

Executive Summary

The purpose of this report is to approve the 2016 Water and Wastewater Operating and Capital Budgets as well establish the corresponding Water and Wastewater Rates.

Following is the impact of the proposed base budget on a typical residence using 200 cubic metres (Cu M) of water during a year.

	2016 (Proposed Base)	2015 (Approved)	Increase (Decrease)
Variable Water Rate (per Cu M)	\$1.351	\$1.244	
Monthly Fixed Water Charge (5/8" meter)	\$16.96	\$15.71	
Wastewater Surcharge	115.7%	119.5%	
Overall WWW Increase	6.4%	0.0%	
Annual Bill for a typical residence:			
Water Variable	\$270.20	\$248.80	\$21.40
Fixed Water	\$203.52	\$188.52	\$15.00
Wastewater Surcharge	\$548.09	\$522.60	\$25.49
Total	\$1,021.81	\$ 959.92	\$61.89

The 2016 Proposed increase is comprised of:

	%
Maintaining WWW Services	3.8
Consumption Decrease	0.9
Increased Capital Investment	0.8
Completion of Biosolids Phase-In	0.9
Overall Increase	6.4%

Staff has also prepared one budget enhancement option for the Committee's consideration:

	Option 1
2016 Proposed Base Budget	6.4%
Option: – Increase capital envelopes by \$600,000	1.0%
Potential Overall WWW Increase - %	7.4%
Potential Annual Increase - \$	\$71

Background

This report provides the Finance and Administration Committee with an overview of:

1. Proposed 2016 Water and Waste Water (WWW) Operating and Capital Budgets
2. Proposed 2016 WWW rates
2. Sustainable Capital Asset Management Plan
3. Proposed Budget Options and resulting impacts to WWW rates

2016 PROPOSED WATER AND WASTEWATER BUDGET

The proposed operating expenditure budget for 2016 is \$69.1 million compared to the 2015 budgeted operating expenditures of \$68.0 million. The 2016 budget details are contained in pages 201 through 229 of the 2016 Budget binder.

To fund the base budget operating expenditures, it will be necessary to raise \$30.4 million through the variable and fixed water user fees (\$28.2 million in 2015) and \$33.2 million through the wastewater surcharge fees (\$31.8 million in 2015). The remaining revenues are raised from the tax levy for fire protection costs and miscellaneous WWW revenues.

The City has three main components to the water and wastewater billing structure that fund WWW expenditures.

Variable Water Rate – The City establishes a rate per cubic meter for water and all water customers pay the same amount for every cubic metre or 1000 litres of consumed water. Since a customer only pays for water consumed this rate is referred to as the variable water rate.

Fixed water Charge – The fixed water charge provides the City with a stable source of annual funding to offset the fixed costs of maintaining water supply and delivery, independent of actual consumption. The fixed water charge is set for a residential meter (5/8 and 3/4 inch meters) and is increased for each larger size meter in accordance with the ratios established by the American Water Works Association.

Wastewater Surcharge – The wastewater surcharge is expressed as a percentage and is applied to the total water charges (variable and fixed) as there are no meters to measure the outflows of wastewater.

The City's rate structure is consistent with most Ontario municipalities.

The following table illustrates the 2016 proposed base rates compared to the 2015 approved rates. The base rate refers to the budget assuming operations at the current service levels and before any consideration of budget reductions or budget enhancements to address the principles of the Sustainable Capital Asset Management Plan.

Table 1 – 2016 Base water wastewater rates (resident using 200 cu m)

	2016 (Proposed Base)	2015 (Approved)	Typical Annual Residential Bill
Variable Water rate (per Cu M)	\$1.351	\$1.244	\$270.20
Monthly Fixed water Charge (5/8" meter)	\$16.96	\$15.71	\$203.52
Wastewater Surcharge	115.7%	119.5%	\$548.09
Overall WWW increase	6.4%	0.0%	\$1,021.81

The monthly fixed water charge for meters 1" to 10" ranges from \$42.40 to \$1,950.29 (2015 -\$39.28 to \$1,806.65).

The overall proposed base WWW increase is 6.4% for a residential customer using 200 cubic metres per annum. The increase is comprised of:

Maintaining WWW Services	3.8%
Reduced Consumption	0.9%
Increased Capital Investments	0.8%
Completion of Biosolids Phase-in	<u>0.9%</u>
	6.4%

There are a number of potential sustainability initiatives that staff is continuing to evaluate, that may reduce future years operating expenses including:

- Business process reviews and implementation of new CMMS system
- Implementation of recommendations from Strategic Technology and Business Plan Review
- Non-revenue water reduction strategies
- Wet weather flow reduction strategies
- P6M savings of \$600,000

KEY BUDGET CONSIDERATIONS

The 2016 proposed overall WWW increase required to maintain the existing service levels is approximately 3.8%. The key factors attributing to this increase are:

- Increased volume of water and wastewater repairs and anticipated tender costs
- Loss of frontage revenues due to completion of loan repayments from ratepayers
- Increased costs of hydro-excavation tender
- One time draw from reserve funds in 2015 to achieve 0% increase

The 2016 Budget provides more detailed explanations for the variances greater than \$50,000 and 10% between 2015 to 2016 Budget, as well as variances between 2015 Budget and 2015 Projected Year End Actuals.

Fire Protection Costs on Municipal Levy

Water and Wastewater costs are recovered through the Water/Wastewater rates, with the exception of water costs related to the provision of fire protection. These costs are funded by the municipal levy in accordance with the Water Wastewater Rate By-law.

Municipal water system design has capacity for increased water flows specifically for firefighting purposes and this capacity has a cost in terms of oversized infrastructure (water mains, pumps, storage tanks) and higher operating expenses. This increase in capacity enables the City to fight fires at institutions which are accessible to everyone. Fire protection costs are calculated using a methodology provided by the American Water Works Association (AWWA). As per the methodology outlined by AWWA, the fire protection costs increase annually, as the operating and capital expenses increase.

For 2016, the fire protection costs should be budgeted at \$3.9 million. The amount budgeted for 2015 was \$3.32 million and 2016 is the second year of a proposed ten-year phase-in of the difference. For 2016, \$3.459 million (\$138,000 increase) will be funded from the municipal tax levy.

User Fees and Consumption

The water and wastewater user fee rates are calculated on the projected consumption for the up-coming year. Consistent with similar trends across the province, consumption of water has been decreasing for a number of years. This decline can be attributed to many factors, including:

- Conservation of water through education and technology such as water saving devices
- Customers using less water in response to increased prices

Although this reduction in consumption has delayed the need for costly capital infrastructure expansions, this decline in consumption has put upward pressure on the water and wastewater user fee rates in recent years. Staff has been able to partially offset this pressure by maintaining expenditure levels at historical levels, and in some cases reducing expenditure lines in the past such as energy and road restoration costs.

In 2006 consumption was 16.3 million cubic metres. The 2015 budget is 14.2 million cubic metres and the year end projection is between 13.9 to 14.0 million cubic metres, due in part to the extremely cold winter resulting in an unprecedented number of frozen services. The final consumption figures will be known by mid-February. For 2016 consumption is budgeted at 14.0 million cubic metres for the purpose of establishing water and waste water rates. This reduction in budgeted consumption of 200,000 cubic metres will increase the overall rate by approximately .9%.

Freezing fixed residential service charges (2012 through 2015)

Council previously adopted AWWA meter ratios which effectively enabled Council to freeze residential fixed water service charges for 2012 through 2014 at \$15.71 per month, while passing on proportional increases to customers with larger meter sizes. In 2014 full AWWA ratios were achieved and for 2015 the residential fixed rate was frozen to achieve a 0% increase in rates. At the overall base rate increase of 6.4%, the proposed residential fixed water service charge will be \$16.96.

Completion of Biosolids Phase-In

During 2013 budget deliberations, Council approved a three year phase-in of additional Biosolids debt repayment and operating costs. The annual funding increase was \$1.3 million for 2013 through 2015. In light of the fact that the biosolids plant was not operational until May 2015, the amount phased in for 2015 was \$626,000 while \$513,000 is to be funded from the 2016 budget. In 2014, the phase-in accounted for 50% of the overall water wastewater increase. For 2016, the phase-in accounts for approximately 0.9% of the base increase.

CHANGES TO OTHER USER FEES AND PROGRAMS

The WWW By-Law also contains numerous miscellaneous user fees, where a fee for service is required. The following is a summary of the recommended changes:

1. **New Water Service Connections-** From the time when a water service connection is made until the water meter is installed, a flat rate consumption charge will be calculated at a "construction rate" of 5 cubic metres per month plus applicable fixed water service charges and wastewater charges if there are sanitary sewers. There have been numerous examples over the past several years where the water has been turned on illegally during the construction period (ie not by the City) resulting in lost revenue. This nominal fee will eliminate the additional administrative burden to investigate the water turn on that was not performed by the City.
2. **Fixed Charges – Exceptions** – Exceptions from the fixed water service charge for vacant lots, where a connection to City's water system is available and uninhabitable properties (such as burned out buildings etc) have been eliminated. The City is incurring costs to maintain and test the infrastructure to meet the requirements of the Safe Water Drinking Act and the fixed water service charge, and potentially wastewater surcharge should apply to these properties. Staff will develop a process to identify the current amount of vacant lots as well as new ones.
3. **Plumbing Problems Rebate Program** – Currently customers may apply to the City for a one-time refund as a result of plumbing problems. It is recommended that this program be eliminated as, per the Water Supply Bylaw (2010-214), it is the property owner's responsibility for the proper maintenance of their plumbing and the program has proven to be administratively burdensome. Over the past few years these adjustments have resulted in lost revenue of approximately \$200,000.
4. **Frozen Water – Water Consumption adjustments** – Clarification has been added to differentiate the permanent Minimum for Winter (MFW) water accounts from properties with a temporary run water advisement and the calculation for these two types of adjustments. In addition, wording has been added requiring MFW customers to advise the City in writing of planned vacancies so as to avoid being charged consumption during that period.
5. **Damaged Meters and Appurtenances** – Additional clarification and fees have been added to charge a fee to repair a meter or repair or replace appurtenances as a result of damage. This will generate additional revenue for which service has historically been provided at no cost. The fees will be \$50 to repair a meter and \$38 to repair a remote and/or appurtenance. While relocation of aforementioned will be at a rate of \$89 per hour during regular business hours or \$135 per hour during after hours.

6. Attendance at Private Property

- a. **Relocation of a Meter or Appurtenance** – The relocation of a water meter and/or appurtenance will be charged out a rate of \$89 per hour during regular business hours or \$135 per hour during after hours.
 - b. **Repair/replace Plumbing** – When the owner requests City staff to effect repairs and/or replacement of private plumbing the corresponding fee will be \$89 per hour during regular business hours and \$135 during after hours. The owner will be responsible for the cost of the parts.
 - c. **Cancellation Fees** - A fee of \$50 will be charged in those instances where the owner or customer has missed an appointment or cancels within 24 hours of the scheduled appointment.
7. **Temporary Water Service Connection** – Water Consumption Adjustments – New wording has been added to address the billing of consumption to properties that supply temporary water service connections (bibbing) to a recipient private property, consistent with current practice.
8. **Definitions and Other Language** – A definition section has been added ensure that terminology is consistent throughout the bylaw based on the definitions. Language has also been added to address how the City will bill if there is a connection made to the water distribution system without the City's knowledge, as well as, clarity in how the City calculates water consumption adjustments.

CAPITAL BUDGET

The following table summarizes the total base capital budget and funding sources for 2016:

Table 2 – 2016 Capital Budget Summary

	Water	Wastewater	Total 2016	Total 2015
Base Expenditures	\$15.0 M	\$21.9 M	\$36.9 M	\$30.2 M
Funding				
Capital Envelopes (user fees)	\$12.9 M	\$11.0 M	\$23.9 M	\$23.4 M
Federal Gas Tax	\$0 M	\$2.0 M	\$2.0 M	\$2.0 M
Reserve Funds	\$ 1.8 M	\$1.6 M	\$3.4 M	\$1.9 M
Other Recoveries	\$0.3M			
Future Capital Envelopes	\$0 M	\$7.3 M	\$7.3 M	\$2.9 M
Total Funding	\$15.0 M	\$21.9 M	\$36.9 M	\$30.2 M

Highlights of the capital budget include:

- \$2.7 million in sewer priority projects and \$7.2 million in watermain priority projects in co-ordination with the roads projects
- \$1.1 million in watermain and \$1.3 million in sewer lining where trenchless technology is appropriate to take advantage of lower costs and less disruption to traffic and customers
- \$800,000 being committed for the introduction of Automated Meter reading (AMR) technology for the second consecutive year

- \$8.4 million for Copper Cliff Wastewater System upgrades
- \$4.9 million in repayments and funding for previously approved projects including Sudbury WWTP expansion upgrades, Wahnapiatae WTP Phase 2 and New Valley Wells and design costs for the Copper Cliff Wastewater System and Gatchell Outfall Sewer upgrades

The detailed Capital Budget can be found on pages 264 to 276 of the 2016 Budget binder.

SUSTAINABLE CAPITAL ASSET MANAGEMENT POLICY:

Since 2002, City Council has adopted a Sustainable Capital Asset Management Policy in an attempt to address the capital funding shortfall that exists in WWW. In 2011 City updated the WWW Long Term Financial Plan, and during the 2012 budget deliberations, Council adopted the following revised Sustainable Capital Asset Management Policy (SCAMP) for Water and Wastewater Services.

“The City’s sustainable capital asset management program shall be continued, for the purpose of financing the renewal of water and wastewater infrastructure systems. The Water and Wastewater capital allocation for this purpose shall be increased in accordance with the City’s “Financial Plan for Water and Wastewater Services” (dated March 1, 2011 and updated and approved by Council as required but no less than every five years) until such time as capital contributions for Water and Wastewater equal 2% of the Water and Wastewater infrastructure replacement value.”

Although the recommended policy sets out that the annual budget allocation required in order to achieve financial sustainability be prepared in accordance with the Financial Plan dated March 3, 2011, Council has the opportunity through the annual budget process to review, change and approve the budget.

Using 2% of replacement value of capital assets as a benchmark for the required capital investment to achieve financial sustainability, the suggested capital spending in 2016 should be approximately \$58 million. This results in an annual capital funding shortfall of \$32 million.

Given that this requirement would have required a large increase, the WWW Financial Plan approved by Council in 2011, recommended a phase-in of capital spending over 10 years that would achieve the benchmark and provide for financial sustainability of the water and wastewater infrastructure. For 2016, the plan recommended \$38.1 million in capital spending. The 2016 base capital envelopes of \$23.9 million plus gas tax funding of \$1.96 million, contribution from reserve funds of \$3.4 million and projects to be funded by future revenues of \$7.3 million provides a total capital budget of \$36.9 million. The planned expenditure for 2016 is approximately \$1.2 million less than the Financial Plan recommended amount.

The WWW Financial Plan recommended a smoothed annual rate increase of 7.4% that would enable the City to achieve financial sustainability by 2021, based upon the assumptions used at the time. A capital budget enhancement option has been prepared that would allow for a 7.4% increase in 2016.

2016 BUDGET OPTION:

One budget enhancement option has been prepared for the Finance and Administration Committee's consideration. The overall Water Wastewater rate increase for 2016 ranges from

the base budget of 6.4% to an enhanced amount of 7.4% if the budget enhancement option is approved.

Budget Enhancement Option

The WWW Financial Plan recommended that a smoothed annual rate increase of 7.4% over 10 years would provide for financial sustainability of the water and wastewater infrastructure. Should Council wish to consider this rate increase of 1.0%, additional capital of \$600,000 would be added to the capital envelopes as follows:

Water	\$300,000
Wastewater	\$300,000

If approved, staff would provide Council with a list of projects that will be added for 2016.

Summary of the Proposed 2016 Budget Rate Increases

The following table summarizes the two scenarios for the Finance and Administration Committee's consideration. Table 3 provides an overview of the water and wastewater overall increases and the resulting rates for each of two scenarios for a **residential homeowner using 200 cubic metres** annually. Approximately 96% of the City's customer base would be in this category, using a 5/8 or 3/4 inch water meter.

Table 3 (residence using 200 cubic metres)

	Proposed Base Budget	Option 1 Enhance Capital Envelopes
2016 Base Budget	6.4%	6.4%
Option 1: – Increase capital envelopes by \$600,000	-	1.0%
Overall Increase - %	6.4%	7.4%
Overall Increase - \$	\$62	\$71
Variable Water Rate Per Cubic Metre	\$1.351	\$1.364
Wastewater Surcharge	115.7%	115.6%
Total Annual Water Variable	\$270.20	\$272.80
Total Annual Water Fixed Charge	203.52	205.44
Total Wastewater Surcharge	548.09	552.85
Total Annual Costs	\$1,021.81	\$1,031.09

CONCLUSION AND RECOMMENDATION

In summary, the proposed overall base water/wastewater rate increase is 6.4%. The enhancement proposed could result in an overall water wastewater increase of 7.4%.

Staff recommends that the Finance and Administration Committee vote on the budget at its January 5th, 2016 meeting and that City Council pass the Water and Wastewater Rate By-Law at its meeting of January 12th, 2016.