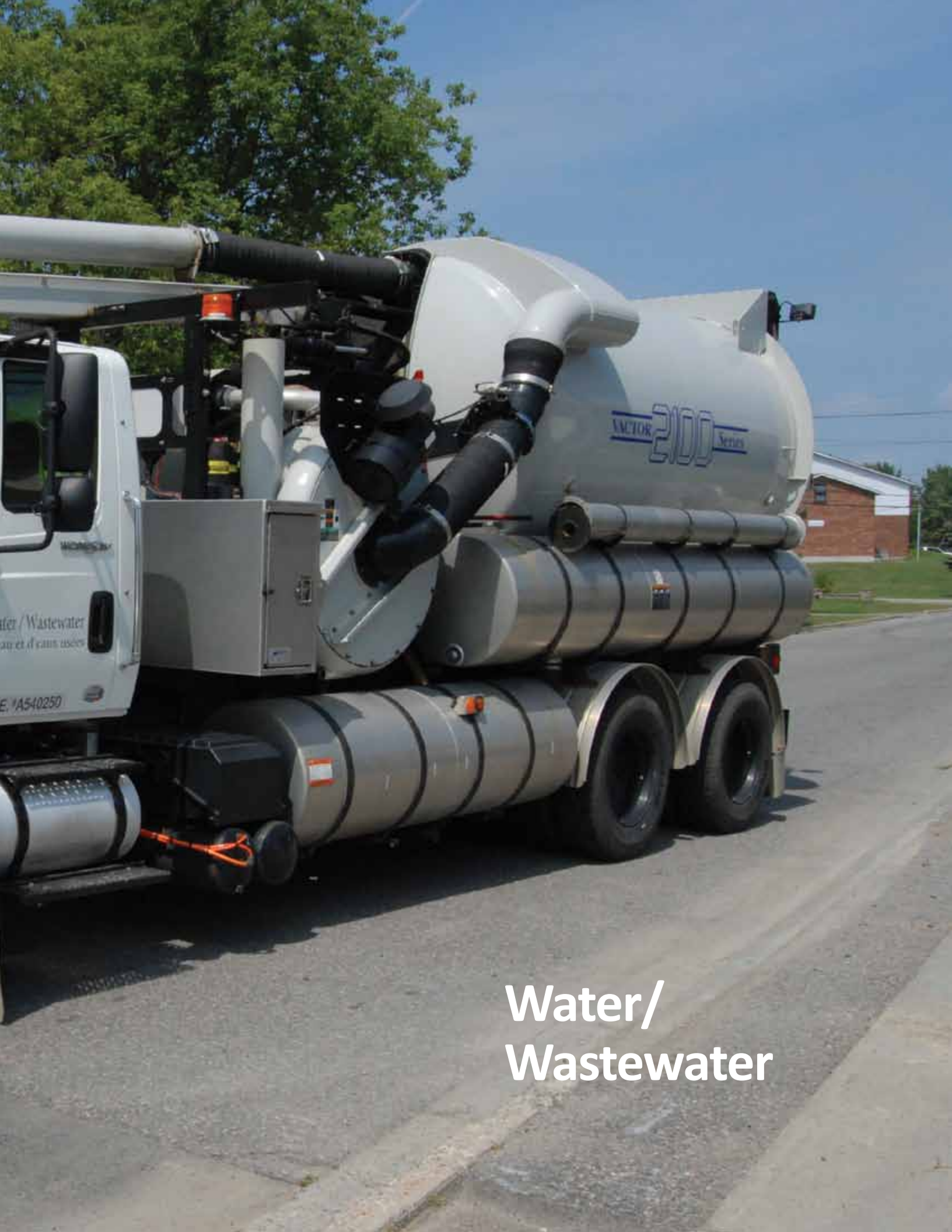




S1204

Water  
Dept  
Salisbury

M.O.



Water/  
Wastewater



## Water/Wastewater Budget

In 2011, a ten-year Water and Wastewater Financial Plan was approved by Council which recommended an annual rate increase of 7.4 % to achieve financial sustainability. In 2016, the recommended 7.4 % increase was approved, and this same increase is recommended for 2017.

The City has three main components to the water and wastewater billing structure that fund Water/Wastewater expenditures:

**Variable Water Rate:** The City establishes a per cubic metre rate for water. All water customers pay the same amount for every cubic metre (1,000 litres of water used). Since a customer only pays for the volume of water they use, this portion of the rate is referred to as the variable water rate.

**Fixed Water Charge:** Water budgets contain fixed costs that do not change in direct proportion to water consumption. The cost to treat and distribute municipal water remains relatively constant, regardless of the volume actually consumed by residents. The fixed water charge provides the City with a stable source of annual funding to offset these fixed costs. The fixed water charge is set for a residential meter (5/8 and 3/4 inch meter) and is increased for each larger size meter in accordance with the ratios established by the American Water Works Association.

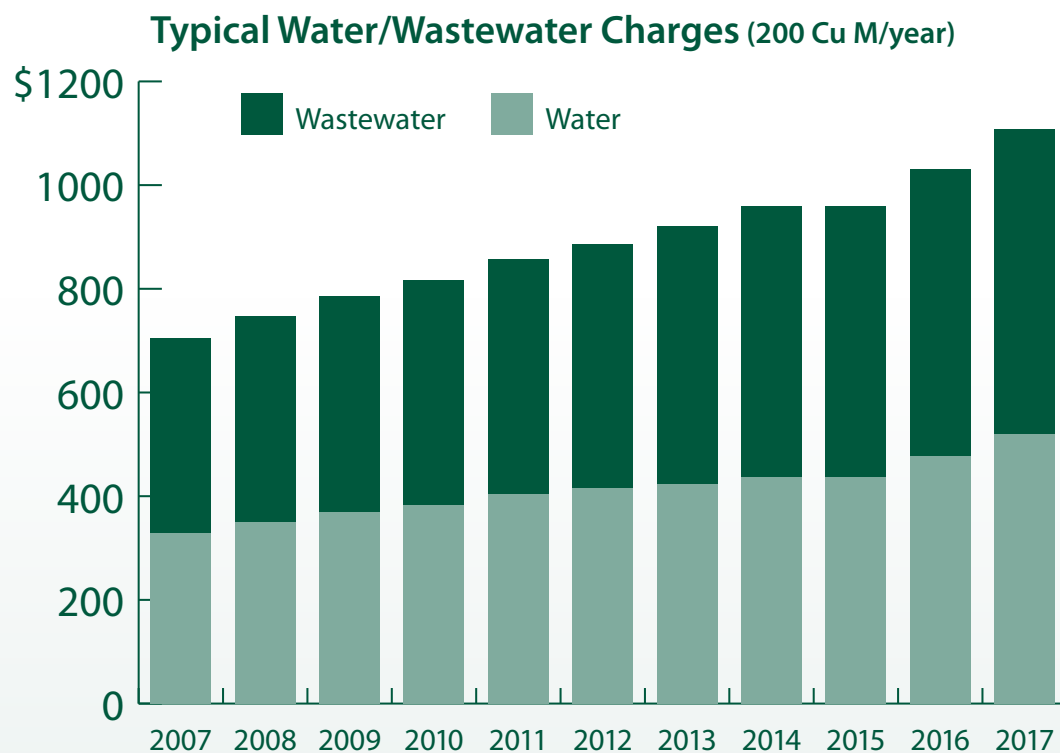
**Wastewater Surcharge:** The wastewater surcharge is a percentage and is applied to total water charges (variable and fixed) as there are no meters to measure the outflows of wastewater.

This rate structure is consistent with most Ontario municipalities.

The Water and Wastewater user fee rates are calculated on the projected consumption for the upcoming 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, it has put upward pressure on the water and wastewater user fee rates in recent years.



## Sample Residential Customer - 2016 Rates

	Sudbury	North Bay	Timmins	Sault Ste. Marie	Thunder Bay
<b>Water</b>					
Annual Volume Charge	\$273	\$206	\$398	\$130	\$311
Annual Service Charge	\$205	\$388	\$0	\$289	\$256
<b>Total Annual Water</b>	<b>\$478</b>	<b>\$594</b>	<b>\$398</b>	<b>\$419</b>	<b>\$567</b>
<b>Wastewater</b>					
Annual Volume Charge	\$316	\$158	\$406	\$87	\$280
Annual Service Charge	\$237	\$296	\$0	\$179	\$232
<b>Total Annual Wastewater</b>	<b>\$553</b>	<b>\$454</b>	<b>\$406</b>	<b>\$266</b>	<b>\$512</b>
<b>Total Water/Wastewater</b>	<b>\$1,031</b>	<b>\$1,048</b>	<b>\$804</b>	<b>\$685</b>	<b>\$1,079</b>

## Water/Wastewater Rates

The City of Greater Sudbury is dedicated to the supply and delivery of high quality potable water and the effective collection and treatment of wastewater to meet the current and future needs of our community. As one of our most precious resources, the City is committed to working with our residents and partners to protect water in all of its forms.

Water/Wastewater operates in a highly regulated framework of federal, provincial and municipal regulations, standards and policies. The operation is guided by financial and tactical strategic plans, with an updated Asset Management and Master Plan currently in development.

Water and wastewater budgets contain fixed costs that do not change in direct proportion to water consumption. The cost to distribute, collect and treat municipal water and wastewater throughout the city remains relatively constant, regardless of the volume actually consumed by all residents.

Operational expenses are affected by rising energy prices, chemical prices and many other factors outside the control of the municipality.

The City of Greater Sudbury is responsible for 1,700 kilometres of water and wastewater mains, that's more than the distance to Winnipeg. The average water pipe is close to 45 years old. A total of 12 treatment facilities, much higher than the provincial average, were constructed to meet the needs of individual communities prior to amalgamation. These also require funds for operations and maintenance. The older this infrastructure becomes, the more costly it is to operate, maintain and replace.

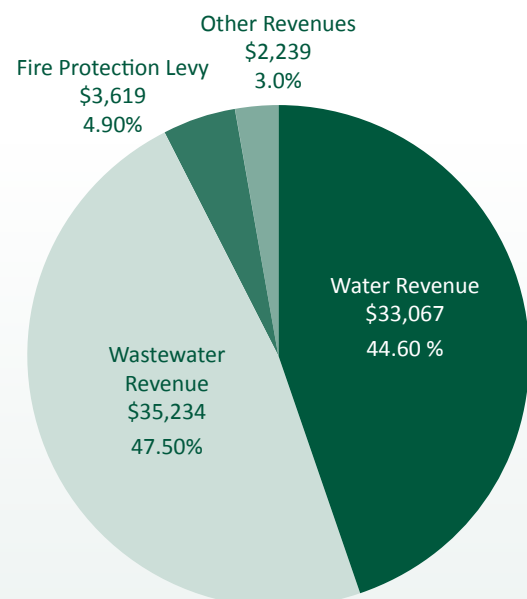
The Province of Ontario requires that all municipalities collect the full cost of water and wastewater services directly from end users. City Council adopted a user pay system in 2001 and charges that were previously rolled into municipal property taxes are billed directly to customers.

The City of Greater Sudbury understands the effect of rate increases on households. Water/Wastewater operations are under constant review to improve efficiencies wherever possible.

### Water/Wastewater operates five areas:

- 1. Water Treatment:**  
Responsible for the operation and maintenance of water treatment plants, supply wells, booster stations, residential and bulk fill stations, and storage tanks/reservoir.
- 2. Wastewater Treatment:**  
Responsible for the operation and maintenance of wastewater treatment facilities, sewage lift stations, sludge and hauled liquid waste receiving.
- 3. Distribution and Collection:**  
Responsible for the operation and maintenance of underground infrastructure, including water mains, water system valves, fire hydrants, pressure regulating stations, sewer mains, rock tunnel, and manholes.
- 4. Compliance and Operational Support:**  
Responsible for water metering, regulatory compliance sampling and monitoring, data management, technical computer system integration and planning, maintenance planning, quality management systems, drinking water source protection, and wastewater source control program implementation.
- 5. Capital Engineering and Administration:**  
Responsible for oversight, strategic planning, administrative coordination as well as long-range planning of Water and Wastewater facilities and linear infrastructure, and capital renewal and replacement of existing infrastructure assets.

### Water/Wastewater Revenues (000's)



## Infrastructure Services - Water/Wastewater

	Actual		2016 Projected Actuals	Budget		Budget Change	
	2014 Actuals	2015 Actuals		2016 Budget	2017 Budget	Dollar Change	Percent Change
<b>Revenues</b>							
Levies	(521,986)	(229,969)	(127,908)	(58,908)	(58,908)	-	0.0%
User Fees	(60,554,757)	(59,860,905)	(64,221,033)	(65,372,751)	(69,519,030)	(4,146,279)	-6.3%
Contr from Reserve and Capital	(2,223,668)	(3,735,798)	(498,619)	(374,998)	(445,345)	(70,347)	-18.8%
Other Revenues	(101,481)	(628,940)	(723,495)	(517,100)	(517,100)	-	0.0%
<b>Total Revenues</b>	<b>(63,401,892)</b>	<b>(64,455,612)</b>	<b>(65,571,055)</b>	<b>(66,323,757)</b>	<b>(70,540,383)</b>	<b>(4,216,626)</b>	<b>-6.4%</b>
<b>Expenses</b>							
Salaries & Benefits	12,151,004	12,374,564	12,650,079	13,339,361	13,693,976	354,615	2.7%
Materials - Operating Expenses	4,475,867	3,465,737	4,224,467	4,731,944	4,877,735	145,791	3.1%
Energy Costs	4,086,957	4,284,666	4,817,573	4,313,559	4,507,295	193,736	4.5%
Rent and Financial Expenses			21,827	19,260	19,260	-	0.0%
Purchased/Contract Services	10,114,516	12,699,951	10,554,453	11,847,764	11,084,719	(763,045)	-6.4%
Debt Repayment	540,337	2,719,262	4,010,789	4,010,789	4,177,445	166,656	4.2%
Grants - Transfer Payments	3,400	4,034	3,100	5,000	5,000	-	0.0%
Contr to Reserve and Capital	28,651,691	25,551,165	25,698,417	24,473,260	28,302,725	3,829,465	15.6%
Internal Recoveries	6,640,256	6,677,233	7,049,350	7,041,820	7,491,228	449,408	6.4%
<b>Total Expenses</b>	<b>66,664,028</b>	<b>67,776,612</b>	<b>69,030,055</b>	<b>69,782,757</b>	<b>74,159,383</b>	<b>4,376,626</b>	<b>6.3%</b>
<b>Net Budget</b>	<b>3,262,136</b>	<b>3,321,000</b>	<b>3,459,000</b>	<b>3,459,000</b>	<b>3,619,000</b>	<b>160,000</b>	<b>4.6%</b>

### Staffing Complement

	2016 Budget	2017 Budget
Full Time Positions	135	135
Part Time Hours	5,163	5,163
Crew Hours	30,773	30,198

### Analysis of Water/Wastewater Budget Changes – Revenues (\$000)

<b>2016 Revenue Budget</b>		<b>\$66,324</b>
1	Water Revenue	2,393
2	Wastewater Revenue	1,716
3	Contribution from Reserve and Capital	70
4	Other user fees	37
<b>2017 Revenue Budget</b>		<b>\$70,540</b>

### Analysis of Water/Wastewater Budget Changes – Expenses (\$000)

<b>2016 Expense Budget</b>		<b>\$69,783</b>
1	Salaries and Benefits (Base Change) - reflects negotiated wage increases, in range progression and job reclassification and benefits costs	355
2	Changes to Debt Servicing costs	166
3	Inflationary and contractual cost increases - materials, purchased services and energy	556
4	Permanent transfer from Operating to Capital	(1,000)
5	Increased Capital Envelopes to support Capital Projects	3,830
6	Increased billing and collection costs from GSU	256
7	Increased costs allocated from other departments	213
<b>2017 Expense Budget</b>		<b>\$74,159</b>



## Water/Wastewater Revenue Sources

On July 1, 2001, the City adopted a fully user-pay basis for water and wastewater services, whereby the full cost would be funded through user fees except for a percentage of costs that relate to fire protection capacity.

Under the City's current rate structure, customers are charged a fixed monthly service fee (2016: \$17.12 residential) that varies based on the size of the water service as well as a variable consumption charge calculated on a per cubic metre basis (2016: \$1.364 per cubic metre), with revenues from the fixed charge accounting for approximately 43 % of user fee revenues.

In the absence of meters for wastewater inflows, user fees for wastewater are calculated as a percentage of water rates (2016: 115.6%) and as such, incorporate both a fixed and variable component.

### Average Homeowner

The chart below illustrates the impact of the 2017 rates on a homeowner who uses 200 cubic metres of water per year. The cost increase for 2017 is approximately \$6.38 per month for the average homeowner.

<b>2017 Water/Wastewater Rate Impact</b>				
<b>Annual</b>	<b>2016</b>	<b>2017</b>	<b>\$ Change</b>	<b>% Change</b>
<b>Water</b>				
Annual Usage Charge	272.76	296.76	24.00	
Annual Fixed Service Charge	205.44	223.68	18.24	
<b>Total Annual Water</b>	<b>478.20</b>	<b>520.44</b>	<b>42.24</b>	<b>8.8%</b>
<b>Wastewater</b>				
Annual Usage Surcharge	315.31	334.75	19.44	
Annual Fixed Service Surcharge	237.49	252.31	14.82	
<b>Total Annual Wastewater</b>	<b>552.80</b>	<b>587.06</b>	<b>34.26</b>	<b>6.2%</b>
<b>Total Annual Water/Wastewater Charges</b>	<b>\$1,031.00</b>	<b>\$1,107.50</b>	<b>\$76.50</b>	<b>7.4%</b>

### Rate Consumption : Sample Residential Customers

The following chart compares Greater Sudbury's 2016 Rates to those of other northern Ontario municipalities. The chart uses rates for 2016, as some other cities have not yet determined the rates for 2017.

#### Sample Residential Customer - 2016 Rates

	Sudbury	North Bay	Timmins	Sault Ste. Marie	Thunder Bay
<b>Water</b>					
Annual Volume Charge	\$273	\$206	\$398	\$130	\$311
Annual Service Charge	\$205	\$388	\$0	\$289	\$260
<b>Total Annual Water</b>	<b>\$478</b>	<b>\$594</b>	<b>\$398</b>	<b>\$419</b>	<b>\$571</b>
<b>Wastewater</b>					
Annual Volume Charge	\$315	\$157	\$406	\$131	\$280
Annual Service Charge	\$237	\$296	\$0	\$289	\$234
<b>Total Annual Wastewater</b>	<b>\$553</b>	<b>\$453</b>	<b>\$406</b>	<b>\$420</b>	<b>\$514</b>
<b>Total Water/Wastewater</b>	<b>\$1,031</b>	<b>\$1,047</b>	<b>\$804</b>	<b>\$839</b>	<b>\$1,086</b>

#### Water Revenue

Revenue Details (000's)	2016 Budget	2016 Sept Forecast	2017 Budget	Budget Change	
				Dollar Change	Percent Change
Water Charges	30,660	30,340	33,067	2,407	7.8%
Other user fees	1,093	1,235	1,063	(30)	-2.8%
Contributions from Reserve and Capital	167	167	128	(39)	-23.5%
Other Revenues	138	239	138	0	0.0%
<b>Total Water Revenues</b>	<b>\$32,059</b>	<b>\$31,981</b>	<b>\$34,397</b>	<b>\$2,337</b>	<b>7.3%</b>

The rate structure for water includes a monthly service charge that varies according to the size of the water meter. The variation in the service charge is based on ratios recommended by the American Water Works Association (AWWA).

The rate structure for water also includes a uniform rate for each cubic metre of water consumed. For water, the uniform rate is applied to all consumption. The impact of the proposed rate increase on the monthly service charge and consumption water rate is shown in the following table.

Water Rates Monthly Service Charge	
Meter Size	2017
5/8"	\$18.64
3/4"	\$18.64
1"	\$46.59
1.5"	\$93.18
2"	\$149.09
3"	\$298.19
4"	\$465.92
6"	\$931.84
8"	\$1,490.94
10"	\$2,143.23
<b>Volume Charge per Cubic Metre</b>	<b>\$1.484</b>

Wastewater Revenue					
Revenues Details (000's)	2016 Budget	2016 Sept Forecast	2017 Budget	Budget Change	
				Dollar Change	Percent Change
Wastewater Charges	33,504	32,724	35,234	1,730	5.2%
Other user fees	270	270	214	(56)	-20.8%
Contributions from Reserve and Capital	111	111	317	206	185.0%
Other Revenues	379	485	379	0	0.0%
<b>Total Wastewater Revenues</b>	<b>\$34,264</b>	<b>\$33,590</b>	<b>\$36,144</b>	<b>\$1,880</b>	<b>5.5%</b>

The wastewater surcharge is a percentage and is applied to total waste charges (volume and fixed) as there are no meters to measure the outflows of wastewater. For 2017 the wastewater surcharge is 112.8 % of water charges.

## Water/Wastewater

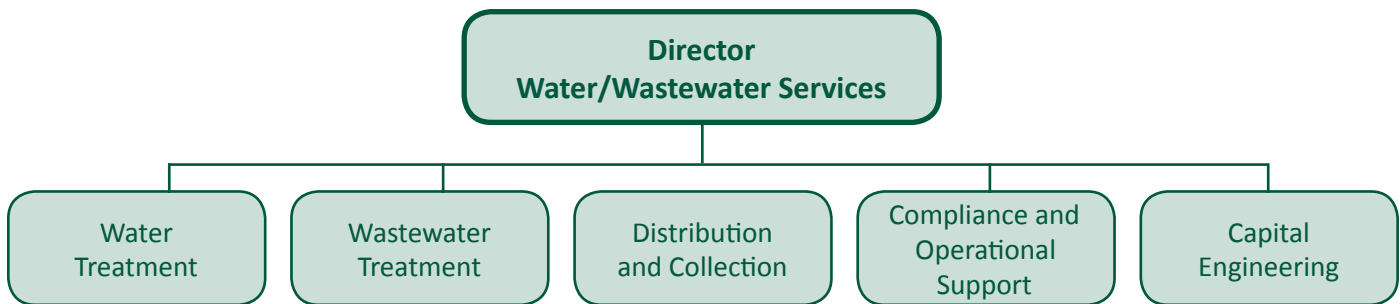
The capital budget for Water/Wastewater is approximately \$56 million in 2017, compared to \$37 million in 2016. This increase is the result of:

A Clean Water/Wastewater Fund grant of \$6.7 million for Water and \$160,000 for Wastewater, which will fund various watermain and sewermain improvements in our community.

Internal financing of \$16.7 million for various Wastewater capital projects such as St. Charles Lift Station upgrades, Gatchell Outfall Sewer, Sudbury Wastewater Treatment Plant upgrades, and Lively Sanitary Sewer upgrades.

Capital envelopes include a higher allocation due to Council direction for a Water/Wastewater user fee increase of 7.4 % in 2017, in line with the long-term financial plan for this division.

## Water/Wastewater



### Mandate:

Water/Wastewater is responsible for the planning, constructing, operating, and maintenance of the city’s water supply and its distribution, as well as wastewater collection and treatment facilities and related programs for Greater Sudbury.

### Overview:

Water/Wastewater is responsible for all water and wastewater infrastructure assets and operates in a regulated framework of federal, provincial and municipal regulations, standards and policies.

It operates five areas: Water Treatment, Wastewater Treatment, Distribution and Collection, Compliance and Operational Support, and Administration/Capital Engineers.

### Services:

#### Water Treatment:

- Responsible for the operation and maintenance of water treatment plants, supply wells, booster stations, residential and bulk fill stations, and storage tanks/reservoir.

#### Wastewater Treatment:

- Responsible for the operation and maintenance of wastewater treatment facilities, sewage lift stations, sludge and hauled liquid waste receiving.

#### Distribution and Collection:

- Responsible for the operation and maintenance of underground infrastructure, including water mains, water system valves, fire hydrants, pressure regulating stations, sewer mains, rock tunnel, and manholes.

**Compliance and Operational Support:**

- Responsible for water metering, regulatory compliance sampling and monitoring, data management, technical computer system integration and planning, maintenance planning, quality management systems, drinking water source protection, and wastewater source control program implementation.

**Capital Engineering and Administration:**

- Responsible for oversight, strategic planning, administrative coordination as well as long-range planning of Water/Wastewater facilities and linear infrastructure, and capital renewal and replacement of existing infrastructure assets.

**2016 Accomplishments:**

- Completed the implementation of the updated Computerized Maintenance Management System for Distribution and Collection assets.
- In conjunction with Communications, implemented a system to notify residents of wastewater releases via the website, as well as near real time notices of their terminations.
- Completed Phase II upgrades to the Wanapitei Water Treatment Plant.
- Fully treated over 23,000 m<sup>3</sup> of waste from private septic systems, portable toilets and holding tanks since the implementation of the Hauled Liquid Waste receiving station at the Sudbury Water Wastewater Treatment Plant in 2015.
- Lined 9 kilometres of water and sewer mains to minimize impacts on traffic, reduce the risk of underground failures and extend the life of the underground infrastructure.

**Issues and Opportunities:**

- The completion of Water/Wastewater Master Plan updates will provide direction for capital investments to enhance system safety, meet legislated requirements, improve system performance and efficiency, and support community growth.
- The completion of the Asset Management Plan updates will provide a risk reduction based framework to guide the strategic management of current and future infrastructure assets, better define future funding requirements, and prepare for future legislative requirements.
- Business improvement initiatives through the introduction of improved technology, including plans to update metering technology through a feasibility study, will lead to improved operations and service.

**Key Deliverables in 2017:**

- Completion of the Water/Wastewater Master Plan.
- Continue to update the Asset Management Plan.
- Update the Financial Plan, which defines funding requirements to achieve fiscally sustainable water and wastewater systems in Greater Sudbury.

# Water Summary

CATEGORY DESCRIPTION <i>(For detailed project listing see attached)</i>	2017 REQUEST	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK
<b>Previous Council Approvals</b>	\$ 1,359,368	\$ 700,738	\$ -	\$ -	\$ -
<b>Water Distribution</b>					
Condition Assessment - Watermains	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Watermain Replacement / Rehabilitation	\$ 1,400,000	\$ 1,750,000	\$ 1,850,000	\$ 1,950,000	\$ 2,050,000
Watermain Priority Projects	\$ 5,775,753	\$ 15,529,236	\$ 8,409,777	\$ 8,641,639	\$ 7,995,138
Network Looping	\$ -	\$ 2,750,000	\$ 250,000	\$ 250,000	\$ -
Distribution System - Other	\$ 551,000	\$ 490,000	\$ 490,000	\$ 490,000	\$ 490,000
<b>Water Plants</b>					
Plants - Water Treatment Plants	\$ 1,340,000	\$ 1,400,000	\$ 1,500,000	\$ 850,000	\$ 10,850,000
Plants - Wells	\$ 1,475,900	\$ 1,300,000	\$ 2,000,000	\$ 1,500,000	\$ 2,000,000
Plants - Reservoirs / Tanks / Booster Stations	\$ 1,000,000	\$ -	\$ -	\$ 600,000	\$ -
Plants - System Wide	\$ 475,000	\$ 600,000	\$ 615,000	\$ 615,000	\$ 575,000
Water Works - Strategic Initiatives	\$ 722,500	\$ 677,500	\$ 677,500	\$ 677,500	\$ 652,500
<b>Clean Water Wastewater Fund Projects</b>					
Clean Water Wastewater Fund Projects	\$ 8,877,000	\$ -	\$ -	\$ -	\$ -
<b>PROJECT COSTS</b>	<b>\$ 23,076,521</b>	<b>\$ 25,297,474</b>	<b>\$ 15,892,277</b>	<b>\$ 15,674,139</b>	<b>\$ 24,712,638</b>
<b>PROJECT FINANCING</b>					
Reserves: Capital	\$ (470,000)	\$ (710,184)	\$ -	\$ -	\$ -
Recovery from Others	\$ -	\$ -	\$ -	\$ -	\$ -
Government Grant: Clean Water and Wastewater Fund Program	\$ (6,657,750)	\$ -	\$ -	\$ -	\$ -
Government Grants: Federal and Provincial Funding for Lorne	\$ -	\$ (3,000,000)	\$ -	\$ -	\$ -
Government Grants: Federal and Provincial Funding for MR35	\$ -	\$ (1,420,368)	\$ -	\$ -	\$ -
Capital Envelopes: Future Years or Debt Financing	\$ -	\$ (3,899,176)	\$ 700,824	\$ 1,250,824	\$ (7,449,176)
<b>CAPITAL ENVELOPE (W/WW User Fees)</b>	<b>\$ 15,948,771</b>	<b>\$ 16,267,746</b>	<b>\$ 16,593,101</b>	<b>\$ 16,924,963</b>	<b>\$ 17,263,462</b>

**Priority Setting:**

Watermain priority projects are determined based on a review of:

- A) Condition: The database of watermain breaks is ranked according to number and frequency of breaks per section of pipe. This ranking is combined with the pipe age, material and diameter to determine priority sections for replacement, either as a watermain priority project or in conjunction with a roads priority project.
- B) Capacity/Security of Supply: Fire flows and pressures are analyzed for anticipated future developments, as well as opportunities for looping or upsizing the watermains, to improve the security of supply.

When a roads or sanitary sewer priority project is identified, all of the above criteria are reviewed to determine if associated watermain replacement / upgrades are required.

The following is the criteria considered for Prioritizing Water and Wastewater Facilities :

- Legislation / Compliance
- Health & Safety
- Protecting Public Health
- Enhancing Productivity
- Protection of the Environment
- Maintenance / Renewal / Replacement of Existing Capital Assets

*Water Detail*

PROJECT DESCRIPTION	PROJECT TYPE	2017 REQUEST	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK
<b>PREVIOUS COUNCIL APPROVALS</b>						
Wanapitae WTP Phase 2 Loan Repayment (2015-2018)	R (Renewal)	\$ 816,753	\$ 700,738			
New Valley Wells (Internal Financing - \$3,500,000 (2013-2017))	E (Expansion)	\$ 542,615				
<b>SUBTOTAL PREVIOUS COUNCIL APPROVALS</b>	<b>N (New)</b>	<b>\$ 1,359,368</b>	<b>\$ 700,738</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Condition Assessment - Watermains</b>						
Condition Assessment	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
<b>SUBTOTAL - Condition Assessment - Watermains</b>		<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>
<b>Watermain Replacement / Rehabilitation</b>						
Watermain Rehabilitation (Lining)	R	\$ 1,000,000	\$ 1,350,000	\$ 1,450,000	\$ 1,550,000	\$ 1,650,000
Consultant Services (Inspection & Contract Administration) for Lining Projects	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Watermain Valve Replacement	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Water Service Replacement	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Watermain Air Release Valve Installation & Replacement	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
<b>SUBTOTAL - Watermain Replacement / Rehabilitation</b>		<b>\$ 1,400,000</b>	<b>\$ 1,750,000</b>	<b>\$ 1,850,000</b>	<b>\$ 1,950,000</b>	<b>\$ 2,050,000</b>
<b>Watermain Priority Projects</b>						
Barrydowne - Westmount to Kingsway (rebudgeted as was cancelled for Ash / Adler Street Emergency) & Additional Funding	R	\$ 1,160,000				
Margaret - Second Avenue to East End	R	\$ 500,000				
Fairburn Street - Barry Downe Road to East End	R	\$ 485,000				
Stanley Street - Ash to Pine	R	\$ 475,000				
Ash Street - Parkwood to Stanley	R	\$ 475,000				
Lorne Street / MR55 - Detailed Design Engineering	R	\$ 470,000	\$ 1,100,000			
West End Trunk Watermain Replacement	R,N	\$ 400,000				
Power Street - MR 55 to Collins Drive	R	\$ 375,000				
Westmount Ave - Barrydowne to Atlee	R	\$ 335,000				
Beatty - Mckim to Hickory	R	\$ 250,000				
Lively - Backyard and Small Diameter W/M Replacement	R	\$ 220,000	\$ 580,000			
System Improvements (Development Related)	R	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	
Elm Street - MacLachlan to Simcoe	R	\$ 150,000				
Rita Street - Wilfred Street to Grace Street	R	\$ 80,000				
Preliminary Design for Subsequent Year Projects (Geotech, Surveys, Consultant Fees)	N,R	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Mont Adam - Lloyd to Cochrane	R	\$ 25,000				
Lorne Street / MR55 Watermain	R		\$ 4,500,000 <sup>2</sup>			
Funding from Future Year Envelopes (2018-2037)			\$ (1,399,176)			
Lorne Street / MR55 Financing in Current Year			\$ 100,824	\$ 100,824	\$ 100,824	\$ 100,824
MR35 Watermain			\$ 2,130,552 <sup>3</sup>			
Danforth Avenue - Fielding to Barrington	R	\$ 1,000,000	\$ 1,000,000			
Beisle - MR15 to End	R	\$ 630,000	\$ 630,000			
Atlee Avenue - Gemmell to Lasalle	R	\$ 500,000	\$ 500,000			
Leslie Street - Myles to bridge	R	\$ 350,000	\$ 350,000			
Maple Street (Eitelbert Street to East End)	R	\$ 250,000	\$ 250,000			
Maple (Parkwood to West End)	R	\$ 250,000	\$ 250,000			
McAllister Ave - Lasalle to South End	R	\$ 250,000	\$ 250,000			
Laberge Lane - North End to Bancroft Drive	R	\$ 210,000	\$ 210,000			
O'Neil Drive E - Penman to Margaret	R	\$ 210,000	\$ 210,000			
Avalon Road - Bancroft Drive to South End	R	\$ 165,000	\$ 165,000			



**Water Detail**

**PROJECT DESCRIPTION**

**PROJECT TYPE**  
R (Renewal)  
E (Expansion)  
N (New)

	2017 REQUEST	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK
Melvin Avenue - Kathleen to Mable		\$ 160,000			
Dell Street - Boivin to Morin		\$ 150,000			
Brookside Road - Rushbrook to Omer		\$ 150,000			
Elm Street - Froot to Elgin		\$ 150,000			
Maple Street (Between Reginald & Eitelbert)		\$ 150,000			
Lorne Street (Easement) - Dean to Sutherland (Combine with Dean)		\$ 130,000	\$ 200,000	\$ 400,000	\$ 200,000
Replacement of 2 " Watermains (Various Locations):		\$ 125,000			
Loach's Road - Edent Point to Aspenwood		\$ 50,000			
Maki Avenue Upgrades - Preliminary Design		\$ 25,000			
Dean - Lorne Easement					
MR15 from Belisle Drive to 2.2 km west - Hydrant Relocation			\$ 3,000,000	\$ 3,000,000	\$ 3,000,000
Various Watermain with Roads Priority Projects			\$ 3,264,807	\$ 2,435,615	\$ 2,106,839
Various Watermain Priority Projects			\$ 500,000	\$ 500,000	\$ 500,000
Replacement / Relocation of Backyard Watermains (Various Locations)			\$ 785,369	\$ 1,816,581	\$ 1,848,417
Projects to be Identified	\$ 150,753	\$ 1,504,769	\$ 434,601	\$ 264,443	\$ 314,882
Contingency - Watermain Priority Projects	\$ 5,775,753	\$ 15,529,236	\$ 8,409,777	\$ 8,641,639	\$ 7,995,138
<b>SUBTOTAL - Watermain Priority Projects</b>					
<b>Network Looping</b>					
Valley Water System Looping - Construction (Four Contracts)		\$ 2,500,000			
Funding from Future Year Envelopes (2019-2020)		\$ (2,500,000)		\$ 1,200,000	
Valley Water System Looping - Financing in Budget Year		\$ -	\$ 1,300,000	\$ 1,200,000	
Water System Looping (Various Areas)		\$ 250,000	\$ 250,000	\$ 250,000	
<b>SUBTOTAL - Network Looping</b>		\$ 2,750,000	\$ 250,000	\$ 250,000	\$ -
<b>Distribution System - Other</b>					
Distribution System Operational Optimization (incl. non-revenue water reduction)	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000
Distribution Support - Contract Support	\$ 141,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Large Water Meter Replacement	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Distribution Health & Safety Equipment (Lock Out / Tag Out / Trench Box/ Confined Space Entry / Depot Improvements)	\$ 60,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
<b>SUBTOTAL - Distribution System - Other</b>	\$ 551,000	\$ 490,000	\$ 490,000	\$ 490,000	\$ 490,000
<b>Plants - Water Treatment Plants</b>					
Wanapitei WTP - Filter Backwash Blower Replacement (2)	\$ 490,000				
David Street WTP - Membrane Filter Replacement (Contribution to Reserve Fund)	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000
Vermilion WTP - Capital Contribution to Vale (Contribution to Reserve Fund)	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000
Wanapitei WTP - Various Plant Repairs / Equipment Replacement	\$ 75,000	\$ 75,000	\$ 100,000	\$ 75,000	\$ 75,000
David Street WTP - Various Plant Repairs / Equipment Replacement	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Wanapitei WTP - Intake Pump Replacement (2)		\$ 350,000			
Wanapitei WTP - Entrance Modifications - Design, CA & Insp./Construction		\$ 200,000	\$ 300,000		
Wanapitei WTP - Treatment Plant Pump Replacements (2)		\$ -	\$ 325,000		
Wanapitei WTP Reactivator Upgrades					\$ 10,000,000
Funding from Future Year Envelopes (2022-2024)					\$ (8,000,000)
Wanapitei WTP Reactivator Upgrades (Construction 2021) - Financing in Budget Year					\$ 2,000,000
<b>SUBTOTAL - Plants - Water Treatment Plants</b>	\$ 1,340,000	\$ 1,400,000	\$ 1,500,000	\$ 850,000	\$ 10,850,000

*Water Detail*

PROJECT DESCRIPTION	PROJECT TYPE R (Renewal) E (Expansion) N (New)	2017 REQUEST	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK
<b>Plants - Wells</b>						
Wells Inspection / Rehabilitation				\$ 1,000,000		
Well Building Repairs / Upgrades, Emergency Power - Design & Construction Funding from Future Year Envelopes (2019-2020)	R	\$ 1,475,900	\$ 1,300,000	\$ 1,000,000	\$ 1,500,000	\$ 2,000,000
Well Building Repairs - Financing in Budget Year				\$ (700,000)	\$ 350,000	\$ 350,000
<b>SUBTOTAL - Plants - Wells</b>		<b>\$ 1,475,900</b>	<b>\$ 1,300,000</b>	<b>\$ 2,000,000</b>	<b>\$ 1,500,000</b>	<b>\$ 2,000,000</b>
<b>Plants - Reservoirs / Tanks / Booster Stations</b>						
Kingsway B.S Demolition/Moss & Montrose B.S. Control Upgrades		\$ 600,000			\$ 600,000	
Storage Tank Inspection / Cathodic Protection / Rehab - Various Tanks Funding from Future Year Envelopes (2020-2021)	R	\$ 400,000			\$ (400,000)	\$ 100,000
Storage Tank Inspection / Cathodic Protection / Rehab - Financing in Budget Year					\$ 200,000	\$ 100,000
<b>SUBTOTAL - Plants - Reservoirs / Tanks / Booster Stations</b>		<b>\$ 1,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 600,000</b>	<b>\$ -</b>
<b>Plants - System Wide</b>						
Health and Safety Inspections and Upgrades (includes Prestart Health & Safet	R	\$ 150,000	\$ 150,000	\$ 50,000	\$ 50,000	\$ 25,000
Various Plant Repairs / Equipment Upgrades	R	\$ 100,000	\$ 75,000	\$ 100,000	\$ 100,000	\$ 100,000
Annual SCADA / Communications Upgrades, All Facilities	R	\$ 100,000	\$ 250,000	\$ 315,000	\$ 315,000	\$ 325,000
Operating Manuals & As-Builts	R	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Condition Assessment		\$ 50,000	\$ 50,000	\$ 75,000	\$ 75,000	\$ 75,000
Security Improvements (Surveillance, Fencing, Alarms, Keys)	N	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
<b>SUBTOTAL - Plants - System Wide</b>		<b>\$ 475,000</b>	<b>\$ 600,000</b>	<b>\$ 615,000</b>	<b>\$ 615,000</b>	<b>\$ 575,000</b>
<b>Water Works - Strategic Initiatives</b>						
AMR (Automatic Meter Reading) Water Meters (Contribution to Reserve Fund)	R,N	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Contribution to Current (Locates Program Staff & Equipment - Capital Costs)	R	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Source Protection Plan (Incl. Modeling Scenarios)	N	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Contribution to Operating ( Benchmarking and Water Festival)		\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500
Strategic Planning (Tactical/Financial Plans)		\$ 30,000				
GIS - Various Equipment & Software	N	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Backflow Cross- Connection Reduction	R	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
Quench Buggy (Water/Wastewater Contribution)		\$ 15,000				
<b>SUBTOTAL - Water Works - Strategic Initiatives</b>		<b>\$ 722,500</b>	<b>\$ 677,500</b>	<b>\$ 677,500</b>	<b>\$ 677,500</b>	<b>\$ 652,500</b>
<b>Clean Water Wastewater Fund Projects</b>						
Spruce Street (Regent Street to Travers Street)	R	\$ 4,257,000				
Balsam and 1st Avenue - Coniston	R	\$ 3,870,000				
York Street Lining (Regent Street to Paris Street)	R	\$ 500,000				
Strathmere Lining (Robinson Drive E to Robinson Drive W)	R	\$ 250,000				
<b>SUBTOTAL - Clean Water Wastewater Fund Projects</b>		<b>\$ 8,877,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>PROJECT COSTS</b>		<b>\$ 23,076,521</b>	<b>\$ 25,297,474</b>	<b>\$ 15,892,277</b>	<b>\$ 15,674,139</b>	<b>\$ 24,712,638</b>

*Water Detail*



PROJECT DESCRIPTION	PROJECT TYPE		2017 REQUEST	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK
	R (Renewal)	E (Expansion)					
	N (New)						
<b>Notes:</b>							
<b>1) Clean Water Wastewater Fund Program</b>							
Spruce Street (Regent Street to Travers Street)		Provincial	\$ 1,064,250				\$ 710,184
Balsam and 1st Avenue - Coniston	\$ 1,935,000		\$ 967,500				\$ 710,184
York Street Lining (Regent Street to Paris Street)	\$ 250,000		\$ 125,000				\$ 710,184
Strathmere Lining (Robinson Drive E to Robinson Drive W)	\$ 125,000		\$ 62,500				\$ 2,130,552
	\$ 4,438,500		\$ 2,219,250				
<b>2) Lorne</b>							
Proposed Federal Government Funding	\$ 1,500,000						
Proposed Provincial Government Funding	\$ 1,500,000						
External Debt Financing (2019-2037)	\$ 1,399,176						
2018 Year Financing	\$ 100,824						
	\$ 4,500,000						

# Wastewater Summary

CATEGORY DESCRIPTION <i>(For detailed project listing see attached)</i>	2017 REQUEST	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK
<b>Previous Council Approvals</b>					
<b>Wastewater Collection</b>					
Condition Assessment - Sewer System	\$ 600,000	\$ 800,000	\$ 600,000	\$ 600,000	\$ 600,000
Sewer System Rehabilitation	\$ 1,541,841	\$ 1,625,000	\$ 1,725,000	\$ 1,825,000	\$ 1,925,000
Sewer Priority Projects	\$ 11,434,507	\$ 6,886,866	\$ 2,661,376	\$ 4,836,070	\$ 4,499,002
Collection System - Other	\$ 200,000	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000
<b>Wastewater Plants</b>					
Wastewater Treatment Plants	\$ 7,035,000	\$ 210,000	\$ 85,000	\$ 85,000	\$ -
Plants - Lift Stations	\$ 9,220,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 4,500,000
Plants - System Wide	\$ 1,000,000	\$ 952,120	\$ 1,023,363	\$ 1,029,730	\$ 825,000
<b>Wastewater General</b>					
Wastewater - Strategic Initiatives	\$ 226,000	\$ 215,000	\$ 215,000	\$ 215,000	\$ 215,000
<b>Clean Water Wastewater Program</b>					
Clean Water Wastewater Fund Projects	\$ 210,000	\$ -	\$ -	\$ -	\$ -
<b>PROJECT COSTS</b>	<b>\$ 33,097,595</b>	<b>\$ 13,494,233</b>	<b>\$ 9,114,986</b>	<b>\$ 11,396,047</b>	<b>\$ 14,369,249</b>
<b>PROJECT FINANCING</b>					
Reserves: Capital	\$ (1,973,341)	\$ (1,200,000)			
Reserves: Federal Gas Tax	\$ (1,960,000)	\$ (1,960,000)	\$ (1,960,000)	\$ (1,960,000)	\$ (1,960,000)
Government Grant: Clean Water and Wastewater Fund	\$ (157,500)				
Government Grants: Federal and Provincial Funding for Lome	\$ (16,652,800)	\$ 3,206,800	\$ 5,698,068	\$ 3,674,068	\$ 963,068
Capital Envelopes: Future Years or Debt Financing					
<b>CAPITAL ENVELOPE (W/WWW User Fees)</b>	<b>\$ 12,353,954</b>	<b>\$ 12,601,033</b>	<b>\$ 12,853,054</b>	<b>\$ 13,110,115</b>	<b>\$ 13,372,317</b>

**Priority Setting:**

Sanitary sewer priority projects are determined based on a review of:

- A) Condition: Camera inspections of the sanitary sewers are conducted to determine pipes that are in need of repair / replacement.
- B) Operational Issues: Groundwater infiltration into aging infrastructure and sagged systems of sewer that require frequent maintenance are prioritized for repair / replacement.
- C) Capacity: Flow capacity is analysed for new and future growth conditions and upsizing is completed as required.

When a roads or watermain priority project is identified, all of the above criteria are reviewed to determine if associated sanitary sewer replacement / upgrades are required.

The following is the basis for prioritizing Water and Wastewater Facility Projects:

- Legislation / Compliance
- Health & Safety
- Protecting Public Health
- Maintenance / Renewal / Replacement of Existing Capital Assets
- Enhancing Productivity
- Protection of the Environment

# Wastewater Detail

**PROJECT DESCRIPTION**

**PROJECT TYPE**

		2017 REQUEST	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK
	R (Renewal)					
	E (Expansion)					
	N (New)					
<b>PREVIOUS COUNCIL APPROVALS</b>						
Copper Cliff Wastewater System Upgrades - Construction (\$7,275,000 Internal Financing 2017-2023)	R,N	\$ 1,167,684	\$ 1,167,684	\$ 1,167,684	\$ 1,167,684	\$ 1,167,684
Sudbury WWTP Upgrades - Headhouse Construction & Standby Power Design (\$4,000,000 Internal Financing 2015 to 2023)	N,R,E	\$ 462,563	\$ 462,563	\$ 462,563	\$ 462,563	\$ 462,563
<b>SUBTOTAL PREVIOUS COUNCIL APPROVALS</b>		<b>\$ 1,630,247</b>	<b>\$ 1,630,247</b>	<b>\$ 1,630,247</b>	<b>\$ 1,630,247</b>	<b>\$ 1,630,247</b>
<b>Condition Assessment - Sewer System</b>						
Sewer Inspection Program (Closed-Circuit Television, Zoom Camera, Cleaning)	R	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Sanitary Rock Tunnel Inspections (Contribution to Reserve Fund)	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Inflow / Infiltration Assessment (Reduction)	R	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
<b>SUBTOTAL - Condition Assessment - Sewer System</b>		<b>\$ 600,000</b>	<b>\$ 800,000</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>
<b>Sewer System Rehabilitation</b>						
Sanitary Sewer System Rehabilitation (Lining) & Repair (3 Yr Contracts)	R	\$ 1,341,841 <sup>1</sup>	\$ 1,425,000	\$ 1,525,000	\$ 1,625,000	\$ 1,725,000
Consultant Services (Inspection & Contract Administration) for Rehabilitation Projects (3 Year Contracts)	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Rock Tunnel Maintenance & Repair (Contribution to Reserve Fund)	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
<b>SUBTOTAL - Sewer System Rehabilitation</b>		<b>\$ 1,541,841</b>	<b>\$ 1,625,000</b>	<b>\$ 1,725,000</b>	<b>\$ 1,825,000</b>	<b>\$ 1,925,000</b>
<b>Sewer Priority Projects</b>						
Gatchell Outfall Sewer - (Construction)	R	\$ 6,000,000				
Funding from Future Year Envelopes (2019-2020)		\$ (3,350,000)	\$ -	\$ 1,000,000	\$ 2,350,000	
Gatchell Outfall Sewer (Construction) - Financing in Budget Year		\$ 2,650,000 <sup>1</sup>	\$ -	\$ 1,000,000	\$ 2,350,000	
Lively Sanitary Sewer Upgrades - Construction	R	\$ 3,052,800				
Funding from Future Year Envelopes (2018-2019)		\$ (3,052,800)	\$ 1,267,800	\$ 1,785,000		
Lively Sanitary Sewer - Financing in Budget Year		\$ -	\$ 1,267,800	\$ 1,785,000		
Algonquin Road Sewer Upgrades (Construction) (includes upsizing)	R	\$ 1,000,000 <sup>1</sup>				
Margaret - Second Avenue to East End	R	\$ 285,000 <sup>1</sup>				
System Improvements (Development Related)	R,E	\$ 275,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Ash Street - Parkwood to Stanley	R	\$ 110,000				
Atlee Avenue - Hawthorne to Gemmell	R	\$ 100,000				
Beatty Street - Flood to Elm	R	\$ 100,000				
Bethune - Randolph to Richard	R	\$ 100,000				
Combined Sewer Investigation	R	\$ 70,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Elm Street - Machtachlin to Big Nickel Mine Rd	R	\$ 65,000				

# Wastewater Detail

PROJECT DESCRIPTION	PROJECT TYPE	2017 REQUEST	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK
	R (Renewal) E (Expansion) N (New)					
Talon Street - Josephine to Will	R	\$ 55,000				
Melvin - Kathleen to Mable	R	\$ 55,000				
Stanley Street - Ash to Pine	R	\$ 35,000				
Northway Avenue - Lasalle to Pallasade	R	\$ 30,000				
Preliminary Design for Subsequent Years	R	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Mont Adam Street from Lloyd Street to Cochrane Street(Lining in 2016)	R	\$ 25,000				
Lively Foremain	R		\$ 2,238,720			
Funding from Future Year Envelopes (2020)			\$ (361,000)		\$ 361,000	
Lively Foremain Financing in Current Year			\$ 1,877,720		\$ 361,000	
Lorne Street / MR55	R	\$ 1,410,000				
West End Trunk Watermain Replacement (related sanitary sewer work)	R, N	\$ 200,000				
Various Sewer with Watermain and Roads Priority Projects	R	\$ 200,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 2,644,074
Dell Street - Tedman to Morin	R	\$ 150,000				
Maki Avenue Upgrades - Preliminary Design	R	\$ 125,000				
Brookside Road - Errington to St. Onge	R	\$ 100,000				
Main Street East - MR15 to Tracks	R	\$ 90,000				
McAllister Avenue - Lasalle to South End	R	\$ 80,000				
Maple (Eithelbert to East End)	R	\$ 75,000				
Maple (Parkwood to West End)	R	\$ 75,000				
O'Neil Drive E - Penman to Margaret	R	\$ 70,000				
Leslie Street - Myles to Bridge	R	\$ 50,000				
Avalon Road - Bancroft Drive to South End	R	\$ 40,000				
Projects to be Identified	R	\$ 1,496,800	\$ 1,173,936	\$ 1,173,936	\$ 3,391,100	\$ 1,769,928
Contingency - Sewer with Watermain Priority Projects	R	\$ 61,346	\$ 62,440	\$ 62,440	\$ 19,970	\$ 60,000
<b>SUBTOTAL - Sewer Priority Projects</b>		<b>\$ 11,434,507</b>	<b>\$ 6,886,866</b>	<b>\$ 2,661,376</b>	<b>\$ 4,836,070</b>	<b>\$ 4,499,002</b>
<b>Collection System - Other</b>						
Collection Support - Contract Support	N	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
Collection Health & Safety Equipment (Trench Box/ Confined Space Entry / Depot Improvements)	R	\$ 50,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
<b>SUBTOTAL - Collection System - Other</b>		<b>\$ 200,000</b>	<b>\$ 175,000</b>	<b>\$ 175,000</b>	<b>\$ 175,000</b>	<b>\$ 175,000</b>

# Wastewater Detail

## PROJECT DESCRIPTION

## PROJECT TYPE

		2017 REQUEST	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK
<b>Wastewater Treatment Plants</b>						
Sudbury WWTP Upgrades - Standby Power/Parking Lot/RV						
Dump Station - Construction	R, N	\$ 5,100,000				
Funding from Future Year Envelopes		\$ (3,250,000)	\$ 1,300,000	\$ 1,950,000		
Sudbury WWTP Upgrades - Standby Power Construction - Financing in Budget Year		\$ 1,850,000	\$ 1,300,000	\$ 1,950,000		
Valley East WWTP Upgrades - Contract Administration and Inspection	R	\$ 900,000 <sup>2</sup>				
Azilada WWTP Rehabilitation (Additional Funding)	R	\$ 700,000 <sup>2</sup>				
Sudbury WWTP - Unit Process Audit - for Compliance	R	\$ 150,000				
Sudbury WWTP Equipment Upgrades (Tank Cleaning, Equipment Failure)	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	
Copper Cliff Sewage Treatment Plant - Capital Contribution to Vale (Contribution to Reserve Fund)	R	\$ 85,000	\$ 85,000	\$ 85,000	\$ 85,000	
Sudbury WWTP - Decking Rehabilitation	R	\$ 125,000	\$ 125,000			
<b>SUBTOTAL - Wastewater Treatment Plants</b>		<b>\$ 7,035,000</b>	<b>\$ 210,000</b>	<b>\$ 85,000</b>	<b>\$ 85,000</b>	<b>\$ -</b>
<b>Plants - Lift Stations</b>						
St. Charles Lift Station Upgrades (Construction)	R, N	\$ 8,000,000				
Funding from Future Year Envelopes (2018)		\$ (1,000,000)	\$ 1,000,000			
Funding from Future Year Envelopes (2019-2025)		\$ (6,000,000)			\$ 963,068	\$ 963,068
St. Charles Lift Station Upgrades (Construction) - Financing in Budget Year		\$ 1,000,000	\$ 1,000,000	\$ 963,068	\$ 963,068	\$ 963,068
Lift Station Upgrades / Standby Power - Various Locations	N	\$ 1,220,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 4,500,000
<b>SUBTOTAL - Plants - Lift Stations</b>		<b>\$ 9,220,000</b>	<b>\$ 1,000,000</b>	<b>\$ 1,000,000</b>	<b>\$ 1,000,000</b>	<b>\$ 4,500,000</b>
<b>Plants - System Wide</b>						
Various Plant Repairs / Equipment Upgrades / Operational Support	R	\$ 350,000 <sup>2</sup>	\$ 322,120	\$ 368,363	\$ 374,730	\$ 350,000
Annual SCADA/Communication Upgrades	R,N	\$ 270,000	\$ 270,000	\$ 270,000	\$ 270,000	\$ 270,000
Lagoon Upgrades	N	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Operating Manuals & Facility As-Built Updates	R,N	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 50,000
Condition Assessment	R	\$ 50,000	\$ 50,000	\$ 75,000	\$ 75,000	\$ 75,000
Roofing and Fencing	R	\$ 50,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Security Improvements (Card Access, Surveillance etc.)	N	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Health and Safety Inspections and Upgrades (Pre-Start Health & Safety Reviews)	R	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
<b>SUBTOTAL - Plants - System Wide</b>		<b>\$ 1,000,000</b>	<b>\$ 952,120</b>	<b>\$ 1,023,363</b>	<b>\$ 1,029,730</b>	<b>\$ 825,000</b>

# Wastewater Detail

## PROJECT DESCRIPTION

## PROJECT TYPE

R (Renewal)  
E (Expansion)

		2017 REQUEST	2018 OUTLOOK	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK
<b>Wastewater - Strategic Initiatives</b>						
Demand - Side Management (Wet Weather Flow Reduction)	N	\$ 96,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Contribution to Operating (Locates Program for Staffing & Equipment - Capital Costs)	R	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
GIS - Various Equipment & Software	N	\$ 40,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Benchmarking (Contribution to Operating)	R	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Community Spills Management Fund	R	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000
<b>SUBTOTAL - Wastewater - Strategic Initiatives</b>		<b>\$ 226,000</b>	<b>\$ 215,000</b>	<b>\$ 215,000</b>	<b>\$ 215,000</b>	<b>\$ 215,000</b>
<b>Clean Water Wastewater Fund Projects</b>						
York Street Lining (Regent Street to Paris Street Lining)	R	\$ 110,000 <sup>3</sup>				
Strathmere Lining (Robinson Dr. E to Robinson Dr. W)	R	\$ 100,000 <sup>3</sup>				
<b>SUBTOTAL - Clean Water Wastewater Fund Projects</b>		<b>\$ 210,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>PROJECT COSTS</b>		<b>\$ 33,097,595</b>	<b>\$ 13,494,233</b>	<b>\$ 9,114,986</b>	<b>\$ 11,395,047</b>	<b>\$ 14,369,249</b>

## Notes:

### 1) Federal Gas Tax Reserve Fund:

Gatchell Outfall Sewer (Construction)	\$ 750,000
Sanitary Sewer System Rehabilitation (Lining) & Repair (3 Yr Contracts)	\$ 575,000
Algonquin Road Sewer	\$ 500,000
Margaret - Second Avenue to East End	\$ 135,000
	<b>\$ 1,960,000</b>

### 2) Capital Financing Reserve Fund - Wastewater:

Valley East WWTP Upgrades - Contract Administration and Inspection	\$ 900,000
Azilda WWTP Rehabilitation (Additional Funding)	\$ 700,000
Various Plant Repairs / Equipment Upgrades / Operational Support	\$ 288,341
Copper Cliff Sewage Treatment Plant - Capital Contribution to Vale	\$ 85,000
	<b>\$ 1,973,341</b>

### 3) Clean Water Wastewater Fund:

York Street Lining (Regent Street to Paris Street Lining)	Federal	\$ 55,000	Provincial	\$ 27,500
Strathmere Lining (Robinson Dr. E to Robinson Dr. W)	Federal	\$ 50,000	Provincial	\$ 25,000
		<b>\$ 105,000</b>		<b>\$ 52,500</b>

### 4) Lorne Street / MR55

Proposed Federal Government Funding	\$ 470,000
Proposed Provincial Government Funding	\$ 470,000
2018 City Portion (1/3)	\$ 470,000
	<b>\$ 1,410,000</b>