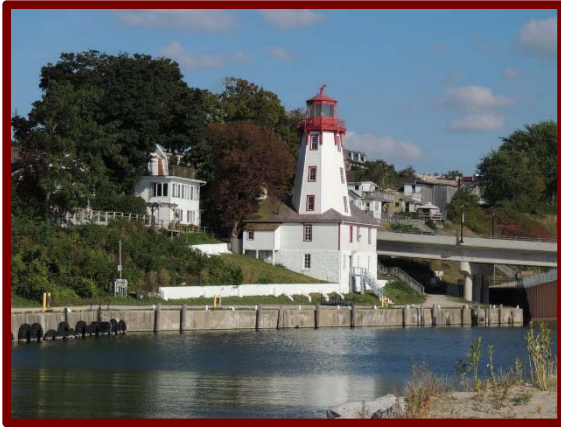


# Municipality of Kincardine Water & Sewer Rates Study Council Information Session



Monday, March 2<sup>nd</sup>, 2020

**HEMSON**  
Consulting Ltd.



# Background Information and Study Objectives

- The Municipality has increased water and sewer rates generally in accordance with the rates outlined in the 2015 Rate Study
- Municipality is required to renew their drinking water license before May 2020
  - A Water Financial Plan (O.Reg 453/07) to support the renewal application will need to be prepared
- Municipal systems are generally in good fiscal standing
  - To start 2020, reserve balances are \$8.7 million for Kincardine Water and \$5.9 million for Wastewater.
  - Tiverton water system reserve (\$227k) is constrained due to limited serviced population

# Background Information and Study Objectives

- Municipality has identified a fairly significant long-term capital plan for Kincardine and Tiverton Water and the Wastewater system
- Hemson to explore rate structure alternatives\*:
  1. **Status Quo:** Maintain separate rates for Kincardine and Tiverton water systems
  2. **Harmonized Water Structure:** Combine Kincardine and Tiverton into one water rate

\*No change to wastewater system rate structure under either option

# 2020 Monthly Water and Sewer Rates:

## 1. Water Fixed Charge (Kincardine)

Description	Rate (monthly)
19mm	\$ 33.14
25mm	\$ 63.71
38mm	\$ 127.42
50mm	\$ 203.90
75mm	\$ 382.28
100mm	\$ 637.14
150mm	\$ 1,274.29

## 2. Water Consumption Charge (Kincardine)

Description	Rate (per m <sup>3</sup> )
All consumption	\$0.93

## 1. Water Fixed Charge (Tiverton)

Description	Rate (monthly)
Metered Accounts	\$41.39

## 2. Water Consumption Charge (Tiverton)

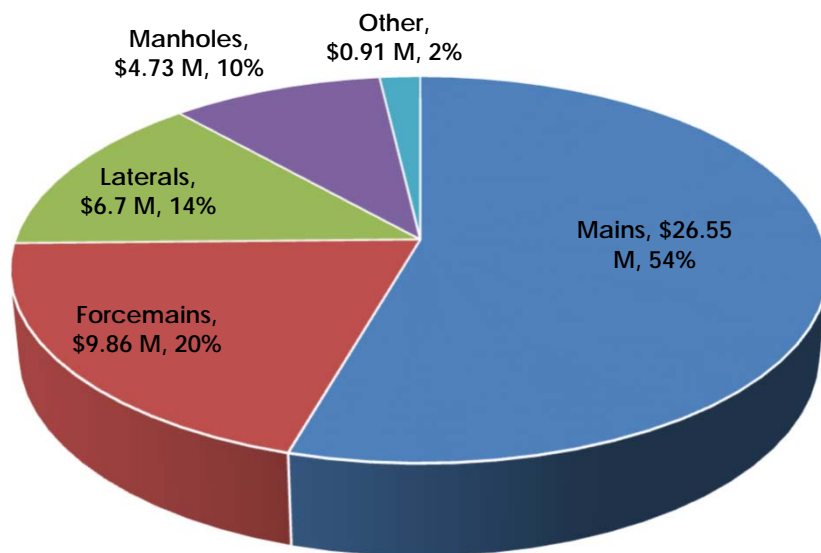
Description	Rate (per m <sup>3</sup> )
All consumption	\$1.15

## 1. Sewer Fixed Charge

Description	Rate (monthly)
Residential	\$35.24
Apartments of 3+ Units	\$28.15
Commercial/Industrial	\$35.24

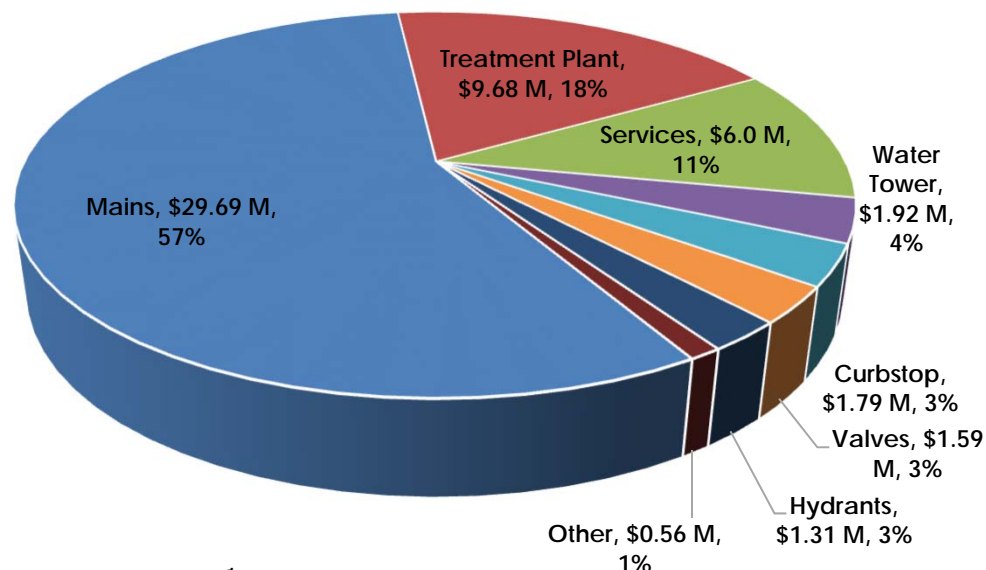
# Summary of Water and Wastewater Infrastructure

Wastewater Inventory Replacement Value



Water = \$48.7 Million

Water Inventory Replacement Value



Water = \$52.5 Million

## Infrastructure Value Summary

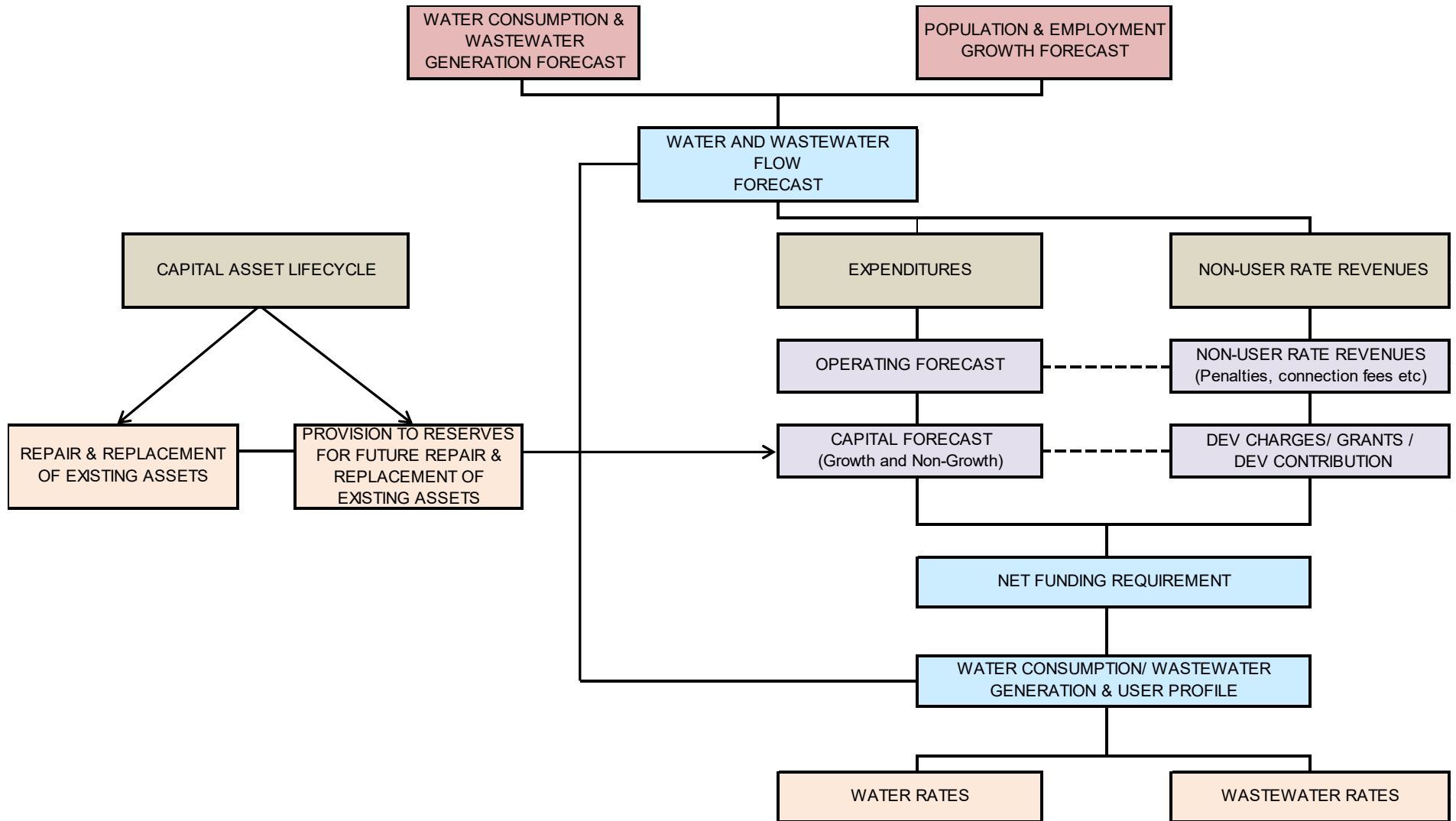
Net Book Value (2018 FIR)	\$42.48 million
Replacement Value	\$101.28 million

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# **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 Municipality's 2019 and 2020 budgets
    - Costs have been adjusted to account for inflation
  2. Full recovery of annual capital needs
    - In-year capital requirements identified by the 10-year capital plan and discussions with staff
    - Financing costs required to carry out the capital plan have been included (where applicable)
    - Only non-growth related costs have been included
  3. Provision for future asset replacement



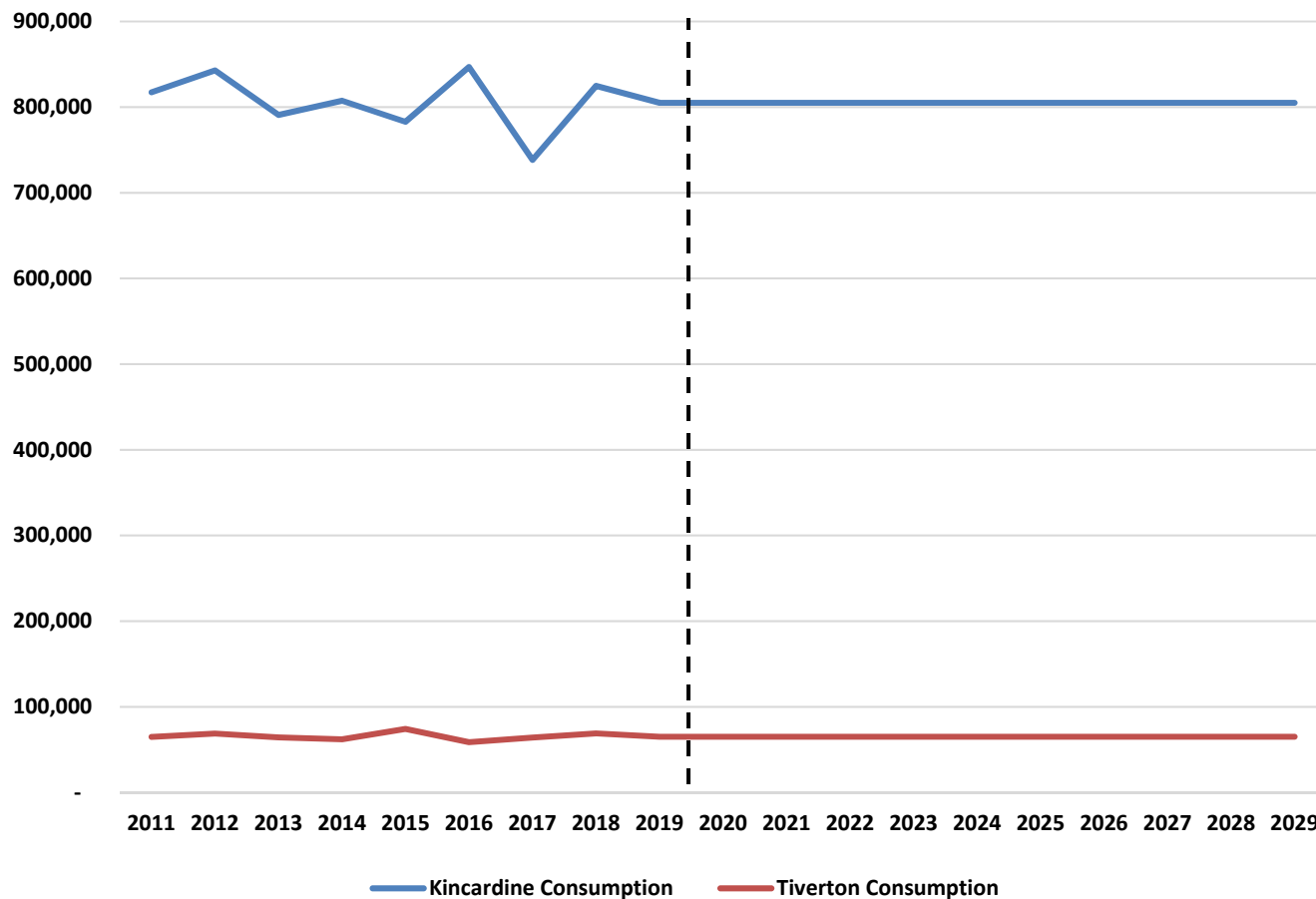
# Future Demand

- Forecast of new connections primarily based on historical assumptions and data from staff
- About 360 new equivalent connections over the planning period

	2019 Year-end	2029 Projected
Total # Equivalent Kincardine Water Connections	4,311	4,642
Total # Equivalent Tiverton Water Connections	371	401

*Includes both new residential and non-residential connections*

# Projected Consumption



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

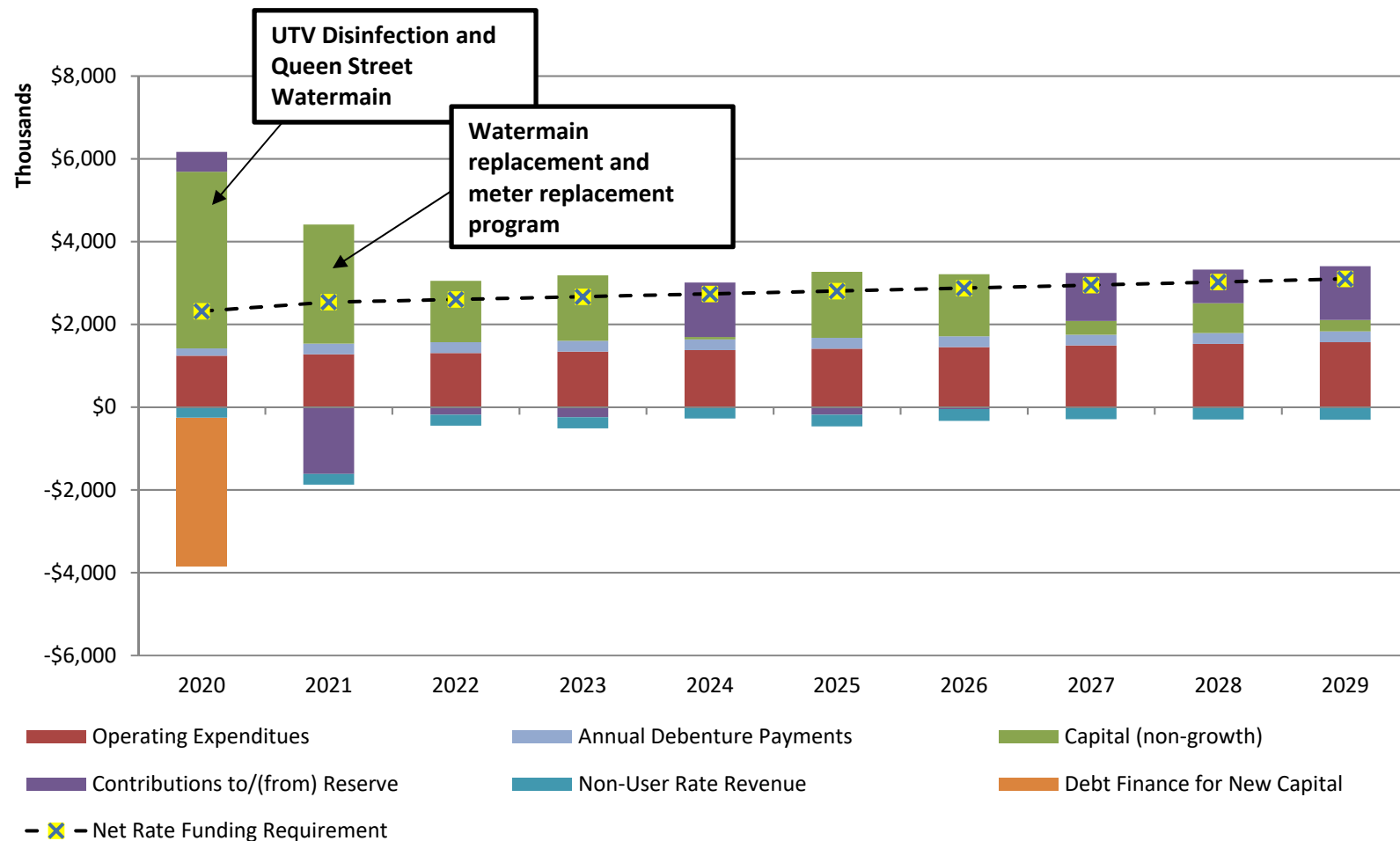
*Note 1: Based on municipal consumption data  
\*2017 consumption may be skewed as a result of standpipe issue  
Excludes Huron-Kinloss Consumption*

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# Water & Sewer Rate Structure Analysis

Accounts	Charge	Basis of Fee
Water/Sewer		
Fixed Fee:	\$/per month	<p>Fee levied <i>regardless</i> of the amount of water consumed</p> <p>Water – levied as a fixed fee relative to the meter size</p> <p>Sewer - Levied as a fixed fee per unit</p>
Variable Rate:	\$/per m <sup>3</sup>	<p>Fee levied on the amount of water consumed</p> <p>Levied as a cost per cubic metre consumed</p> <p>Sewer not subject to a variable rate</p>

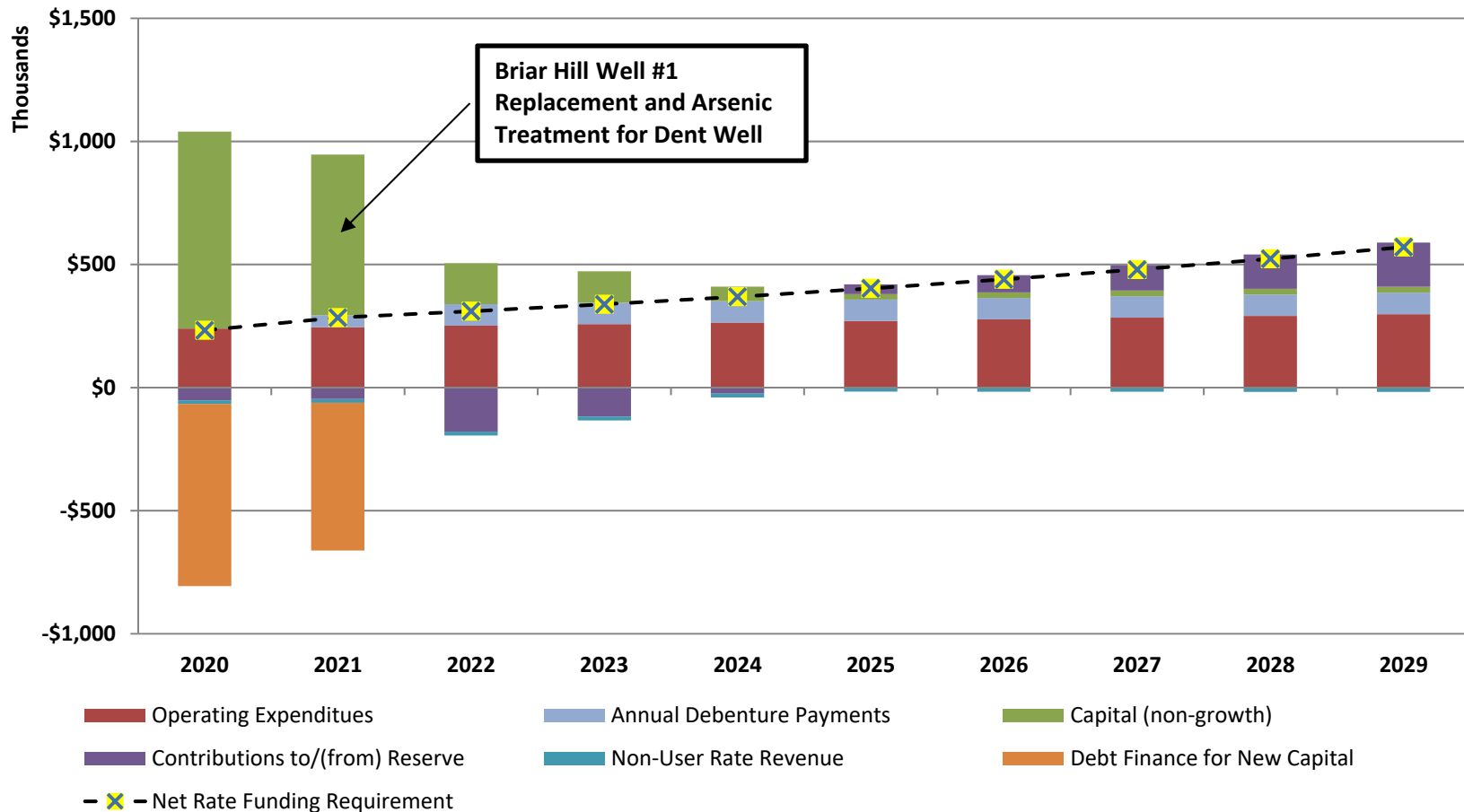
# How much Revenue Needs to be Collected from Kincardine Water Rates?



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, Huron Kinloss Water Charges, etc.)

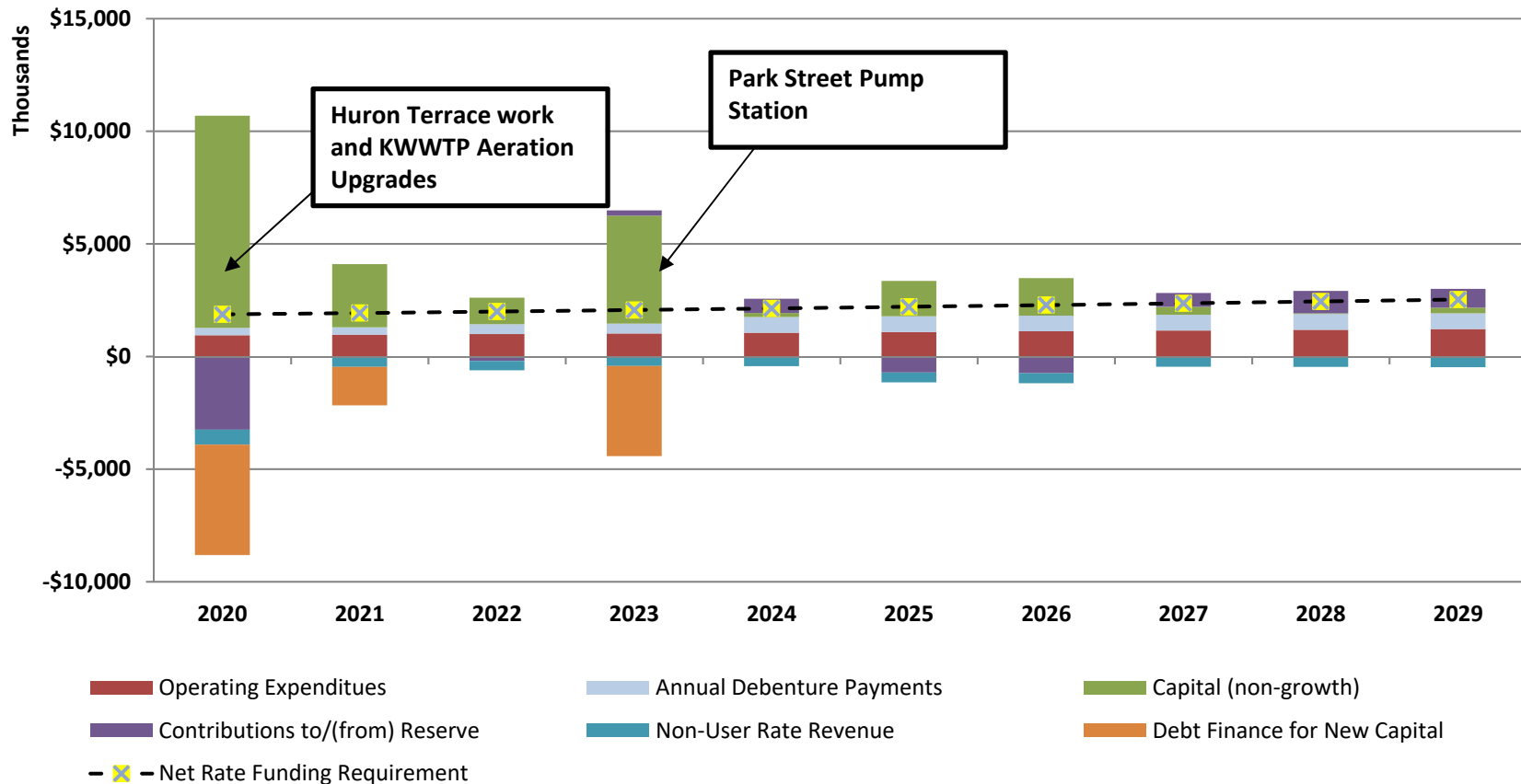
# How much Revenue Needs to be Collected from Tiverton Water Rates?



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.)

# How much Revenue Needs to be Collected from Sewer Rates?



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

Note 2: Non-user rate revenues are budget items which decrease the net operating budget but are not recovered through the Kincardine user rates ( interest and penalties, Huron-Kinloss, BEC/Iverhuron Park Sewer etc.)



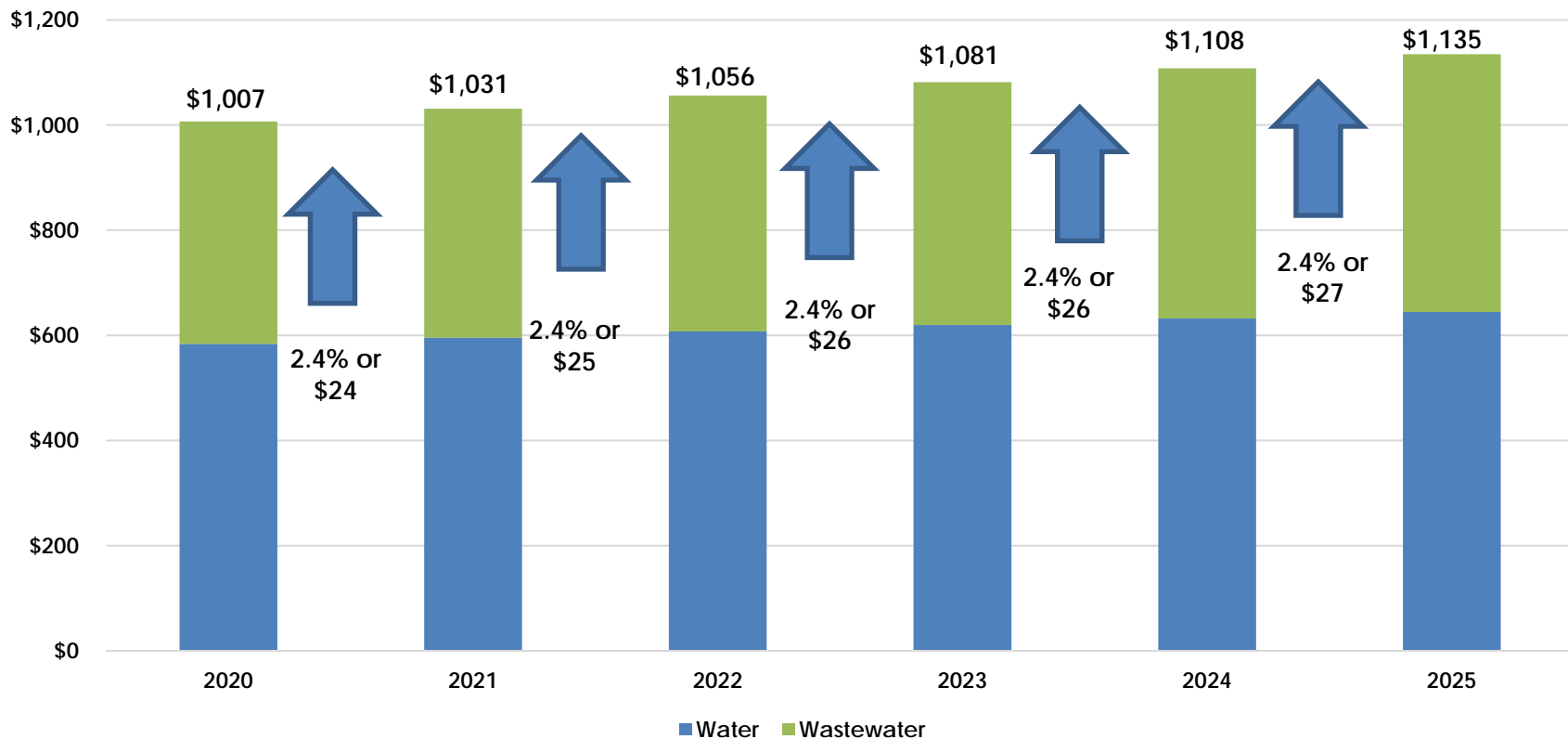
# **RATE RESULTS AND IMPACT PER USER**



# 1. Status Quo



# Status Quo: Typical Annual Kincardine Household Charge <sup>(1)</sup>

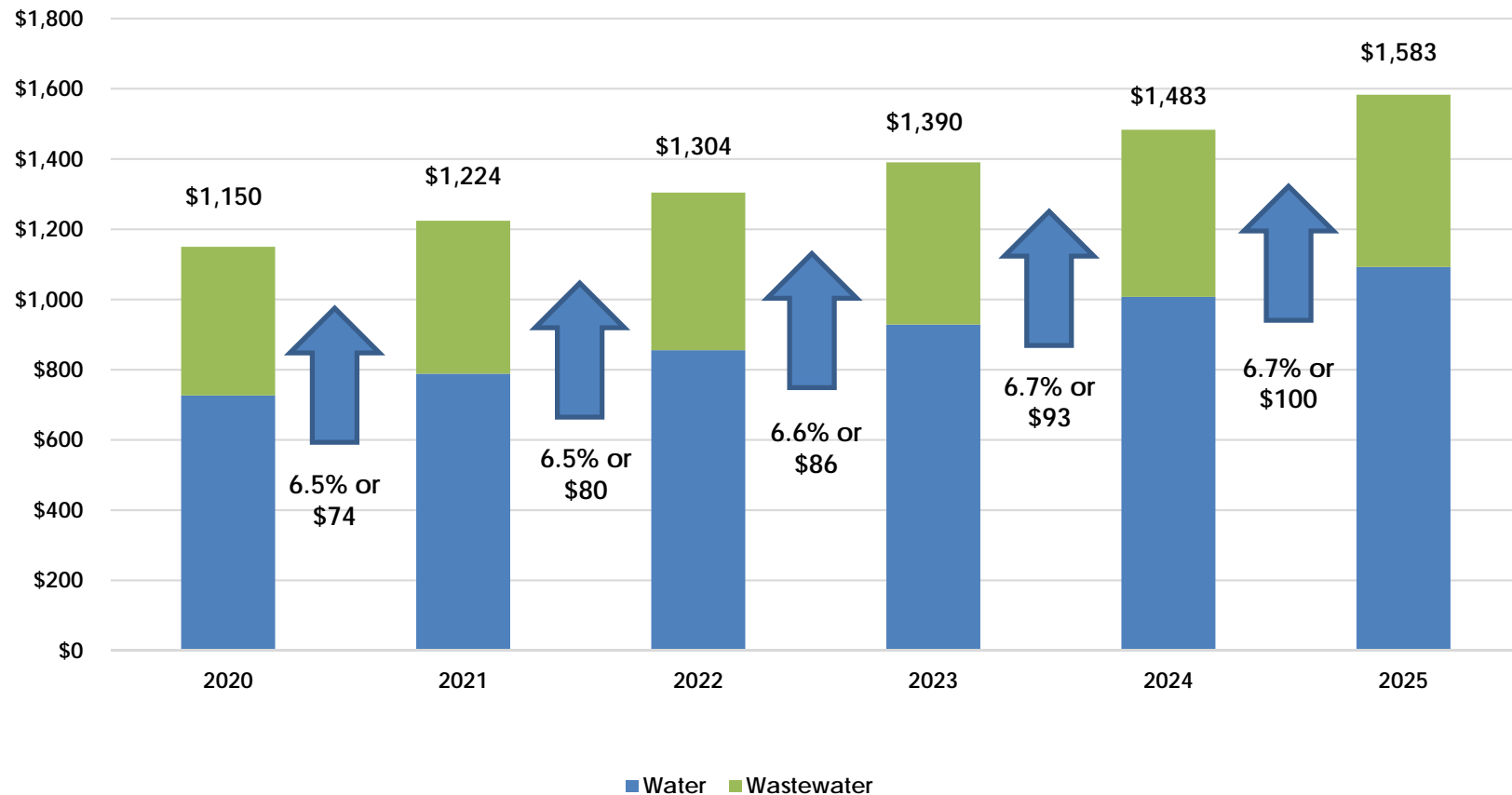


*Note 1: Typical Household consuming 200m<sup>3</sup> per year.*

*Water Rates (Kincardine) are calculated to increase at a rate of 2% per annum (fixed and variable)*

*Sewer charges are calculated to increase at a rate of 3% per annum*

# Status Quo: Typical Annual Tiverton Household Charge <sup>(1)</sup>

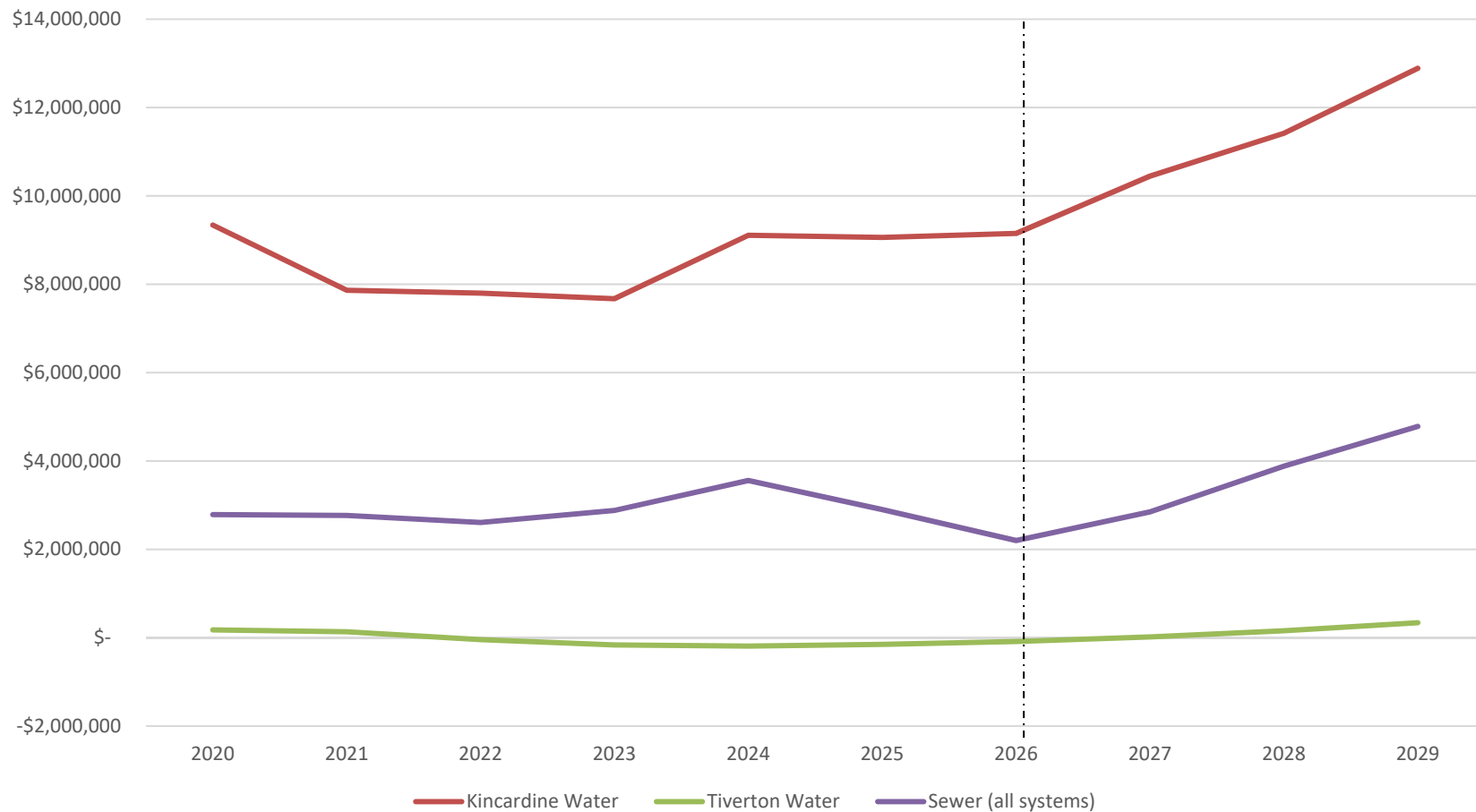


*Note 1: Typical Household consuming 200m<sup>3</sup> per year.*

*Water Rates (Tiverton) are calculated to increase at a rate of 8.5% per annum (fixed and variable)  
Sewer charges are calculated to increase at a rate of 3% per annum*

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# Summary of Projected Year-end Reserve Fund Balances

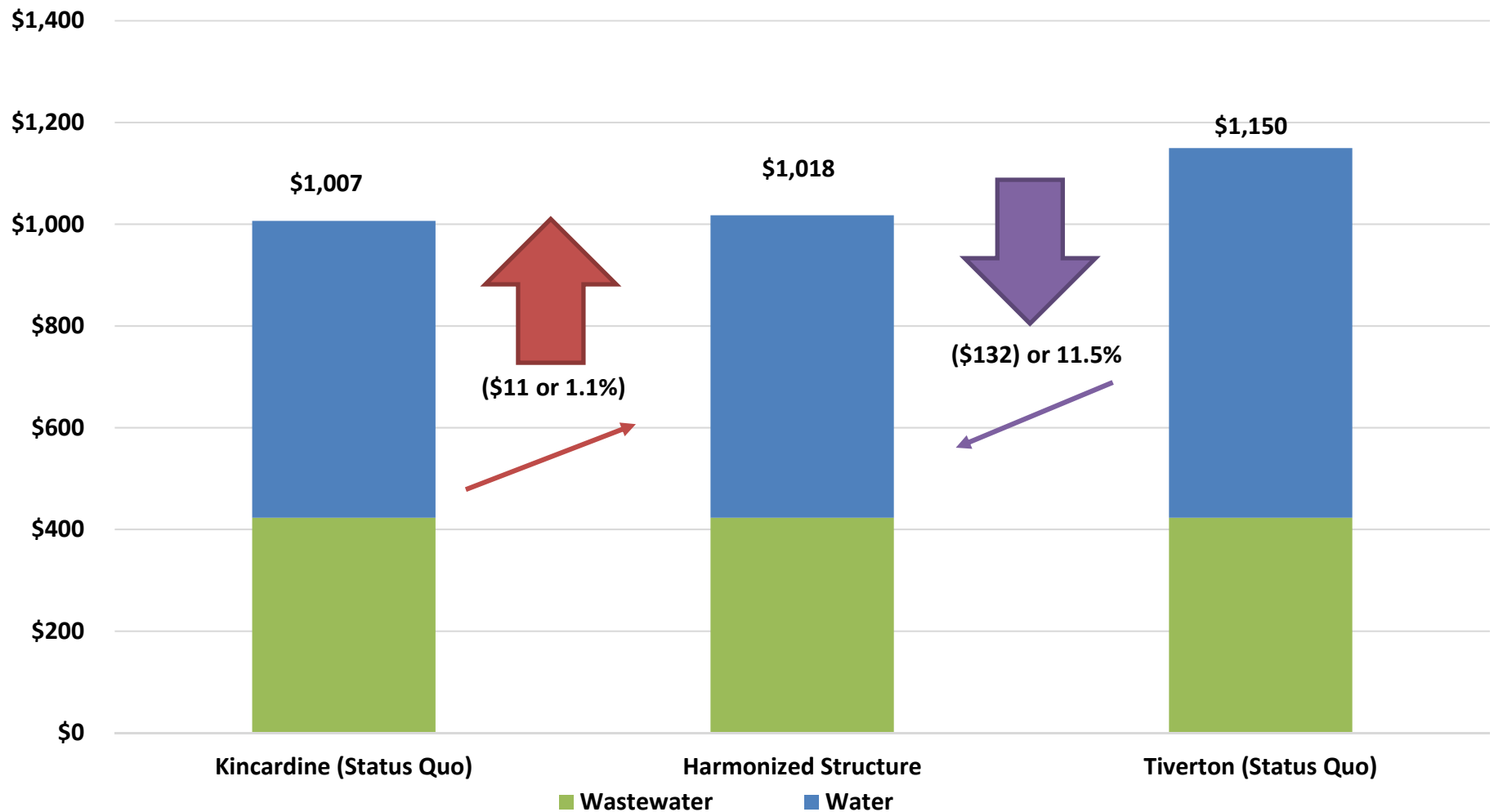


*\*Note: After 2026, Kincardine Water and Sewer reserves accumulate at a faster pace because capital priorities may not be fully identified and additional capital costs may be required as needed*



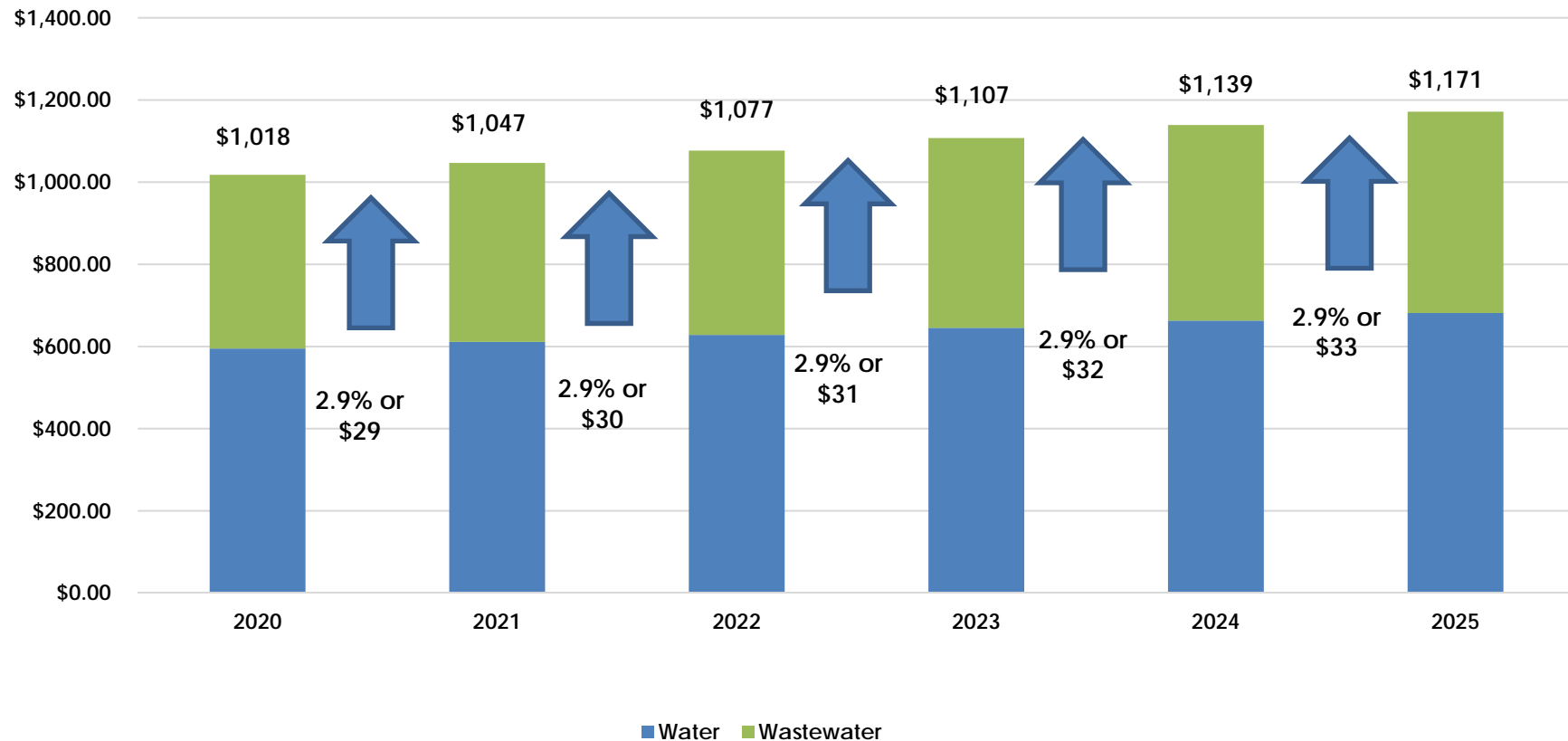
## 2. Harmonized Rate Structure

# 2020 Typical HH Rate Comparison: Status Quo vs. Harmonized



# Option 2: Harmonized Rate Structure

## Typical Household Charge <sup>(1)</sup>



Total Charges illustrated are annual and includes water and wastewater.

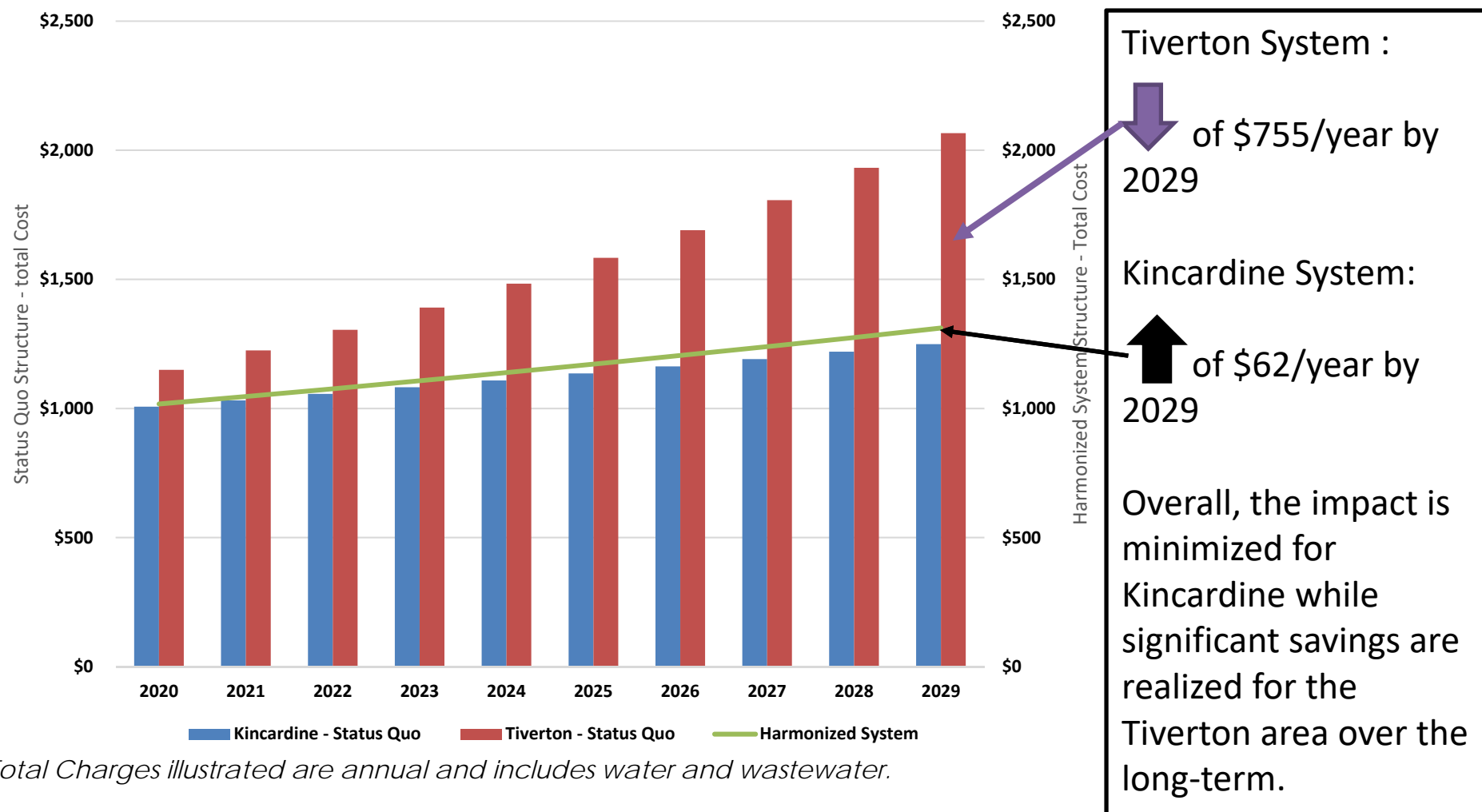
Note 1: Typical Household consuming 200m<sup>3</sup> per year.

Water Rates are calculated to increase at a rate of 2.75% per annum (fixed and variable)

Sewer charges are calculated to increase at a rate of 3% per annum

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# Long-Term Rate Outlook: Status Quo vs. Harmonized Structure

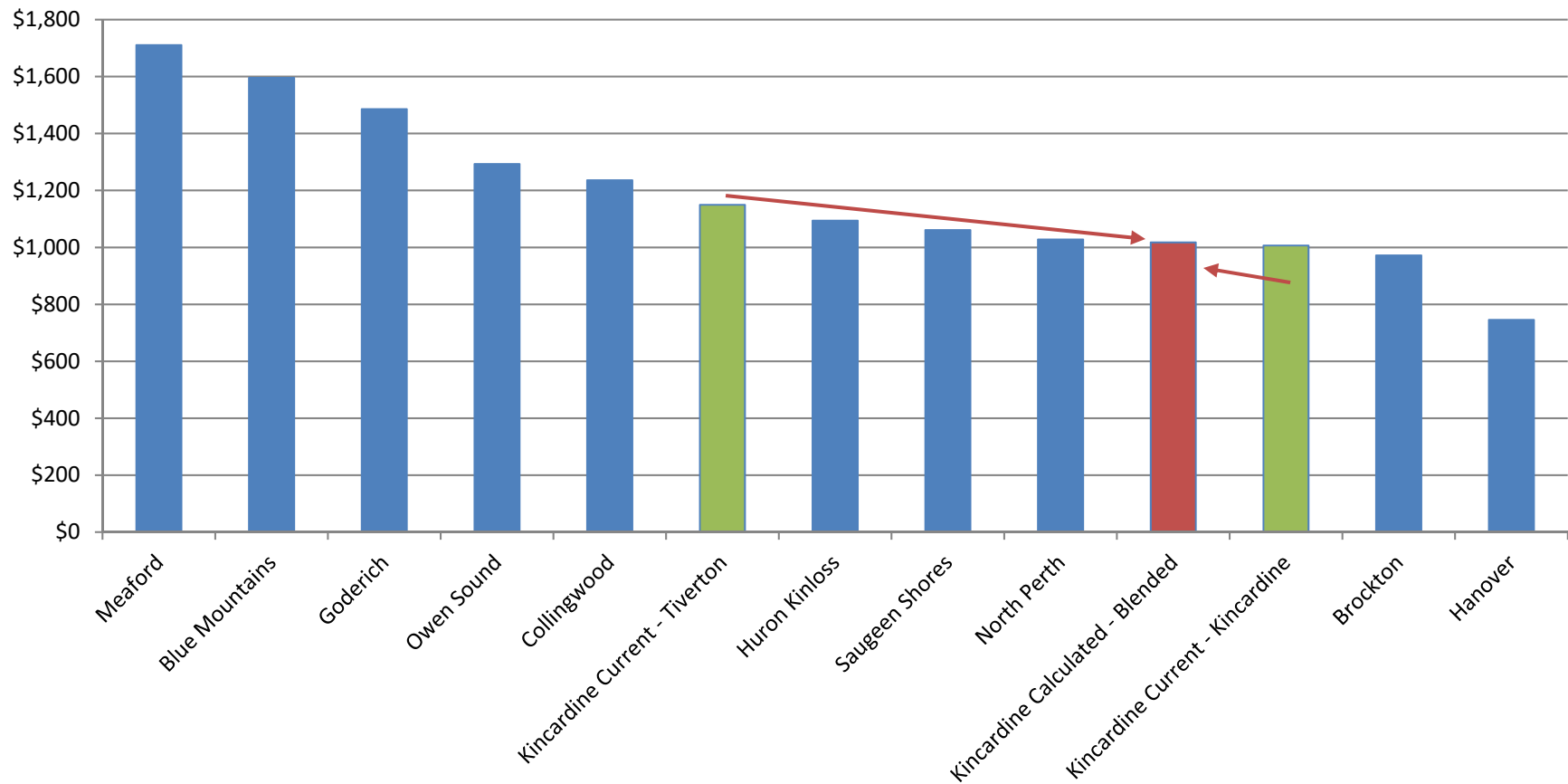


# Summary of Harmonized Rate Results

- Avoids significant water rate increases required in the Tiverton service area to fund capital
- Modest increase to Kincardine water users to offset reduction to Tiverton users (from current)
- Maintains positive water reserve fund balances without significant rate increases
- Overall, full cost of providing services is consistent under both Status Quo and Harmonized Rate Structure



# Benchmarking Analysis: Cost per Typical Household (200 m<sup>3</sup>)



*Note: As of December 2019, represents 2020 rates  
Includes water and wastewater*

# Next Steps

- Refine analysis as required
- Prepare Water Financial Plan consistent with *SDWA* and *O.Reg 453/07* to support license renewal application
- Rates to come into force January 1 2021