Watson & Associates ECONOMISTS LTD.

Haldimand County 2025 Water and Wastewater Rate Study and Water Financial Plan

Public Consultation Meeting
September 9, 2025

Agenda

1. Study Purpose
2. Current Rates, Customer Profile, System Growth
3. Capital Needs and Financing, Lifecycle Costs
4. Proposed Rates
5. Special Charges
6. Questions

1
2
3
4
5
6

Study Purpose

Haldimand County – 2025 Water & Wastewater Rate Study and Water Financial Plan

Study Purpose

1. Identify all current and future water system capital needs;
2. Identify cost recovery options for capital;
3. Estimate future operating costs over the next 10 years;
4. Review existing rate structure; and
5. Recommend new rates to recover the cost of the water systems.
6.

Legislation for Water

- Since Walkerton, new legislation has been passed by the Province to enhance the provision of services. These include the following:
  - Safe Drinking Water Act;
  - Sustainable Water and Sewage Systems Act;
  - O.Reg. 453/07 - Safe Drinking Water Act;
  - Clean Water Act; and
  - Water Opportunities Act.
- Further Requirements:
  - Municipal Infrastructure Strategy
  - Infrastructure for Jobs and Prosperity Act, 2015

Principal of Full Cost Recovery

1
2
3
4
5
6

Current Rates, Customer Profile, and System Growth

Haldimand County – 2025 Water & Wastewater Rate Study and Water Financial Plan

2025 Water and Wastewater Rates

2025 - Water Billing Rates	
Base Charge	
R1/C1 (5/8" and 3/4")	$27.36
R2/C2 (1")	$27.36
R3/C3 (1 ½")	$154.57
R4/C4 (2")	$335.95
C5 (3")	$591.19
C6 (4")	$1,175.81
C7 (6")	$2,187.20
C8 (8")	$3,735.89
Volume Charge	
$ 1.2864	per m^3
Flat Rate*	
$ 46.65	Total flat rate

* Consumption charge of 15 m^3/month + R1/C1 Base Charge

2025 - Wastewater Billing Rates	
Base Charge	
R1/C1 (5/8" and 3/4")	$25.06
R2/C2 (1")	$25.06
R3/C3 (1 ½")	$141.60
R4/C4 (2")	$307.76
C5 (3")	$541.59
C6 (4")	$1,077.16
C7 (6")	$2,003.70
C8 (8")	$3,422.45
Volume Charge	
$ 1.5001	per m^3
Flat Rate*	
$ 47.56	Total flat rate

* Consumption charge of 15 m^3/month + R1/C1 Base Charge

Existing Customer Profile

Metered	Water	Wastewater
Residential		
R1 (5/8" and 3/4")	9,073	8,812
R2 (1")	1,659	1,645
R3 (1 ½")	10	10
R4 (2")	16	16
Non-Residential		
C1 (5/8" and 3/4")	430	440
C2 (1")	126	128
C3 (1 ½")	32	33
C4 (2")	67	69
C5 (3")	7	6
C6 (4")	15	15
C7 (6")	3	3
C8 (8")	1	1
Total	**11,439**	**11,178**

Customers have been categorized by residential versus non-residential and meter size

Water and Wastewater Users Forecast

Water - Assumed an average of 166 cu.m per customer for future flows

Water Customer Forecast	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing	11,439	11,439	11,439	11,439	11,439	11,439	11,439	11,439	11,439	11,439
New - Growth	-	204	611	1,018	1,425	1,832	2,239	2,624	2,989	3,354
Total	**11,439**	**11,643**	**12,050**	**12,457**	**12,864**	**13,271**	**13,678**	**14,063**	**14,428**	**14,793**

Water Volume Forecast (m³)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Volumes										
Existing	3,491,190	3,491,190	3,491,190	3,491,190	3,491,190	3,491,190	3,491,190	3,491,190	3,491,190	3,491,190
New	-	33,864	101,426	168,988	236,550	304,112	371,674	435,584	496,174	556,764
Total	**3,491,190**	**3,525,054**	**3,592,616**	**3,660,178**	**3,727,740**	**3,795,302**	**3,862,864**	**3,926,774**	**3,987,364**	**4,047,954**

Wastewater - Assumed an average of 169 cu.m per customer for future flows

Wastewater Customer Forecast	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing	11,178	11,178	11,178	11,178	11,178	11,178	11,178	11,178	11,178	11,178
New - Growth	-	204	611	1,018	1,425	1,832	2,239	2,624	2,989	3,354
Total	**11,178**	**11,382**	**11,789**	**12,196**	**12,603**	**13,010**	**13,417**	**13,802**	**14,167**	**14,532**

Wastewater Flows Forecast (m³)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Volumes										
Existing	2,714,275	2,714,275	2,714,275	2,714,275	2,714,275	2,714,275	2,714,275	2,714,275	2,714,275	2,714,275
New	-	34,476	103,259	172,042	240,825	309,608	378,391	443,456	505,141	566,826
Total	**2,714,275**	**2,748,751**	**2,817,534**	**2,886,317**	**2,955,100**	**3,023,883**	**3,092,666**	**3,157,731**	**3,219,416**	**3,281,101**

1
2
3
4
5
6

Capital Needs and Financing, Lifecycle Costs

Haldimand County – 2025 Water & Wastewater Rate Study and Water Financial Plan

Capital Infrastructure

- Capital needs were identified based on the County's ten-year capital forecast. Capital works were identified by
  - Need;
  - Timing; and
  - Costs.
- A significant portion (approximately 34%) of the water spending program is related to:
  - Plant capital improvements from 2029-2032 and 2034
  - Replacement of the elevated storage tank in 2032 and 2033
  - Expansion of the Caledonia North Water Storage
- For wastewater, 58% of the capital spending program is related to the Caledonia wastewater treatment plant

Water and Wastewater System Capital Needs 2026 – 2034

(Inflated $)

Water

Description	Total 2026 to 2034
Non-Growth-Related Capital Expenditures	$30,091,850
Studies	$934,100
Growth-Related Capital Expenditures*	$27,527,900
Total Expenditures	**$58,553,850**

*Non-growth-related components of projects are captured in the total amount

Wastewater

Description	Total 2026 to 2034
Non-Growth-Related Capital Expenditures	$13,026,900
Studies	$34,000
Growth-Related Capital Expenditures*	$85,858,000
Total Expenditures	**$98,918,900**

*Non-growth-related components of projects are captured in the total amount

Capital Financing Options

1. ✓ Reserve Funds
2. ✓ Development Charges
3. ✓ Debt
4. ✓ Operating Budget Transfers (Funding Reserves)
5. ✓ Other Recoveries
6. • Grants
   • Municipal Act (Part 12)

Reserve Balances – As of December 31, 2024

1
2
3
4
5
6

Reserve	Dec. 31 2024
Water	
Development Charges Reserve Fund	**909,789**
Dunnville Microstrainer	**47,736**
Rate Stabilization	**2,441,062**
Capital Replacement Reserve	**960,784**
Wastewater	
Capital Replacement Reserve	**12,984,009**
Development Charges Reserve Fund	**(12,908,380)**
Rate Stabilization	**3,619,713**

Proposed Capital Financing Programs 2026 to 2034

(Inflated $)

1
2
3
4
5
6

Description	Water	Wastewater
Capital Financing		
Provincial/Federal Grants	-	-
Recoveries from Norfolk	622,800	-
Other Recoveries	3,912,800	-
Development Charges Reserve Fund	1,887,700	3,351,900
Non-Growth Related Debenture Requirements	-	-
Growth Related Debenture Requirements	15,073,900	66,923,400
Operating Contributions	-	-
Lifecycle Reserve Fund	-	-
Water Rate Stabilization	-	-
Canada Community Building Fund Reserve Fund	6,654,200	-
Water Capital Replacement Reserve	30,402,450	-
Wastewater Capital Replacement Reserve Fund	-	28,643,600
Total Capital Financing	**58,553,850**	**98,918,900**

Lifecycle Infrastructure Costs

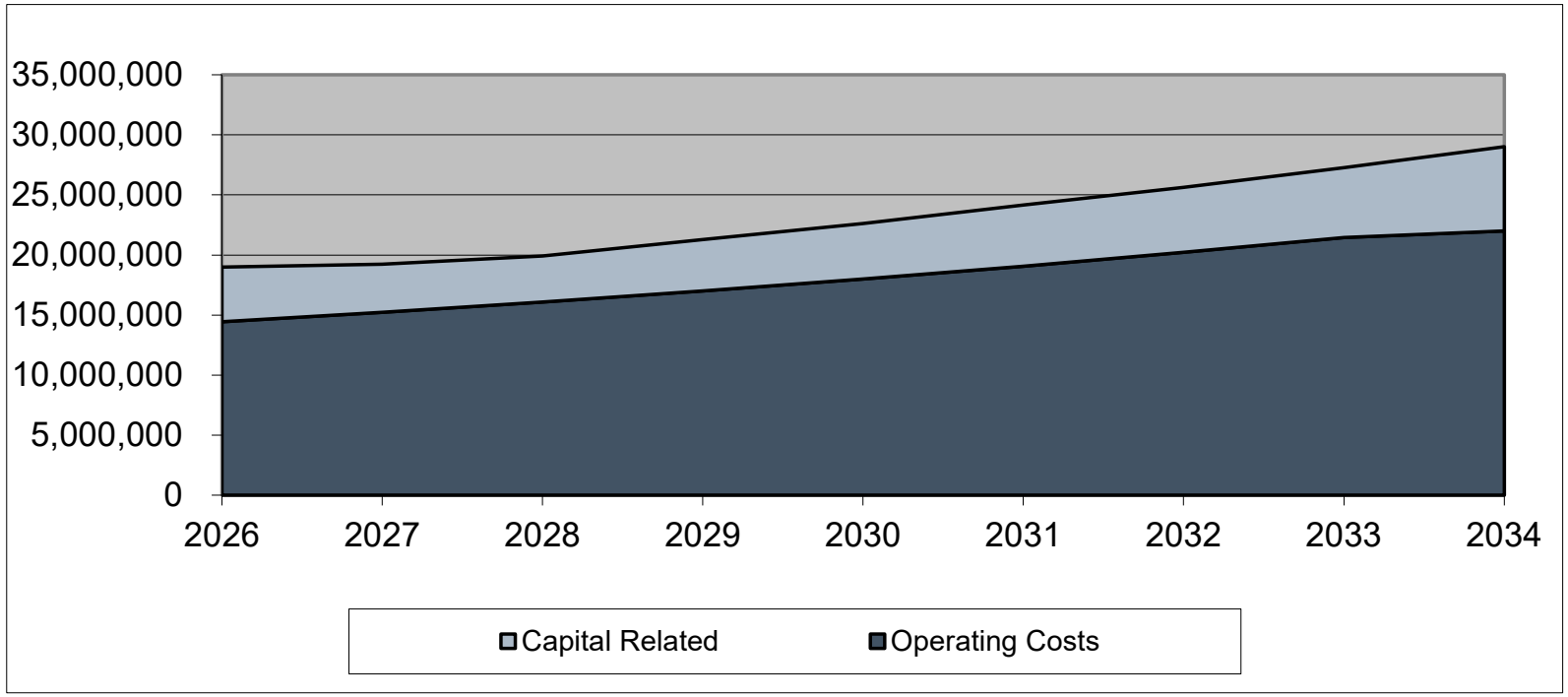
- The County is currently updating the asset management inventory.
- For this analysis, a review of municipalities with similar volumes of treated water and/or kilometres of watermains was conducted.
  - Average annual lifecycle requirements of surveyed municipalities:
    - **Water: $6.45 million**
    - **Wastewater: $7.45 million**
  - County's current annual asset management expenditures over the forecast period:
    - **Water: $4.81 million**
    - **Wastewater: $3.12 million**
- Expenditures on lifecycle replacement may not be adequate
- Not setting aside adequate funds in the short term will lead to higher rate increases in the future

Operating Budgets

- Operating expenditures are increasing over the forecast to recognize:
  - Wholesale water purchases from the City of Hamilton:
    - 10% per year from 2026 to 2033 and 2% in 2034
      - This cost is growing from 34% of total operating expenditures in 2025 to 46% by 2034
  - Caledonia Wastewater Treatment Plant
    - Additional costs have been factored into wastewater operating budget once new treatment plant opens
  - Inflationary impacts
    - 5% for hydro, utilities, materials and chemicals
    - 2% for wages and salaries
    - Other minor operating costs have been assumed to remain constant

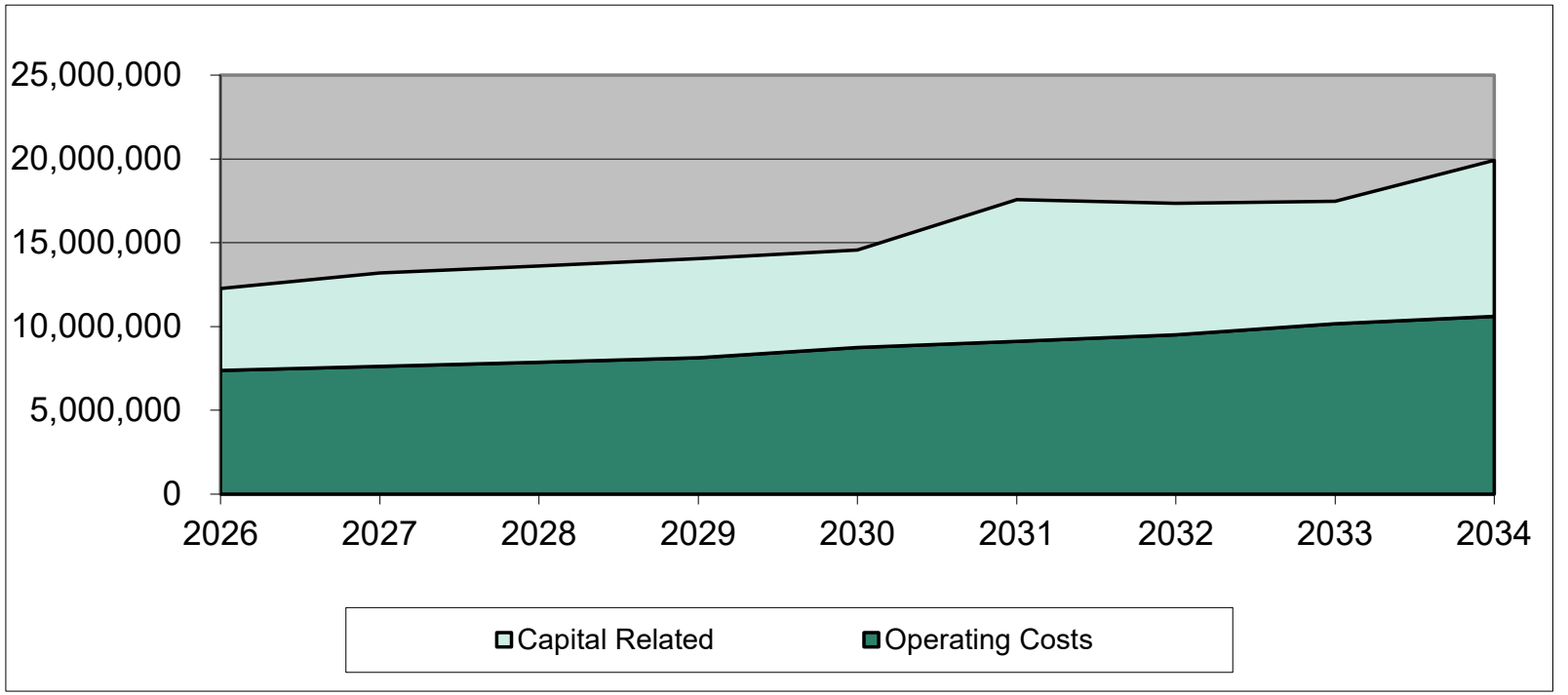
1
2
3
4
5
6

Water Operating Budget



Description	2026	2027	2028	2029	2030	2031	2032	2033	2034
Operating Costs	14,439,977	15,226,614	16,075,252	16,991,490	17,981,428	19,051,367	20,208,906	21,462,045	22,018,585
Capital Related	4,561,638	4,000,004	3,822,933	4,283,738	4,639,047	5,108,114	5,409,941	5,812,127	7,007,362
Total	19,001,615	19,226,618	19,898,185	21,275,228	22,620,475	24,159,481	25,618,847	27,274,172	29,025,947

Wastewater Operating Budget



Description	2026	2027	2028	2029	2030	2031	2032	2033	2034
Operating Costs	7,383,610	7,620,701	7,866,791	8,122,792	8,736,547	9,109,143	9,496,419	10,175,468	10,600,064
Capital Related	4,878,700	5,584,479	5,740,497	5,939,268	5,837,596	8,473,493	7,849,018	7,297,814	9,318,948
Total	12,262,311	13,205,180	13,607,289	14,062,060	14,574,143	17,582,636	17,345,437	17,473,282	19,919,013

1
2
3
4
5
6

Proposed Rates

Haldimand County – 2025 Water & Wastewater Rate Study and Water Financial Plan

Average Residential Customer Water Bill – Based on 166 cu.m

Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Monthly Base Rate	$27.36	$28.70	$30.09	$31.67	$33.24	$34.99	$36.72	$38.65	$40.78	$42.88
Volume Rate	1.29	1.36	1.44	1.53	1.62	1.72	1.82	1.93	2.05	2.17
Annual Base Rate Bill	**$328.32**	**$344.38**	**$361.07**	**$380.06**	**$398.83**	**$419.84**	**$440.62**	**$463.79**	**$489.30**	**$514.57**
Volume	166	166	166	166	166	166	166	166	166	166
Annual Volume Bill	**$213.54**	**$225.76**	**$239.04**	**$253.98**	**$268.92**	**$285.52**	**$302.12**	**$320.38**	**$340.30**	**$360.22**
Total Annual Bill	**$541.86**	**$570.14**	**$600.11**	**$634.04**	**$667.75**	**$705.36**	**$742.74**	**$784.17**	**$829.60**	**$874.79**
% Increase - Base Rate		**4.89%**	**4.85%**	**5.26%**	**4.94%**	**5.27%**	**4.95%**	**5.26%**	**5.50%**	**5.16%**
% Increase - Volume Rate		**5.72%**	**5.88%**	**6.25%**	**5.88%**	**6.17%**	**5.81%**	**6.04%**	**6.22%**	**5.85%**
% Increase - Total Annual Bill		**5.22%**	**5.26%**	**5.65%**	**5.32%**	**5.63%**	**5.30%**	**5.58%**	**5.79%**	**5.45%**

Average annual increase of 5.5%

Average Residential Customer Wastewater Bill – Based on 166 cu.m

Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Monthly Base Rate	$25.06	$25.64	$26.03	$26.41	$26.80	$27.18	$27.57	$27.97	$28.37	$28.78
Volume Rate	$1.50	$1.53	$1.56	$1.59	$1.62	$1.65	$1.68	$1.71	$1.74	$1.77
Annual Base Rate Bill	**$300.72**	**$307.73**	**$312.31**	**$316.92**	**$321.56**	**$326.22**	**$330.90**	**$335.66**	**$340.50**	**$345.34**
Volume	166	166	166	166	166	166	166	166	166	166
Annual Volume Bill	**$249.02**	**$253.98**	**$258.96**	**$263.94**	**$268.92**	**$273.90**	**$278.88**	**$283.86**	**$288.84**	**$293.82**
Total Annual Bill	**$549.74**	**$561.71**	**$571.27**	**$580.86**	**$590.48**	**$600.12**	**$609.78**	**$619.52**	**$629.34**	**$639.16**
% Increase - Base Rate		**2.33%**	**1.49%**	**1.48%**	**1.46%**	**1.45%**	**1.43%**	**1.44%**	**1.44%**	**1.42%**
% Increase - Volume Rate		**1.99%**	**1.96%**	**1.92%**	**1.89%**	**1.85%**	**1.82%**	**1.79%**	**1.75%**	**1.72%**
% Increase - Total Annual Bill		**2.18%**	**1.70%**	**1.68%**	**1.66%**	**1.63%**	**1.61%**	**1.60%**	**1.58%**	**1.56%**

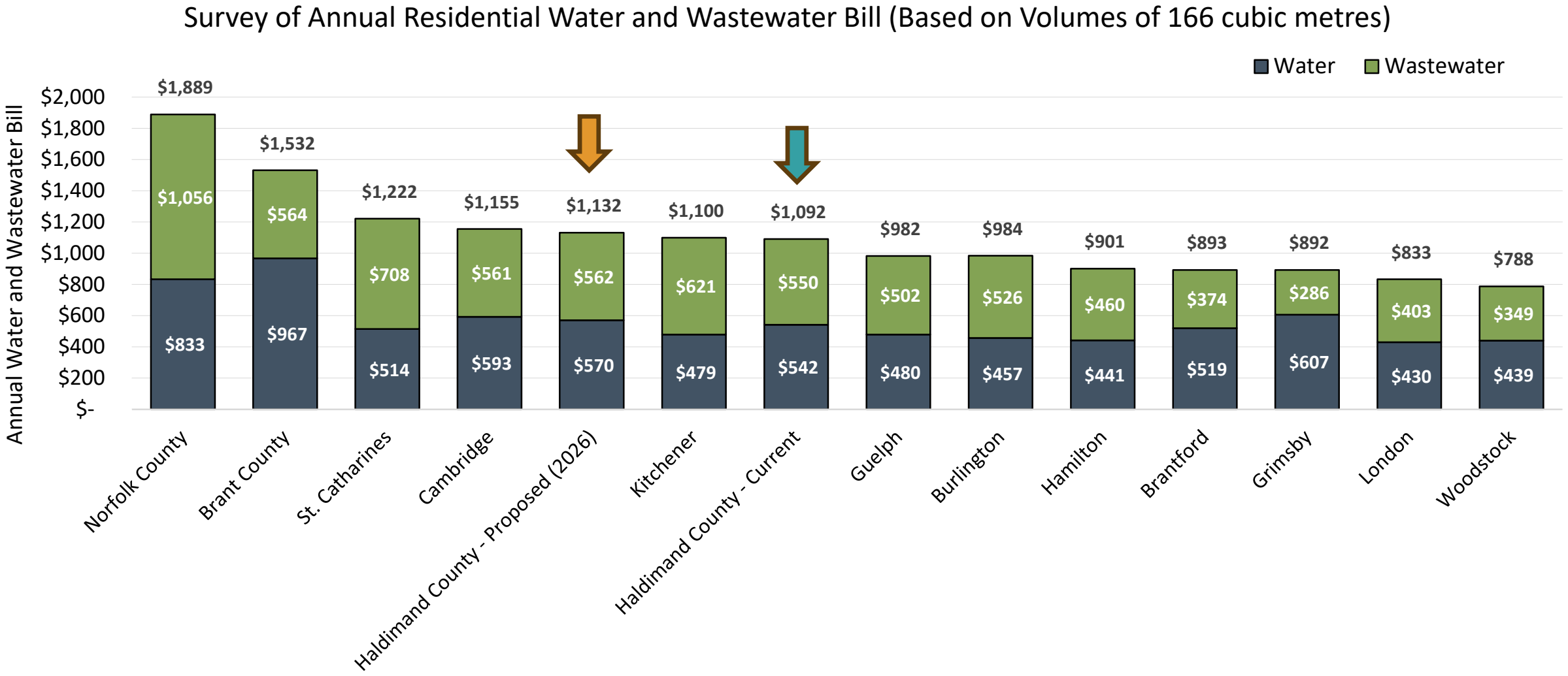
Average annual increase of 1.7%

Average Annual Residential Bill – Based on volumes of 166 cu.m

Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Water										
Base Charge	$328.32	$344.38	$361.07	$380.06	$398.83	$419.84	$440.62	$463.79	$489.30	$514.57
Volume (166 cu.m)	$213.54	$225.76	$239.04	$253.98	$268.92	$285.52	$302.12	$320.38	$340.30	$360.22
Total Water Bill	**$541.86**	**$570.14**	**$600.11**	**$634.04**	**$667.75**	**$705.36**	**$742.74**	**$784.17**	**$829.60**	**$874.79**
Wastewater										
Base Charge	$300.72	$307.73	$312.31	$316.92	$321.56	$326.22	$330.90	$335.66	$340.50	$345.34
Volume (166 cu.m)	$249.02	$253.98	$258.96	$263.94	$268.92	$273.90	$278.88	$283.86	$288.84	$293.82
Total Wastewater Bill	**$549.74**	**$561.71**	**$571.27**	**$580.86**	**$590.48**	**$600.12**	**$609.78**	**$619.52**	**$629.34**	**$639.16**
Total Combined Bill	**$1,091.60**	**$1,131.85**	**$1,171.38**	**$1,214.90**	**$1,258.23**	**$1,305.48**	**$1,352.52**	**$1,403.70**	**$1,458.94**	**$1,513.95**
% Increase - Combined Bill		**3.69%**	**3.49%**	**3.72%**	**3.57%**	**3.76%**	**3.60%**	**3.78%**	**3.94%**	**3.77%**

Average annual increase of 3.7%

Comparison of Annual Residential Bill



Note: average bills for comparator municipalities are based on 2025 rates

1
2
3
4
5
6

Special Charges

Haldimand County – 2025 Water & Wastewater Rate Study and Water Financial Plan

Special Charges

1
2
3
4
5
6

- To provide a higher level of equity in the calculation of the water and wastewater rates, Haldimand County utilizes a number of special charges:

Water	Wastewater
• Fire protection charge • Bulk water rate	• Septic-Holding Rate • Leachate Rate

- These charges have been recalculated as part of this rate study using existing principles and current budget information
- Revenues have been included in forecast of rate calculations

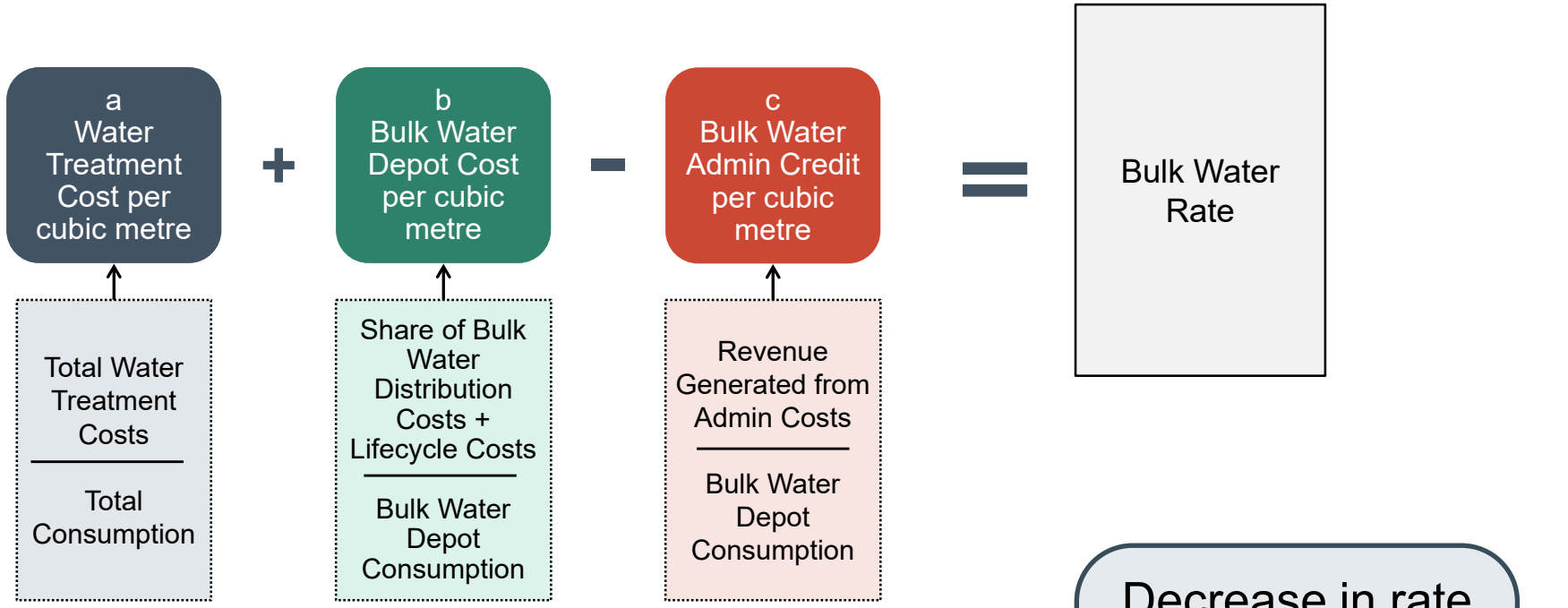
Fire Protection Charge

- Internal chargeback to fire department for water used in fire services (recovered through property taxes)
- Costs related to operating/maintenance, capital, and lifecycle are allocated to fire services based on flows and share of capacity
- Resultant fire protection costs are 13% of the net water system costs
  - In alignment with American Water Works Association recommendations

Revenue	2026	2027	2028	2029	2030	2031	2032	2033	2034
Fire Hydrant Fees	$2.35M	$2.40M	$2.46M	$2.52M	$2.58M	$2.65M	$2.71M	$2.78M	$2.85M

Bulk Water Charge

- Related to sale of water at bulk water depots in Dunnville, Hagersville, and Jarvis
- Charge is to recover costs related to water supply and treatment, and distribution costs

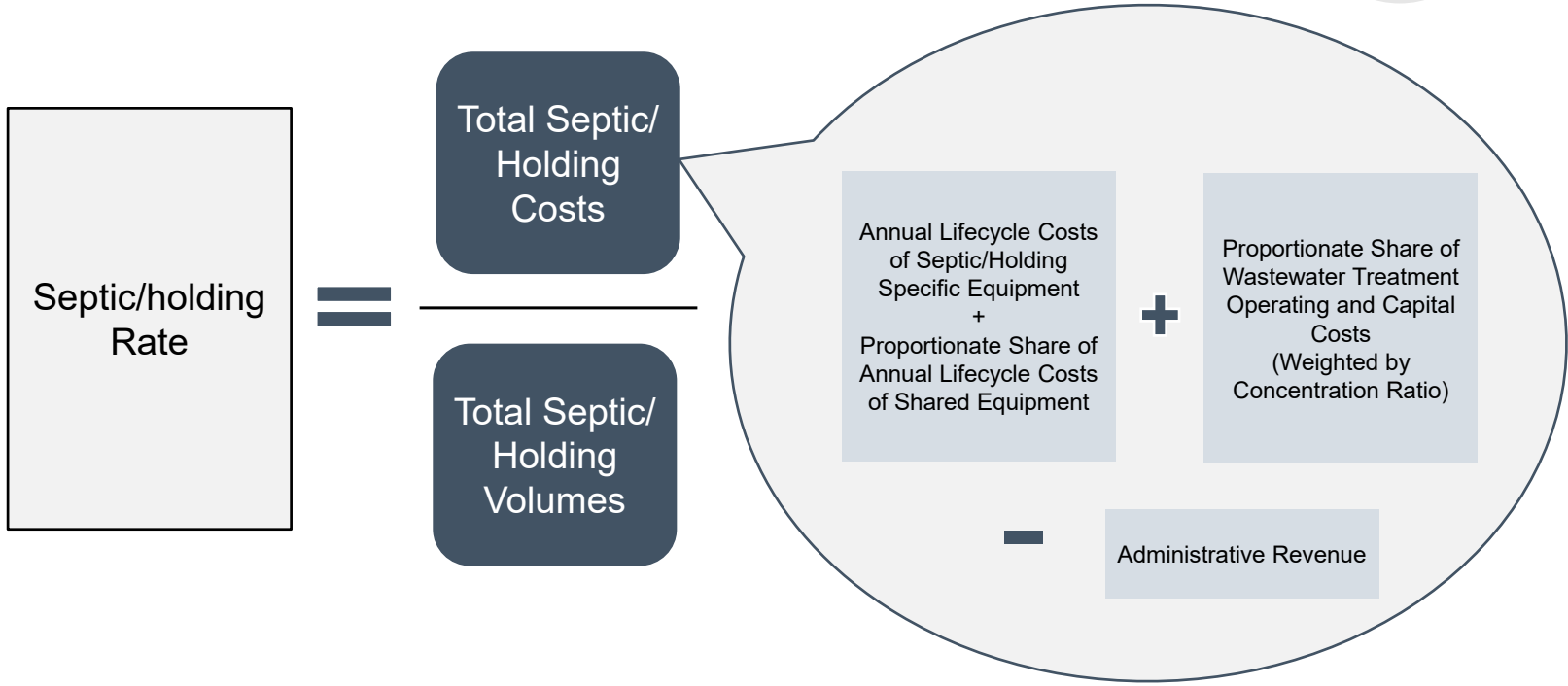


Current Rate (2025): $3.53/cu.m → Calculated Rate (2026): $2.74/cu.m

Decrease in rate is due to increase in volumes relative to inflation

Septic/Holding Charge

- Related to septic/hold tank waste (larger impact on the system relative to typical household waste)
- Charge is utilized to recover costs associated with septic tank and holding tank flows
- Charge is allocated based on relative flows
  - Flows are weighted based on relative concentration of septage and holding tank volumes relative to typical sewage

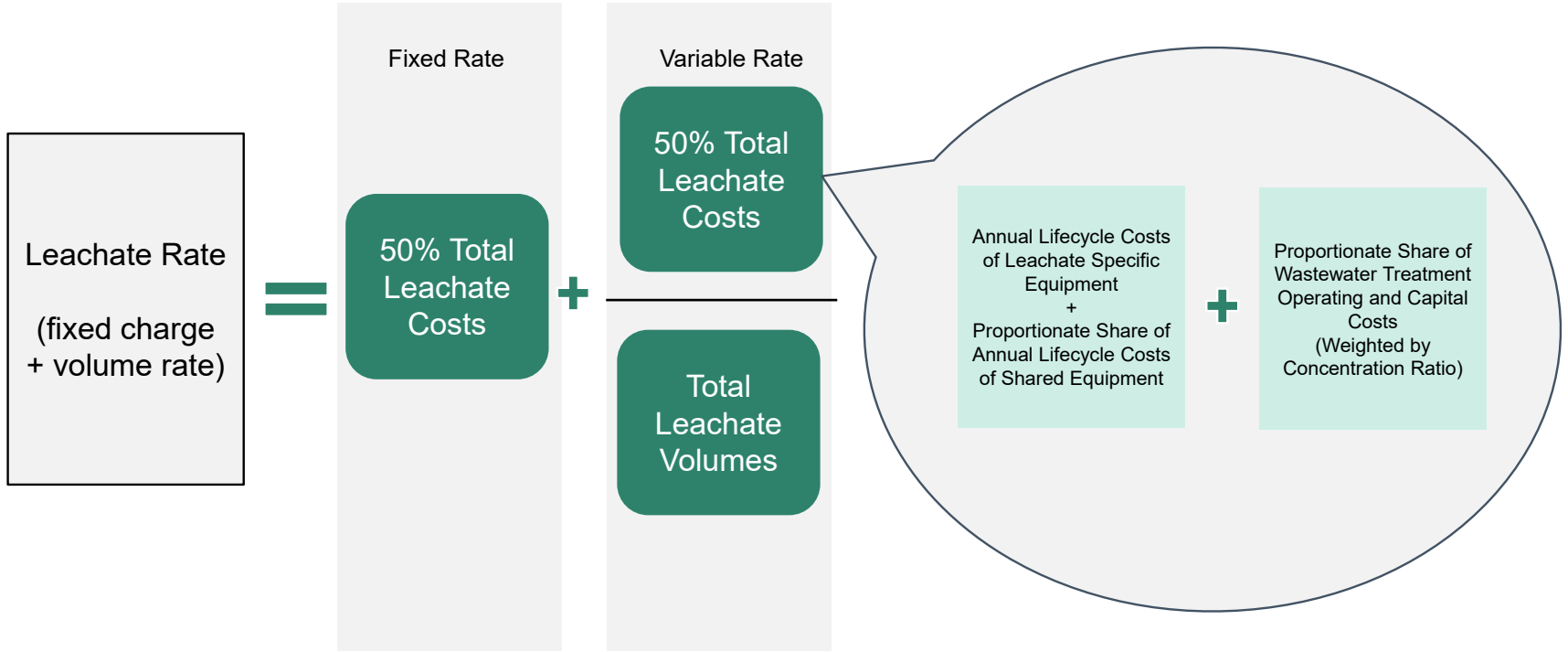


Current Rate (2025): $16.88/cu.m → Calculated Rate (2026): $18.95/cu.m

Rate increase is due to re-addition of lifecycle costing for septage receiving station in Dunnville and decrease in overall volumes

Leachate Charge

- Special charge to recover costs for treatment of leachate waste (larger impact on system relative to typical household waste)
- Flows are weighted based on relative concentration of leachate to typical sewage
- 50% fixed + 50% variable charge



Current Rate (2025):
$724,000 + $19.54/cu.m

→

Calculated Rate (2026):
$802,518 + $19.56/cu.m

Questions