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## 2018 Proposed Water and Wastewater Rates

April 16, 2018

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### **2018 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 which was purchased in 2017.

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 conducted previously in 2006, and again in 2014, by C.N Watson & Associates Ltd. The next study is required to be completed by 2019. This is a requirement by the Town of Pelham's Sustainable Financial Plan in compliance with Ontario Water Regulation 453/07.

The Town of Pelham has not had a rate increase in either water or wastewater from 2014 to 2017. It has the lowest combined water and wastewater rates in the Niagara Region.

#### Recommendations:

It is recommended that a proposed 3% increase in the fixed water and wastewater rates be effective for 2018. This is equivalent to \$8.76 increase per average household for the most common consumption of 25 m<sup>3</sup> per year (see Appendix 4). The consumption rates are remaining at the same rate as in 2017 for water and wastewater.

It is recommended to conduct the Water & Wastewater Rate Study in 2018 in order to be in compliance with Ontario Water Regulation 453/07.



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### **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 2018 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 2018.

Currently, the Town recovers its water consumption with a 29.45% flat rate and a 70.55% 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		\$2,477,727
29.45% Fixed Cost	(1)	(\$729,577)
Subtotal		\$1,748,150
Less: Other Revenues		(\$210,650)
Revenue Required for Consumption	(2)	\$1,537,500



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**(1) Rate Setting for fixed given amount of \$729,577**

# of Metres	Rate	Revenue
4,845	\$ 22.96	\$667,447
38	\$ 45.91	\$ 10,467
23	\$ 64.28	\$ 8,871
31	\$ 91.81	\$ 17,077
3	\$ 229.56	\$ 4,132
1	\$ 382.72	\$ 2,296
1	\$ 765.22	\$ 4,591
2	\$ 1,224.67	\$ 14,696
<b>Total Revenue</b>		<b>\$729,577</b>

**(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 at a rate of \$0.566 per cubic metre. Although the Region uses 1,158,192 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	\$1,537,500
Divided by forecasted water flows (M3) for 2018	1,158,192
<b>2018 Proposed Annual Consumption Rate Charge (no change)</b>	<b>\$1.3275/m3</b>

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### WASTEWATER

The Town of Pelham has previously used the 2006 Water and Wastewater study prepared by C.N. Watson 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 2018:

Total Wastewater Budget		\$1,708,694
45.72% Fixed Cost	(1)	(\$781,194)
Subtotal		\$927,500
Less: Other Revenues	(2)	(\$5,000)
Revenue Required for Consumption		\$922,500

#### (1) Fixed Rate Calculation

# of Metres	Rate	Revenue
4,416	\$27.13	\$718,836
30	\$54.26	\$9,767
18	\$75.97	\$8,205
24	\$108.53	\$15,628
2	\$271.32	\$3,256
1	\$452.26	\$2,714
1	\$904.25	\$5,426
2	\$1,446.85	\$17,362
<b>Total Revenue</b>		<b>\$781,194</b>




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**(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	\$922,500
Divided by forecasted water flows (M3) for 2018	1,011,624
<b>2018 Proposed Annual Consumption Rate Charge (no change)</b>	<b>\$0.9119</b>

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 sustaining the wastewater infrastructure.

**SUMMARY**

Attached is a summary of sample water billings for a two-month billing period which has a 3% increase from last year's water billings for the fixed fee only. For the average household, this is a \$1.46 increase to the annual water and wastewater bill or \$8.76 per year.

Finally, the 2018 Water and Wastewater Budgets are provided for Council's information and reference.

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# 2018 Proposed Water and Wastewater Rates

April 16, 2018

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## The Challenge:

1. HMW ensure that the operating costs of water distribution are recovered through user fees and fixed charges?
2. HMW ensure that water rates within the community are affordable for Pelham residents and businesses?

## Our Recommended Solution:

THAT the Issue Sheet regarding the 2018 Water and Wastewater Budget be received;  
AND THAT Committee recommend to Council that the 2018 Water and Wastewater Budgets be approved.

That a Water & Wastewater Rate Study be conducted in 2018 in order to update the Town of Pelham's Sustainable Financial Plan in compliance with Ontario Water Regulation 453/07.

## Rationale:

- A 3% increase to the water and wastewater billing for the fixed rate is required to address the cost increases in the water and wastewater distribution systems.
- An updated Sustainable Financial Plan will provide the Town with a review of the water and wastewater rates and meet compliance with provincial regulations.

## Measure of Success:

- Council approves the water and wastewater budget and the Water & Wastewater Study to be completed in 2018.

## Milestones:

- Staff communicate the fact that the Town has maintained a 0% increase in water rates from 2014-2018 for the consumption rate and now is recommending a 3% water and wastewater fixed rate increase which equates to \$8.76 annually per household.



**TOWN OF PELHAM**  
**2018 Operating Budget**  
**Water**

	2016 Actual	2017 Budget	2017 Actual	2018 Budget
<b>REVENUES</b>				
Water Consumption Charge	1,663,894	1,636,652	1,447,571	1,537,500
Flat Rate Charge	663,943	693,331	706,302	729,577
Meter Installations	60,343	50,000	76,274	75,000
Fees - Administration Charges	5,660	5,000	5,870	5,100
Fees - Disconnect/Reconnect	2,445	2,500	2,933	2,550
Water Haulers	118,568	115,000	96,422	115,000
Penalties - Water & Sewer	7,913	7,500	8,139	7,500
Interest Revenue	2,500	2,500	-	2,500
Other Revenues	2,849	3,000	2,261	3,000
<b>Total Revenues</b>	<b>2,528,115</b>	<b>2,515,483</b>	<b>2,345,772</b>	<b>2,477,727</b>
<b>EXPENSES</b>				
Total Salaries & Benefits	784,139	897,721	894,979	942,369
WSIB	15,614	25,000	18,153	25,000
Professional Development	10,190	14,500	8,842	14,500
Associations/Memberships	1,272	650	145	650
Other Travel Expenses	205	-	181	-
Hydro	1,606	5,000	1,878	2,000
Water	36,297	-	24,211	25,000
Telephone	-	750	-	750
Hand Held Devices	3,941	4,200	3,683	3,900
Office Supplies and Services	605	1,050	1,833	1,050
Materials and Supplies	137,399	35,500	141,842	149,500
Printing Fees/Copy Costs	5,557	-	2,504	3,000
Postage	16,352	-	20,597	20,000
Protective Clothing	2,612	6,172	3,443	7,200
Insurance	14,861	-	15,285	16,050
Licences	145	-	145	-
Taxes on Own Property	809	-	-	-
Interdepartmental transfers			49,967	18,100
Software Support	8,853	2,500	4,274	5,000
Contract Services - Engineering	5,050	51,200	24,011	26,200
Contract Services - Other	49,278	16,240	34,371	52,000
Contract Services - Water Testing	13,373	21,500	14,630	14,000
Contract Services - Region	1,038,191	1,063,000	876,797	893,508
Building Rental	12,211	-	-	-
Equipment Rental- Other		1,000	36	1,000
Transfer to Water Capital Reserve	369,555	369,500	203,965	256,950
<b>Total Expenses</b>	<b>2,528,115</b>	<b>2,515,483</b>	<b>2,345,772</b>	<b>2,477,727</b>
<b>Net Surplus(Deficit)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>



**2018 Proposed Water and Wastewater Rates  
as per 2 Month Billing**

	<b>2017</b>		<b>2018</b>		<b>\$</b>	<b>%</b>
	<b>Rates</b>		<b>Rates</b>		<b>INCREASE</b>	<b>INCREASE</b>
<b>WATER</b>						
Bi-Monthly Base Charge (up to 19mm Metre)	\$ 22.29	\$	22.96	\$	0.67	3.00%
Bi-Monthly Base Charge (25mm Metre)	\$ 44.57	\$	45.91	\$	1.34	3.00%
Bi-Monthly Base Charge (37mm Metre)	\$ 62.41	\$	64.28	\$	1.87	3.00%
Bi-Monthly Base Charge (50mm Metre)	\$ 89.14	\$	91.81	\$	2.67	3.00%
Bi-Monthly Base Charge (75mm Metre)	\$ 222.87	\$	229.56	\$	6.69	3.00%
Bi-Monthly Base Charge (100mm Metre)	\$ 371.57	\$	382.72	\$	11.15	3.00%
Bi-Monthly Base Charge (150mm Metre)	\$ 742.93	\$	765.22	\$	22.29	3.00%
Bi-Monthly Base Charge (200mm Metre)	\$ 1,189.00	\$	1,224.67	\$	35.67	3.00%
Usage Charge, Per Cubic Metre	\$ 1.3275	\$	1.367	\$	0.04	3.00%
<b>WATER HAULERS</b>						
Usage Charge, Per Cubic Metre	\$ 1.4860	\$	1.5306	\$	0.04	3.00%
<b>WASTEWATER</b>						
Bi-Monthly Base Charge	\$ 26.34	\$	27.13	\$	0.79	3.00%
Bi-Monthly Base Charge (25mm Metre)	\$ 52.68	\$	54.26	\$	1.58	3.00%
Bi-Monthly Base Charge (37mm Metre)	\$ 73.76	\$	75.97	\$	2.21	3.00%
Bi-Monthly Base Charge (50mm Metre)	\$ 105.37	\$	108.53	\$	3.16	3.00%
Bi-Monthly Base Charge (75mm Metre)	\$ 263.43	\$	271.32	\$	7.89	3.00%
Bi-Monthly Base Charge (100mm Metre)	\$ 439.09	\$	452.26	\$	13.17	3.00%
Bi-Monthly Base Charge (150mm Metre)	\$ 877.91	\$	904.25	\$	26.34	3.00%
Bi-Monthly Base Charge (200mm Metre)	\$ 1,404.71	\$	1,446.85	\$	42.14	3.00%
Usage Charge based on Cubic Metres for Sewer	\$ 0.9119	\$	0.9393	\$	0.0274	3.00%
<b>SEWERS ONLY, NO WATER</b>						
Base Charge Per Billing Period (2 Months)	\$ 26.34	\$	26.34	\$	27.13	3.00%
Usage Charge based on Cubic Metres for Sewer	\$ 92.83	\$	92.83	\$	95.61	3.00%

**TOWN OF PELHAM  
2018 Proposed Water and Wastewater Rates**

Consumption per 2 month period	25 M <sup>3</sup>		50 M <sup>3</sup>		75 M <sup>3</sup>		100 M <sup>3</sup>		150 M <sup>3</sup>		200 M <sup>3</sup>	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
<b>WATER</b>												
Base Charge	\$ 22.29	\$ 22.96	\$ 22.29	\$ 22.96	\$ 22.29	\$ 22.96	\$ 22.29	\$ 22.96	\$ 22.29	\$ 22.96	\$ 22.29	\$ 22.96
Usage Charge	\$ 33.19	\$ 33.19	\$ 66.37	\$ 66.37	\$ 99.56	\$ 99.56	\$ 132.75	\$ 132.75	\$ 199.12	\$ 199.12	\$ 265.50	\$ 265.50
	<u>\$ 55.48</u>	<u>\$ 56.15</u>	<u>\$ 88.66</u>	<u>\$ 89.33</u>	<u>\$ 121.85</u>	<u>\$ 122.52</u>	<u>\$ 155.04</u>	<u>\$ 155.71</u>	<u>\$ 221.41</u>	<u>\$ 222.08</u>	<u>\$ 287.79</u>	<u>\$ 288.46</u>
Year to Year Increase	\$ -	\$ 0.67	\$ -	\$ 0.67	\$ -	\$ 0.67	\$ -	\$ 0.67	\$ -	\$ 0.67	\$ -	\$ 0.67
<b>WASTEWATER</b>												
Base Charge	\$ 26.34	\$ 27.13	\$ 26.34	\$ 27.13	\$ 26.34	\$ 27.13	\$ 26.34	\$ 27.13	\$ 26.34	\$ 27.13	\$ 26.34	\$ 27.13
Usage Charge	\$ 22.80	\$ 22.80	\$ 45.60	\$ 45.60	\$ 68.39	\$ 68.39	\$ 91.19	\$ 91.19	\$ 136.79	\$ 136.79	\$ 182.38	\$ 182.38
	<u>\$ 49.14</u>	<u>\$ 49.93</u>	<u>\$ 71.94</u>	<u>\$ 72.73</u>	<u>\$ 94.73</u>	<u>\$ 95.52</u>	<u>\$ 117.53</u>	<u>\$ 118.32</u>	<u>\$ 163.13</u>	<u>\$ 163.92</u>	<u>\$ 208.72</u>	<u>\$ 209.51</u>
Year to Year Increase	\$ -	\$ 0.79	\$ -	\$ 0.79	\$ -	\$ 0.79	\$ -	\$ 0.79	\$ -	\$ 0.79	\$ -	\$ 0.79
<b>TOTAL WATER AND WASTEWATER CHARGES</b>												
	<u>\$ 104.62</u>	<u>\$ 106.08</u>	<u>\$ 160.60</u>	<u>\$ 162.06</u>	<u>\$ 216.58</u>	<u>\$ 218.04</u>	<u>\$ 272.57</u>	<u>\$ 274.03</u>	<u>\$ 384.54</u>	<u>\$ 386.00</u>	<u>\$ 496.51</u>	<u>\$ 497.97</u>

<b>\$ INCREASE OVER 2016 RATES</b>	<b>\$ 1.46</b>							
<b>% INCREASE OVER 2016 RATES</b>	<b>1.40%</b>	<b>0.90%</b>	<b>0.67%</b>	<b>0.54%</b>	<b>0.38%</b>	<b>0.29%</b>		