

# 2022

## Water & Wastewater Budget

Council-in-Budget Committee

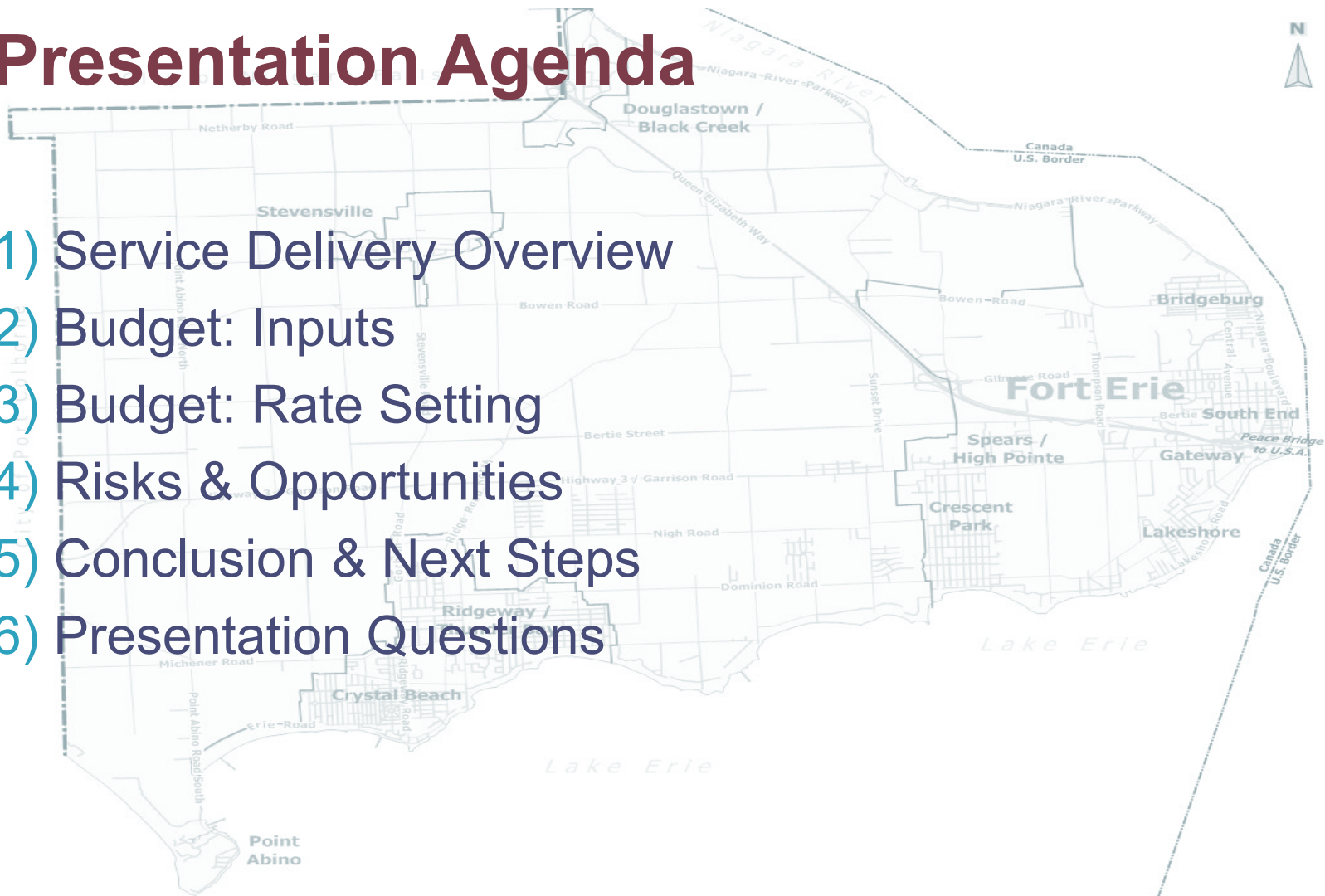
Report No. CBC-02-2022

December 8, 2021

1

# Presentation Agenda

- 1) Service Delivery Overview
- 2) Budget: Inputs
- 3) Budget: Rate Setting
- 4) Risks & Opportunities
- 5) Conclusion & Next Steps
- 6) Presentation Questions



# 1) Service Delivery Overview System

- Customers: 14,000 (95% res + 5% ICI)
- System:
  - 278 km watermains
  - 198 km sanitary sewers
- Safe Drinking Water Act
- Legislated Full Cost Recovery
- Reliable system (safe, availability, flow & pressure)
- Quality of Life
  - Eliminate basement flooding/sewer backups
  - Protection of natural environment
  - Cost control



# 1) Service Delivery Overview

## Responsibilities

### Municipal Officials

- Legislative resources (e.g., “Taking Care of Your Drinking Water – A Guide For Members Of Municipal Councils”)
- Training (e.g., “Standard of Care” presentation for all municipal Councils coordinated by Region in early 2019).

### Corporate & Community Services

- Billing & Collections
- Customer Service, Digital Services

### Infrastructure Services

- Engineering & Capital
- Operations & Maintenance, Compliance
- Customer Service

# 1) Service Delivery Overview

## Operational Commitments

### ✓ Legislative Compliance

- Conformance and Maintenance of Accreditation.

### ✓ Reduce Infiltration to Sanitary Sewer System

- Capital investment, extraneous flow programs, capturing new development issues before they start, sewer flow monitoring.

### ✓ Reduce 'Non-Revenue' Water Volumes

- Capital investment, Water Meter Exchange program, leak detection, tracking, maintenance programs, smart hydrants pressure monitoring and acoustic detection.

# 1) Service Delivery Overview

## Operational Challenges

- **Geography & Geology:** relatively low customer density to support vast infrastructure.
- **Watermain breaks:** 29 in 2020 down compared to historical average of 50; tracking well in 2021 to be 35.
- **Legislative requirements:** for new water projects (e.g., 2021 MECP phasing in consolidated linear infrastructure Environmental Compliance Approvals for Wastewater & Storm sewer systems).
- **Meter program:** Commercial and industrial meter replacement. Meter software upgrade/conversion.
- **Work orders:** outstanding meter & billing issues.
- **COVID-19:** staffing schedules & protocols.

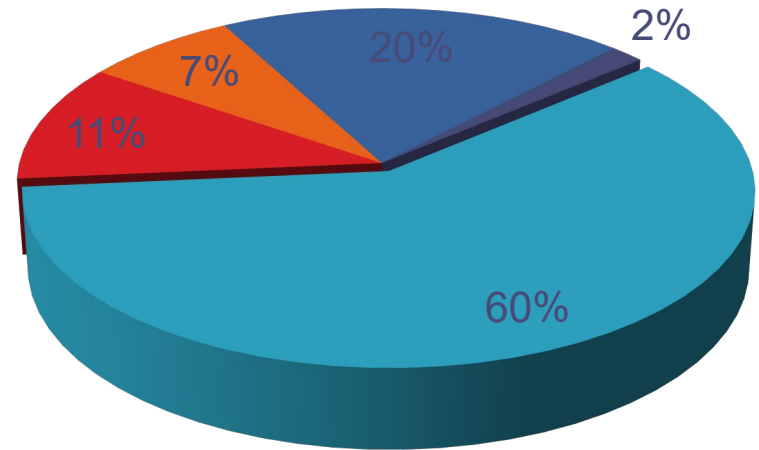
## 2) Budget: Inputs Overview

**Customer Rates** are a function of:

1. Expenses & Other Revenues
  - a) Region - Treatment Costs
  - b) Town - Expenses (i.e., operations, billing) and other revenues
  - c) Town - Financing & Transfers
2. Rate Setting
  - a) Customer volumes
  - b) Town's billing methodology

## 2) Budget: Inputs Total Expenses

Expense	Amount	%
Regional Treatment cost	\$12,319,094	60%
Wages & Benefits	2,253,092	11%
Materials & Supplies	1,561,802	7%
Reserve transfers	4,156,289	20%
Debt Costs	349,758	2%
<b>Total</b>	<b>\$20,640,035</b>	<b>100%</b>



Note: CBC-02-2022 Appendix “1” contains the above information for prior actual/budget and forecast periods. Appendix “2” contains highlights of budget changes.



## 2) Budget: Inputs

### Region - Treatment Costs

Increase in Regional budget = \$617,047 or 3.16%

- Decreased \$50,142 for Town efforts to reduce volumes:
  - FE water volume share: down **1.2%**.
  - FE wastewater volume share: up **1.2%**.
- Approx. 60% of Town's budget
- Region: Budget Review Nov 4 & Council By-law Nov 19.
  - Net budget increase of **5.15%** (Water budget increase of **3.99%** and Wastewater increase of **5.84%**).
  - 2023 to 2027 forecasts similar 5.15% annual increase.

## 2) Budget: Inputs

### Region - Treatment Costs

No change in Regional billing formulas:

- **Water** charge
  - 75% variable & 25% fixed.
- **Wastewater** charge
  - 100% fixed apportioned on prior 3 year average volumes.
  - 2022 reconciliation adjustment for 2020 actual flows is a charge of **\$100,828** as volumes were lower than estimated.
  - 2023 estimate is small charge using 2021 YTD actual flows.

## 2) Budget: Inputs

### Town - Expenses & Other Revenue

Increase in budget of \$282,338 or 1.44%

- Inflation of 3.5% (CS-12-2021, Jul/21) for capital reserves.
- Increased other revenue (i.e., fees).
- Increased wages & benefits of \$76K.
- Increased materials & services of \$223K with focus on reducing non-revenue water and extraneous wastewater flows. Includes overhead costs (e.g., CSU, fleet, finance, HR, insurance).
- Debt charges stable (no matured debt to repurpose). Next debt maturities are in 2025 for Water and 2031 for Wastewater.

## 2) Budget: Inputs

### Town - Program Expenses

#### Financial assistance Programs

- Water Emergency Relief Fund (WERF): \$8,000 for low income families.
- Seniors Utility Relief Fund (SURF): \$27,000 for low income seniors increased 25% in 2021.
- Extraneous Flow Reduction Program: \$70,000 for customer subsidy for works to reduce inflow and infiltration.

## 2) Budget: Inputs

### Town - Financing & Transfers

- Rate Stabilization Reserves (RSR) are key to mitigating annual increases due to:
  - Unknown Regional budget increases.
  - Unknown proportionate share changes.
  - Unknown future treated volumes (e.g., 2023 adjustment expected to be additional charge).

## 2) Budget: Inputs

### Town - Financing & Transfers

Decrease in budget of \$393,348 or 2.02%

- Increase RSR transfers of \$200,000 to offset pressures and fund 2 \$50,000 one-time studies.
- Increase transfers to fund reconciliation charge of \$100,828 from Sewer RSR with overall increase from 2021 credit of \$298,910.
- Increase in strategic AMP capital contributions of \$70,000 and \$136,390 for inflationary measures.

## 2) Budget: Inputs

# Capital Reserve Funding

- Capital Budget presented to Council November 17.
- Proposed 2022 changes reflect strategic AMP increases (\$70,000) and new amortization (\$3,000).
- Inflation included at 3.5%; below comparative figures.

Reserve	2021 Actual	2022 Strat + new Amort	2022 Inflation	2022 Proposed	2022 Target contribution
Water Capital	\$2,199,781	\$3,000	\$76,990	\$2,279,771	\$2,279,771
Wastewater Capital	1,697,118	70,000	59,400	1,826,518	1,826,518
<b>TOTAL</b>	<b>\$3,896,899</b>	<b>\$73,000</b>	<b>\$136,390</b>	<b>\$4,106,289</b>	<b>\$4,106,289</b>
<b>% of Target</b>	<b>98%</b>			<b>100%</b>	<b>100%</b>

## 2) Budget: Inputs Revenue & Expense Summary

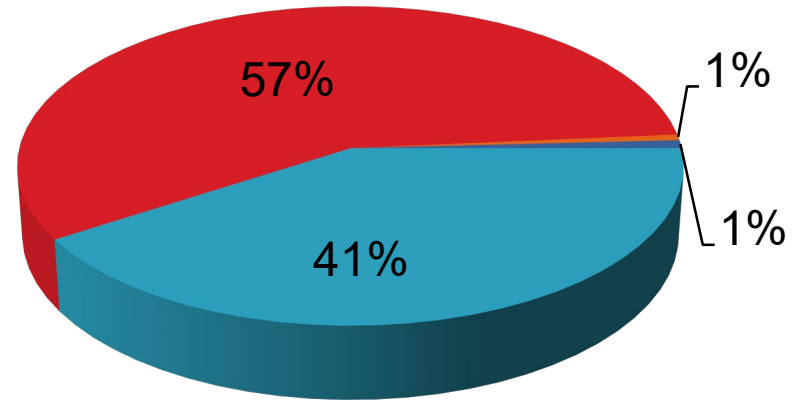
	\$ 2021 Budget	\$ 2022 Budget	\$ Increase/ (decrease)	% Increase/ (decrease) of Total
Prior Rate Revenue			\$19,496,501	
Net cost – FE	7,845,140	8,133,868	288,728	1.48%
Treatment cost – FE volume		(50,142)	(50,142)	(0.26%)
Treatment cost – Region budget (excl. reconciliation)	11,651,361	12,268,408	617,047	3.17%
Budget increase			\$855,633	4.39%
Final Rate Revenue	\$19,496,501	\$20,352,134	\$20,352,134	



### 3) Budget: Rate Setting

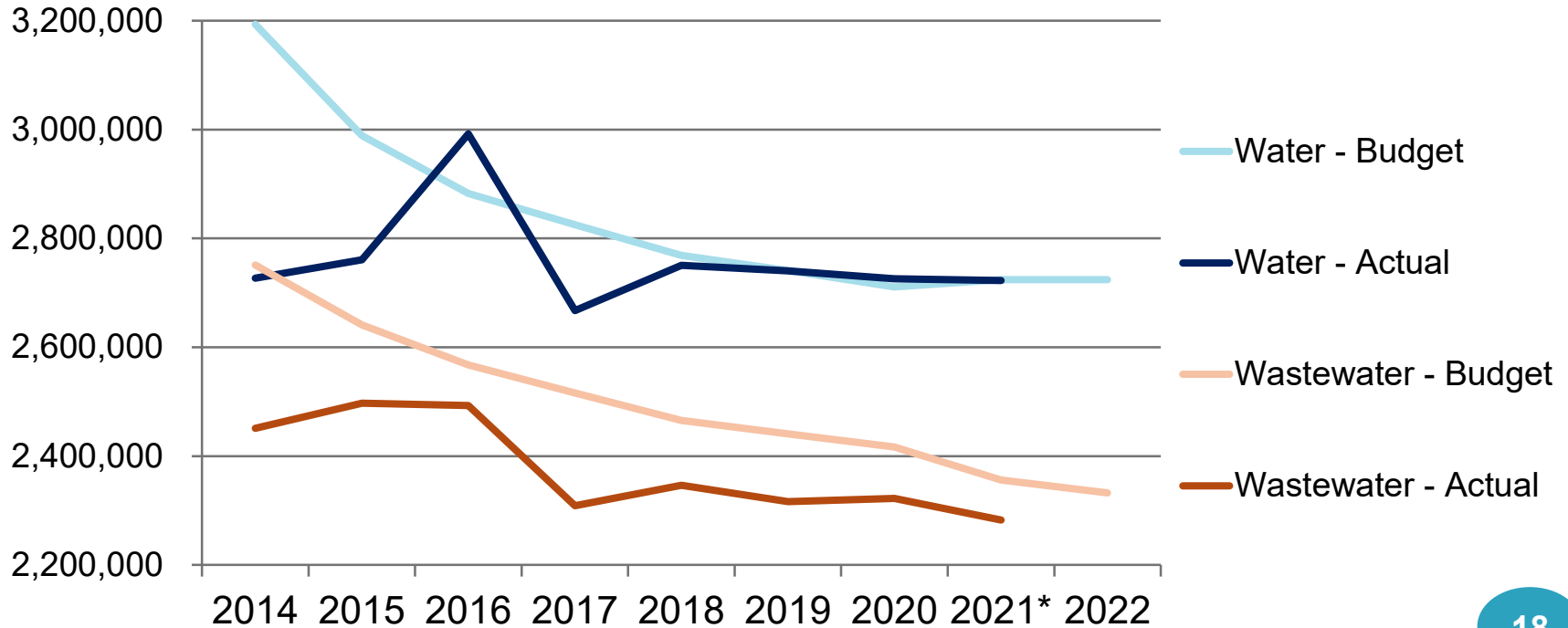
## Total Revenue

Revenue	Amount	%
Wastewater Billings	\$11,924,040	57%
Water Billings	8,428,094	41%
Interest, Penalties & user fees	167,000	1%
Local Improvement Charges	120,901	1%
<b>Total</b>	<b>\$20,640,035</b>	<b>100%</b>



### 3) Budget: Rate Setting

## Volume Budget vs. Actual (m3)



\* 2021 is estimated using YTD volumes

### 3) Budget: Rate Setting Volume Assumptions

- Major historical volume gap addressed over last 8 years.
- Water Consumption: Volume of 2.72M m<sup>3</sup> in rate calc
  - No change from 2021 volumes.
  - Between 3-yr and 5-yr averages.
- Wastewater Treatment: Volume of 2.33M m<sup>3</sup> in rate calc
  - Decrease 23,562m<sup>3</sup> or 1.0% over 2021 volumes.
  - Near 5-yr average (0.8% over).

# 3) Budget: Rate Setting

## Base charge

Base charge for stability and sufficiency:

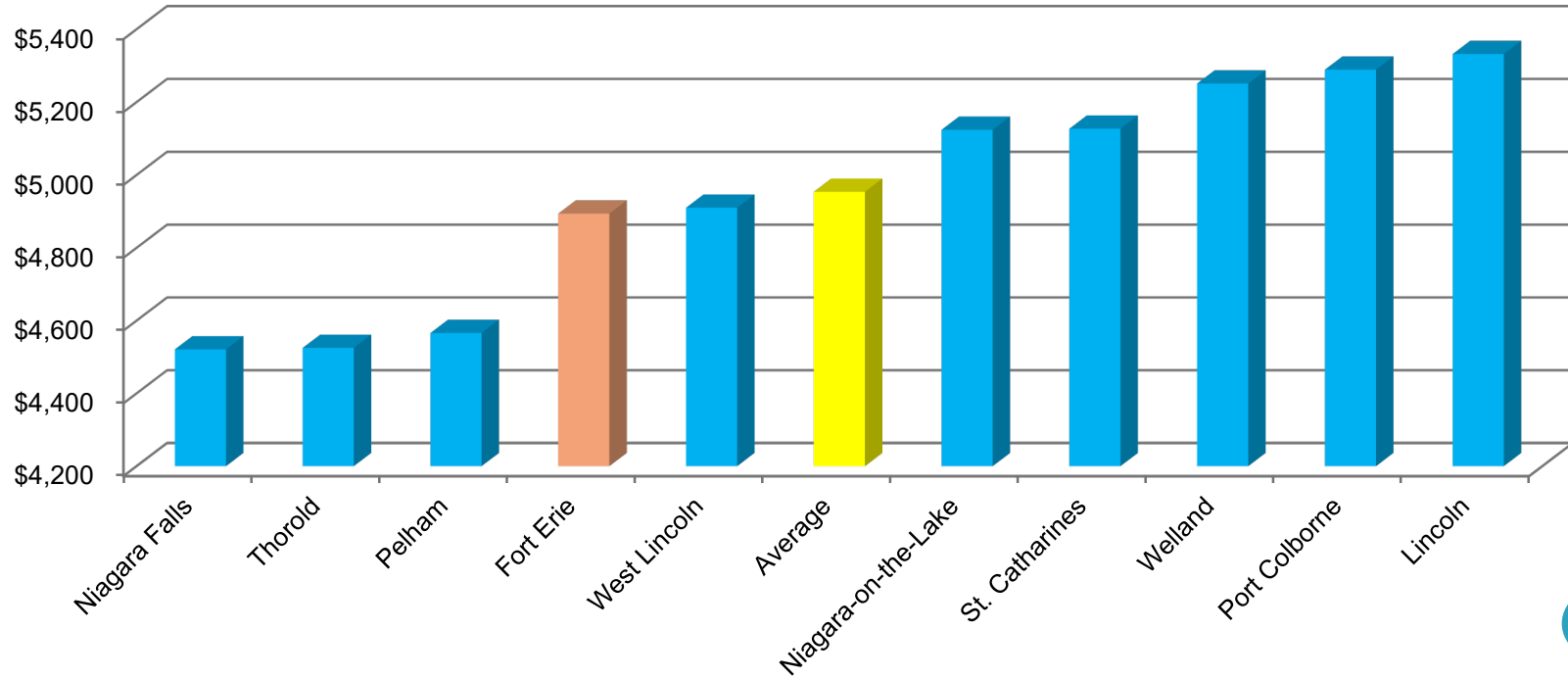
- 2022 combined monthly base of **\$67.55**.
- Water: 0.1% decrease over 2021.
- Wastewater: 2.0% increase over 2021.

Niagara base average is 45% of monthly bill

- Fort Erie 2021 was 54%; 2022 is 53%.
- Fort Erie 3<sup>rd</sup> highest in Niagara in 2021. Challenge due to low customers per km of infrastructure.
- 5-yr forecast decreases to 50%.

# 3) Budget: Rate Setting

## Municipal Burden Comparison



### 3) Budget: Rate Setting

## Volumetric rate

#### Volumetric Rates for **control & conservation**:

- **\$3.512/m<sup>3</sup>** 2021 current combined rate
- **\$3.726/m<sup>3</sup>** 2022 proposed combined rate, or 6.1% increase

#### Niagara combined volumetric rate for 2021:

- Average 2021 of **\$3.202/m<sup>3</sup>**, min of **\$1.307/m<sup>3</sup>**, max of **\$4.739/m<sup>3</sup>**.
- TOFE 2022 of **\$3.726/m<sup>3</sup>** above 2021 avg.

### 3) Budget: Rate Setting

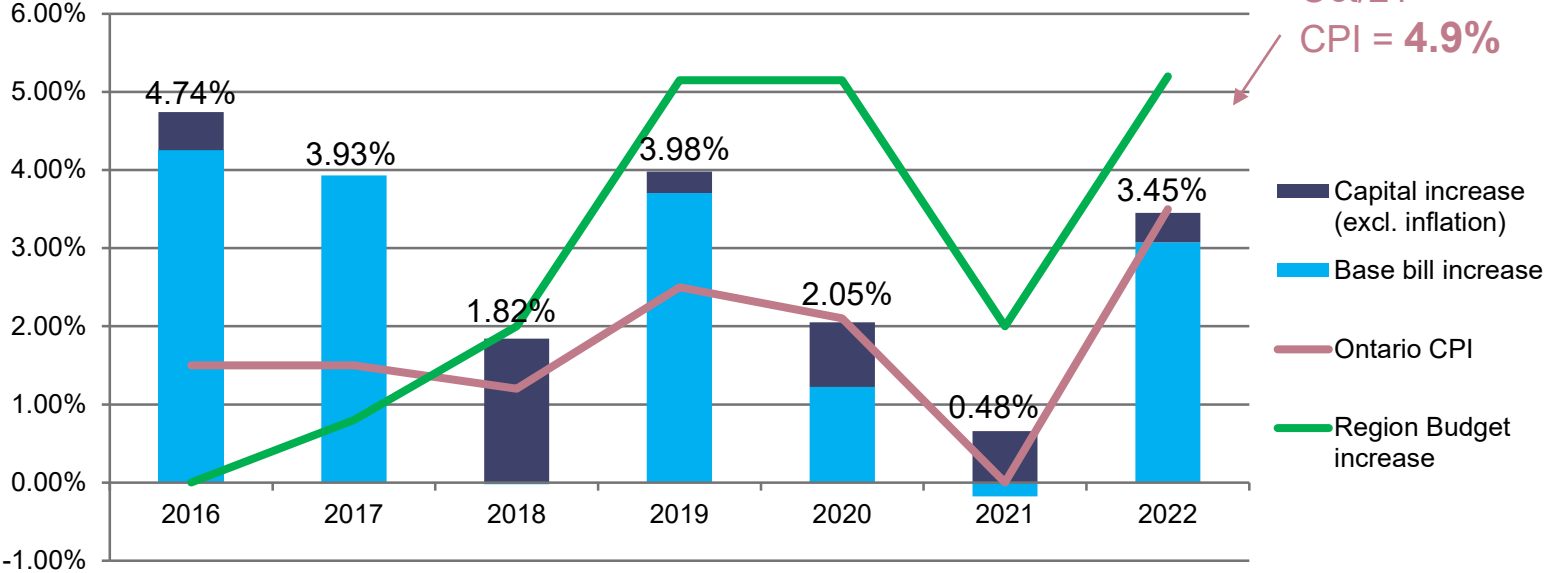
Avg Monthly Bill	2021	2022	% increase/ (decrease)	\$ increase/ (decrease)
Water base charge	\$25.27	\$25.25	(0.10%)	(\$0.02)
Water rate charge: \$1.465 *16m3	\$23.47	\$23.44	(0.10%)	(\$0.03)
Water monthly	\$48.74	\$48.69	(0.10%)	(\$0.05)
Wastewater base charge	\$41.47	\$42.30	2.0%	\$0.83
Wastewater rate charge: \$2.261 *16m3	\$32.72	\$36.18	10.6%	\$3.46
Wastewater monthly	\$74.19	\$78.48	5.78%	\$4.29
<b>Monthly total</b>	<b>\$122.93</b>	<b>\$127.17</b>	<b>3.45%</b>	<b>\$4.24</b>
Annual total	\$1,475	<b>\$1,526</b>	<b>3.45%</b>	\$51

Household cost of \$4.18 per day  
Based on average consumption of 16m<sup>3</sup>/month

# 3) Budget: Rate Setting

## Rate History & Forecast

Water & Wastewater bill increase by year



Forecast for 2023-2027 is approx. **3.45%** per year and includes Region increase of **5.15%** per year



## 4) Risks

- **Volumetric rate:** revenue risk from volume variances impacted by consumer shifts such as large consumer changes, aging population uses less water per household than family, COVID-19.
- **Weather:** consumption, treatment volumes & maintenance costs.
- **Billing frequency:** monthly based on AWWA best practice & assists with leak detection & customer cash flow.
- **Legislative compliance:** DWQMS, CLI/ECA wastewater systems
- **Comparisons:** relatively high residential & low non-res rates.
- **Inflation:** trending higher than 3.5% included for 2022.

## 4) Opportunities

- **Reserves:** below provincial avg but forecasts stable.
- **Grant funding:** applying for available programs (CSO, OCIF).
- **Meter change out program:** reduced meter reading costs, improved customer service & accuracy.
- **Condition assessments:** more precise capital investments.
- **Extraneous flows:** continued reduction of extraneous flows

Example photo: infiltration  
sewer maintenance hole →



# 5) Conclusion

## Key Messages

- **Costs:** Town increase of 1.22% + Region increase of 3.17% for a combined budget increase of 4.39%.
- **Rates:** When distributed over estimated volumes for 2022, the net increase for the average household is **3.45%**.
- **Capital:** With this budget, all infrastructure gaps identified in the 2019 AMP are funded with reserve transfers. Water and wastewater capital was presented and approved on November 17.
- **Debt:** No new debt budgeted or forecasted. Existing debt maturing in 2025 and 2031 will provide additional funding options.
- **Further information:** Related resources available on Town website, including 20 “Frequently Asked Questions”.

# 5) Conclusion

## Budget Next Steps

### Water & Wastewater Budget & User Fees:

- Dec 13 By-law: Preliminary Capital
- Jan 17 By-law: W&WW and Fees

### General Levy Budget:

- Feb 2 Budget-in-Committee: Town Levy #1 with Library reports & presentation
- Feb 9 Budget-in-Committee: Town Levy #2 (if necessary)
- Feb 28 By-laws: Levy & General Capital (actual timing depends on use of dates above)

## 6) Presentation Questions



Please refer to Council Report No. [CBC-02-2022](#) for recommendations and further information