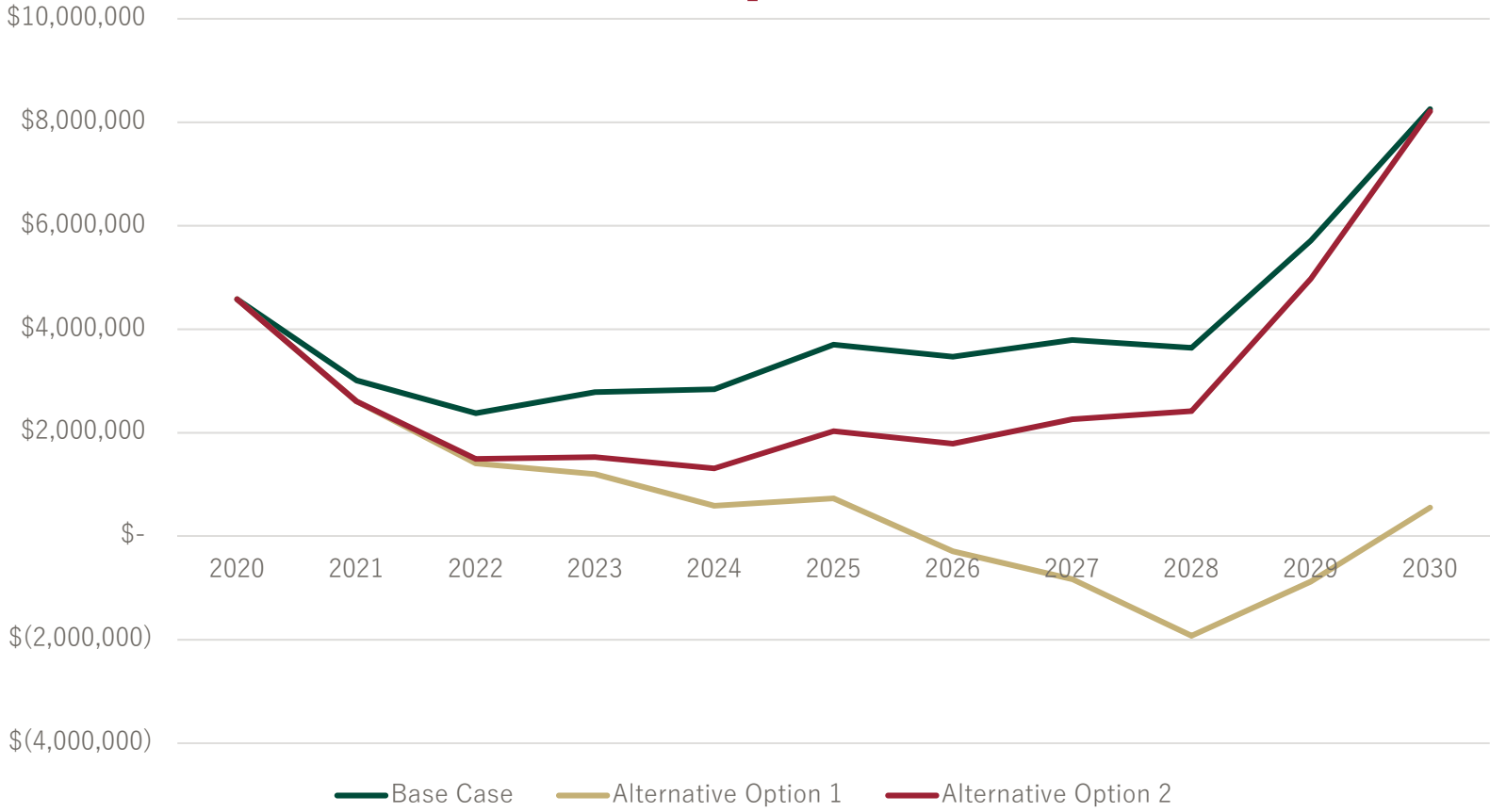
# Comparison of Total Annual Typical HH Charges (165 m<sup>3</sup>/annum) Water and Wastewater Rate Options



Option	Average Annual Increase per Typical HH	Difference in 2025 Bill Relative to Base Case	Difference in 2030 Bill Relative to Base Case
Alternative Option 1	4.7%	(\$45)	(\$63)
Alternative Option 2	5.4%	(\$6)	\$48

*Note: Base Case Scenario average annual increase per typical HH equal to 5.1% per annum*

# Estimated Year-end 2030 Reserve Fund Balance Comparison



Option	Difference in 2025 Balance Relative to Base Case	Difference in 2030 Balance Relative to Base Case
Alternative Option 1	(\$3.0 million)	(\$7.7 million)
Alternative Option 2	(\$1.7 million)	\$0



# Summary of Options for Council Consideration

Options for Consideration	Key Indicators for Comparison			Comments
	Average Annual Rate Increase per Typical HH (2021 – 2030)	Typical HH Bill in 2030 (165m <sup>3</sup> /year)	2030 Ending Reserve Balance (water & ww combined)	
Base Case	5.1%	\$1,578	\$8.2 Million	<ol style="list-style-type: none"> <li>1. No Rate relief provided in 2021</li> <li>2. Systems remain sustainable over the 10-years</li> <li>3. Produces the relatively lower year-over-year average rate increase per typical household</li> <li>4. Provides Town with maximum flexibility/ability to manage unforeseen capital expenditures and operating pressures</li> </ol>
Alternative Option 1	4.7%	\$1,515	\$553k	<ol style="list-style-type: none"> <li>1. Rate relief provided in 2021</li> <li>2. Cumulatively, reserves would go into a deficit position in 2026</li> <li>3. Increased debt financing<sup>(1)</sup> or deferral of capital would be required to carry out program</li> <li>4. Very limited ability to manage unforeseen capital expenditures and operating pressures</li> </ol>
Alternative Option 2	5.4%	\$1,625	\$8.2 Million	<ol style="list-style-type: none"> <li>1. Rate relief provided in 2021</li> <li>2. System remains sustainable over the 10-years</li> <li>3. No further debt <sup>(1)</sup> or deferral of capital required</li> <li>4. Town has flexibility/ability to manage unforeseen capital expenditures and operating pressures</li> </ol>

20 *Note 1: In addition to the \$8.5 million of new debt required to carry out the capital program outlined in the base case option*



# Summary of Conclusions and Recommendations

- Town will require an increase in user rates in order to recover the costs outlined in this analysis
- Town rates continues to remain similar with surrounding communities
- Proposal is not without risk: Town needs to monitor costs and revenues closely over the period and may need to adjust the user rates to respond to:
  - Changes in regional purchasing and treatment costs
  - Asset management requirements
  - Economic conditions



## Next Steps

- October 28<sup>th</sup>: Council to provide direction on options presented
- Hemson to finalize results based on discussions with Council
- Prepare Rate Study Report to inform by-law passage
- Prepare Water Financial Plan for the Town's drinking water licence renewal application