



# 2018 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 2017, the recommended 7.4 % increase was approved, and this same increase is recommended for 2018.

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.

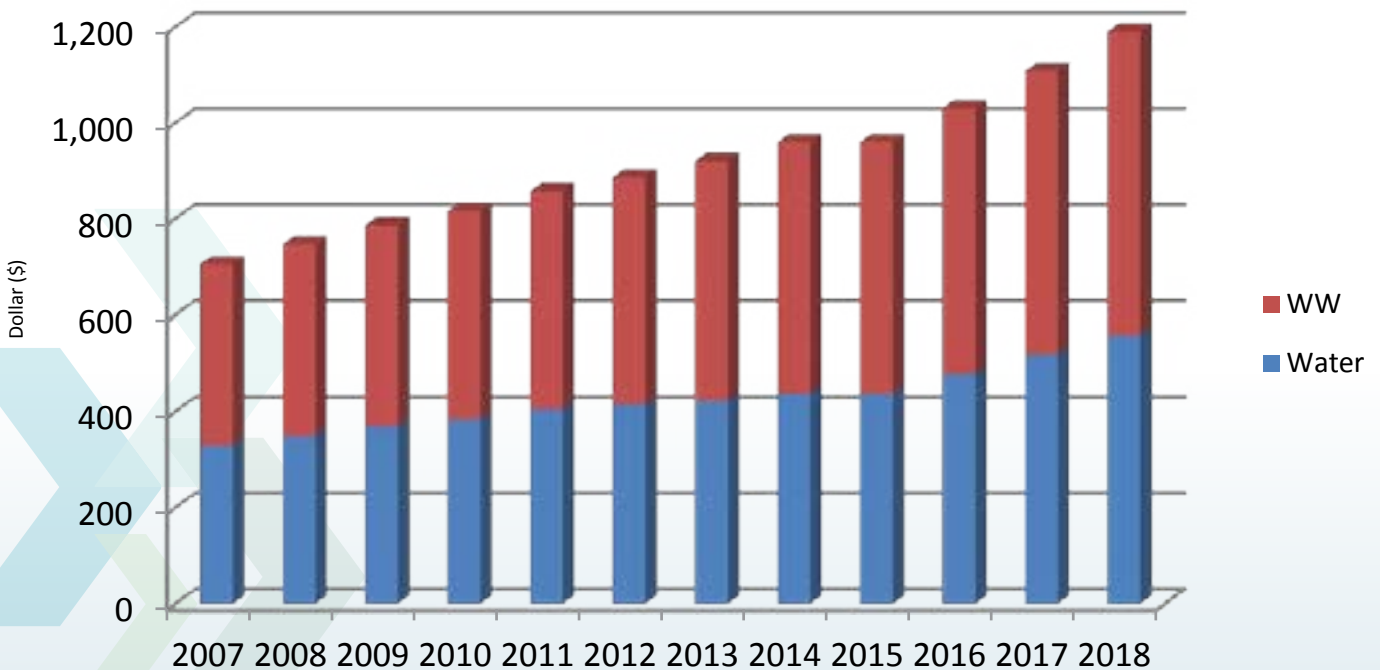
This rate structure is consistent with most Ontario municipalities.

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.

Typical Water/Wastewater Charges (200 Cu M/year)



## 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. 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.

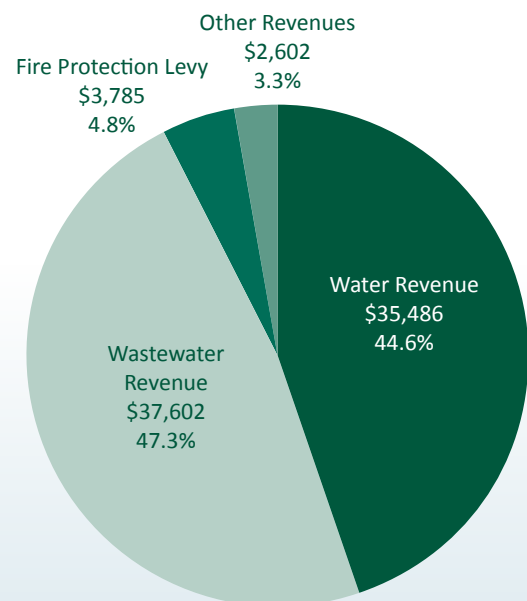
The Province of Ontario requires that all municipalities collect the full cost of water and wastewater services directly from end users. City Council adopted a user pay system in 2001 and charges that were previously rolled into municipal property taxes are billed directly to customers.

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)**



## Water/Wastewater

	Actual		2017 Projected Actuals	Budget		Budget Change	
	2015 Actuals	2016 Actuals		2017 Budget	2018 Budget	Dollar Change	Percent Change
<b>Revenues</b>							
Levies	(229,969)	(229,162)	(59,489)	(58,908)	(41,647)	17,261	-29.3%
User Fees	(59,860,905)	(64,408,361)	(67,927,437)	(69,519,030)	(74,456,286)	(4,937,256)	7.1%
Contr from Reserve and Capital	(3,735,798)	(233,267)	(1,260,768)	(445,345)	(377,317)	68,028	-15.3%
Other Revenues	(628,940)	(975,680)	(871,431)	(517,100)	(814,600)	(297,500)	57.5%
<b>Total Revenues</b>	<b>(64,455,612)</b>	<b>(65,846,470)</b>	<b>(70,119,125)</b>	<b>(70,540,383)</b>	<b>(75,689,850)</b>	<b>(5,149,467)</b>	<b>7.3%</b>
<b>Expenses</b>							
Salaries & Benefits	12,374,564	12,382,619	13,268,504	13,693,976	14,072,608	378,632	2.8%
Materials - Operating Expenses	3,465,737	4,280,036	4,494,593	4,877,735	4,933,511	55,776	1.1%
Energy Costs	4,284,666	4,740,702	5,231,815	4,507,295	4,753,352	246,057	5.5%
Rent and Financial Expenses	-	11,462	55,301	24,260	63,077	38,817	160.0%
Purchased/Contract Services	12,699,951	10,323,711	10,310,380	11,079,719	11,249,293	169,574	1.5%
Debt Repayment	2,719,262	4,010,792	4,177,445	4,177,445	4,109,417	(68,028)	-1.6%
Grants - Transfer Payments	4,034	1,600	2,500	5,000	5,000	-	0.0%
Contr to Reserve and Capital	25,551,165	26,703,404	28,511,805	28,302,725	32,518,779	4,216,054	14.9%
Internal Recoveries	6,677,233	6,851,144	7,685,782	7,491,228	7,769,813	278,585	3.7%
<b>Total Expenses</b>	<b>67,776,612</b>	<b>69,305,470</b>	<b>73,738,125</b>	<b>74,159,383</b>	<b>79,474,850</b>	<b>5,315,467</b>	<b>7.2%</b>
<b>Net Budget</b>	<b>3,321,000</b>	<b>3,459,000</b>	<b>3,619,000</b>	<b>3,619,000</b>	<b>3,785,000</b>	<b>166,000</b>	<b>4.6%</b>

### Staffing Complement

	2017 Budget	2018 Budget
Full Time Positions	135	135
Part Time Hours	5,163	5,163
Crew Hours	30,198	30,198

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

<b>2017 Revenue Budget</b>		<b>70,540</b>
1	Water Revenue	2,432
2	Wastewater Revenue	2,381
3	Contribution from Reserve and Capital	(68)
4	Other user fees and revenues	405
<b>2018 Revenue Budget</b>		<b>\$75,690</b>

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

<b>2017 Expense Budget</b>		<b>74,159</b>
1	Salaries & Benefits - reflects negotiated wage increases, in range progression and job reclassification and benefits costs	379
2	Changes to Debt Servicing Costs	(68)
3	Inflationary and contractual cost increases - materials, purchased services and energy	510
4	Increased Capital Envelopes to support approved Capital Projects.	4,216
5	Increased costs allocated from other departments	279
<b>2018 Expense Budget</b>		<b>\$79,475</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 (2017: \$18.64 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 (2017: \$1.484 per cubic metre), with revenues from the fixed charge accounting for approximately 43 % of user fee revenues.

In the absence of meters for wastewater outflows, user fees for wastewater are calculated as a percentage of water rates (2017: 112.8%) and as such, incorporate both a fixed and variable component.

### Average Homeowner

The chart below illustrates the impact of the 2018 rates on a homeowner who uses 200 cubic metres of water per year. The cost increase for 2018 is approximately \$6.80 per month for the average homeowner.

2018 Water/Wastewater Rate Impact				
	2017	2018	\$ Change	% Change
<b>Water</b>				
Annual Usage Charge	296.76	320.40	23.64	
Annual Fixed Service Charge	223.68	238.68	15.00	
<b>Total Annual Water</b>	<b>520.44</b>	<b>559.08</b>	<b>38.64</b>	<b>7.4%</b>
<b>Wastewater</b>				
Annual Usage Surcharge	334.75	361.09	26.34	
Annual Fixed Service Surcharge	252.31	268.99	16.68	
<b>Total Annual Wastewater</b>	<b>587.06</b>	<b>630.08</b>	<b>43.02</b>	<b>7.3%</b>
<b>Total Annual Water/Wastewater Charges</b>	<b>\$1,107.50</b>	<b>\$1,189.16</b>	<b>\$81.66</b>	<b>7.4%</b>





### Rate Consumption : Sample Residential Customers

The following chart compares Greater Sudbury's 2017 Rates to those of other northern Ontario municipalities. The chart uses rates for 2017, as some other cities have not yet determined the rates for 2018.

#### Sample Residential Customer - 2017 Rates

	Sudbury	North Bay	Timmins	Sault Ste. Marie	Thunder Bay
<b>Water</b>					
Annual Volume Charge	\$297	\$254	\$0	\$143	\$321
Annual Service Charge	\$224	\$331	\$410	\$315	\$268
<b>Total Annual Water</b>	<b>\$521</b>	<b>\$585</b>	<b>\$410</b>	<b>\$458</b>	<b>\$589</b>
<b>Wastewater</b>					
Annual Volume Charge	\$335	\$195	\$0	\$89	\$289
Annual Service Charge	\$252	\$229	\$434	\$195	\$241
<b>Total Annual Wastewater</b>	<b>\$587</b>	<b>\$424</b>	<b>\$434</b>	<b>\$284</b>	<b>\$530</b>
<b>Total Water/Wastewater</b>	<b>\$1,108</b>	<b>\$1,009</b>	<b>\$844</b>	<b>\$742</b>	<b>\$1,119</b>

\*2017 BMA Study

#### Water Revenue

	2017 Budget	2017 Sept Forecast	2018 Budget	Budget Change	
				Dollar Change	Percent Change
Water Charges	33,053,870	32,527,010	35,486,048	2,432,178	7.4%
Other user fees	898,671	880,632	925,632	26,961	3.0%
Contributions from Reserve and Capital	128,102	128,102	101,282	(26,820)	-20.9%
Other Revenues	138,291	139,943	130,622	(7,669)	-5.5%
<b>Total Water Revenues</b>	<b>\$34,218,934</b>	<b>\$33,675,687</b>	<b>\$36,643,584</b>	<b>\$2,424,650</b>	<b>7.1%</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	2018
5/8"	\$19.89
3/4"	\$19.89
1"	\$49.72
1.5"	\$99.44
2"	\$159.11
3"	\$318.21
4"	\$497.21
6"	\$994.42
8"	\$1,591.07
10"	\$2,287.16
<b>Volume Charge per Cubic Metre</b>	<b>\$1.602</b>

### Wastewater Revenue

	2017 Budget	2017 Sept Forecast	2018 Budget	Budget Change	
				Dollar Change	Percent Change
Wastewater Charges	35,220,641	34,216,221	37,602,277	2,381,636	6.8%
Contributions from Reserve and Capital	317,243	317,243	276,035	(41,208)	-13.0%
Other Revenues	428,116	790,777	716,025	287,909	67.3%
<b>Total Wastewater Revenues</b>	<b>\$35,966,000</b>	<b>\$35,324,241</b>	<b>\$38,594,337</b>	<b>\$2,628,337</b>	<b>7.3%</b>

The wastewater surcharge is a percentage and is applied to total water charges (volume and fixed) as there are no meters to measure the outflows of wastewater. For 2018 the wastewater surcharge is 112.7 % of water charges.

## Water/Wastewater

The capital budget for water/wastewater is approximately \$37.2 million in 2018, compared to \$56 million in 2017. This decrease is the result of:

One-time Clean Water/Wastewater grants of \$6.9 received in 2017 funded various watermain and sewermain improvements in our community.

No internal financing of projects in 2018 (\$16.7 million in 2017).

Capital envelopes include a higher allocation of approximately \$4.2 million due to Council direction for a water/wastewater user fee increase of 7.4 % in 2018, in line with the long-term financial plan for this division.



## Water/Wastewater



### Overview

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

### Services

#### Water Treatment:

- Operates and maintains water treatment plants, supply wells, booster stations, residential and bulk fill stations, and storage tanks and reservoirs.

#### Wastewater Treatment:

- Operates and maintains wastewater treatment facilities, sewage lift stations, sludge and hauled liquid waste receiving.

#### Distribution and Collection:

- Operates and maintains 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.

## Water/Wastewater

### 2017 Accomplishments

- Lined 13 kilometres of water and sewer mains to minimize impacts on traffic, reduce the risks of underground failures and extend the life of the underground infrastructures.
- Completed the Water/Wastewater Master Plan and Asset Management Plan.

### Strategic Issues and Opportunities

- The completion of the Water/Wastewater Master Plan provides a more refined strategy to guide the level of investment and priorities for capital investments to enhance water and wastewater system safety, while meeting legislated requirements, improving system performance and efficiency, and supporting community growth.
- The completion of the Asset Management Plan provides a risk-reduction based framework to guide the maintenance, renewal, and replacement of current and future infrastructure assets, enabling refinement of future funding requirements, and proactive preparation to meet future legislative requirements.
- Significant business improvement initiatives through the introduction of improved technology and automation enable the establishment of performance metrics.
- A defined strategy to update water metering technology through a feasibility study will lead to improved operations and service.

### Key Deliverables in 2018

- Update the Financial Plan, which recommends funding requirements to achieve fiscally sustainable water and wastewater systems in Greater Sudbury.
- Continue work to reduce the amount of inflow and infiltration into the City's wastewater collection systems as well as reduce the volume of non-revenue water leakage from the City's water distribution systems.
- Continue to update the Asset Management Plan with condition assessment information on existing assets.

### Key Performance Indicators

Measure Name	Measure Category	CGS Result	Median Result
Total Cost of Wastewater Collection/Conveyance and Treatment/Disposal per Megalitre Treated	Efficiency	\$1,084	\$927
Number of Water Main Breaks per 100 km (excluding connections) of Water Distribution Pipe	Customer Service	8.3	7.7



**CATEGORY DESCRIPTION**

(For detailed project listing see attached)

	2018 REQUEST	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK	2022 OUTLOOK
<b>Previous Council Approvals</b>	\$ 700,738	\$ -	\$ -	\$ -	\$ -
<b>Water Distribution</b>					
Watermain Priority Projects	\$ 9,472,376	\$ 10,173,501	\$ 13,624,939	\$ 8,040,054	\$ 8,457,373
Watermain Replacement / Rehabilitation	\$ 1,750,000	\$ 2,000,000	\$ 1,950,000	\$ 2,050,000	\$ 2,050,000
Condition Assessment - Watermains	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ -
Distribution System - Other	\$ 490,000	\$ 490,000	\$ 490,000	\$ 490,000	\$ 490,000
Network Looping	\$ -	\$ -	\$ 2,600,000	\$ 100,000	\$ 100,000
<b>Water Plants</b>					
Water Treatment Plants	\$ 2,050,000	\$ 1,575,000	\$ 850,000	\$ 10,850,000	\$ 850,000
Water Works - Strategic Initiatives	\$ 2,135,000	\$ 1,800,000	\$ 1,825,000	\$ 1,800,000	\$ 1,900,000
Wells	\$ 1,925,000	\$ 2,460,000	\$ 1,675,000	\$ 2,175,000	\$ 1,475,000
Reservoirs / Tanks / Booster Stations	\$ 1,825,000	\$ -	\$ -	\$ 240,000	\$ -
System Wide	\$ 687,843	\$ 754,600	\$ 706,392	\$ 718,220	\$ 670,084
<b>PROJECT COSTS</b>	<b>\$ 21,135,957</b>	<b>\$ 19,353,101</b>	<b>\$ 23,821,331</b>	<b>\$ 26,563,274</b>	<b>\$ 15,992,457</b>
<b>PROJECT FINANCING</b>					
Capital Envelopes: Future Years Financing	\$ -	\$ (620,000)	\$ (190,000)	\$ (7,050,000)	\$ 3,780,000
Reserves: Capital Financing Reserve Fund - Water	\$ (2,868,211)	\$ (100,000)	\$ (226,392)	\$ (228,535)	\$ (100,000)
Government Grants: Federal and Provincial Funding for Lorne	\$ -	\$ -	\$ (3,000,000)	\$ -	\$ -
External Debt Financing	\$ -	\$ -	\$ (1,399,176)	\$ 101,139	\$ 101,139
<b>CAPITAL ENVELOPE (WWW User Fees)</b>	<b>\$ 18,267,746</b>	<b>\$ 18,633,101</b>	<b>\$ 19,005,763</b>	<b>\$ 19,385,878</b>	<b>\$ 19,773,596</b>

**Priority Setting:**

The Water and Wastewater Capital Budget priorities are primarily determined by the recommendations and framework contained in the Water / Wastewater Infrastructure Master Plan and Asset Management Plan, both recently received by Council.

The Master Plan provides recommendations for the long term infrastructure needs, based on four primary principles: Safety, Efficiency, Regulatory Requirements, and Development.

The Asset Management Plan (AMP) provides a strategic framework to: guide infrastructure decisions: efficiently and effectively allocate resources to meet the City's desired levels of service in lowest overall lifecycle costs; and identify costs and benefits of infrastructure investment decisions across the organization, all in accordance with best practices. The risk assessment incorporated within the AMP utilizes condition and age data, service criticality, socioeconomic, environmental and traffic impacts among others, to determine the priority projects.

The priorities are then allocated within the constraints of the City's Water / Wastewater Financial Plan.



**Water Detail**

**PROJECT DESCRIPTION**

**PROJECT TYPE**

R (Renewal)

E (Expansion)

N (New)

PROJECT DESCRIPTION	PROJECT TYPE	2018 REQUEST	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK	2022 OUTLOOK
<b>PREVIOUS COUNCIL APPROVALS</b>						
Wanapitei WTP Phase 2 Loan Repayment (2015-2018)	R	\$ 700,738	\$ -	\$ -	\$ -	\$ -
<b>SUBTOTAL PREVIOUS COUNCIL APPROVALS</b>		<b>\$ 700,738</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Water Distribution</b>						
<b>Watermain Priority Projects (Replacement / Rehabilitation)</b>						
Maley Drive Watermain (Contract 3)	R	\$ 1,500,000 <sup>1</sup>	\$ -	\$ -	\$ 200,000	\$ 200,000
MR 35 Watermain - Construction	R	\$ 863,000	\$ -	\$ -	\$ -	\$ -
Attlee Avenue - Gemmill Street to Lasalle Boulevard	R	\$ 800,000	\$ -	\$ -	\$ -	\$ -
McAllister Avenue - Lasalle Boulevard to South End	R	\$ 575,000	\$ -	\$ -	\$ -	\$ -
Creighton Road - School Street to Godfrey Drive	R	\$ 550,000	\$ -	\$ -	\$ -	\$ -
Auger Avenue - Hawthorne Drive to Falconbridge Highway	R	\$ 500,000	\$ -	\$ -	\$ -	\$ -
Lorne Street / MR55 - Detailed Design Engineering & Contract Admin	R	\$ 405,000	\$ -	\$ -	\$ -	\$ -
Parkwood Street - Maple Street to Poplar Street	R	\$ 205,000	\$ -	\$ -	\$ -	\$ -
Parkwood Street - Poplar Street West End to Stanley Street	R	\$ 200,000	\$ -	\$ -	\$ -	\$ -
Loach's Road - Eden Point to 40m North of Aspenwood Court (lining)	R	\$ 350,000	\$ -	\$ -	\$ -	\$ -
Melvin Avenue - Kathleen Street to Mable Street	R	\$ 350,000	\$ -	\$ -	\$ 200,000	\$ 200,000
System Improvements (Development Related)	R	\$ 300,000	\$ -	\$ -	\$ -	\$ -
Various Bridges & Culverts - Watermain Work	R	\$ 275,000	\$ -	\$ -	\$ -	\$ -
Avalon Road - Bancroft Drive to South End	R	\$ 250,000	\$ -	\$ -	\$ -	\$ 250,000
Consultant Fees (Various Projects)	R	\$ 250,000	\$ -	\$ -	\$ -	\$ -
Tarneaud Street - Howey Drive to South End	R	\$ 220,000	\$ -	\$ -	\$ -	\$ -
Douglas Street Bridge	R	\$ 210,000	\$ -	\$ -	\$ -	\$ -
Leslie Street - Notre Dame Avenue to Murray Street	R	\$ 200,000	\$ -	\$ -	\$ -	\$ -
Dominion Drive - Elmview to MR 80	R	\$ 200,000	\$ -	\$ -	\$ -	\$ -
Beatrice Crescent Culvert - Watermain Work	R	\$ 200,000	\$ -	\$ -	\$ -	\$ -
Robin Street Culvert - Watermain Work	R	\$ 150,000	\$ -	\$ -	\$ -	\$ -
Notre Dame Avenue (Azilda) Culvert - Watermain Work	R	\$ 150,000	\$ -	\$ -	\$ -	\$ -
Maki Avenue Upgrades - Preliminary Design	R	\$ 125,000	\$ -	\$ -	\$ -	\$ -
Rita Street - Wilfred Street to Grace Street (Additional Funds)	R	\$ 125,000	\$ -	\$ -	\$ -	\$ -
QA / QC Testing for Linear Works (Various Locations)	R	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ 100,000
Oliver Street Watermain (Copper Cliff) - Investigation / Design	R	\$ 50,000	\$ -	\$ -	\$ -	\$ -
Preliminary Design for Subsequent Years (Geotech, Surveys)	N,R	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ 25,000
Various Watermain Priority Projects	R	\$ -	\$ 2,000,000	\$ 2,333,615	\$ 2,106,839	\$ 500,000
Ash Street - Parkwood Street to Stanley Street (Additional Funding)	R	\$ -	\$ 900,000	\$ -	\$ -	\$ -
Stanley Street - Ash Street to Pine Street (Additional Funding)	R	\$ -	\$ 880,000	\$ -	\$ -	\$ -
Dell Street - Morin Avenue to Snowdon Avenue	R	\$ -	\$ 650,000	\$ -	\$ -	\$ -
Dean Avenue - Lorne Street to Jane Street	R	\$ -	\$ 600,000	\$ -	\$ -	\$ -
Maple Street - Reginald Street to Cul-de-sac East of Ethelbert Street	R	\$ -	\$ 600,000	\$ -	\$ -	\$ -
MR 24 - Trunk Watermain	R	\$ -	\$ 500,000	\$ -	\$ -	\$ -
MR 80 - Dutrisac to Campeau	R	\$ -	\$ 500,000	\$ -	\$ -	\$ -
Replacement / Relocation of Backyard Watermains (Various Locations)	R	\$ -	\$ 500,000	\$ -	\$ 150,000	\$ 500,000
Various Watermain with Sewer and Roads Priority Projects	R	\$ -	\$ 635,400	\$ 3,000,000	\$ 3,000,000	\$ 3,099,601
Dean Avenue - Jane Street to Landsend Street	R	\$ -	\$ 400,000	\$ -	\$ -	\$ -
Maple Street - Ethelbert Street to East End	R	\$ -	\$ 300,000	\$ -	\$ -	\$ -
Maple Street - Parkwood Street to West End	R	\$ -	\$ 300,000	\$ -	\$ -	\$ -
Laberge Lane - Bancroft Drive to North End	R	\$ -	\$ 210,000	\$ -	\$ -	\$ -





**Water Detail**

**PROJECT DESCRIPTION**

**PROJECT TYPE**

	2018 REQUEST	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK	2022 OUTLOOK
Small Diameter Watermain Replacement - Various Locations		\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Lorne Street Easement - Dean Street to Sutherland Street		\$ 150,000			
As-Built Drawings Updates		\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Ramsey Shore Easement - Investigation / Design		\$ 50,000			
Lorne Street / MR 55 - Construction			\$ 4,500,000 <sup>2</sup>		
Funding from External Debt Financing (2021-2039)			\$ (1,399,176)	\$ 101,139	\$ 101,139
Lorne Street / MR 55 Financing in Current Year			\$ 3,100,824	\$ 101,139	\$ 101,139
10th Avenue Lively Watermain Replacement			\$ 300,000		
Anderson Drive Watermain Replacement				\$ 500,000	
MR 15 from Belisle Drive to 2.2 km West - Hydrant Relocation				\$ 25,000	
Ethelbert Street - Spruce Street to Linden Street					\$ 2,000,000
Notre Dame Avenue - Wilma to 0.6km North of Cambrian Heights Drive			\$ 1,816,581	\$ 1,385,000	\$ 1,000,000
Projects to be Identified	\$ 244,376	\$ 373,101	\$ 1,816,581	\$ 1,385,000	\$ 1,000,000
Contingency - Watermain Priority Projects			\$ 299,743	\$ 248,215	\$ 482,772
<b>SUBTOTAL - Watermain Priority Projects (Replacement / Rehabilitation)</b>	<b>\$ 9,472,376</b>	<b>\$ 10,173,501</b>	<b>\$ 13,624,939</b>	<b>\$ 8,040,054</b>	<b>\$ 8,457,373</b>
<b>Watermain Replacement / Rehabilitation</b>					
Watermain Rehabilitation (Lining)	\$ 1,350,000 <sup>1</sup>	\$ 1,450,000	\$ 1,550,000	\$ 1,650,000	\$ 1,650,000
Consultant Services for Lining Projects	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Watermain Valve Replacement	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Water Service Replacement	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Watermain Air Release Valve Installation & Replacement	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Corrosion Protection Renewal - Wan. WTP to Coniston	\$ 100,000	\$ 150,000	\$ 100,000	\$ 100,000	\$ 100,000
<b>SUBTOTAL - Watermain Replacement / Rehabilitation</b>	<b>\$ 1,750,000</b>	<b>\$ 2,000,000</b>	<b>\$ 1,950,000</b>	<b>\$ 2,050,000</b>	<b>\$ 2,050,000</b>
<b>Distribution System - Other</b>					
Distribution System Operational Optimization	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000
Distribution Support - Contract Support	\$ 100,000	\$ 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	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
<b>SUBTOTAL - Distribution System - Other</b>	<b>\$ 490,000</b>	<b>\$ 490,000</b>	<b>\$ 490,000</b>	<b>\$ 490,000</b>	<b>\$ 490,000</b>
<b>Condition Assessment - Watermains</b>					
Condition Assessment	\$ 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>Network Looping</b>					
Valley Water System Looping - Construction (Four Contracts)			\$ 2,500,000		
Funding from Future Year Envelopes (2019-2020)			\$ (500,000)		
Valley Water System Looping - Financing in Current Year			\$ 2,000,000	\$ 500,000	\$ 500,000
Water System Looping (Various Areas)			\$ 100,000	\$ 100,000	\$ 100,000
<b>SUBTOTAL - Network Looping</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,600,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>
<b>TOTAL - Water Distribution</b>	<b>\$ 11,812,376</b>	<b>\$ 12,763,501</b>	<b>\$ 18,764,939</b>	<b>\$ 10,780,054</b>	<b>\$ 11,097,373</b>
<b>Water Plants</b>					
<b>Water Treatment Plants</b>					
Wanapitei WTP - Entrance Modifications	\$ 500,000				
David Street WTP - Membrane Filter (Contribution to Reserve)	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000



**PROJECT DESCRIPTION**

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

	2018 REQUEST	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK	2022 OUTLOOK
Wanapitei WTP - Intake Pump Replacement	\$ 350,000				
Vermilion WTP - Capital Contribution to Vale (Contribution to Reserve)	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000
Wan. WTP Intake Watermain - Leak Detection System	\$ 200,000	\$ 25,000			
Wan. WTP Intake Watermain - Corrosion Protection Renewal	\$ 150,000				
Wanapitei WTP - Various Plant Repairs / Equipment Replacement	\$ 75,000	\$ 100,000	\$ 75,000	\$ 75,000	\$ 75,000
David Street WTP - Various Plant Repairs / Equipment Replacement	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Wanapitei WTP - Valve Replacements	\$ 50,000	\$ 350,000			
Wanapitei WTP - Treatment Plant Pump Replacements	\$	\$ 325,000			
Wanapitei WTP Reactivator Upgrades	\$	\$	\$ 10,000,000	\$ (7,700,000)	\$ 3,700,000
Funding from Future Year Envelopes (2022-2024)					
Wanapitei WTP Reactivator Upgrades - Financing in Current Year					
<b>SUBTOTAL - Water Treatment Plants</b>	<b>\$ 2,050,000</b>	<b>\$ 1,575,000</b>	<b>\$ 850,000</b>	<b>\$ 10,850,000</b>	<b>\$ 850,000</b>
<b>Wells</b>					
Well Building Repairs / Upgrades - Design & Construction	\$ 1,200,000	\$ 1,355,000	\$ 1,500,000	\$ 2,000,000	\$ 1,300,000
Well Process Upgrades - M/J & Kenneth Wells Iron/Manganese	\$ 300,000				
Wells Inspection / Rehabilitation	\$ 250,000	\$ 930,000			
Funding from Future Year Envelopes (2020-2021)		\$ (620,000)	\$ 310,000	\$ 310,000	
Well Inspection/Rehabilitation - Financing in Budget Year	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
Sentinel Wells System	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Groundwater Monitoring Program - Annual	\$ 1,925,000	\$ 2,460,000	\$ 1,675,000	\$ 2,175,000	\$ 1,475,000
<b>SUBTOTAL - Wells</b>	<b>\$ 1,925,000</b>	<b>\$ 2,460,000</b>	<b>\$ 1,675,000</b>	<b>\$ 2,175,000</b>	<b>\$ 1,475,000</b>
<b>Water Works - Strategic Initiatives</b>					
Master Plan Program / Study Recommendations	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000
Automatic Meter Reading Water Meters (Contribution to Reserve)	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Valve Inspection and Maintenance	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Source Protection Plan	\$ 125,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Strategic Planning (Tactical/Financial Plans)	\$ 75,000	\$ 25,000	\$ 50,000	\$ 25,000	\$ 25,000
Locates - (Contribution to Operating)	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Sentinel Well System - Operational Costs	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Depot & Public Work Administrative Upgrades	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Benchmarking & Water Festival - Contribution to Operating	\$ 425,000 <sup>1</sup>	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Consultant Guidelines Manual - Linear	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500	\$ 32,500
GIS - Various Equipment & Software	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Public Awareness - Contribution to Operating	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000
Hydraulic Model License	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500
Catholic Protection Program - Install & Monitor	\$	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Transient Air Release Valve Studies	\$	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Valve Criticality Study	\$	\$	\$	\$	\$
Break / Corrosion Protection Study	\$	\$	\$	\$	\$
CPP Condition Assessment	\$	\$	\$	\$	\$
<b>SUBTOTAL - Water Works - Strategic Initiatives</b>	<b>\$ 2,135,000</b>	<b>\$ 1,800,000</b>	<b>\$ 1,825,000</b>	<b>\$ 1,800,000</b>	<b>\$ 1,900,000</b>
<b>Reservoirs / Tanks / Booster Stations</b>					
Val. Caron Booster & Valve Building Upgrades	\$ 1,550,000				
Montrose Booster Control Systems Upgrades	\$ 275,000				



**Water Detail**

PROJECT DESCRIPTION	PROJECT TYPE	2018 REQUEST	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK	2022 OUTLOOK
	R (Renewal)					
	E (Expansion)					
	N (New)					
Storage Tank Inspection & Rehabilitation - Various Tanks	R				\$ 240,000	\$ 80,000
Funding from Future Year Envelopes (2020-2021)					\$ (160,000)	\$ 80,000
Storage Tank Inspection & Rehabilitation - Financing in Budget Year						
<b>SUBTOTAL - Reservoirs / Tanks / Booster Stations</b>		<b>\$ 1,825,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 240,000</b>	<b>\$ -</b>
<b>System Wide</b>						
Annual SCADA / Communications Upgrades - All Facilities	R	\$ 250,000	\$ 315,000	\$ 315,000	\$ 325,000	\$ 325,000
Health & Safety Inspections & Upgrades	R	\$ 150,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Capital Project Delivery Resources (Contribution to Operating)	N	\$ 87,843	\$ 89,600	\$ 91,392	\$ 93,220	\$ 95,084
Various Plant Repairs / Equipment Upgrades	R	\$ 75,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Operating Manuals & As-Builts	R	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Condition Assessment	R	\$ 50,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000
Security Improvements	N	\$ 25,000	\$ 75,000	\$ 25,000	\$ 25,000	\$ 25,000
<b>SUBTOTAL - System Wide</b>		<b>\$ 687,843</b>	<b>\$ 754,600</b>	<b>\$ 706,392</b>	<b>\$ 718,220</b>	<b>\$ 670,084</b>
<b>TOTAL - Water Plants</b>		<b>\$ 8,622,843</b>	<b>\$ 6,589,600</b>	<b>\$ 5,056,392</b>	<b>\$ 15,783,220</b>	<b>\$ 4,895,084</b>
<b>PROJECT COSTS</b>		<b>\$ 21,135,957</b>	<b>\$ 19,353,101</b>	<b>\$ 23,821,331</b>	<b>\$ 26,563,274</b>	<b>\$ 15,992,457</b>

Notes:

- 1) Capital Financing Reserve Fund - Water:
  - Maley Drive Watermain \$ 2,868,211
  - Watermain Rehabilitation (Lining) \$ 943,211
  - Depot & Public Work Administrative Upgrades \$ 425,000
- 2) Lorne Street Funding
  - Proposed Federal Government Funding \$ 1,500,000
  - Proposed Provincial Government Funding \$ 1,500,000



**CATEGORY DESCRIPTION**

(For detailed project listing see attached)

	2018 REQUEST	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK	2022 OUTLOOK
<b>Previous Council Approvals</b>	\$ 5,198,047	\$ 7,328,315	\$ 4,943,315	\$ 2,593,315	\$ 2,593,315
<b>Wastewater Collection</b>					
Sewer Priority Projects	\$ 2,215,486	\$ 1,772,440	\$ 4,235,000	\$ 5,680,887	\$ 5,857,421
Sewer System Rehabilitation	\$ 1,725,000	\$ 1,825,000	\$ 1,925,000	\$ 2,025,000	\$ 2,050,000
Collection System - Other	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000
Condition Assessment - Sewer System	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
<b>Wastewater Plants</b>					
Lift Stations	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000
System Wide	\$ 1,150,000	\$ 1,025,000	\$ 1,025,000	\$ 1,025,000	\$ 1,025,000
Wastewater Treatment Plants	\$ 685,000	\$ 285,000	\$ 200,000	\$ 200,000	\$ 200,000
<b>Wastewater General</b>					
Strategic Initiatives	\$ 2,306,421	\$ 1,982,299	\$ 1,983,195	\$ 1,984,109	\$ 1,985,041
<b>PROJECT COSTS</b>	<b>\$ 16,054,954</b>	<b>\$ 16,993,054</b>	<b>\$ 17,086,510</b>	<b>\$ 16,183,311</b>	<b>\$ 16,485,777</b>
<b>PROJECT FINANCING</b>					
Reserves: Federal Gas Tax	\$ (960,000)	\$ (960,000)	\$ (960,000)	\$ (960,000)	\$ (960,000)
Reserves: Capital	\$ (843,921)	\$ (1,497,000)	\$ (359,735)	\$ (100,000)	\$ (100,000)
Government Grants: Federal and Provincial Funding for Lorne	\$ -	\$ -	\$ (940,000)	\$ -	\$ -
<b>CAPITAL ENVELOPE (W/WW User Fees)</b>	<b>\$ 14,251,033</b>	<b>\$ 14,536,054</b>	<b>\$ 14,826,775</b>	<b>\$ 15,123,311</b>	<b>\$ 15,425,777</b>

**Priority Setting:**

The Water and Wastewater Capital Budget priorities are primarily determined by the recommendations and framework contained in the Water / Wastewater Infrastructure Master Plan and Asset Management Plan, both recently received by Council.

The Master Plan provides recommendations for the long term infrastructure needs, based on four primary principles: Safety; Efficiency; Regulatory Requirements; and Development.

The Asset Management Plan (AMP) provides a strategic framework to: guide infrastructure decisions: efficiently and effectively allocate resources to meet the City's desired levels of service in lowest overall lifecycle costs; and identify costs and benefits of infrastructure investment decisions across the organization, all in accordance with best practices. The risk assessment incorporated within the AMP utilizes condition and age data, service criticality, socioeconomic, environmental and traffic impacts among others, to determine the priority projects.

The priorities are then allocated within the constraints of the City's Water / Wastewater Financial Plan.



PROJECT DESCRIPTION	PROJECT TYPE	2018 REQUEST	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK	2022 OUTLOOK
<b>PREVIOUS COUNCIL APPROVALS</b>						
Sudbury WWTP Upgrades - Standby Power/Parking Lot/RV	R (Renewal)	\$ 1,300,000	\$ 1,950,000			
Dump Station - Construction (2018-2019)	E (Expansion)	\$ 1,267,800	\$ 1,785,000			
Lively Sanitary Sewer Upgrades Jacob St. - Construction (2018-2019)						
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
St. Charles Lift Station Upgrades (Construction) (2019-2025)		\$ 1,000,000	\$ 963,068	\$ 963,068	\$ 963,068	\$ 963,068
Sudbury WWTP Upgrades - Headhouse Construction & Standby Power Design (\$4,000,000 Internal Financing 2015 to 2023)		\$ 462,563	\$ 462,563	\$ 462,563	\$ 462,563	\$ 462,563
Gatchell Outfall Sewer - (Construction) (2019-2020)	N,R,E	\$ 1,000,000	\$ 1,000,000	\$ 2,350,000		
<b>SUBTOTAL PREVIOUS COUNCIL APPROVALS</b>		<b>\$ 5,198,047</b>	<b>\$ 7,328,315</b>	<b>\$ 4,943,315</b>	<b>\$ 2,593,315</b>	<b>\$ 2,593,315</b>
<b>Wastewater Collection</b>						
<b>Sewer Priority Projects</b>						
Lorne Street / MR 55 - Detailed Design Engineering & Contract Admin	R	\$ 405,000				
Lorne Street / MR 55 - Construction	R			\$ 1,410,000 <sup>2</sup>		
Consultant Fees - Various Projects		\$ 250,000		\$ 250,000		\$ 250,000
Attlee Avenue - Gemmill Street to Lasalle Boulevard	R	\$ 200,000				
Preliminary Design for Subsequent Years (incl. CCTV & Geotech)	R	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000
Various Bridges & Culverts - Sanitary Sewer Work	R	\$ 150,000				
Melvin Avenue - Kathleen Street to Mable Street	R	\$ 125,000				
Maki Avenue Upgrades - Preliminary Design	R	\$ 125,000				
McAllister Avenue - Lasalle Blvd to South End	R	\$ 100,000				
Loach's Road - Eden Point Drive to Cerilli Crescent	R	\$ 100,000				
Avalon Road - Bancroft Drive to South End	R	\$ 100,000				
Leslie Street - Notre Dame Avenue to Murray Street	R	\$ 100,000				
Tarnaud Street - Howey Drive to South End	R	\$ 100,000				
System Improvements (Development Related)	R,E	\$ 100,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
QA / QC Testing for Linear Works (Various Locations)	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Fairburn Street - Barrydowne Road to East End	R	\$				
Dell Street - Morin Avenue to Snowden Avenue	R	\$ 25,000				
Lively Sanitary Sewer Phase 2	R					
Dean Avenue - Lane Street to Landsend Street	R		\$ 500,000			
Maple Street - Reginald Street to Cul-de-sac East of Ethelbert Street	R		\$ 200,000			
Maple - Parkwood Street to West End	R		\$ 120,000			
Maple Street - Ethelbert Street to East End	R		\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Stanley Street - Ash Street to Pine Street	R		\$ 50,000			
Lively Sanitary Sewer Phase 2	R		\$ 15,000			
Various Sewer with Watermain & Roads Priority Projects	R			\$ 2,000,000	\$ 2,000,000	\$ 2,000,000
Ethelbert Street - Spruce Street to Linden Street	R			\$ 2,922,465	\$ 2,922,465	\$ 2,922,465
Notre Dame Avenue - Wilma to 0.6km North of Cambrian Heights Drive	N,R					
Contingency - Sewer with Watermain Priority Projects	R	\$ 60,486	\$ 62,440	\$ 83,422	\$ 83,422	\$ 83,422
<b>SUBTOTAL - Sewer Priority Projects</b>		<b>\$ 2,215,486</b>	<b>\$ 1,772,440</b>	<b>\$ 4,235,000</b>	<b>\$ 5,560,887</b>	<b>\$ 5,857,421</b>
<b>Sewer System Rehabilitation</b>						



**Wastewater Detail**

**PROJECT DESCRIPTION**

**PROJECT TYPE**

R (Renewal)  
E (Expansion)  
N (New)

PROJECT DESCRIPTION	PROJECT TYPE	2018 REQUEST	2019 OUTLOOK	2020 OUTLOOK	2021 OUTLOOK	2022 OUTLOOK
<b>Sanitary Sewer System Rehabilitation &amp; Repair (3 Yr. Contracts)</b>	R	\$ 1,425,000 <sup>1</sup>	\$ 1,525,000	\$ 1,625,000	\$ 1,725,000	\$ 1,750,000
Sanitary Sewer Laterals Rehabilitation		\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Consultant Services for Rehabilitation Projects (3 Year Contracts)	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Rock Tunnel Maintenance & Repair (Contribution to Reserve)	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
<b>SUBTOTAL - Sewer System Rehabilitation</b>		<b>\$ 1,725,000</b>	<b>\$ 1,825,000</b>	<b>\$ 1,925,000</b>	<b>\$ 2,025,000</b>	<b>\$ 2,050,000</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	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
<b>SUBTOTAL - Collection System - Other</b>		<b>\$ 175,000</b>	<b>\$ 175,000</b>	<b>\$ 175,000</b>	<b>\$ 175,000</b>	<b>\$ 175,000</b>
<b>Condition Assessment - Sewer System</b>						
Sanitary Rock Tunnel Inspections (Contribution to Reserve)	R	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
<b>SUBTOTAL - Condition Assessment - Sewer System</b>		<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>
<b>Wastewater Plants</b>						
<b>Plants - Lift Stations</b>						
Lift Station Upgrades / Standby Power - Various Locations	N	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000
<b>SUBTOTAL - Plants - Lift Stations</b>		<b>\$ 2,500,000</b>	<b>\$ 2,500,000</b>	<b>\$ 2,500,000</b>	<b>\$ 2,500,000</b>	<b>\$ 2,500,000</b>
<b>Plants - System Wide</b>						
Annual Plant Repairs / Equipment Upgrades / Operational Support	R	\$ 450,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000
Various SCADA/Communication Upgrades	R,N	\$ 270,000	\$ 270,000	\$ 270,000	\$ 270,000	\$ 270,000
Condition Assessment	R	\$ 150,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
Lagoon Upgrades	N	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Operating Manuals & Facility As-Built Updates	R,N	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Roofing & Fencing	R	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Security Improvements	N	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Health & Safety Inspections and Upgrades	R	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
<b>SUBTOTAL - Plants - System Wide</b>		<b>\$ 1,150,000</b>	<b>\$ 1,025,000</b>	<b>\$ 1,025,000</b>	<b>\$ 1,025,000</b>	<b>\$ 1,025,000</b>
<b>Wastewater Treatment Plants</b>						
Sudbury WWTP - Blower	R	\$ 500,000 <sup>2</sup>				
Plant Effluent Compliance with Regulation		\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Copper Cliff Sewage Treatment Plant - Capital Contribution to Vale						
(Contribution to Reserve)	R	\$ 85,000	\$ 85,000	\$ 85,000	\$ 85,000	\$ 85,000
Sudbury WWTP Equipment Upgrades - Tank Cleaning, Equipment Failure	R	\$ 685,000	\$ 285,000	\$ 200,000	\$ 200,000	\$ 200,000
<b>SUBTOTAL - Wastewater Treatment Plants</b>		<b>\$ 685,000</b>	<b>\$ 285,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>
<b>Wastewater - Strategic Initiatives</b>						
Master Plan Program / Study Recommendations	R	\$ 1,100,000	\$ 1,100,000	\$ 1,100,000	\$ 1,100,000	\$ 1,100,000
Sewer Inspection & Maintenance Program	R	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000
Locates - Contribution to Operating	R	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Depot & Public Work Administrative Upgrades	R	\$ 425,000 <sup>1</sup>	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Capital Project Delivery Resources (Contribution to Operating)	N	\$ 43,921	\$ 44,799	\$ 45,695	\$ 46,609	\$ 47,541
GIS - Various Equipment & Software	R	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Benchmarking (Contribution to Operating)	R	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Public Awareness (Contribution to Operating)	R	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000