

2024 Water & Wastewater Budgets



Presented by:

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February 7, 2024



Agenda

- **Water and Wastewater Budget**
 - 2024 Water Wastewater Budget Overview
 - Historical Averages – Consumption & Billing
 - 2024 Regional Rate increases
 - 2024 Water & Wastewater Rates
 - Water Wastewater Reserves Analysis
 - Household Impact
 - Comparison to Other Municipalities

2024 Water & Wastewater Overview

- Water & Wastewater rates are charged to users based on fixed costs and variable (consumption) usage.
- Long Range Financial Plan updated by BMA in 2023 provides guidance for sustainability and rate setting for the Town.
- Although the Town's cost to provide water and wastewater service is largely fixed (80%), the residents are billed a larger proportion on a variable basis.
- This promotes conservation and ensures that the overall water bill can be lowered if less water is consumed.
- 32% of water and 47% of wastewater bill continues to be on a fixed basis (i.e., same cost per month regardless of consumption).

2024 Water & Wastewater Overview

- Impacts on rate setting strategy;
 - Region's approved rates
 - Continued conservation
 - Rainfall throughout year
 - Capital requirements and reserve balance
 - Operating cost to maintain water distribution and billing

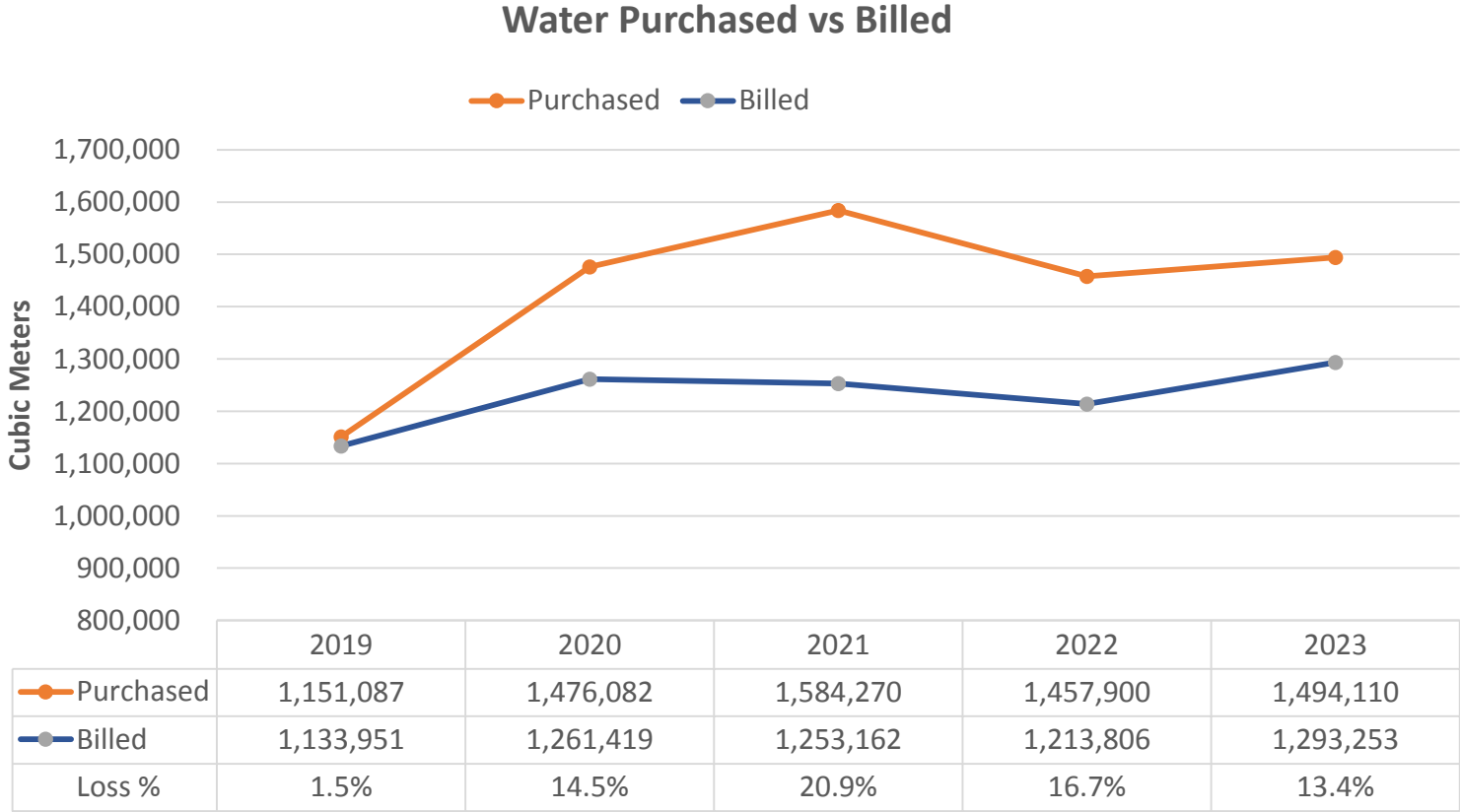
Historical Averages – Purchases

Niagara Region - Purchase							
Niagara Region Purchase Rates	2019 Actual	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2023 Budget	Variance
Water	\$ 0.580	\$ 0.601	\$ 0.611	\$ 0.636	\$ 0.669	\$ 0.669	
Wastewater	\$ 0.934	\$ 1.090	\$ 1.039	\$ 1.155	\$ 1.228		
Purchase From Region (\$)							
Water - Variable	667,631	887,125	967,989	927,224	999,560	1,003,500	3,940
Water - Fixed	240,912	236,556	262,092	301,908	342,828	342,834	6
Water Total	908,543	1,123,681	1,230,081	1,229,132	1,342,388	1,346,334	3,946
Wastewater - Variable	-	-	-	-	-		
Wastewater - Fixed	1,310,535	1,477,496	1,400,588	1,686,600	1,962,324	1,962,319	(5)
Wastewater Total	1,310,535	1,477,496	1,400,588	1,686,600	1,962,324	1,962,319	(5)
Volume Purchased From Region (m3)							
Water (m3)	1,151,087	1,476,082	1,584,270	1,457,900	1,494,110	1,500,000	5,890
Wastewater (m3)	1,403,713	1,354,929	1,348,526	1,460,176	1,598,026		

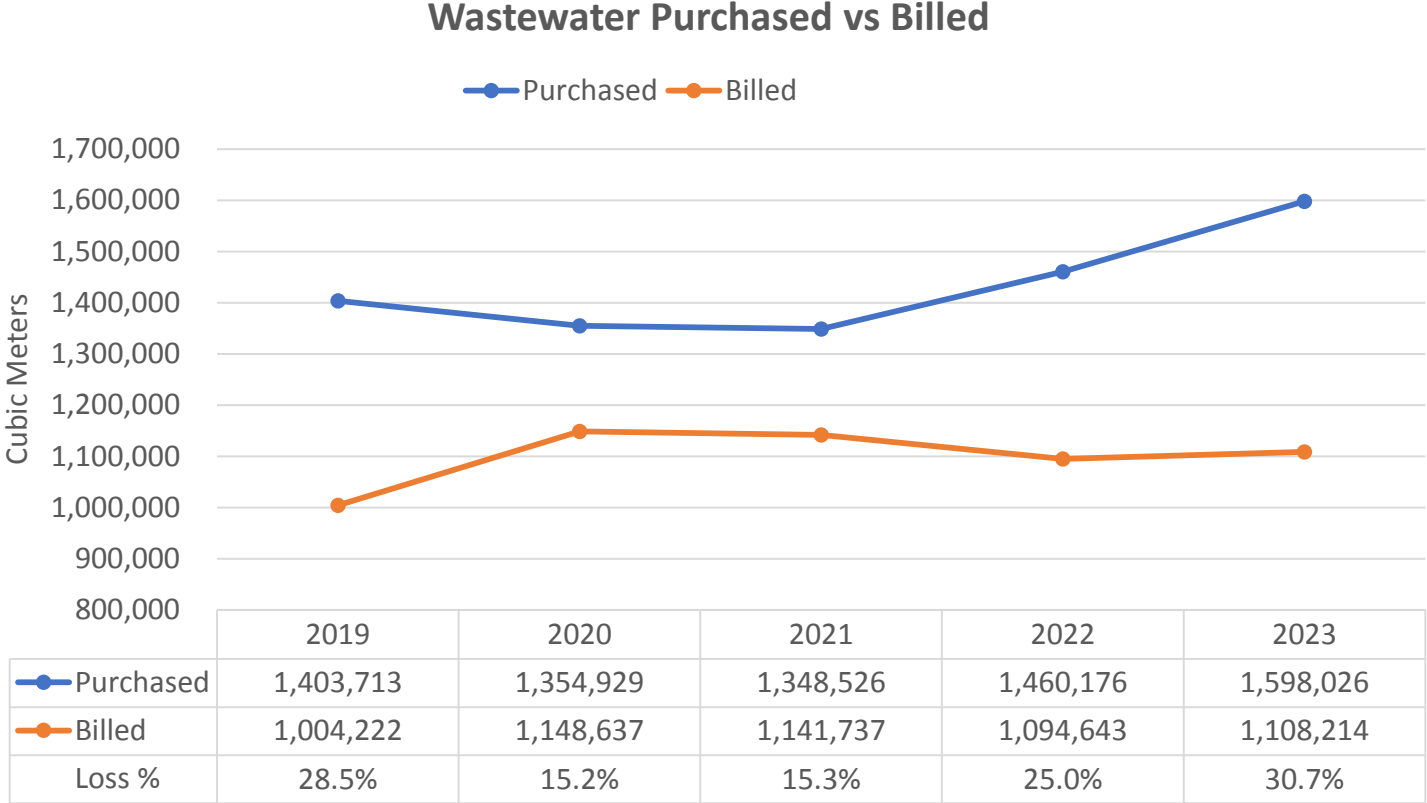
Historical Averages – Billing

Town of Pelham - Billing							
	2019	2020	2021	2022	2023	2023	
Town of Pelham Billing Rates	Actual	Actual	Actual	Actual	Actual	Budget	Variance
Water	\$ 1.427	\$ 1.534	\$ 1.649	\$ 1.773	\$ 1.888	\$ 1.888	
Wastewater	\$ 0.999	\$ 1.094	\$ 1.198	\$ 1.288	\$ 1.410	\$ 1.410	
Town of Pelham Billing (\$)							
Water - Variable	1,572,142	1,943,040	2,086,013	2,125,441	2,305,156	2,346,711	(41,555)
Water - Fixed	812,254	894,976	993,212	1,097,999	1,187,550	1,197,725	(10,175)
Water Total	2,384,396	2,838,016	3,079,226	3,223,440	3,492,706	3,544,436	(51,730)
Wastewater - Variable	1,001,504	1,262,012	1,379,409	1,418,426	1,571,504	1,591,309	(19,805)
Wastewater - Fixed	888,035	999,776	1,134,779	1,256,590	1,398,778	1,385,149	13,629
Wastewater	1,889,539	2,261,788	2,514,188	2,675,016	2,970,282	2,976,458	(6,176)
Volume Billed - Town of Pelahm (m3)							
Water (m3)	1,133,951	1,261,419	1,253,162	1,213,806	1,293,253	1,300,000	(6,747)
Wastewater (m3)	1,004,222	1,148,637	1,141,737	1,094,643	1,108,214	1,153,300	(45,086)

Historical Averages – Purchased Vs Billed

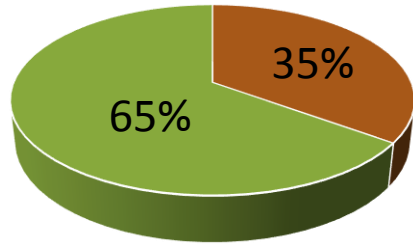


Historical Averages – Purchased Vs Billed



2024 Region Rate Increases

Town's Water Budget



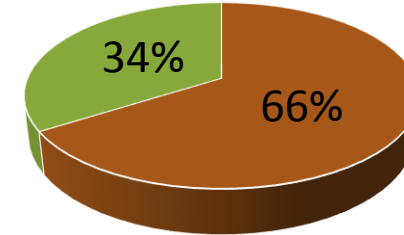
■ Region Cost ■ Town Cost



5.63%



Town's Wastewater Budget



■ Region Cost ■ Town Cost



11.64%

- 35% of Water and 66% of Wastewater Budget is tied to purchase and treatment of water and wastewater.
- Region bills the Town for water on a fixed and variable basis and Wastewater on a fixed basis on a 3-year rolling average.
- Regional rate increases put significant pressure on the Town's rate setting strategy.

2024 Region Rate Increases

Table 1: Region Water Rate Increase	2023 Budget	2024 Budget	\$ Change	% Change	Notes
Fixed Rate - 25%	\$ 342,834	\$ 362,204	\$ 19,370	5.65%	
Variable Rate - 75%	\$ 1,003,500	\$ 1,059,982	\$ 56,482	5.63%	(1)
Total Cost to Town	\$1,346,334	\$1,422,186	\$ 75,852	5.63%	

Notes:

(1) Variable rate increase from the Region is 4.78%. However, the 2024 budget is based on purchase of 1,512,000 cubic meters of water and 2023 budget is based on purchase of 1,500,000 cubic meters of water. The town takes a 3 year average to budget the anticipated volume of water needed by the Town

2024 Region Rate Increases

Table 2: Region Wastewater Rate Increase	2023 Budget	2024 Budget	\$ Change	% Change	Notes
Fixed Rate - 100%	\$ 1,822,618	\$ 2,053,691	\$ 231,073	12.68%	
Reconciliation Adjustment	\$ 139,701	\$ 136,956	\$ (2,745)	-	(1)
Total Cost to Town	\$ 1,962,319	\$ 2,190,647	\$ 228,328	11.64%	

Notes:

(1) Reconciliation adjustment refers to the update in 3 year average volume of wastewater treatment purchased by the Town and this amount is payable by the town in 2024.

2024 Water Rates – Town of Pelham

2024 Town Proposed Water Rate Increase → **6.5%**

BMA Study Recommended Water Rate Increase → **6.5%**

Total Water Budget - Expenses	\$ 4,021,046
Less: Fixed Cost	\$ 1,281,833
Less: Other Revenue	\$ 218,650
Less: Revenue Required from Consumption	\$ 2,520,563
Budgeted Billing Volume (m3)	1,253,400
Rate per m ³	\$ 2.011

Water Distribution System

	2021	2022	2023	2024	Budget Change		
	Actual	Actual	Approved Budget	Draft Budget	Dollar	Percent	Notes
Revenues							
Consumption Charges	\$ 2,086,013	\$ 2,125,441	\$ 2,346,711	\$ 2,520,563	\$ 173,852	7.41%	
Flat Rate Charge	993,212	1,097,999	1,197,725	1,281,833	84,108	7.02%	
Consumption Charges Water Haulers	177,416	178,288	150,000	150,000	-	-%	
Meter Installations	64,360	14,392	40,000	40,000	-	-%	
Other Revenues	35,465	51,979	28,650	28,650	-	-%	
Total Revenues	3,356,466	3,468,099	3,763,086	4,021,046	257,960	6.86%	
Expenditures							
Salaries and Benefits	1,084,389	1,201,512	1,000,484	1,073,379	72,895	7.29%	
Materials and Supplies	307,683	310,372	309,373	315,634	6,261	2.02%	
Insurance	24,362	25,451	28,621	29,212	591	2.06%	
Contract Services							
Contract Services	1,424,503	1,465,064	1,526,434	1,602,286	75,852	4.97%	-
Contract Services - Region	(1,230,081)	(1,229,132)	(1,346,334)	(1,422,186)	75,852	(5.63)%	-
Contract Services	194,422	235,932	180,100	180,100	-	-%	
Transfer to Reserve	515,529	465,701	898,174	1,000,535	102,361	11.40%	
Total Expenditures before Region Costs	2,126,385	2,238,968	2,416,752	2,598,860	182,108	7.54%	
Niagara Region Volumetric Costs	1,230,081	1,229,131	1,346,334	1,422,186	75,852	5.63%	(1)
Total Expenditures	3,356,466	3,468,099	3,763,086	4,021,046	257,960	6.86%	(1)
Net Surplus (Deficit)	\$ -	\$ -	\$ -	\$ -	\$ -	-%	

Notes:

(1) 2024 Regional approved rate increase for purchase of water is 5.65% for fixed component and 4.78% for variable component. 2024 budget is based on the estimated purchase of 1,512,000 cubic meters of water (3 year average).

2023 Wastewater Rates – Town of Pelham

2024 Town Proposed Wastewater Rate Increase → **9.5%**

BMA Study Recommended Wastewater Rate Increase → **9.5%**

Total WasteWater Budget - Expenses	\$ 3,295,901
Less: Fixed Cost	\$ 1,554,112
Less: Other Revenue	\$ 20,000
Less: Revenue Required from Consumption	\$ 1,721,789
Budgeted Billing Volume (m3)	1,114,900
Rate per m ³	\$ 1.544

Wastewater Distribution System

	2021	2022	2023	2024	Budget Change		
	Actual	Actual	Approved Budget	Draft Budget	Dollar	Percent	Notes
Revenues							
Consumption Charges	\$ 1,379,409	\$ 1,418,426	\$ 1,591,309	\$ 1,721,789	\$ 130,480	8.20%	
Flat Rate Charge	1,134,779	1,256,590	1,385,149	1,554,112	168,963	12.20%	
Other Revenues	25,092	55,948	20,000	20,000	-	-%	
Total Revenues	2,539,280	2,730,964	2,996,458	3,295,901	299,443	9.99%	
Expenditures							
Salaries and Benefits	266,130	297,714	658,642	711,073	52,431	7.96%	
Materials and Supplies	6,660	4,602	11,200	11,326	(126)	(1.13)%	
Insurance	2,707	2,827	3,169	3,222	53	1.67%	
Contract Services	2,496	39,906	18,000	18,000	-	-%	
Transfer to Reserve	860,699	702,315	343,128	361,633	18,505	5.39%	
Total Expenditures before Region Costs	1,138,692	1,047,364	1,034,139	1,105,254	71,115	6.88%	
Niagara Region Volumetric Costs	1,400,588	1,683,600	1,962,319	2,190,647	228,328	11.64%	(1)
Total Expenditures	2,539,280	2,730,964	2,996,458	3,295,901	299,443	9.99%	
Net Surplus (Deficit)	\$ -	\$ -	\$ -	\$ -	\$ -	-%	

Notes:

(1) 2024 Regional approved rate for purchase of wastewater treatment is 11.64% which includes the 3-year rolling average reconciliation adjustment.

Reserve Fund Analysis

- 2024 Proposed Reserve contributions are different from BMA Study recommendations.
- Decreasing the contribution was necessary to maintain the rate increases as recommended in the BMA Study.
- Rate increase would be 14.38% vs 9.5% for wastewater if reserve contributions weren't lowered.
- Rate increase would be 6.78% vs 6.5% for water if the reserve contributions weren't lowered.

BMA Study - Reserve Contribution		
	2023	2024
Water	853,780	1,010,788
Wastewater	563,680	507,639
Proposed Budget Reserve Contribution		
	2023	2024
Water	898,174	1,000,534
Wastewater	343,128	361,633
Water - Over (Under) Contribution	44,394	(10,254)
Wastewater - Over (Under) Contribution	(220,552)	(146,006)

Additional % Increases Needed to maintain BMA Reserve Contributions	
Water	0.28%
Wastewater	4.88%

Water Reserve Projection

10 Year Reserve Fund Forecast

	Water											
Reserve Fund Name	Water											
Reserve Fund Object Code	1713											
Capital Department Number	80705											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
Opening Balance - Beginning of the Year	500,582	(344,886)	(624,386)	(602,840)	686,060	(4,085)	862,715	722,065	1,104,115	1,544,515	3,346,215	
Additions to Reserve												
Contribution from Operating Budget	898,174	1,000,500	1,187,500	1,318,900	1,459,600	1,610,300	1,771,600	1,913,300	2,066,400	2,231,700	2,410,200	
Interest Revenue	-	-	-	-	-	-	-	-	-	-	-	
Total Additions	898,174	1,000,500	1,187,500	1,318,900	1,459,600	1,610,300	1,771,600	1,913,300	2,066,400	2,231,700	2,410,200	
Reductions from Reserve												
Total Approved Capital Commitments - 2023 & Prior	(1,743,642)											
10 Year Capital Forecast		(1,280,000)	(1,165,954)	(30,000)	(2,149,745)	(743,500)	(1,912,250)	(1,531,250)	(1,626,000)	(430,000)	(470,000)	
Total Reductions	(1,743,642)	(1,280,000)	(1,165,954)	(30,000)	(2,149,745)	(743,500)	(1,912,250)	(1,531,250)	(1,626,000)	(430,000)	(470,000)	
Projected Reserve Balance/(Deficit) - End of Year	(344,886)	(624,386)	(602,840)	686,060	(4,085)	862,715	722,065	1,104,115	1,544,515	3,346,215	5,286,415	
Year over Year Increase in Contribution - \$		102,326	187,000	131,400	140,700	150,700	161,300	141,700	153,100	165,300	178,500	
Year over Year Increase in Contribution - %		11.39%	18.69%	11.07%	10.67%	10.32%	10.02%	8.00%	8.00%	8.00%	8.00%	

Wastewater Reserve Projection

10 Year Reserve Fund Forecast

	Wastewater											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
Reserve Fund Name	1712											
Reserve Fund Object Code	80700											
Capital Department Number	80700											
Opening Balance - Beginning of the Year	2,563,441	228,347	(340,053)	(1,986,989)	(1,467,031)	(749,909)	(569,956)	801,758	2,467,058	4,290,358	6,273,558	
Additions to Reserve												
Contribution from Operating Budget	343,128	361,600	563,500	694,958	992,122	1,329,953	1,713,214	1,850,300	1,998,300	2,158,200	2,330,900	
Interest Revenue	-	-	-	-	-	-	-	-	-	-	-	
Total Additions	343,128	361,600	563,500	694,958	992,122	1,329,953	1,713,214	1,850,300	1,998,300	2,158,200	2,330,900	
Reductions from Reserve												
Total Approved Capital Commitments - 2023 & Prior	(2,678,222)											
10 Year Capital Forecast		(930,000)	(2,210,436)	(175,000)	(275,000)	(1,150,000)	(341,500)	(185,000)	(175,000)	(175,000)	(1,729,500)	
Total Reductions	(2,678,222)	(930,000)	(2,210,436)	(175,000)	(275,000)	(1,150,000)	(341,500)	(185,000)	(175,000)	(175,000)	(1,729,500)	
Projected Reserve Balance/(Deficit) - End of Year	228,347	(340,053)	(1,986,989)	(1,467,031)	(749,909)	(569,956)	801,758	2,467,058	4,290,358	6,273,558	6,874,958	
Year over Year Increase in Contribution - \$		18,472	201,900	131,458	297,164	337,831	383,261	137,086	148,000	159,900	172,700	
Year over Year Increase in Contribution - %		5.38%	55.84%	23.33%	42.76%	34.05%	28.82%	8.00%	8.00%	8.00%	8.00%	

2024 Annual Household Impact

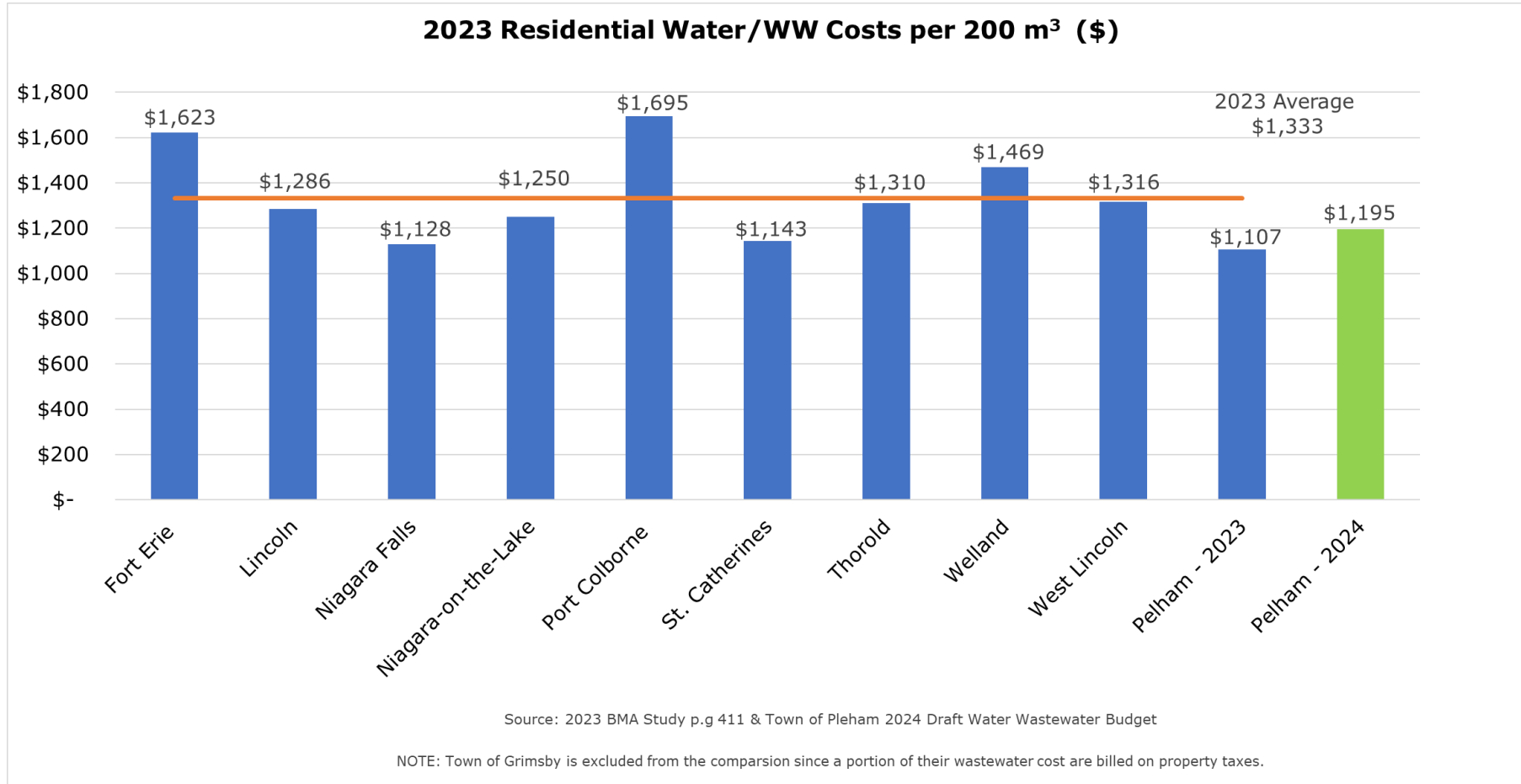
		Usage in Cubic Meters (M ³)					
		33		50		75	
		2023	2024	2023	2024	2023	2024
WATER							
	Base Charge	\$ 32.64	\$ 34.76	\$ 32.64	\$ 34.76	\$ 32.64	\$ 34.76
	Usage Charge	62.31	66.36	94.41	100.55	141.62	150.82
		\$ 94.95	\$ 101.12	\$ 127.05	\$ 135.31	\$ 174.26	\$ 185.59
	Year-to-Year Increase	\$ 5.81	\$ 6.17	\$ 7.77	\$ 8.26	\$ 10.66	\$ 11.33

		Usage in Cubic Meters (M ³)					
		33		50		75	
		2023	2024	2023	2024	2023	2024
WASTEWATER							
	Base Charge	\$ 41.93	\$ 45.91	\$ 41.93	\$ 45.91	\$ 41.93	\$ 45.91
	Usage Charge	46.54	50.96	70.52	77.22	105.78	115.83
		\$ 88.47	\$ 96.88	\$ 112.45	\$ 123.13	\$ 147.71	\$ 161.74
	Year-to-Year Increase	\$ 7.68	\$ 8.40	\$ 9.76	\$ 10.68	\$ 12.82	\$ 14.03

		33 M ³		50 M ³		75 M ³	
		2023	2024	2023	2024	2023	2024
TOTAL WATER AND WASTEWATER CHARGES		\$ 183.43	\$ 198.00	\$ 239.50	\$ 258.44	\$ 321.97	\$ 347.32

\$ INCREASE OVER 2023 RATES (per billing)	\$ 14.57
\$ INCREASE OVER 2023 RATES (per month)	\$ 7.29
% INCREASE OVER 2023 RATES	7.94%
\$ INCREASE OVER 2023 RATES (per year)	\$ 87.44

Residential Water and Wastewater Costs Comparison



Recommendation

- THAT Committee receive the 2024 Water and Wastewater Budget presentation by the Treasurer, for information;
- AND THAT Committee recommend to Council to approve the 2024 Water and Wastewater Budget, increasing the Water rate by 6.5% and the wastewater rate by 9.5%, at their meeting scheduled for February 21st, 2024.