
2020 Proposed Water and Wastewater Rates

2020 Water and Wastewater Budget

Background:

Water is provided in Pelham on a two-tiered system. The Niagara Region is responsible for the treatment and supply of water while the Town of Pelham is responsible for distribution, billing and collection. Water is wholesaled to the Town which then subsequently distributes it to the users. The Town has two main service areas, those being Fenwick and Fonthill. The Town also owns a water hauling station.

Wastewater collection is provided in a similar two-tiered system. The Town provides collection and transmission of wastewater while the Region provides treatment. Similar to water, there are two main service areas: Fenwick and Fonthill. Not all water users in these areas have municipal wastewater service.

Most customers on the system are metered and pay on a water volume consumed basis plus a base charge and are billed six times a year.

A Water & Wastewater Rate Study was completed in 2018 by BMA Management Consulting Inc. The report is attached to this report. This is a requirement by the Town of Pelham's Sustainable Financial Plan in compliance with Ontario Water Regulation 453/07.

The Water and Wastewater Long-range Financial Plan recommends a rate increase for Water 7.5% and for Wastewater 9.5%. This is required to meet the infrastructure and operating requirements of the Water and Wastewater services in Pelham. Pelham has the highest household income in the Niagara Region with one of the lowest water and wastewater rates in the Niagara Region. This is partially a result of a four-year no rate increase from 2014-2017.

Recommendations:

It is recommended that a proposed 7.5% increase in the Water and 9.5% increase in the Wastewater rates be effective for 2020. This is equivalent to \$67.98 increase per average household for the most common consumption of 33 M³ per billing (see Appendix 4).

2020 Proposed Water and Wastewater Rates

WATER

Water rates have been set by the Town of Pelham based on a fixed charge component and a rate for consumption usage. This methodology benefits those who conserve water usage and also ensures that the infrastructure is factored into the rate setting structure. Sustainability costs include the costs to maintain the water distribution system with infrastructure repairs, replacements or renewals. These costs together with administrative costs are considered in determining the budget requirements.

Also, the Niagara Region provides water flows to the Town of Pelham based on actual usage. The water usage in the past three (3) years has decreased significantly prompting the Region to institute a fixed component for cost recovery. That said, for 2020 the Region will bill the Town a 25% flat rate based on last year's consumption levels combined with a usage rate based on 100% of actual consumption for 2019.

Currently, the Town recovers its water consumption with a 30.06% flat rate and a 69.94% volumetric rate. As the Town is proactive in energy conservation efforts and the promotion of these environmental initiatives, the Town feels it prudent to reward those that follow these practices. This is done by setting the fixed rate at a minimum level and ensuring users pay more when they consume more.

Base Fixed Rate Calculation

Total Water Budget	\$2,948,982
30.06% Fixed Revenues	(\$886,475) (1)
Subtotal	\$2,062,507
Less: Other Revenues	(\$185,650)
Revenue Required for Consumption	\$1,876,857 (2)

2020 Proposed Water and Wastewater Rates

(1) Rate Setting for fixed given amount of \$886,475

# of Metres	Rate (per billing)	Revenue
5,033	\$ 26.53	\$801,153
39	\$ 53.04	\$12,411
26	\$ 74.27	\$11,586
33	\$ 106.08	\$21,004
3	\$ 265.22	\$4,774
1	\$ 442.18	\$2,653
3	\$ 884.12	\$15,914
2	\$ 1,414.96	\$16,980
Total Revenue		\$886,475

(2) Consumption Rate Calculation

The consumption rate charge is 100% attributed to the billing from the Niagara Region. The Region allocates its water costs to municipalities based on their actual consumption per month. For 2020 it is estimated that this rate will be 3.8% higher than 2019 resulting in a rate of \$0.602 per cubic metre. Although the Region uses 1,248,050 cubic metres for billing purposes, this is an estimate and conservation or excess rain causes this usage to be significantly lower at year end. Thus, the Town uses a rate that better reflects the actual usage so that it can recover its costs of operating the distribution system.

Total Town of Pelham estimated consumption costs related to water	\$1,876,857
Divided by forecasted water flows (M ³) for 2020	1,223,505
2020 Proposed Annual Consumption Rate Charge	\$1.534/M³

2020 Proposed Water and Wastewater Rates

WASTEWATER

The Town of Pelham is using the 2018 Water and Waste Water Rate Study as prepared by BMA Management Consulting Inc. to set its annual rates in wastewater as well. The methodology proposed in the study for wastewater is to establish a fixed rate and a volumetric rate for user fees. Using this methodology, the Town is proposing the following rate structure for wastewater in 2020:

Total Wastewater Budget	\$2,161,293
45.83% Fixed Cost	(\$990,559) (1)
Subtotal	\$1,170,734
Less: Other Revenues	(\$4,330)
Revenue Required for Consumption	\$1,166,404 (2)

(1) Fixed Rate Calculation

# of Metres	Rate (per billing)	Revenue
4,607	\$32.53	\$899,194
31	\$65.05	\$12,099
21	\$91.08	\$11,476
26	\$130.09	\$20,294
2	\$325.25	\$3,903
1	\$542.27	\$3,254
3	\$1,084.23	\$19,516
2	\$1,735.22	\$20,823
Total Revenue		\$990,559

2020 Proposed Water and Wastewater Rates

(2) Consumption Rate Calculation

The consumption rate charge is 100% attributed to the billing from the Niagara Region. The Region allocates its wastewater costs to municipalities based on their proportionate share of the Region's total three-year average historical wastewater flows.

Total Town of Pelham estimated consumption costs related to wastewater	\$1,166,404
Divided by forecasted water flows (M ³) for 2020	1,066,000
2020 Proposed Annual Consumption Rate Charge	\$1.094/M³

It is noted that consumption levels for wastewater are forecasted to be less than water consumption since there are fewer sewer accounts, as well as higher water flow generated from water hauler usage. It should also be noted that although the rates are based on usage within the Town, the Region's requisition to the Town for wastewater is fixed.

The Niagara Region has reported that water conservation efforts are leveling off as members of the community have been diligent in their efforts to conserve water. Originally, excess use of water led to a methodology of charging 100% of the water and wastewater cost based on consumption. However, as the water consumption levels decrease, the revenues being generated are no longer able to cover the fixed costs resulting in large deficits in this area. The need to cover the fixed costs has become paramount to sustain the wastewater infrastructure.

SUMMARY

Appendix 4 is a summary of sample water billings for a two-month billing period which include the proposed 7.5% increase in the water and 9.5% increase in the wastewater rates effective for 2020. For the average household, this is a \$ 67.98 increase to the annual water and wastewater bill.

Finally, the 2020 Water and Wastewater Budgets are provided for Council's information and reference.

TOWN OF PELHAM
2020 Operating Budget
Water

	2018 Actual	2019 Budget	2019 Actual as at Aug 31/19 (8 months)	2020 Budget
REVENUES				
Water Consumption Charge	1,606,322	1,752,173	1,104,571	1,876,857
Flat Rate Charge	746,931	824,061	536,897	886,475
Meter Installations	22,768	50,000	20,020	40,000
Fees - Administration Charges	6,105	5,100	3,540	5,100
Fees - Disconnect/Reconnect	2,021	2,550	2,322	2,550
Water Haulers	117,136	115,000	79,524	123,000
Penalties - Water & Sewer	8,923	7,500	5,207	7,500
Interest Revenue	-	2,500	-	4,500
Other Revenues	2,019	3,000	1,673	3,000
Total Water Revenues	2,512,225	2,761,884	1,753,754	2,948,982

EXPENSES				
Total Salaries & Benefits	881,857	1,021,751	624,242	1,014,100
WSIB	21,861	26,000	-	24,930
Professional Development	8,693	14,500	6,236	12,000
Associations/Memberships	476	650	131	650
Other Travel Expenses	126	-	1,319	-
Hydro	1,684	2,000	3,854	8,400
Water	26,601	25,000	1,731	25,000
Telephone	-	750	-	750
Hand Held Devices	3,680	3,900	2,715	2,150
Office Supplies and Services	669	1,050	709	1,050
Materials and Supplies	153,313	149,500	110,011	149,500
Printing Fees/Copy Costs	9,995	3,000	1,859	3,000
Postage	17,922	20,000	14,786	20,000
Protective Clothing	3,518	7,200	3,427	7,000
Insurance	14,952	16,050	7,476	20,150
Interdepartmental transfers	39,722	44,210	-	37,100
Software Support	4,274	5,000	-	5,000
Contract Services - Engineering	26,797	26,200	2,035	26,200
Contract Services - Other	71,443	52,000	43,614	52,000
Contract Services - Water Testing	14,636	14,000	9,612	14,000
Interdepartmental transfers	71,191	67,600	-	76,200
Equipment Rental - Other	-	1,000	-	1,000
Transfer to Water Capital Reserve	185,941	285,334	296,410	436,556
Total Expenses	1,559,351	1,786,695	1,130,167	1,936,736

Niagara Region Volumetric Water Cost	952,874	975,189	623,587	1,012,246
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Total Water Expenses	2,512,225	2,761,884	1,753,754	2,948,982
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Net Surplus(Deficit)	-	-	-	-
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TOWN OF PELHAM
2020 Operating Budget
Wastewater

	2018 Actual	2019 Budget	2019 Actual as at Aug 31/19 (8 months)	2020 Budget
REVENUES				
Sewer Consumption Charges	987,218	1,106,007	702,357	1,166,404
Fixed Rate User Charge	802,350	903,097	586,013	990,559
Penalties on overdue accounts	7,350	5,000	4,622	4,330
Total Wastewater Revenues	1,796,918	2,014,104	1,292,992	2,161,293
EXPENSES				
Salaries and Benefits	223,748	251,742	145,473	238,500
WSIB	5,695	7,000	-	5,870
Hydro	1,076	2,000	1,039	2,000
Natural Gas	876	2,000	434	2,000
Materials & Supplies	10,352	7,000	2,327	7,000
Insurance	1,582	1,690	791	2,227
Contract Services - Other	8,803	35,000	10,317	18,000
Transfer - Capital Reserve Fund	169,176	354,149	189,587	450,962
Total Expenses	421,308	660,581	349,968	726,559
Niagara Region Volumetric Sewage Cost	1,375,610	1,353,523	943,024	1,434,734
Total Wastewater Expenses	1,796,918	2,014,104	1,292,992	2,161,293
Net Surplus(Deficit)	-	-	-	-

TOWN OF PELHAM
2020 Proposed Water and Wastewater Rates
as per 2 Month Billing

APPENDIX 3

	2019 Rates	2020 Rates	\$ INCREASE	% INCREASE
WATER				
Bi-Monthly Base Charge (up to 19 mm Meter)	\$ 24.68	\$ 26.53	\$ 1.85	7.5%
Bi-Monthly Base Charge (25mm Meter)	49.35	53.04	3.69	7.5%
Bi-Monthly Base Charge (37mm Meter)	69.10	74.27	5.17	7.5%
Bi-Monthly Base Charge (50mm Meter)	98.70	106.08	7.38	7.5%
Bi-Monthly Base Charge (75mm Meter)	246.77	265.22	18.45	7.5%
Bi-Monthly Base Charge (100mm Meter)	411.42	442.18	30.76	7.5%
Bi-Monthly Base Charge (150mm Meter)	822.61	884.12	61.51	7.5%
Bi-Monthly Base Charge (200mm Meter)	1,316.52	1,414.96	98.44	7.5%
Usage Charge, Per Cubic Meter	1.427	1.534	0.107	7.5%
WATER HAULERS				
Usage Charge, Per Cubic Meter	\$1.6454	\$1.7688	\$ 0.1234	7.5%
WASTEWATER				
Bi-Monthly Base Charge	\$ 29.71	\$ 32.53	\$ 2.82	9.5%
Bi-Monthly Base Charge (25mm Meter)	59.40	65.05	5.65	9.5%
Bi-Monthly Base Charge (37mm Meter)	83.18	91.08	7.90	9.5%
Bi-Monthly Base Charge (50mm Meter)	118.80	130.09	11.29	9.5%
Bi-Monthly Base Charge (75mm Meter)	297.04	325.25	28.21	9.5%
Bi-Monthly Base Charge (100mm Meter)	495.22	542.27	47.05	9.5%
Bi-Monthly Base Charge (150mm Meter)	990.16	1,084.23	94.07	9.5%
Bi-Monthly Base Charge (200mm Meter)	1,584.67	1,735.22	150.55	9.5%
Usage Charge, Based on Cubic Meters for Sewer	0.999	1.094	0.095	9.5%
SEWERS ONLY, NO WATER				
Base Charge Per Billing Period (2 Months)	\$ 29.71	\$ 32.53	\$ 2.82	9.5%
Usage Charge based on 100 Cubic Meters for Sewer	102.11	111.81	9.70	9.5%

TOWN OF PELHAM
2020 Proposed Water and Wastewater Rates
as per 2 Month Consumption

APPENDIX 4

WATER

Base Charge
Usage Charge

25 M³		33 M³		50 M³		75 M³		100 M³		150 M³	
2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
\$ 24.68	\$ 26.53	\$ 24.68	\$ 26.53	\$ 24.68	\$ 26.53	\$ 24.68	\$ 26.53	\$ 24.68	\$ 26.53	\$ 24.68	\$ 26.53
35.68	38.35	47.09	50.62	71.35	76.70	107.03	115.05	142.70	153.40	214.05	230.10
\$ 60.36	\$ 64.88	\$ 71.77	\$ 77.15	\$ 96.03	\$ 103.23	\$ 131.71	\$ 141.58	\$ 167.38	\$ 179.93	\$ 238.73	\$ 256.63
\$ 4.21	\$ 4.52	\$ 5.01	\$ 5.38	\$ 6.70	\$ 7.20	\$ 9.19	\$ 9.87	\$ 11.68	\$ 12.55	\$ 16.65	\$ 17.90

WASTEWATER

Base Charge
Usage Charge

25 M³		33 M³		50 M³		75 M³		100 M³		150 M³	
2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
\$ 29.71	\$ 32.53	\$ 29.71	\$ 32.53	\$ 29.71	\$ 32.53	\$ 29.71	\$ 32.53	\$ 29.71	\$ 32.53	\$ 29.71	\$ 32.53
\$ 24.98	\$ 27.35	32.97	36.10	49.95	54.70	74.93	82.05	99.90	109.40	149.85	164.10
\$ 54.69	\$ 59.88	\$ 62.68	\$ 68.63	\$ 79.66	\$ 87.23	\$ 104.64	\$ 114.58	\$ 129.61	\$ 141.93	\$ 179.56	\$ 196.63
\$ 4.76	\$ 5.19	\$ 5.45	\$ 5.95	\$ 6.93	\$ 7.57	\$ 9.11	\$ 9.94	\$ 11.29	\$ 12.32	\$ 15.64	\$ 17.07

**TOTAL WATER AND
WASTEWATER CHARGES**

25 M ³		33 M ³		50 M ³		75 M ³		100 M ³		150 M ³	
2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
\$ 115.05	\$ 124.76	\$ 134.45	\$ 145.78	\$ 175.69	\$ 190.46	\$ 236.35	\$ 256.16	\$ 296.99	\$ 321.86	\$ 418.29	\$ 453.26

\$ INCREASE OVER 2019 RATES (per billing)	\$ 9.71		\$ 11.33		\$ 14.77		\$ 19.81		\$ 24.87		\$ 34.97
% INCREASE OVER 2019 RATES	8.44%		8.43%		8.41%		8.38%		8.37%		8.36%
\$ INCREASE OVER 2019 RATES (per year)	\$ 58.26		\$ 67.98		\$ 88.62		\$ 118.86		\$ 149.22		\$ 209.82