The Water and Wastewater System continues to be very lean over the last 6 (six) years resulting from meter replacements, infrastructure upgrades and continued audits within the system. Additionally, for 2015 the following items have been considered in setting the water and wastewater rates:

- 1. The Niagara Region set their 2015 budget and used a 3 year rolling average for consumption when billing area municipalities. For the Town of Pelham the consumption for billing will be 1,400,000 cubic meters.
- Maintaining the Town's commitment to water and wastewater sustainability and lifecycle contributions requiring the transfer of user fees to capital reserve to address infrastructure needs.
- 3. The impact that conservation has on the level of consumption. The Town strongly encourages conservation efforts but also has to consider that most of the items budgeted are fixed costs that do not fluctuate with the level of consumption. The Town recovers approximately 75% of its user fees through consumption thus increasing the risk of not meeting the fixed costs requirements.

In addition to these impacts, the largest impact on the 2015 budget continues to be due to results of a study conducted by CN Watson on Water and Wastewater rate setting. This study was previously done in 2006 when the Town had not yet established reserves and had no mechanism for rate stabilization. Since this time as Council is aware the Town has reserves that far surpass the requirements of maintaining the system in the long-term. As a result with work done by the consultants together with the Town staff, the amount of transfer into reserves has been reduced significantly. The study shows that the Town has been able to maintain the sustainability of both the water infrastructure and also the cost to maintain the distribution system.

This is further quantified by the amount of additional revenues the Town realized upon completion of the meter replacement program. An additional study performed by a consultant on the potential for significant leaks or losses in the Towns distribution system revealed that the Town works very well at minimizing any loss in the system. The efforts of the staffs work to create a lean system is now being realized. This is why the recommendation to the Committee of the Whole this evening is to maintain the water and wastewater rates at 2014 rates representing a two-year 0% increase in water and wastewater rates for ratepayers excluding waterhaulers.

Each of the Budgets will be discussed in detail taking into consideration the factors above:

### 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 allows to ensure 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 waterflows 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 2015 the Region will bill the Town a 25% flat rate based on last years consumption levels and usage rate at 100% of actual consumption for 2015.

Currently, the Town recovers its water consumption with a 28.74% flat rate and a 71.26% 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	\$2,254,139
28.74% Fixed Cost	(1) \$ 645,262
Subtotal	\$1,608,877
Less: Other Revenue	(\$144,500)
Revenue Required for Consumption	(2) \$1,464,377

### (1) Rate Setting for fixed given amount of \$645,262

# of Meters	Rate	Revenue	
4498	\$22.29	\$606,377	
38	\$44.57	\$10,162	
21	\$62.41	\$7,864	
29	\$89.14	\$15,510	
4	\$222.87	\$5,349	
Total Revenue		\$645,262	

### (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 \$0.537. Although the Region uses 1,400,000 cubic meters 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	\$1,464,377
Divided by forecasted waterflows (M3) for 2014	1,103,109
2015 Proposed Annual Consumption Rate Charge	\$1.3275

### 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 2015.

The rates proposed for 2015 have been calculated as follows:

Total Wastewater Budget	\$1,668,244
40.8% Fixed Cost	(1) \$683,937
Subtotal	\$984,307
Less: Other Revenue	(\$5,000)
Revenue Required for Consumption	(2) \$979,307

### (1) Fixed Rate Calculation

# of Meters	Rate	Revenue	
4102	\$26.34	\$648,280	
30	\$52.68	\$9,482	
17	\$73.76	\$7,524	
22	\$105.37	\$13,908	
3	\$263.43	\$4,741	
Total Revenue		\$683,937	

## (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.

The Town of Pelham consumption costs related to wastewater:

2015 Proposed Annual Consumption Rate Charge	\$0.9119
Divided by forecasted waterflows (M3) for 2015	1,073,919
Total Town of Pelham estimated consumption costs related to water	\$ 979,307

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 let 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.

### WATER HAULERS

The Bulk Water station continues to realize improvements to the prepay system at the station. As a result of the investment in the station and the continuous maintenance required to sustain the station to the highest level, a modest increase of 2% is required.

### SUMMARY

Attached is a summary of sample water billings for a two month billing period which has not changed from last years water billings.

Finally, the 2015 Water and Wastewater Budgets are provided for Council's information and reference.

### APPENDIX 3

# TOWN OF PELHAM

# 2015 Operating Budget

Water

	2013 Actual	2014 Budget	2014 Projected to Dec 30/14	2015 Budget
REVENUES				
Water Consumption Charge	1,447,897	1,454,084	1,450,793	1,464,377
Flat Rate Charge	637,243	639,055	642,130	645,262
Meter Installations	9,504	10,000	23,127	20,000
Fees - Administration Charges	3,040	3,500	2,990	3,000
Fees - Disconnect/Reconnect	2,605	2,500	1,548	2,000
Water Haulers	95,890	100,000	96,689	100,000
Penalties - Water & Sewer	5,286	3,000	6,703	5,000
Interest Revenue	2,500	2,500	5,179	5,000
Other Revenues	2,232	2,000	2,065	2,000
Rain Barrel Program Revenues	4,220	7,500	1,708	7,500
Transfer from Deferred Revenues				
Total Revenues	2,210,417	2,224,139	2,232,932	2,254,139
EXPENSES				
Total Salaries & Benefits	244,993	224,009	205,942	241,362
WSIB	9,066	9,000	9,685	15,456
Professional Development	9,445	12,490	5,750	11,800
Associations/Memberships	600	700	861	930
Mileage	126	600	-	300
Other Travel Expenses	191	-	441	-
Hydro	5,495	5,000	2,495	5,000
Water	15,520	16,000	29,843	16,000
Telephone	370		730	750
Hand Held Devices	4,610	4,200	4,106	4,200
Office Supplies and Services	410	500	598	500
Materials and Supplies	2,301	1,000	992	1,000
Printing Fees/Copy Costs	2,690	-	2,909	-
Postage	17,180	16,000	18,240	16,000
Protective Clothing	540	3,000	520	3,000
Advertising			3,099	-
Insurance	15,302	14,630	14,631	14,630
Licences	115	-	-	-
Taxes on Own Property	2,664	2,700	-	2,700
Legal Fees	642	_	-	_
Software Support	771	6,000	-	6,000
Contract Services - Engineering	5,240	27,000	6,278	27,000
Contract Services - Other	27,645	-	25,234	-
Contract Services - Region	1,027,402	1,100,000	1,100,000	1,100,000
Building Rental	12,211	12,500	12,211	12,500
Transfer to Water Capital Reserve	387,040	350,000	423,929	350,000
Total Administration	1,792,569	1,805,329	1,868,494	1,829,128

APPENDIX 3

# TOWN OF PELHAM

# 2015 Operating Budget

Water

	2013 Actual	2014 Budget	2014 Projected to Dec 30/14	2015 Budget
WATER SYSTEM EXPENSES				
Salaries and Wages - Regular	212,312	194,127	178,470	201,833
Materials & Supplies	12,221	40,000	30,291	40,000
Contracted Services - Other	13,693	-		-
Equipment Rental - Other		1,000	305	1,000
Total Administration - Water System	238,226	235,127	209,066	242,833
WATER METER MAINTENANCE EXPENSES				
Salaries and Wages - Regular	118,179	108,057	99,342	106,780
Materials & Supplies	9,607	20,000	15,004	20,000
Contracted Services - Other		2,000	-	2,000
Total Administration - Water Meter	127,786	130,057	114,346	128,780
WATER TESTING EXPENSE				
Salaries and Wages - Regular	19,166	17,524	16,110	17,317
Materials & Supplies	63	1,200	87	1,200
Contract Services - Water Testing	20,637	22,200	18,608	22,200
Total Administration - Water Testing	39,866	40,924	34,805	40,717
WATER CONSERVATION PROGRAM EXPEN	ISES			
Salaries and Wages - Regular	2,955	2,702	2,484	2,681
Rainbarrel Program	8,991	10,000	3,737	10,000
Total Expenses	11,971	12,702	6,221	12,681
Grand Total Expenses	2,210,417	2,224,139	2,232,932	2,254,139
Net Surplus(Deficit)	0	0	0	0

### Appendix 4

# TOWN OF PELHAM 2015 Operating Budget Wastewater

REVENUES	2013 Actual	2014 Budget	2014 Projected to Dec 30/14	2015 Budget
Sewer Consumption Charges	890,007	978,352	881,040	979,307
Fixed Rate User Charge	674,663	676,758	679,934	683,937
Penalties on overdue accounts	4,328	5,000	5,385	5,000
Other Revenues	680		200	
Transfer from Reserve	26,892			
Total Revenues	1,596,570	1,660,110	1,566,559	1,668,244

## EXPENSES

179,576	202,235	185,923	211,475
1,358	1,350	1,761	2,110
2,693	5,000	2,802	5,000
1,596	1,525	1,526	1,525
	5,000	-	5,000
1,922	15,000	2,696	15,000
66,030	80,000	9,851	-
103,243	150,000	150,000	200,000
356,418	460,110	354,559	440,110
	. <u> </u>		
1,240,152	1,200,000	1,212,000	1,228,134
1,596,570	1,660,110	1,566,559	1,668,244
	1,358 2,693 1,596 1,922 66,030 103,243 <b>356,418</b> 1,240,152	1,358       1,350         2,693       5,000         1,596       1,525         5,000       5,000         1,596       1,525         5,000       1,922         1,922       15,000         66,030       80,000         103,243       150,000         356,418       460,110	1,358       1,350       1,761         2,693       5,000       2,802         1,596       1,525       1,526         5,000       -       -         1,922       15,000       -         1,922       15,000       9,851         103,243       150,000       150,000         356,418       460,110       354,559

#### APPENDIX 1

## TOWN OF PELHAM 2015 Proposed Water and Wastewater Rates As per 2 Month Billing

	2014 Rates	2015 Rates	\$ INCREASE	% INCREASE
WATER				
Bi-Monthly Base Charge (up to 19mm Meter) Bi-Monthly Base Charge (25mm Meter) Bi-Monthly Base Charge (37mm Meter) Bi-Monthly Base Charge (50mm Meter) Bi-Monthly Base Charge (75mm Meter) Usage Charge, Per Cubic Metre	\$ 22.29 \$ 44.57 \$ 62.41 \$ 89.14 \$ 222.87 \$ 1.3275	<ul> <li>\$ 22.29</li> <li>\$ 44.57</li> <li>\$ 62.41</li> <li>\$ 89.14</li> <li>\$ 222.87</li> <li>\$ 1.3275</li> </ul>	-\$ 0.00 -\$ 0.00 \$ 0.00 -\$ 0.00 \$ 0.00 \$ 0.00	0.00% 0.00% 0.00% 0.00%
WATER HAULERS				
Usage Charge, Per Cubic Metre	\$ 1.4382	\$ 1.4670	\$ 0.03	2.00%
WASTEWATER				
Bi-Monthly Base Charge	\$ 26.34	\$ 26.34	\$ -	0.00%
Bi-Monthly Base Charge (25mm Meter) Bi-Monthly Base Charge (37mm Meter)	\$ 52.68 \$ 73.76	\$ 52.68 \$ 73.76	\$ - \$ -	0.00% 0.00%
Bi-Monthly Base Charge (50mm Meter)	\$ 105.37	\$ 105.37	\$ - \$ -	0.00%
Bi-Monthly Base Charge (75mm Meter)	\$ 263.43	\$ 263.43	\$ -	0.00%
Usage Charge based on Cubic Metres for Sewer	\$ 0.9119	\$ 0.9119	\$-	0.00%
SEWERS ONLY, NO WATER	<b>•</b> • • • • • •	<b>•</b> • • • • • •	•	0.000/
Base Charge Per Billing Period (2 Months) Usage Charge based on Cubic Meters for Sewer	\$ 26.34 \$ 92.83	\$ 26.34 \$ 92.83	\$ - \$ -	0.00% 0.00%
5 5				

### TOWN OF PELHAM 2015 Proposed Water and Wastewater Rates

Consumption per 2 month period WATER		M <sup>3</sup> 2015	2014	50 M <sup>3</sup>	2015	75 2014	M <sup>3</sup> 2015	100 2014	) M <sup>3</sup> 2015	150 2014	0 M <sup>3</sup> 2015	200 2014	) M <sup>3</sup> 2015
Base Charge Usage Charge	\$ 22.29 \$ 33.19 \$ 55.48	\$ 22.29 \$ 33.19 \$ 55.48	\$ 22. \$ 66. \$ 88.	37 \$	22.29 66.38 88.67	\$ 22.29 \$ 99.56 \$ 121.85	\$ 22.29 \$ 99.56 \$ 121.85	· · ·	\$ 22.29 \$ 132.75 \$ 155.04	\$ 22.29 \$ 199.12 \$ 221.41	\$ 22.29 \$ 199.13 \$ 221.42	\$ 22.29 \$ 265.50 \$ 287.79	\$ 22.29 \$ 265.50 \$ 287.79
Year to Year Increase	\$ -	-\$ 0.00	<u> </u>	\$	0.00	\$ -	\$ 0.00	\$ -	\$ 0.00	\$ -	\$ 0.00	\$ -	\$ 0.00
WASTEWATER													
Base Charge Usage Charge	\$ 26.34 \$ 22.80	\$ 26.34 \$ 22.80	\$26. \$45.		26.34 45.60	\$ 26.34 \$ 68.39	\$ 26.34 \$ 68.39	\$ 26.34 \$ 91.19	\$   26.34 \$   91.19	\$ 26.34 \$ 136.79	\$26.34 \$136.79	\$ 26.34 \$ 182.38	\$26.34 \$182.38
Year to Year Increase	\$ 49.14 \$ -	\$ 49.14 \$ -	\$ 71. \$ -	94 \$ \$	71.94	<u>\$</u> 94.73 \$-	\$ 94.73 \$ -	<u>\$ 117.53</u> \$ -	\$ <u>117.53</u> \$ -	<u>\$ 163.13</u> \$ -	\$ 163.13 \$ -	\$ 208.72 \$ -	\$ 208.72 \$ -
TOTAL WATER AND WASTEWATER CHARGES	\$ 104.62	\$ 104.62	\$ 160.	60 \$	160.60	\$ 216.58	\$ 216.59	\$ 272.57	\$ 272.57	\$ 384.54	\$ 384.54	\$ 496.51	\$ 496.51
\$ INCREASE OVER 2014 RATE	S	-\$ 0.00		\$	0.00		\$ 0.00		\$ 0.00		\$ 0.00		\$ 0.00
% INCREASE OVER 2014 RAT	ES	0.0%			0.0%		0.0%		0.0%		0.0%		0.0%