

**DATE:** November 16, 2020  
**REPORT NO:** T-25-2020  
**SUBJECT:** 2020 Water and Wastewater Rate Study and Financial Plan  
**CONTACT:** Donna DeFilippis, Director of Finance

**OVERVIEW:**

- The Township is required to prepare and submit an updated Water System Financial Plan to meet the requirements of the Drinking Water Quality Management System as defined under O.Reg.453/07 for renewal of its water distribution system license.
- Along with the Financial Plan, a Water and Wastewater Rate Study has also been completed
- Water and Bulk Water fees are projected to increase by 5% annually, over the years of 2021 to 2025
- Wastewater rates are projected to increase by 5% in 2021 and by 4% annually over the years 2022 to 2025.

**RECOMMENDATION:**

1. That, Report T-25-2020, dated November 16, 2020 regarding the “Water & Wastewater Systems Rate Study and Financial Plan” be received; and,
2. That the Water & Wastewater Systems Rate Study and Financial Plan No. 077-301, as attached to this report, prepared by Watson and Associates Economists Ltd. be accepted, and,
3. That the Water & Wastewater Systems Rate Structure and Rates recommended in the report prepared by Watson and Associates Economists Ltd. be approved, and,
4. That the 10-year financial plan, as required by the Safe Drinking Water Act Regulation (O.Reg. 453/07) as outlined in the report attached. be approved.

**ALIGNMENT TO STRATEGIC PLAN:**

**Theme #6**

- Efficient, Fiscally Responsible Operations- the Township of West Lincoln is a lean organization that uses sustainable, innovative approaches and partnerships to streamline processes, deliver services and manage infrastructure assets.

**BACKGROUND:**

Regulation (O. Reg. 453/07) under the Safe Drinking Water Act (SDWA) puts in place requirements for Financial Plans for municipal drinking water systems as a pre-requisite

for a drinking water licence. The Township's current Municipal Drinking Water License will expire on June 9, 2021. The new license, once approved, will be in effect for six years. The license renewal package, including the Financial Plan, is to be submitted 6 months prior to the license expiry date.

The O.Reg. 453/07 provides details with regards to the Financial Plans for existing water systems. The requirements for existing systems are summarized as follows:

- Must indicate financial viability of the system
- Must be approved by resolution of Council (or governing body)
- Must apply to a period of at least six years (commencing the year of license expiry)
- Details of the proposed or projected financial position
- Details of the proposed or projected financial operations
- Details of the proposed or projected gross cash receipts and gross cash payments
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system
- Financial plans are to be made available to the public upon request and at no charge
- Made available to the public through publication on the internet
- Notice of availability to be given to the public
- Submitted to the Ministry of Municipal Affairs and Housing

The Smithville water distribution system is supplied by the Region of Niagara via a connection to the Grimsby Water Treatment Plant. Water is distributed via a system that consists of approximately 30 km of watermains. Storage is provided in the Region-owned storage facility. Wastewater is discharged to the Region System at the Smithville Pumping Station which then discharges to the Baker Road Treatment Plant.

The Region's annual charges to the Township for water and wastewater treatment services comprise a significant portion of the annual cost of service for each system. The Township currently recovers water and wastewater system costs from various direct user fees and administrative charges, and from billings to customers through a base and volumetric charge based on water consumed.

### **CURRENT SITUATION:**

Watson and Associates Economists Ltd (Watson) were the successful proponents to the Request for Proposal(RFP) issued by the Township. Staff from Watson and Associates worked closely with the following staff members: Manager of Operations, Coordinator of Engineering Services, Director of Public Works and Recreation and the Treasure/Director of Finance.

Township staff provided Watson with data such as Capital Plans, Growth Forecasts, Operating Budgets, Asset Inventory, Customers, Consumption, Reserves and Development Charges. Several meeting were held with staff to discuss the draft reports. In addition, a Special Council Meeting was held to educate the Members of Council on the various Provincial Regulations that impact Water Licenses as well as an overview of rates and financial plans.

Attached to this report are two documents: Rate Study Report and 2020 Water Financial Plan. The detailed technical appendix (the asset inventory details) has not been included with this report due to its size.

There will be no change to the current rate structure which is based on a constant volumetric charge and a base charge. This rate structure is the most commonly used in Ontario. Rates are projected to increase 5% annually for the years 2021 to 2025 for Water and 5% in 2021 and 4% in the years 2022 to 2025 for Wastewater. The charts below summarize the proposed rates outlined in the study. 1 cubic meter is equivalent to 1,000 litres.

### **Water Rates based on an annual consumption of 161 cubic meters and a 3/4 or 5/8 water meter:**

Description	2020	2021	2022	2023	2024	2025
Quarterly Base Charge (Jan-June)	\$37.60	\$39.48	\$41.45	\$43.53	\$45.70	\$47.99
Quarterly Base Charge (July-Dec)	\$39.48	\$41.45	\$43.53	\$45.70	\$47.99	\$50.39
Constant Rate (m <sup>3</sup> ) - January to June	\$1.34	\$1.41	\$1.48	\$1.55	\$1.63	\$1.71
Constant Rate (m <sup>3</sup> ) - July to December	\$1.41	\$1.48	\$1.55	\$1.63	\$1.71	\$1.80
<b>Annual Base Charge Bill</b>	<b>\$154.16</b>	<b>\$161.87</b>	<b>\$169.96</b>	<b>\$178.46</b>	<b>\$187.38</b>	<b>\$196.75</b>
January to June Volume (m <sup>3</sup> )	80.5	80.5	80.5	80.5	80.5	80.5
July to December Volume (m <sup>3</sup> )	80.5	80.5	80.5	80.5	80.5	80.5
<b>Annual Volume Bill</b>	<b>\$221.38</b>	<b>\$232.69</b>	<b>\$244.32</b>	<b>\$256.54</b>	<b>\$269.36</b>	<b>\$282.83</b>
<b>Total Annual Bill</b>	<b>\$375.54</b>	<b>\$394.55</b>	<b>\$414.28</b>	<b>\$434.99</b>	<b>\$456.74</b>	<b>\$479.58</b>
% Increase - Base Rate		5%	5%	5%	5%	5%
% Increase - Volume Rate		5%	5%	5%	5%	5%
% Increase - Total Annual Bill		5%	5%	5%	5%	5%

### **Wastewater Rates based on an annual consumption of 161 cubic meters and a 3/4 or 5/8 water meter:**

Description	2020	2021	2022	2023	2024	2025
Quarterly Base Charge (Jan-June)	\$86.68	\$91.01	\$95.56	\$100.34	\$105.36	\$110.62
Quarterly Base Charge (July-Dec)	\$91.01	\$95.56	\$100.34	\$105.36	\$110.62	\$116.15
Constant Rate (m <sup>3</sup> ) - January to June	\$1.73	\$1.82	\$1.86	\$1.89	\$1.93	\$1.97
Constant Rate (m <sup>3</sup> ) - July to December	\$1.82	\$1.86	\$1.89	\$1.93	\$1.97	\$2.01
<b>Annual Base Rate Bill</b>	<b>\$355.38</b>	<b>\$373.14</b>	<b>\$391.80</b>	<b>\$411.39</b>	<b>\$431.96</b>	<b>\$453.56</b>
January to June Volume (m <sup>3</sup> )	80.5	80.5	80.5	80.5	80.5	80.5
July to December Volume (m <sup>3</sup> )	80.5	80.5	80.5	80.5	80.5	80.5
<b>Annual Volume Bill</b>	<b>\$285.78</b>	<b>\$295.95</b>	<b>\$301.87</b>	<b>\$307.91</b>	<b>\$314.06</b>	<b>\$320.35</b>
<b>Total Annual Bill</b>	<b>\$641.16</b>	<b>\$669.09</b>	<b>\$693.67</b>	<b>\$719.29</b>	<b>\$746.02</b>	<b>\$773.90</b>
% Increase - Base Rate		5%	5%	5%	5%	5%
% Increase - Volume Rate		5%	2%	2%	2%	2%
% Increase - Total Annual Bill		5%	4%	4%	4%	4%

**Bulk Water Rates per Cubic Meter:**

Bulk Water Rate	2020	2021	2022	2023	2024	2025
Constant Rate (m <sup>3</sup> ) - January to June	\$1.81	\$1.90	\$2.00	\$2.10	\$2.21	\$2.32
Constant Rate (m <sup>3</sup> ) - July to December	\$1.90	\$2.00	\$2.10	\$2.21	\$2.32	\$2.44
% Increase - Volume Rate		5%	5%	5%	5%	5%

The chart below outlines the impacts to a typical residential water/wastewater customer:

Quarterly Water Bill							
Based on an average consumption of 40.25 cubic meters per quarter, or 161 cubic meters annually							
		Jul-20	Jul-21	Jul-22	Jul-23	Jul-24	Jul-25
Water Consumptive		\$ 56.75	\$ 59.57	\$ 62.39	\$ 65.61	\$ 68.83	\$ 72.45
Sewer Consumptive		\$ 73.26	\$ 74.87	\$ 76.07	\$ 77.68	\$ 79.29	\$ 80.90
Water Base		\$ 39.48	\$ 41.45	\$ 43.53	\$ 45.70	\$ 47.99	\$ 50.39
Sewer Base		\$ 91.01	\$ 95.56	\$100.34	\$105.36	\$110.62	\$ 116.15
<b>Total</b>		<b>\$260.50</b>	<b>\$271.45</b>	<b>\$282.33</b>	<b>\$294.35</b>	<b>\$306.73</b>	<b>\$ 319.89</b>

The July 2021 quarterly bill of \$271.45 based on 40.25 cubic meters would equate to a price of \$0 .006 per litre. To put this in perspective, a half-litre water bottle is often sold in retail stores at a price of \$2.00.

**FINANCIAL IMPLICATIONS:**

The Water and Wastewater Rate Study is recommending a rate structure that will recover the full cost of delivering water and wastewater services and will ensure that the systems are sustainable. This plan ensures that adequate reserves are maintained to fund the required infrastructure renewal.

There are two items to note from the Water Financial Plan:

- The Water Development Charge Reserve Fund is anticipated to fall into a negative balance over the years 2023 to 2029. This will require internal borrowing from other reserves with reimbursement made from future Development Charges collected.
- Included in the Financial Plan is the issuance of debt in order to complete capital projects. It is anticipated that the debt would be issued in 2023 (\$726,974) and in 2024 (\$369,500). Principal payments over 2024 to 2030 total \$290,880 and interest payments over the same period of time is projected at \$211,606.

**INTER-DEPARTMENTAL COMMENTS:**

The attached rate study and water financial plan was a collaboration between Finance and Public Works staff.

**CONCLUSION:**

It is being recommended that Council accept and approve the Water and Wastewater Rate Study & Water Financial Plan No. 077-301 prepared by Watson and Associates Economists Ltd.

**Prepared & Submitted by:**



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**Donna DeFilippis, Director of Finance**

**Approved by:**



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**Bev Hendry, CAO**