OPERATING BUDGET & CAPITAL FORECAST



WATER & WASTEWATER







2022 Rate Supported Water & Wastewater Operating Budget and Capital Forecast

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HALDIMAND COUNTY

Chief Financial Officer Report





For Consideration by Committee of the Whole on January 13, 2022

Message from the Chief Financial Officer

Mayor and Members of the Council,

This document presents the 2022 Draft Rate Supported Operating Budget and Capital Forecast, outlining the services to provide potable water and wastewater services to Haldimand County's citizens and businesses. As such, it is one of the most important strategic documents that Council reviews annually in ensuring reliable, safe, clean and affordable potable water is available to people in every community. The review and approval of the 2022 Draft Rate Supported Budget will provide for the applicable water and wastewater rates required to fully recover the cost of the relevant systems, as **none** of these costs are funded by property taxes.

The provision of potable water services in the Province of Ontario is highly regulated. While these regulatory requirements have helped to ensure potable water is safe and clean, they have significantly impacted the water and wastewater operations over time and have adversely impacted the associated rates. Despite these impacts and the large number of independent water and wastewater systems across the County, Haldimand County's water and wastewater rates have remained competitive through long range financial planning and good fiscal stewardship over the annual operations.

The 2022 Draft Rate Supported Operating Budget and Capital Forecast has been developed on the following fundamental principles:

- Capital and operating costs associated with the provision of water and wastewater services have been allocated directly to the users of these systems (although the majority of customers use both systems, some users only have one system or the other);
- Full cost recovery of all operating and capital costs are recovered directly from the users of the applicable systems;
- Aggregate net costs (i.e. revenues required from rates revenue) will be recovered 50% from fixed revenues (i.e. basic charges) and 50% from variable revenues (i.e. consumption revenues);
- Leachate costs to be allocated based on relative loading at the treatment plant and recovered 50% from fixed revenues and 50% from variable revenues;
- Annual indexing of all miscellaneous revenues based on the annual increase of underlying costs;

As such, there are three main factors that impact the rates annually: (i) increase/decreases in gross costs; (ii) increases/decreases in miscellaneous revenues (i.e. bulk services, industrial recoveries, etc.); and (iii) changes in annual consumptions/number of customers.

The 2022 Draft Rate Supported Operating Budget, as outlined in this document, represents an overall net <u>increase</u> in total rate revenue requirements of approximately \$857,000 or 6.61% compared to the 2021 budgeted total rates revenue of \$13.0 million (the water system requires an increase of \$665,430 or 11.25% in rates revenue; while the wastewater system reflects an increase of \$191,760 or 2.72% in rates revenue). The relative impact on each system varies: a 1% impact in the water system is equal to approximately \$59,200 in user rates revenue; while a 1% impact on the wastewater system is equal to \$70,500 (\$129,700 combined).

Based on the proposed potable water rates, the typical residential user will see a monthly bill of \$84.47, representing an <u>increase</u> of approximately \$1.73 or 2.1% (based on a residential service of 1" or less and average consumption of 15 m^3 per month – as outlined in Operating Summary 1).

Key Financial Messages - 2022 Draft Rate Supported Operating Budget and Capital Forecast

- Full cost recovery of all capital and operating costs from users of the systems achieved (no revenues from property taxation);
- Targeted rate stabilization reserves maintained at a level of 25% of rates revenue to offset any unforeseen revenue shortfalls due to fluctuating consumption or cost increases
- All capital financing principles met:
 - Planned rehabilitation/replacement of underlying infrastructure;
 - Continued focus on comprehensive performance reviews, condition assessments and inflow/infiltration studies to maximize performance and capacity of existing infrastructure;
 - Providing capacity for anticipated growth;
 - Within projected/established debt limits and sufficient capital replacement reserves to meet forecasted replacements;
- An overall increase in net costs, driven primarily by:
 - o Revenue increases in bulk water consumption and the annual fire protection charge;
 - An increase to the OCWA water operations contract based on the approved contract;
 - Expenditure increase in the cost for Hamilton Water based on consumption increase and rate change;
 - An increases to the insurance requirements based on preliminary estimates and known pressures that are not unique to Haldimand;
 - A contribution to the Capital Replacement Reserve Fund Water (CRRF Water) matching the financing principles set out in Capital Summary 3;
 - o The use of the Water Rate Stabilization Reserve to phase-in in abnormally large of the cost increases
 - Expenditure increases to the Veolia wastewater operations based on the approved contract, in addition to known increases to chemical costs.

Overall impact is a 2.1% increase (or \$1.73) per month for the average residential user.

Average Monthly Residential Customer Impact (15 m3)						
	2021	2022	\$	%		
Total Water	\$35.00	\$37.56	\$2.56			
Total Wastewater	\$47.74	\$46.91	(\$0.83)			
<u>Total</u>	<u>\$82.74</u>	<u>\$84.47</u>	<u>\$1.73</u>	<u>2.1%</u>		

It should be noted that other customer's will have slightly varying impacts depending on individual circumstances, such as: service size, monthly consumption and type of service (i.e. water only or wastewater only).

All bulk services (i.e. water depot, septic holding treatment, etc.) have been increased by 3.0% based on increases to the overall underlying costs.

The 2022 Draft Rate Supported Operating Budget and Capital Forecast is fiscally sustainable and based on sound financial principles. There are significant investments in rehabilitation/replacement of infrastructure and provisions for growth while maintaining the integrity of the water and wastewater systems. In addition, based on current projections and assumptions, water and wastewater rates should be relatively stable over the term of Council. However, it should be cautioned, that Provincial legislation can significantly impact municipal operations and senior staff will continue to monitor the political environment and lobby against changes that may impact the affordability of water rates in the Province of Ontario.

Respectfully Submitted,

Mark Merritt, CPA, CA

Chief Financial Officer and General Manager of Financial & Data Services

HALDIMAND COUNTY

2022 Draft Rate Supported Operating Budget and Capital Forecast



For Consideration by Committee of the Whole on January 13, 2022

EXECUTIVE SUMMARY:

The County currently develops three (3) annual budgets as follows:

- Rate Supported (Water and Wastewater) Operating Budget (current year) and Capital Budget (current year plus 9 year capital forecast)
- Tax Supported Capital Budget (current year plus 9 year capital forecast)
- Tax Supported Operating Budget (current year).

Council has approved the following 2022 Budget Timetable:

Draft Budget	Review Date(s)	Additional/Conditional Dates
Rate Supported Operating and Capital Budget	January 13, 2022	n/a
Tax Supported Capital Budget	March 3, 2022	March 4, 2022
Tax Supported Capital Budget	101010113, 2022	(if required)
Tou Companied Operating Dudget	March 21, 2022	April 1, 2022
Tax Supported Operating Budget	March 31, 2022	(if required)

The review and approval of the 2022 Rate Supported Budget will provide for the applicable water and wastewater rates required to fully recover the cost of the relevant systems, as **none** of these costs are funded by property taxes. The subsequent review of the 2022 Draft Tax Supported Operating Budget will provide the basis for the 2022 levy impacts for tax supported operations.

2022 Rate Supported Operating Budget

Notable drivers in the 2022 Rate Supported Operating Budget include:

Water Operations:

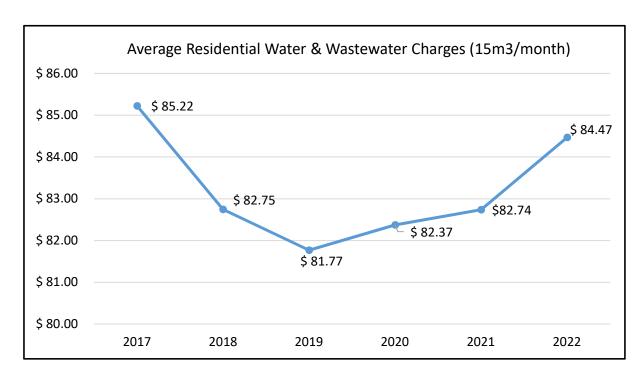
- Revenue increases in bulk water consumption and the annual fire protection charge;
- An increase to the OCWA operations contract based on the approved contract;
- Expenditure increase in the cost for Hamilton Water based on consumption increase and rate change;
- An increases to the insurance requirements based on preliminary estimates and known pressures that are not unique to Haldimand;
- A contribution to the Capital Replacement Reserve Fund Water (CRRF Water) matching the financing principles set out in Capital Summary 3;
- The use of the Water Rate Stabilization Reserve to assist in offsetting some of the cost increases.

Wastewater Operations:

- Expenditure increases to the Veolia operations based on the approved contract, in addition to known increases to chemical costs;
- An increases to the insurance requirements based on preliminary estimates and known pressures that are not unique to Haldimand.

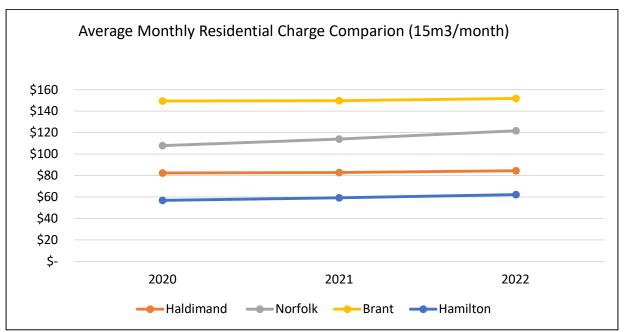
As water and wastewater operations are recovered 100% from the applicable users, changes in consumption patterns can shift the burden to different users. Although setting the fixed component of the bill at 50% will assist in offsetting future shifts in consumption, approximately 25% of the County's total water consumption is derived from 2 major industrial users (includes 4 separate locations). As a result, any fluctuations in their operations can cause large revenue shifts on the volumetric portion of the billing. Though the County's user group is relatively small, the growth mainly related to the development in Caledonia is beginning to impact the end cost to the user, as additional customers will help spread the costs over more users. It should be noted that this growth may also result in additional costs to provide the service.

As a result of the proposed changes, the effective monthly impact on selected standard services is as follows:



Average Monthly Residential							\$	%
Charges (15m3/month)	2017	2018	2019	2020	2021	2022	Change	Change
Water Basic	\$ 21.78	\$ 21.10	\$ 19.80	\$ 20.24	\$20.38	\$ 22.35	\$ 1.97	9.7%
Water Consumption	\$ 15.49	\$ 15.45	\$ 14.85	\$ 14.61	\$14.62	\$ 15.21	\$ 0.59	4.0%
Total Water Charges	\$ 37.27	\$ 36.55	\$ 34.65	\$ 34.85	\$35.00	\$ 37.56	\$ 2.56	7.3%
Wastewater Basic	\$ 25.45	\$ 24.14	\$ 24.03	\$ 24.86	\$24.60	\$ 24.71	\$ 0.11	0.4%
Wastewater Consumption	\$ 22.50	\$ 22.05	\$ 23.09	\$ 22.66	\$23.14	\$ 22.20	\$ (0.94)	(4.1%)
Total Wastewater Charges	\$ 47.95	\$ 46.20	\$ 47.12	\$ 47.52	\$47.74	\$ 46.91	\$ (0.83)	(1.7%)
Total Water & Wastewater Charges	\$ 85.22	\$ 82.75	\$ 81.77	\$ 82.37	\$82.74	\$ 84.47	\$ 1.73	2.1%

To provide context, below is a comparison of the average monthly residential charge to other municipalities.



The majority of the County's customers have both water and wastewater services and, for residential users, will see a slight increase in their overall monthly costs as a result of the proposed 2022 rates. Bulk water users, holding/septic tank customers, and other miscellaneous user rates will experience overall increases relative to the inflationary increase of 3.0% on costs for 2022.

2022 Rate Supported Capital Forecast

The County's Capital Budget process is focused on strategic objectives and long term financial plans.

The 2022 Draft Rate Supported Capital Budget focuses on the following key principles:

• Focus on Replacement/Rehabilitation

- Studies/Reviews/Evaluations
- Provide Service Capacity for Anticipated Growth

A comparison of the gross capital expenditures included in the 2022 Draft Rate Supported Capital Forecast are summarized below:

Gross Expenditures	2021 Budget Average Annual Gross Expenditures	2022 Draft Budget Average Annual Gross Expenditures
Water System	\$4.5 Million	\$12.8 Million
Wastewater System	\$8.2 Million	\$9.9 Million
Total	\$12.7 Million	\$22.7 Million

^{*}increases in the average expenditures in water relate to capital projects fully funded from Norfolk

As the County's Asset Management Plan is an evolving tool, it is anticipated that staff will be better able to predict the capital requirements as they relate to the water and wastewater infrastructure, particularly in the latter years of the forecast. Details of the significant changes over the 2021-2030 Rate Supported Capital Forecast can be found in Capital Summary 1.

As the water and wastewater systems are 100% self-funded from the users, there are limited financing sources and limited customers to spread the burden of expensive project expenditures across (approximately 10,180 users in total). As the individual systems are funded specifically from the users of the relative systems (i.e. water users pay 100% of infrastructure costs related to the water system and wastewater users pay 100% of infrastructure costs related to wastewater systems), the funding sources are different for the two systems. Typically, replacements and rehabilitations, as well as enhancements to existing services and processes that are not growth related, are funded from the applicable capital replacement reserve funds. As the water capital replacement reserve fund is experiencing a significant decline in the first three years of the forecast (reaching a low of approximately \$606,000 in 2022) a significant portion of the Federal Gas Tax allocation was applied to water capital projects. All growth related projects are funded from development charges. Staff took a detailed look at the use of the Gas Tax Reserve Fund while preparing the 2022 Capital Forecast. As a result, all Rate Supported Federal Gas Tax Funding in 2022 is being allocated to Water projects. Moving forward, staff will continue to monitor the use of this grant, and may begin shifting the use of the funds, depending on the capital needs. Currently the split between the Rate Supported Capital Forecast and the Tax Supported Capital Forecast is 50/50, but that can be expected to change as the capital forecast needs are better understood through the further development of the County. If insufficient funds are available from DC receipts, debt will be issued, resulting in the annual debt payments funded from future development charges. Other than growth related debt, this capital forecast does not have any new proposed debt financed projects for water or wastewater projects.

INTRODUCTION/BACKGROUND:

Prudent management, as well as section 290 (1) of the Municipal Act, requires local municipalities to prepare and adopt annual estimates required for the purposes of the municipality, including amounts sufficient to pay all debts of the municipality falling due within the year, amounts required to be raised for sinking funds, and amounts required for any board, commission or other body. A budget is a guide to ensure Corporate Strategic priorities and departmental business plans are achieved. Annual budget estimates ultimately determine the County's revenue requirements and the impact on taxation/user rates to County residents.

Legislative Framework and Budget Process:

Haldimand County is responsible for the purification and distribution of potable water to its users and the collection and treatment of the resulting wastewater. This system is <u>fully funded by the users</u>, with no financial support from property taxes. Capital infrastructure is funded from user rates with offsetting funding from Development Charges and financial assistance from other levels of Government when available.

During 2013, the County completed a comprehensive Water and Wastewater Rate study to review cost allocation methodologies and recovery principles for all water and wastewater customers. This review included a series of public consultations as well as review by Council of the principles and the associated impacts on specific users of the water/wastewater systems.

The principles, as approved during the 2013 water/wastewater rate study, and as amended, continue to be utilized for preparation of the 2022 Draft Rate Supported (Water and Wastewater) Operating and Capital Budget, including:

- Full cost recovery of all operating and capital costs recovered directly from the users of the applicable systems;
- Net costs (i.e. revenues required from rates revenue) will be recovered 50% from fixed revenues (i.e. basic charges) and 50% from variable revenues (i.e. consumption revenues);
- Leachate costs to be allocated based on relative loading at the treatment plant and recovered 50% from fixed revenues and 50% from variable revenues;
- Annual indexing of all miscellaneous revenues based on annual increase of underlying costs.

The Rate Supported Budget is scheduled to be reviewed by Council on January 13th, 2022. It is recommended that the required rate increases take effect February 1st, 2022, upon approval of the draft budget by Council.

A. 2022 DRAFT RATE SUPPORTED OPERATING BUDGET

Rate Supported Operating Process and Budgetary Constraints

The environment for water and wastewater operations is very highly regulated and monitored. The County's treatment facilities are governed by contracts with independent operators who are qualified to meet the stringent legislative requirements. As a result, several financial pressures influence the 2022 Draft Rate Supported Operating Budget that are, to some degree, beyond Council's control.

In addition to these external factors, there are several budgetary constraints that are unique to Haldimand County. The County operates a number of independent water and wastewater systems servicing relatively few users. With only approximately 10,180 users, the County operates four wastewater treatment facilities, four wastewater lagoons, two water treatment facilities, seven water distribution systems and eight wastewater collection systems. Though the County's user group is relatively small, the growth mainly related to the development in Caledonia is beginning to impact the end cost to the user, as discussed further within this report. Additional customers will help spread the costs over more users, however, other factors will impact operations: increased costs for servicing more users, potential loss/reduced consumption by large scale industrial customers; and change in consumption patterns for all users.

2021 Forecasted Operating Variance

Annual rates are impacted by the net costs to be recovered by rates revenues (i.e. increases/decreases in costs or miscellaneous revenue sources). In addition, fluctuations in annual consumption can significantly impact the annual water/wastewater revenues. As a result, to mitigate these fluctuations, the fixed component of the water and wastewater billings was increased to 50% of the total estimated annual revenues starting in 2013. The emphasis on fixed revenues ("basic/base charges") can help alleviate budget variances due to fluctuations in consumption. In addition to this, the County maintains a rate stabilization reserve for both water and wastewater to offset any unanticipated operating variances. As outlined in the draft 2022 operating budget document, the combined water/wastewater forecasted year end 2021 operating surplus is approximately \$22,100.

The following chart outlines the forecasted 2021 surplus/(deficit) for water operations:

2020 Projected Water Operating Surplus/(Deficit)	
Revenues	Surplus/(Deficit)
User Rates Revenue - Regular Residential Consumption	\$162,256
User Rates Revenues - Regular Commercial Consumption	(\$39,328)
Bulk Water Consumption	\$185,358
Nanticoke Industrial Pumping Station - Reduction in recoveries as a result of projected	
hydro surplus (offset below)	(\$342,220)
Miscellaneous items	(\$18,153)
Sub-total Revenues	(\$52,087)
Expenditures	
Hamilton Water Contract - due to increases in consumption	(\$672,300)
Nanticoke Industrial Pumping Station - Reduction in recoveries as a result of projected	
hydro surplus (offset below)	\$342,220
Miscellaneous Items	(\$3,863)
Sub-total Expenditures	(\$333,943)
Net Projected Surplus/(Deficit)	(\$386,030)

The following chart outlines the forecasted 2021 surplus/(deficit) for wastewater operations:

2021 Project Wastewater Operating Surplus/(Deficit)				
Revenues	Surplus/(Deficit)			
User Rates Revenue - Residential Consumption	\$223,563			
User Rates Revenue - Residential Basic Charges	\$25,452			
User Rates Revenues - Regular Commercial Basic Charges	(\$125,859)			
User Rates Revenues - Large Industrial Consumption	\$126,043			
Leachate - higher than anticipated volumes	\$124,660			
Miscellaneous items	(\$3,507)			
Sub-total Revenues	\$370,352			

Expenditures	Surplus/(Deficit)
Various M&R accounts	\$30,377
Miscellaneous items	\$7,430
Sub-total Expenditures	\$37,807
Net Projected Surplus/(Deficit)	\$408,159

There were several items with significant 2021 variances that impact the 2022 operations as follows:

- Fluctuating annual consumption (including increases in residential consumption)
 - o Action: historical averages have been used in calculating consumption predictions, including an estimate of anticipated increases in consumption due to residential growth.
- Greater than budgeted bulk water usage:
 - Action: increases in consumption have been taken in to account in determining the estimated consumption for bulk water customers.
- Higher than budgeted leachate treatment levels;
 - Action: Leachate budget remains the same, as a Leachate Best Practices Study is currently being completed. The study findings will be considered further during preparation of the 2023 budget.
- Hamilton Water Supply costs impacted by fluctuating volumes and increasing rates;
 - Action: The 2022 budget has been adjusted to reflect the anticipated consumption related to the Hamilton Water Supply contract, including increases based on residential growth, as well as rate changes. Staff are also proposing the use of the Water Rate Stabilization Reserve over the next three years to assist in offsetting these increased costs and stabilize the impact on the end user.

2022 Draft Rate Supported Operating Budget Overview

The 2022 Draft Rate Supported Operating Budget, as outlined in this document, represents an overall net <u>increase</u> in total rate revenue requirements of \$857,190 or 6.61% compared to the 2022 budgeted total rates revenue of \$13 million: the water system requires a increase of \$665,430 or 11.25% in rates revenue; the wastewater system reflects an increase of \$191,760 or 2.72% in rates revenue. The relative impact on each system varies: a 1% impact in the water system is equal to approximately \$59,200 in user rates revenue; while a 1% impact on the wastewater system is equal to \$70,500.

The budget summary by major function is outlined below. The 2022 Draft Rate Supported Budget includes a number of impacts as discussed below, resulting in a monthly increase of approximately \$1.73 or 2.1% for the typical residential user (based on a residential service of 1" or less and average consumption of 15 m³ per month – as outlined in Operating Summary 1).

2022 Budget Drivers – Water Operations

WATER OPERATIONS				
	2021 Budget	2022 Budget	increase/(deci	rease)
Expenditures	\$	\$	\$	%
Salaries, Wages & Benefits	2,033,080	2,029,790	(3,290)	-0.16%
Materials	2,401,380	2,440,610	39,230	1.63%
Hamilton Water Supply	2,553,200	3,553,200	1,000,000	39.17%
Contracted Services	601,400	602,100	700	0.12%
Rents & Financial Expenses	10,300	10,300	-	0.00%
OCWA Operating Services Charges	2,100,010	2,181,840	81,830	3.90%
Interfunctional Adjustments	397,640	415,110	17,470	4.39%
Long Term Debt Charges	1,279,440	1,276,310	(3,130)	-0.24%
Transfers to Reserves/Reserve Funds	1,417,000	1,549,590	132,590	9.36%
Total Expenditures	12,793,450	14,058,850	1,265,400	9.89%
Revenues		-		
Bulk Service Charges	1,701,400	1,894,980	193,580	11.38%
General Fees	4,674,330	4,780,920	106,590	2.28%
Transfers from Reserve/Reserve Funds	-	300,000	300,000	
Development Charges Reserve Funds	502,130	501,930	(200)	-0.04%
Total Revenues	6,877,860	7,477,830	599,970	8.72%
Net Revenues Required from User Rates	5,915,590	6,581,020	665,430	11.25%

As noted above, the overall 2022 rates revenue requirement from water users has increased by \$665,430 or 11.25%

Driver	Net Rate Revenues Impact	% Impact
A. Base Budget (net)	\$836,080	14.13%
B. Water Additional Capital Contribution	\$129,460	2.19%
C. Contribution from Rate Stabilization Reserve	(\$300,000)	(5.07%)
Total	\$665,540	11.25%

Details of the water operations budget drivers are outlined below.

A. Base Budget Drivers (net)

As indicated above, the total base budget net operating expenditures <u>increased</u> by approximately \$836,080. This net change is driven primarily by and increase that is required for the Hamilton Water Contract due to an increase to both the rates, as well as a significant increase to the consumption utilized by the County. This increase is offset slightly by an increase in the annual fire hydrant fee rental, as well as an increase to the predicted bulk water consumption.

The major detailed net operational impacts are outlined below:

2022 Draft Water Operating Budget				
Summary of Impact of Base Budget Drivers on Rate Revenue Requirements				
Base Budget:	Increase/ (Decrease)			
Revenues (excludes rate revenues):				
New Credit Water Depot and Residential - based on three year average consumption	\$17,300			
Fire Hydrant Fees - 3.0% increase	\$69,510			
Bulk Water - based on five year average consumption	\$193,580			
Miscellaneous Fees & Recoveries	\$45,990			
Sub-total Revenues	\$326,380			
Expenditures:				
Salaries, Wages and Benefits	(\$3,290)			
OCWA Operations - County share	\$55,280			
Hamilton Water Contract - rate increase	\$130,000			
Hamilton Water Contract - consumption increases	\$870,000			
Interfunctional Adjustments	\$17,470			
Insurance	\$48,600			
Miscellaneous Supplies & Services	\$44,400			
Sub-total Expenditures	\$1,162,460			
Total Base Budget Impact on Rate Revenue Requirements	\$836,080			

B. New Initiatives

There is one New Initiative in 2022, as outlined in Operating Summary 2. Overall, the net rate revenue impact of this initiative in water operations is a decrease of \$300,000 (5.07%) as outlined below:

Description	Rate Revenue Increase/ (Decrease)
New Initiatives	
Contribution from Rate Stabilization Reserve to offset cost increases (three year phase in)	(\$300,000)
Total Initiatives Impact on Rate Revenue Requirements	(\$300,000)

Details of this new initiative can be found in Operating Summary 2.

C. Infrastructure Capital Financing Requirements

Overall, water annual capital financing related impacts on the user rates are **2.19**% in 2022. Capital related impacts include the combination of annual capital replacement reserve fund contributions and debt repayments, as outlined in Capital Summary 4. Essentially, the combined water reserve fund contributions and changes to debt repayments for 2022 increased by \$129,460. As indicated previously, it is recommended to maintain an annual <u>combined</u> water and wastewater rate increase of 1.0% dedicated for capital related impacts over the forecasted period, with an annual shift in additional

contributions to water from wastewater phased in over 10 years. For 2022, the 1% capital contribution was directed completely to water. It is recommended that increases to these capital replacement reserve funds will end in 2024. This plan will be revisited on an annual basis based on projected sources of capital financing and relative capital replacement reserves.

2022 Budget Drivers – Wastewater Operations

WASTEWATER OPERATIONS								
	2021	2022	increase/(decre	ease)				
Expenditures	\$	\$	\$	%				
Salaries, Wages & Benefits	1,045,270	1,033,290	(11,980)	-1.15%				
Supplies & Materials	1,336,090	1,363,260	27,170	2.03%				
Services	356,610	357,320	710	0.20%				
Rents & Financial Expenses	3,400	3,400	-	0.00%				
Veolia Operating Services Charges	2,646,100	2,802,190	156,090	5.90%				
Interfunctional Adjustments	308,460	321,390	12,930	4.19%				
Long Term Debt Charges	1,647,710	2,537,030	889,320	53.97%				
Transfers to Reserves/Reserve Funds	2,084,480	2,118,450	33,970	1.63%				
Total Expenditures	9,428,120	10,536,330	1,108,210	11.75%				
Revenues								
Bulk Service Charges	1,665,540	1,652,340	(13,200)	-0.79%				
Municipal Recoveries	50,500	50,600	100	0.20%				
General Fees	239,770	253,830	14,060	5.86%				
Transfers from Reserves/Reserve Funds	422,000	1,337,490	915,490	216.94%				
Total Revenues	2,377,810	3,294,260	916,450	38.54%				
Net Revenues Required from User Rates	7,050,310	7,242,070	191,760	2.72%				

As noted above, the overall 2022 rates revenue requirement from wastewater users has <u>increased</u> by \$191,760 or 2.72%. Detailed budget drivers are outlined below.

Driver	Net Rate Revenues Impact	% Impact
A. Base Budget (net)	\$191,760	2.72%
B. New Initiatives	\$0	0.00%
C. Wastewater Additional Capital Contribution	\$0	0.00%
Total	\$191,760	2.72%

A. Base Budget Drivers (net)

As indicated above, total net base expenditures increased by approximately \$191,760. Expenditure related impacts include Veolia operating impacts and insurance changes. The major detailed net operational impacts are outlined below:

2022 Draft Wastewater Operating Budget Summary of Impact of Base Budget Drivers on Rate Revenue Requirements					
Base Budget	Increase/ (Decrease)				
Other Revenues (excludes rate revenues)					
Miscellaneous items	\$960				
Sub-total Revenues	\$960				
Expenditures					
Salaries, Wages and Benefits	\$(11,980)				
Veolia Operations - Standard annual increase	\$74,790				
Veolia Operations - Chemical cost increases	\$81,300				
Insurance	\$32,900				
Miscellaneous items	\$15,710				
Sub-total Expenditures	\$192,720				
Total Base Budget Impact on Rate Revenue Requirements	\$ 191,760				

B. New Initiatives

There are no New Initiatives for 2022, as outlined in Operating Summary 2.

C. Infrastructure Capital Financing Requirements

Overall, wastewater annual capital financing related impacts on the user rates were <u>0.0%</u> in 2022, as the entire 1% contribution was allocated to water in 2022. Capital related impacts include the combination of annual capital replacement reserve fund contributions and debt repayments, as outlined in Capital Summary 4. As indicated previously, it is recommended to maintain an annual <u>combined</u> water and wastewater rate increase of <u>1.0%</u> dedicated for capital related impacts over the forecasted period. It is recommended that increases to these capital replacement reserve funds will end in 2024. This plan will be revisited on an annual basis based on projected sources of capital financing and relative capital replacement reserves.

Impacts on Miscellaneous Rates

A comprehensive list of all fees and charges is included in Operating Appendix C – Schedules B through D, inclusive. The intent is to pass a comprehensive water and wastewater by-law that includes all water and wastewater fees, with an effective date of February 1, 2022.

The majority of the revenues derived from miscellaneous charges are the bulk processing fees (i.e. bulk water charges and bulk wastewater treatment charges — leachate, holding/septic tanks and portable toilets) and Fire Protection Charges. These fees and recovery methodologies were covered in detail in the 2013 rate study. The principles adopted as part of the rate study were based on cost allocation methodologies to ensure the users of the systems pay for the full costs of these systems. There are no planned changes to the underlying recovery methodologies in 2022.

Water Miscellaneous Revenues

Miscellaneous revenues represent approximately \$7.4 million in annual revenues for the water system, reducing the user rates revenue by a corresponding amount. These fees are broken down as follows:

- approximately \$2.1 million relates to the recovery of costs associated with the provision of non-potable water to industries in Nanticoke - it should be noted that this budget has been developed with no changes to the cost allocations under the Lake Erie industrial agreement;
- bulk water recoveries represent total revenues of approximately \$1.9 million, with the impacts on the end user outlined below;
- o \$502,000 relates to development charges funding to offset related development related debt payments;
- o fire protection charges represent approximately \$2.4 million which includes an increase of \$69,510 or 3.0%;
- Use of the Water Rate Stabilization Reserve in the amount of \$300,000 to offset increased costs;
 - the remaining miscellaneous fees total approximately \$276,570 and include:
 - property tax recoveries from industry of approximately \$92,000;
 - miscellaneous charges of approximately \$185,000.

These miscellaneous revenues (excluding the New Credit charge as it is covered by a specific agreement) are all proposed to reflect an annual inflationary increase of 3.0% (rounded where applicable), based on the underlying increase in the associated costs to provide these services (subject to the annual budget review).

Ultimately, if the proposed miscellaneous charges are not adopted, the rates to other users of the systems will have to be increased to offset the resulting reduction in revenue.

Staff are also recommending that the Refuse Access Fee (as outlined in Operating Appendix C, Schedule D) be increased from \$32 to \$64 in order to encourage users to allow access to meters. This fee, though important, is not utilized on a regular basis, and as such there is no revenue generation related to this fee included in the proposed budget.

The following summarizes the proposed changes for bulk processing fees:

(i) Bulk Water Charges

Historically Bulk Water charges were based on the methodology outlined in the County's 2013 rate study as approved by Council. The methodology included both a "fixed" component and a variable component. Due to the fluctuations in consumption within this user group, the related rate had been fluctuating in recent years. In order to maintain a level of predictability to these rates, Council adopted a change as part of the 2018 budget to provide for the indexing of the bulk water cubic meter rate based on the underlying cost increases (3.0% for 2021), which is the same approach taken with respect to the septic and holding tank customers a few years ago in order to achieve rate consistency. The proposed 2022 monthly fee is \$18.51 which represents a 3.0% <u>increase</u>. The monthly administration fee will continue to be billed to all customers with consumption in the applicable month. The majority of the revenues generated from these charges relate to commercial water haulers.

For reference purposes, a history of the bulk water rate is included below:

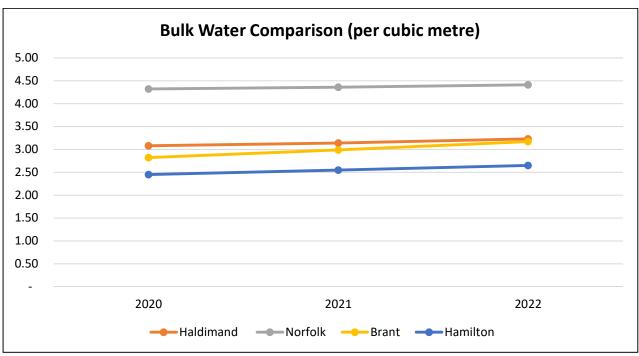
	2013	2014	2015	2016	2017	2018	2019	2020	2012	2022
Bulk Water Rate										
(per m3)	\$3.02	\$2.96	\$2.93	\$2.96	\$2.89	\$2.94	\$3.00	\$3.08	\$3.14	\$3.23

The proposed "per load" impact on a "typical end user", based on the assumptions noted below, is as follows:

Bulk Water Rate (per cubic metre)	2021 Rate	2022 Rate	Cha	inge
Controlled by Haldimand County				
Bulk Water Rate (charged to hauler)	\$3.14	\$3.23	\$0.09	3.0%
Monthly Administration Fee (charged to hauler)	\$17.97	\$18.51	\$0.54	3.0%
Per Load Impact on a "Typical End User" (1	3.6 m3 or 3	,000 gallon	load)	
Water Commodity (determined by Haldimand County)	\$42.78	\$44.06	\$1.28	3.0%
Estimated hauler delivery charge (determined by hauler)	\$85.45	\$88.01	\$2.56	3.0%
Total "End User" estimated cost	\$128.23	\$132.08	\$3.85	3.0%

^{*}assumes 3,000 gallons (approximately 13.6 cubic metres), an equivalent increase to the delivery charge, and excludes any administration fees

A comparison of the bulk water rates from 2020-2022 across select municipalities is included below, for reference purposes:



Wastewater Miscellaneous Revenues

Miscellaneous revenues represent approximately \$3.3 million in annual income for the wastewater system which helps reduce the impact on user rates revenue. These fees are broken down as follows:

- approximately \$1.5 million relates to the leachate treatment cost recovery. The 2022 budget reflects no change in this revenue source as a Leachate Best Practices Study is currently being completed, and the study findings will be considered during preparation of the 2023 budget. As the majority of the costs are allocated based on loading, it is anticipated as leachate strength and volumes decline after the closure of Tom Howe, that these revenues will decline. The associated loading and allocation of costs will be monitored in future years to ensure appropriate costs allocations;
- o the holding/septic tank treatment charges total approximately \$175,300;
- o \$1,337,490 relates to development charges funding to offset related development related debt payments;
- o the remaining miscellaneous fees total approximately \$305,930 and include:
 - "overstrength" charges established under the Sewer Use By-law of \$169,000;
 - sludge storage charges to Norfolk County of approximately \$50,600;
 - miscellaneous charges of approximately \$86,330;

The miscellaneous fees reflect an inflationary increase of 3.0% (rounded as required), based on the underlying increase in the associated cost to provide these services (subject to the annual budget review).

(i) Holding/Septic/Portable Toilet Tank Treatment Charges

As approved by Council during the 2013 rate supported budget review, the recovery methodology for holding and septic tank treatment cost allocation is to allocate the full <u>operating</u> costs associated with these services to the applicable users. Similar to other fixed/miscellaneous fees, it is recommended to increase the "fixed" monthly charge to \$18.51 or 3.0%. The volumetric rates apply equally to all septic, holding tank and portable toilet waste treated at the County's facilities.

When the rate study was approved, Council amended the proposed recovery methodology to exclude specific capital costs associated with this service. As a result, there were no funds to replace any capital failures/repairs/maintenance which will impact the County's ability to provide this service in the future. During the 2015 budget review, Council evaluated options to continue to provide this service and recover the full costs associated therein (i.e. recovery of capital replacement costs) to ensure the sustainability of this service. From this review, Council approved the closure of the Caledonia septage receiving station and recovery of capital costs at the Dunnville receiving plant to provide the necessary capital funding to sustain this service into the future. In addition, all future rates will be indexed similar to other miscellaneous fees.

Based on Council's recommendation, the 2022 holding/septic tank rates have been increased by 3.0% similar to other miscellaneous fees. The proposed administration and treatment fees are paid by all customers that discharge holding tank/septic/portable toilet waste to County treatment facilities.

The impact on the holding/septic tank rates for 2022 is as follows:

Holding/Septic/Portable Toilet Tank Treatment Charge (per cubic metre)	2021	2022	Change					
Controlled by Haldimand County								
Proposed Rate (charged to hauler)	\$15.00	\$15.45	\$0.45	3.0%				
Monthly Administration Fee (charged to hauler)	\$17.97	\$18.51	\$0.54	3.0%				
Per Load Impact on "Typical End User" (9.1 m3	3 or 2,000	0 gallon l	oad)*					
Treatment Cost (determined by Haldimand)	\$136.38	\$140.47	\$4.09	3.0%				
Estimated hauler delivery charge (determined by Hauler)	\$91.57	\$94.32	\$2.75	3.0%				
Total "End User" cost	\$227.95	\$234.78	\$6.84	3.0%				

^{*}based on 2,000 gallon load (approximately 9.1 cubic meters, an equivalent increase to the delivery charge and excludes any administration fees

Impacts on Rates

Water and wastewater rates are impacted by the net revenue requirements, as well as the anticipated consumption by the affected users. As a result, although additional revenues may <u>not</u> be required, anticipated consumption can increase/decrease the relative rates correspondingly (i.e. increased consumption will decrease rates; decreased consumption will increase rates). Given there are different users of each system (i.e. there are approximately 98 water only customers and approximately 89 wastewater only customers), the funding of these two systems must remain autonomous.

For 2022, the water users are required to generate approximately \$6.6 million, which represents an <u>increase</u> in water rate revenue requirements of 11.25%. These revenues are collected by a combination of base water fixed fees and volumetric consumption charges per cubic metre consumed. The required rate revenue for the wastewater users is approximately \$7.2 million in 2022, representing an <u>increased</u> requirement of 2.72%, and it collected using the same methodology as the water system.

As water and wastewater operations are recovered 100% from the applicable users, changes in consumption patterns can shift the burden to different users. Although setting the fixed component of the bill at 50% will assist in offsetting future shifts in consumption, approximately 25% of the County's total water consumption is derived from 2 major industrial users (includes 4 separate locations). As a result, any fluctuations in their operations can cause large revenue shifts on the volumetric portion of the billing.

The number of customers for budgeting purposes reflects the totals from an in-year review, with an incremental increase related the known development coming on in 2022. Similar consumption projections were utilized for wastewater customers with corresponding reductions for large industrial customers (one of the large industrial customers has water only and operates its own wastewater lagoon). A summary of these statistics can be found in Operating Appendix B.

The resulting 2022 water and wastewater user rates are included in Operating Appendix C in this budget document. The proposed rates would be effective on all billings for consumption **effective February 1, 2021**. The intent is to implement rate changes as early in the year as possible to provide the users with a more predictable increase (i.e. one rate increase at the beginning of each year). Additionally, this would provide the flexibility to change the rates during the year to offset anticipated in-year shortfalls as the case may be.

B. 2021 DRAFT RATE SUPPORTED CAPITAL BUDGET AND FORECAST TO 2030

Capital Budget Process/Principles

The County's Capital Budget process has been focused on <u>strategic objectives</u> and <u>long term financial plans</u>. This process provides direction to management when identifying infrastructure needs and implementing a long range financial plan that is sustainable. The County completed a comprehensive Asset Management Plan (AMP) in early 2014 for the following

asset categories: roads, bridges/culverts, storm sewer, water and wastewater. The plan included the required annual reserve contributions based on the anticipated cost and timing of replacement of the assets in these categories. This plan identified some funding shortfalls, in particular, water and wastewater had an annual deficit of approximately \$700,000 (primarily in water). Although this plan was approved in early 2014, it is anticipated to change/evolve over time. The results of both the rate study and AMP will help refine the current long range plan which continues to provide the fundamental basis for the ten year capital forecast.

The 2021 Draft Rate Supported Capital Budget focuses on the following key principles:

- Focus on Replacement/Rehabilitation
- Studies/Reviews/Evaluations
- Provide Service Capacity for Anticipated Growth

Gross Capital Costs Overview

Based on the aforementioned guidelines and principles, the total gross capital expenditures (for the combined water and wastewater systems) are approximately \$222 million for the period 2022 to 2031. Although the current annual capital requirements are realistic and manageable, given the current customer base, there are replacements, not currently within the current 10 year forecast, that require a long range plan to address the associated financial impacts. A long range financial plan to address the replacement of current water and wastewater infrastructure was included as part of the 2013 rate study (the principles from which form the basis for the 2021 Capital Budget and Forecast).

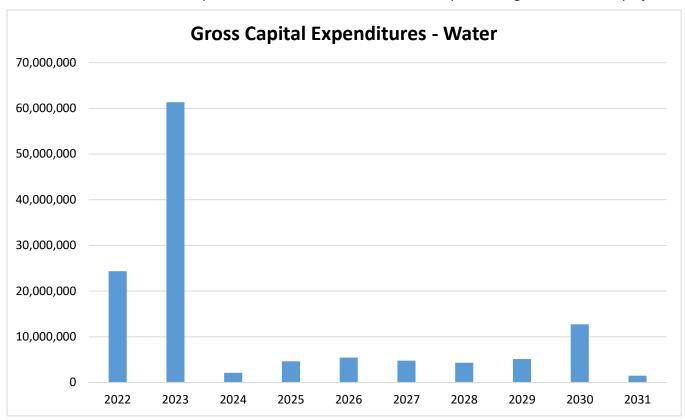
Gross Expenditures	2021 Budget Average Annual Gross Expenditures	2022 Draft Budget Average Annual Gross Expenditures				
Water System	\$4.5 Million	\$12.8 Million				
Wastewater System	\$8.2 Million	\$9.9 Million				
Total	\$12.7 Million	\$22.7 Million				

Water Gross Capital Costs:

A summary of the planned gross capital costs for Water services is presented in the chart below. One major change from the 2021 Capital Forecast is the inclusion of construction of infrastructure in order to supply water to Norfolk. The forecasted capital expenditures related to supplying water to Norfolk total \$67.5 million and include the following projects (all costs recoverable from Norfolk County):

- Nanticoke Water Treatment Plan Capacity Expansion \$8 million in 2022 related to engineering, with construction beginning in 2023 with a budget of \$52 million;
- Nanticoke Transmission Main Services Extension Lake Erie Industrial Park \$3.5 million in construction identified in 2022;
- Nanticoke Transmission Main Service Extension Townsend \$4 million in construction identified in 2022.

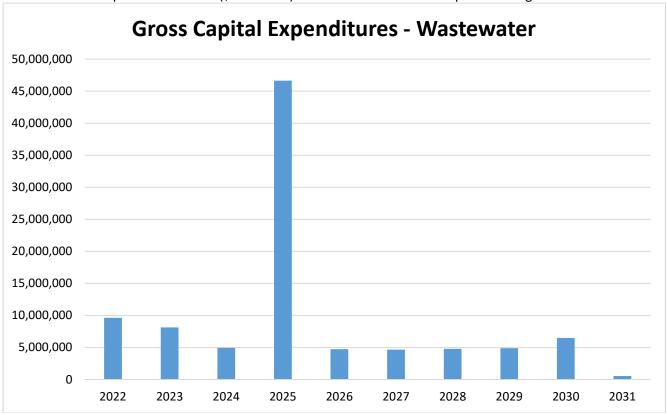
As it is more difficult to predict long term needs, fewer specifically identified projects are scheduled in the final 6 years of the forecast. More detailed inventory and continued studies will better identify the timing of these related projects.



Wastewater Gross Capital Costs

A summary of the planned gross capital costs for Wastewater services is presented in the chart below. Although there are limited overall changes, there are shifts in timing/scope changes for projects that will affect the long range financing plan As it is more difficult to predict long term needs, fewer specifically identified projects are scheduled in the final 6 years of the forecast. More detailed inventory and continued studies will better identify the timing of these related projects.

As can be seen in the follow chart, 2025 has an exceptional increase in capital costs. This relates to the expansion of the wastewater treatment plan in Caledonia (\$45 million) and is funded from Development Charges Debt.

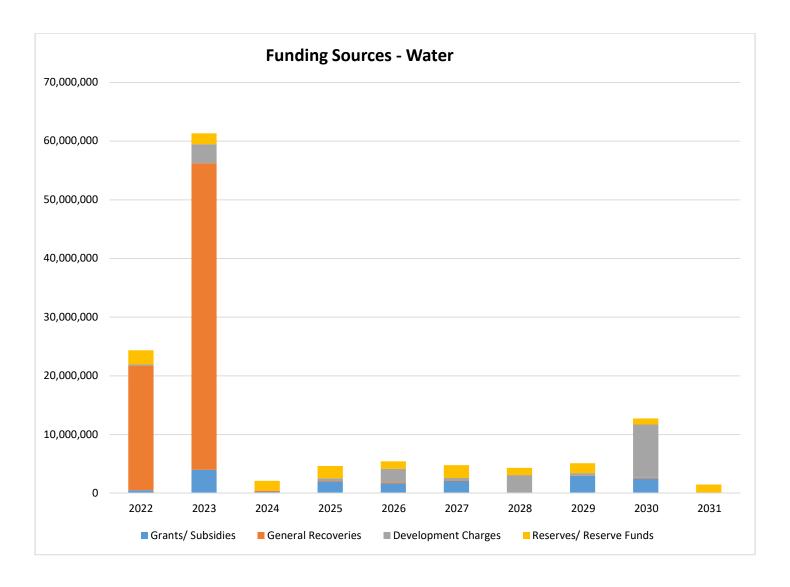


Financing Methodology

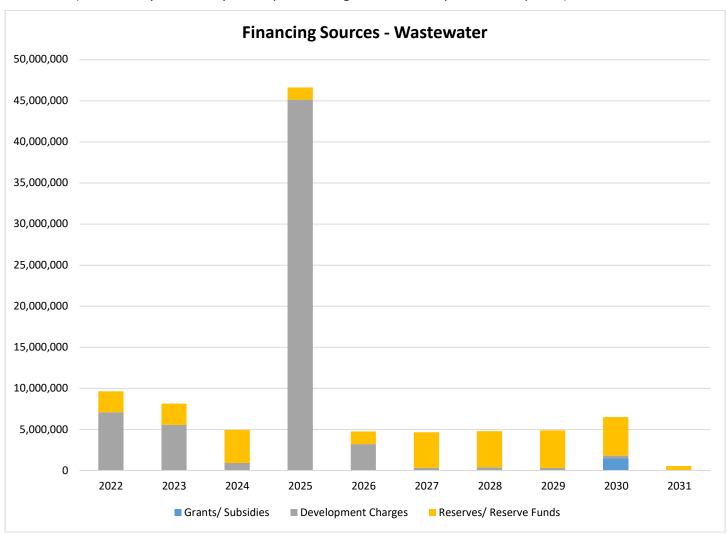
There are limited financing sources available to the County to fund the necessary infrastructure replacements. As the water and wastewater systems are 100% self-funded from the users, there are limited customers to spread the burden of expensive project expenditures across (approximately 10,180 users in total). As the individual systems are funded specifically from the users of the relative systems (i.e. water users pay 100% of infrastructure costs related to the water system and wastewater users pay 100% of infrastructure costs related to wastewater systems), the funding sources are different for the two systems. The sources of financing for specific projects depend on the availability of funds and the nature of the capital projects. A long range plan was developed independently for water and wastewater infrastructure needs based on the 10 year forecasted costs. As a result, the focus of the 2022 Draft Rate Supported Capital Budget and Forecast is **financing**, meaning there are **no** capital projects financed directly from rates. These principles are a major step towards sustainability and lifecycle costing of infrastructure needs – it is the first step in moving from a "cash basis" to an "accrual basis" of funding.

Funding Sources

Funding Sources – Water Projects: As depicted below, much of the financing in the forecast is funded from recoveries (59%) – this is mainly to the expansion of the water infrastructure in Nanticoke in order to provide water services to Norfolk County. The other general recoveries are related to contributions for capital works undertaken on behalf of industries supplied with raw water from Nanticoke or Port Maitland. These projects are primarily funded 100% from the applicable industries utilizing this infrastructure. Staff took a detailed look at the use of the Gas Tax Reserve Fund while preparing the 2022 Capital Forecast. As a result, all Rate Supported Federal Gas Tax Funding in 2022 is being allocated to Water projects. Moving forward, staff will continue to monitor the use of this grant, and may begin shifting the use of the funds, depending on the capital needs. Currently the split between the Rate Supported Capital Forecast and the Tax Supported Capital Forecast is 50/50, but that can be expected to change as the capital forecast needs are better understood through the further development of the County. There have been no announcements regarding grant funding on a go forward basis, therefore no future funding is included within this forecast.



<u>Funding Sources – Wastewater</u>: As depicted below, the much of funding for replacement wastewater capital projects is from the wastewater capital replacement reserve fund (in aggregate, approximately 32% of total funding over the forecasted period). Use of Development Charges for wastewater financing is substantial and represents approximately 66% of total projects financing. As mentioned, the main driver of the significant development charges financing for wastewater projects is as a result of the inclusion of a second wastewater treatment plant in Caledonia in the amount of \$52 million (which is fully financed by Development Charges over the ten year forecast period).

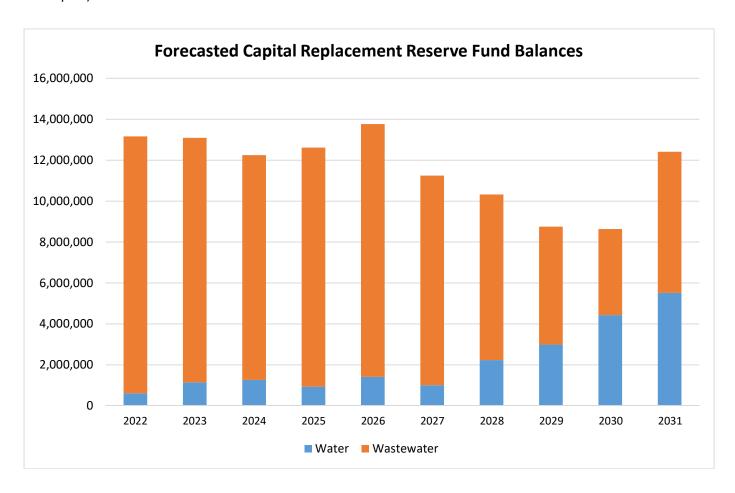


Grant Funding

As indicated above, the only predictable grant funding is the County's annual Federal Gas Tax Allocation (our current allocation is approximately \$2.89 million per year). As outlined in the capital financing principles, 50% of the annual allocation is applied to water/wastewater capital needs, though this allocation is being re-evaluated in conjunction with asset management plans and funding needs. As there is currently a funding deficit in water; more Gas Tax funds have been allocated to the water system. Currently there is no other grant funding included in the rate supported capital forecast. If an application to the Green fund is put forth and approved, this will impact the County's long term financial plan, as any related project has not been budgeted for, and any funding that the County will be responsible for has not currently been captured in the forecast as presented.

Impacts on Reserves and Reserve Funds

As noted above, reserves and reserve funds are a critical component of a municipality's long-term financing plan and represent the major financing source for projected future capital projects. Included in the appendices is a summary of the water and wastewater capital replacement reserve funds. Income for these funds is derived from the County's rate supported operating budget and is used to fund the proposed capital projects included in the 2022 Draft Rate Supported Capital Budget and Forecast to 2031. The following chart outlines the projected balance of the water and wastewater capital replacement reserve funds (impacts on the development charges reserve funds are described in more detail later in this report).



The capital financing principles approved by Council, included in Capital Appendix A, require the respective reserve funds to remain positive over the forecasted period. In addition, any particular year's deficit cannot exceed 25% of the annual contributions to the respective reserve. As outlined in the graph above, the projected balances in the water and wastewater capital replacement reserve funds meet the financial principles outlined above. Although the water capital replacement reserve fund reaches a critically low balance in 2022, it does rebound in subsequent years. A more comprehensive asset replacement program is required in future years to identify specific financing needs so that the impacts on the capital replacement reserve can be re-evaluated at that time.

Capital related impacts include the combination of annual capital replacement reserve fund contributions and debt repayments. As outlined in Capital Summary 4, It is recommended that increases to these capital replacement reserve funds continue until 2024, subject to annual review, to offset the anticipated future disbursements, particularly for water. The annual shift in additional contributions to water from wastewater has been phased in over a number of years but limited to a cumulative annual rate increase of 1.0%. Similar to the allocation of Federal Gas Tax, if future predictable grants are available for water/wastewater infrastructure projects, this reallocation will need to be re-evaluated.

Development Charges (DC)

During the comprehensive update to the Development Charges By-law in 2018/2019, detailed capital projects and the relative growth related proportions were identified. Incorporated in this analysis is the financing of these requirements over the next 10 and 20 years (10 years for parking, leisure, library, general government, cemeteries and ambulance services; 20 years for roads/bridges, fleet, fire services, water/water and storm sewer). As a result, the projects included

in the 2022 Rate Supported Capital Budget and Forecast include the projects outlined in the Haldimand County Development Charge Background Study, dated March 5, 2019 with the exception of a few newly identified projects that will be included in the next DC Background Study in 2024.

During the setting of the development charges rates in 2018/2019, the anticipated timing of receipts in relation to infrastructure needs was evaluated. As a result, it was anticipated that certain development charges reserve funds would be "negative" over the period covered by the current rates. These shortfalls would be offset by growth related borrowing, Development Charge Debt (DC Debt), which would ultimately be collected from future development charges as these costs are fully self financed. A summary of the water and wastewater development charges reserve funds over the forecasted period is included in Capital Appendix D (which includes the impacts of any required DC debt).

Impact on Long Term Debt

As outlined in the Capital Financing Principles (Capital Appendix A), debt financing for rate supported projects is utilized in limited circumstances when insufficient alternative funds are not available.

Proposed New Debt: Over the ten year forecast, there is **NO** new proposed debt financed projects for water or wastewater projects. New debt to be issued over the forecast term includes existing projects where construction is to be completed and debt financed in 2021 or beyond.

Development Charge Debt (DC Debt): As outlined above, it is anticipated that new growth related debt to be recovered from future Development Charges will need to be issued over the forecast period to offset negative cash flows due to timing of Development Charges receipts (i.e. commonly referred to as DC or growth related debt). Over the ten year forecast, there is approximately \$79 million of new debt issuances required to fund specifically identified projects (approximately \$27 million when excluding the new/upgraded Caledonia WWTP).

FUTURE IMPACTS/BUDGET CONSTRAINTS

Although the County has consistently established the Rate Supported Budget as full cost recovery from the users of these systems (i.e. no property tax revenues support the water or wastewater operations or capital infrastructure), there are some areas that still require assumptions and projections that could impact future rates. In addition, as a result of changing legislative environments, operating costs can fluctuate year to year. These will have varying effects on future budgets; and it is anticipated that, through future reviews and closely monitoring actual results, impacts can be minimized. These future issues include:

- Impacts of additional customers and/or consumption patterns related to residential growth.
- Impacts of Reduced Consumption at Large Industrial Users As indicated above, reduced consumption at the 4 large industrial operations (2 separate owners) could have significant impacts on future rates.
- Tangible Capital Asset Reporting and Long Range Asset Management A comprehensive inventory of water and wastewater assets will identify the infrastructure needs for long range infrastructure planning.
- Ongoing Performance Evaluations of Facilities Facility reviews and needs studies may impact future timing of required infrastructure replacements.
- Leachate Treatment Revenues With the transition from landfill operations to a transfer station, the treatment of leachate from these closed landfills will decline over time and affect the revenues generated from the applicable treatment. Further review of leachate management will be completed in the upcoming years.
- Available Balances in Rate Stabilization Reserves The availability of balances in rate stabilization reserves will be
 a major factor in the ability to offset/mitigate any of the above factors in a given year or over a planned timeframe
 (as is currently planned for 2022-2024). These balances need to be managed and monitored to ensure sufficient
 reserves are available.

All of these items could have substantial financial impacts on future County budgets and/or user rates.

CONCLUSION/RECOMMENDATIONS

In light of the current economic times and from a financial perspective, the 2022 Draft Rate Supported Operating Budget and Capital Forecast is fiscally responsible and based on sound financial principles. There are significant investments in rehabilitation/replacement of infrastructure while maintaining the integrity of the water and wastewater system.

Continual revisions to the operating budget process will help the County better allocate resources to manage its operations and develop a long range financial plan with predictable water and wastewater rates.

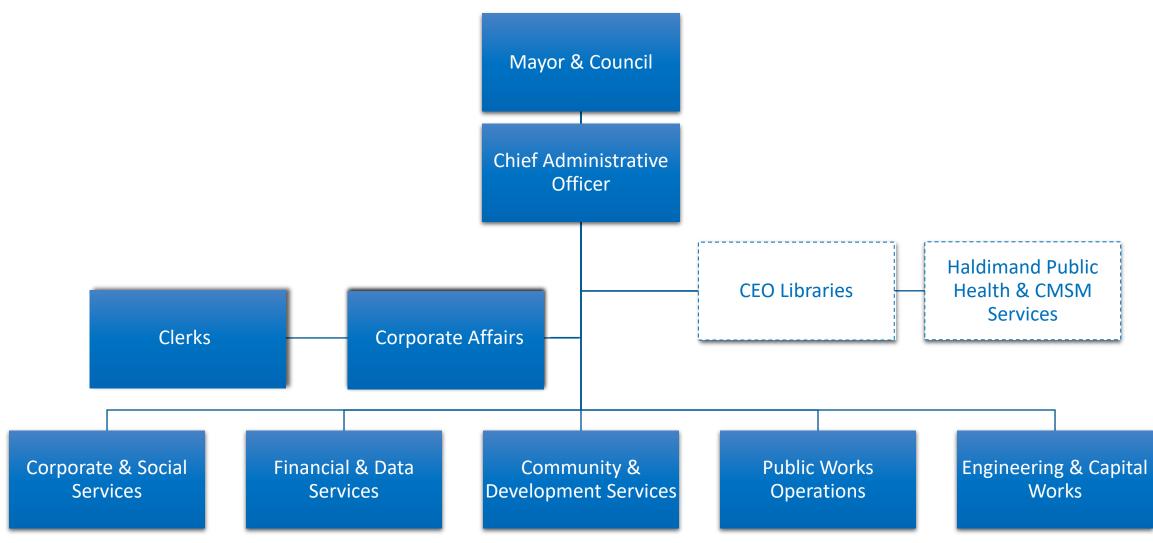
It is, therefore, recommended that Council adopt the 2022 Draft Rate Supported Operating Budget and Capital Forecast and associated revisions to user rates and miscellaneous fees and charges.

Prepared by: Heather Love, CPA, CGA, Supervisor, Budgets & Financial Planning

Respectfully submitted: Mark Merritt, CPA, CA, Chief Financial Officer and General Manager of Financial & Data Services



Governance





Council & Senior Management

Haldimand County Council 2018-2022

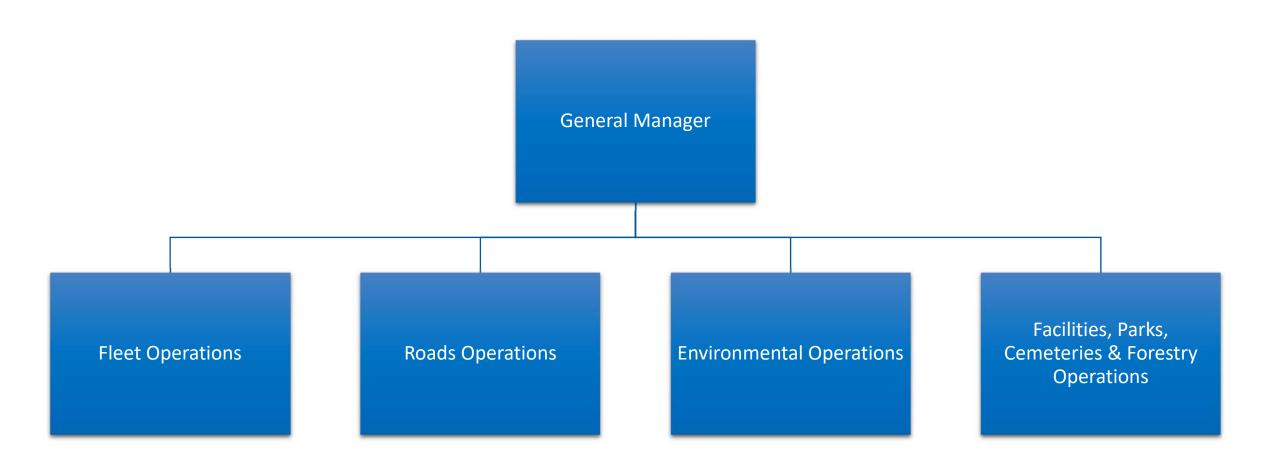
	Mayor	Ken He	ewitt
Ward 1	Stewart Patterson	Ward 4	Tony Dalimonte
Ward 2	John Metcalfe	Ward 5	Rob Shirton
Ward 3	Dan Lawrence	Ward 6	Bernie Corbett

Haldimand County Senior Management

Craig Manley	Chief Administrative Officer	Mike Evers	General Manager, Community & Development Services
Cathy Case	General Manager, Corporate & Social Services	Phil Mete	General Manager, Public Works Operations
Mark Merritt	General Manager, Financial & Data Services	Tyson Haedrich	General Manager, Engineering & Capital Works
Megan Jamieson	Director, Human Resources	David Pressey	Director, Roads Operations

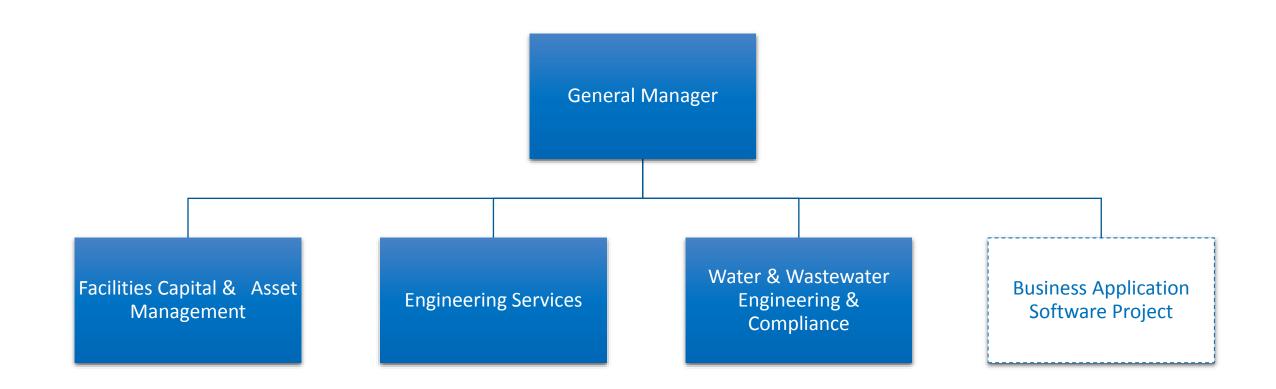


Public Works Operations



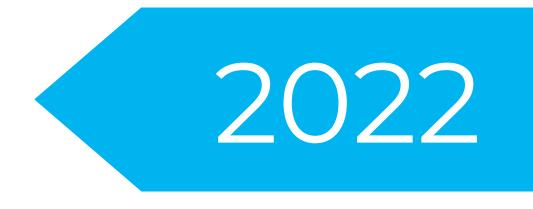


Engineering & Capital Works



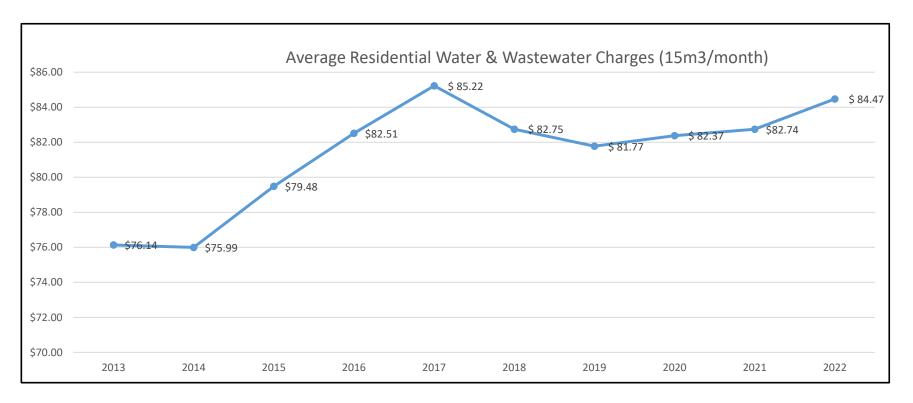
OPERATING BUDGET WATER & WASTEWATER







Average Customer Impacts



Average Monthly Residential Charges (15m3/month)	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	\$ Change	% Change
Water Basic	\$21.85	\$21.86	\$22.08	\$21.47	\$ 21.78	\$ 21.10	\$ 19.80	\$ 20.24	\$20.38	\$ 22.35	\$ 1.97	9.7%
Water Consumption	\$16.41	\$15.33	\$16.01	\$15.82	\$ 15.49	\$ 15.45	\$ 14.85	\$ 14.61	\$14.62	\$ 15.21	\$ 0.59	4.0%
Total Water Charges	\$38.26	\$37.19	\$38.09	\$37.29	\$ 37.27	\$ 36.55	\$ 34.65	\$ 34.85	\$35.00	\$ 37.56	\$ 2.56	7.3%
Wastewater Basic	\$20.51	\$20.99	\$22.54	\$23.73	\$ 25.45	\$ 24.14	\$ 24.03	\$ 24.86	\$24.60	\$ 24.71	\$ 0.11	0.4%
Wastewater Consumption	\$17.36	\$17.82	\$18.85	\$21.49	\$ 22.50	\$ 22.05	\$ 23.09	\$ 22.66	\$23.14	\$ 22.20	\$ (0.94)	(4.1%)
Total Wastewater Charges	\$37.87	\$38.81	\$41.39	\$45.22	\$ 47.95	\$ 46.20	\$ 47.12	\$ 47.52	\$47.74	\$ 46.91	\$ (0.83)	(1.7%)
Total Water & Wastewater Charges	\$76.14	\$75.99	\$79.48	\$82.51	\$ 85.22	\$ 82.75	\$ 81.77	\$ 82.37	\$82.74	\$ 84.47	\$ 1.73	2.1%

2022 New Initiatives Draft Budget Rate Supported Operating Budget		Ha			
Category	Initiative(s)	New Initiative - One-Time	New Initiative - Ongoing	Total New Initiative	Totals per Category
Environmental Operations - Water Water Administration	The County has a rate stabilization reserve for both water and wastewater operations. Annually, any surplus or deficit is contributed or funded from these reserves. This reserve is also intended to help offset any substantial swings in the rates charged to system users. Given the uncontrollable cost increases in the water services in 2022, staff are proposing that a contribution from the water rate stabilization reserve be approved over a three year period in order to mitigate the rate increase for the end users. The use of the rate stabilization reserve will be phased out over a three year period (with \$300,000 utilized in 2022, \$200,000 in 2023 and \$100,000 in 2024). At the end of this timeframe it is anticipated that the stabilization reserve will no longer be required, and the rates will be more stable.	300,000	-	300,000	300,000
TOTAL Rate-Supported Operations New Initiatives		300,000		300,000	1

Change Request

Change Request: AUTO - 1483 - Contribution from Water Rate Stabilization Reserve - Three Year Phase-in

Budget Year: 2022

Budget Program: Water Budget Category: Water Administration

Change Request Category: New Initiative Type: Replacement/Repair unable to accommodate in

oase

Justification: Community Interest Frequency: One-Time

Description:

The County has a rate stabilization reserve for both water and wastewater operations. Annually, any surplus or deficit is contributed or funded from these reserves. This reserve is also intended to help offset any substantial swings in the rates charged to system users. Given the uncontrollable cost increases in the water services in 2022, staff are proposing that a contribution from the water rate stabilization reserve be approved over a three year period in order to mitigate the rate increase for the end users. The following breakdown is being proposed over the next three years:

2022: \$300,000 contribution from the Water Rate Stabilization Reserve

2023: \$200,000 contribution from the Water Rate Stabilization Reserve

2024: \$100,000 contribution from the Water Rate Stabilization Reserve

It is believed that after this three year period rates will then stabilization again, and the use of this reserve will no longer be required.

New Initiative Details	2022 Base Budget	2022 One-Time New Initiative Impacts	2022 Ongoing New Initiative Impacts	2022 Revised Total Budget
Revenues				
Transfers from Reserves/Reserve Funds				
Transfer from Reserves/Reserve Funds		(300,000)		(300,000)
Subtotal		(300,000)		(300,000)
Net Levy Impact		(300,000)		(300,000)

Haldimand County 2022 Draft Rate Supported Operating Budget

Water and Wastewater Summary

Function:

To manage the County's water supply, water and wastewater treatment systems as well as operate and maintain the County's water distribution system, wastewater collection and storm water collection systems.

Services:

The Water & Waste Water Operations Division and the Water & Wastewater Engineering Division are committed to providing safe, reliable drinking water and good economical effluent through the efficient, effective and environmentally responsible operation of the County's Water, Wastewater and Storm Sewer systems.

Services include:

- Contract administration for the Nanticoke and Dunnville water treatment facilities and supply systems
- Operation of the Caledonia and Cayuga water supply systems
- Operation and maintenance of the County's three water systems, including fire hydrants and water meters
- Contract administration for the eight wastewater treatment facilities and 20 sewage pump stations within the County
- Operation and maintenance of the County's eight wastewater collection systems
- Operation and maintenance of the County's eight urban storm sewer systems in partnership with the County's Roads Operations Division
- Ensuring legislative compliance for all aspects of the operation of the water, wastewater and storm facilities
- Assessment and prioritization of short term and long term capital requirements for the water and wastewater and urban storm sewer systems through activities and initiatives designed to enhance understanding of system needs.

Service Issues:

Ensure legislative compliance for all aspects of the operation of the water, wastewater and storm facilities. Continued communication and involvement with industries to ensure compliance with the Sewer use By-Law. Ongoing review and update of the Drinking Water Quality Management System for all water facilities and systems to meet the requirements of the Safe Drinking Water Act. Ensure effluent compliance through continuing optimization at all wastewater treatment facilities. Continuation of upgrade projects in water and wastewater treatment facilities throughout the County to ensure capable plants are in place. Promotion of optimization tools with a focus on data based decision making to enhance process control for all treatment facilities to ensure the production of safe reliable water in sufficient quantity to meet system requirements.

Service Outcomes:

The establishment of a water, wastewater and storm water management program that fosters a team-based approach to ensure the protection of public health and the environment. Resolution of servicing and environmental issues; building trust and positive relationships through strict adherence to legislative requirements and forged partnerships with local industries, the Mississaugas of the Credit First Nation and the City of Hamilton.



Haldimand County 2022 Rate Supported Operating Budget Summary

Corporate Summary By Type

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Expenses:						
Salaries, Wages & Benefits	3,078,350	3,078,350	-	3,063,080	(15,270)	-0.50%
Long Term Debt Charges	2,927,093	2,927,150	57	3,813,340	886,190	30.27%
Materials	6,607,163	6,290,670	(316,493)	7,357,070	1,066,400	16.95%
Contracted Services	5,656,497	5,703,250	46,753	5,942,640	239,390	4.20%
Rents and Financial Expenses	16,334	14,500	(1,834)	14,500	-	0.00%
Transfers to Reserves/Reserve Funds	3,501,480	3,501,480	-	3,668,040	166,560	4.76%
Interfunctional Adjustments	730,790	706,170	(24,620)	736,510	30,340	4.30%
Total Expenses:	22,517,706	22,221,570	(296,136)	24,595,180	2,373,610	10.68%
Revenues:						
General Recoveries	(21,615,724)	(21,297,440)	318,284	(22,455,760)	(1,158,320)	5.44%
Development Charges Reserve Funds	(924,110)	(924,130)	(20)	(1,839,420)	(915,290)	99.04%
Transfers from Reserves/Reserve Funds	-	-	-	(300,000)	(300,000)	0.00%
Total Revenues:	(22,539,834)	(22,221,570)	318,264	(24,595,180)	(2,373,610)	10.68%
Projected Surplus/(Deficit)	(22,128)	-	22,128	-	-	0.00%



Haldimand County 2022 Rate Supported Operating Budget Summary

Water

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Expenses:						
Salaries, Wages & Benefits	2,033,080	2,033,080	-	2,029,790	(3,290)	-0.16%
Long Term Debt Charges	1,279,408	1,279,440	32	1,276,310	(3,130)	-0.24%
Materials	5,290,397	4,954,580	(335,817)	5,993,810	1,039,230	20.98%
Contracted Services	2,684,124	2,700,540	16,416	2,783,130	82,590	3.06%
Rents and Financial Expenses	12,934	11,100	(1,834)	11,100	-	0.00%
Transfers to Reserves/Reserve Funds	1,417,000	1,417,000	-	1,549,590	132,590	9.36%
Interfunctional Adjustments	410,450	397,710	(12,740)	415,120	17,410	4.38%
Total Expenses:	13,127,393	12,793,450	(333,943)	14,058,850	1,265,400	9.89%
Revenues:						
General Recoveries	(12,239,232)	(12,291,320)	(52,088)	(13,256,920)	(965,600)	7.86%
Development Charges Reserve Funds	(502,130)	(502,130)	-	(501,930)	200	-0.04%
Transfers from Reserves/Reserve Funds	-	-	-	(300,000)	(300,000)	0.00%
Total Revenues:	(12,741,362)	(12,793,450)	(52,088)	(14,058,850)	(1,265,400)	9.89%
Projected Surplus/(Deficit)	386,030	-	(386,030)	-	-	0.00%



Haldimand County 2022 Rate Supported Operating Budget

Water Administration

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Expenses:						
Salaries, Wages & Benefits	963,930	963,930	-	939,420	(24,510)	-2.54%
Long Term Debt Charges	1,279,408	1,279,440	32	1,276,310	(3,130)	-0.24%
Materials	230,111	255,840	25,729	295,070	39,230	15.33%
Contracted Services	258,130	277,830	19,700	278,590	760	0.27%
Rents and Financial Expenses	3,300	3,300	-	3,300	-	0.00%
Transfers to Reserves/Reserve Funds	1,417,000	1,417,000	-	1,549,590	132,590	9.36%
Interfunctional Adjustments	257,565	246,910	(10,655)	259,150	12,240	4.96%
Total Expenses:	4,409,443	4,444,250	34,807	4,601,430	157,180	3.54%
Revenues:						
General Recoveries	(36,046)	(22,940)	13,106	(24,840)	(1,900)	8.28%
Transfers from Reserves/Reserve Funds	-	-	-	(300,000)	(300,000)	0.00%
Total Revenues:	(36,046)	(22,940)	13,106	(324,840)	(301,900)	1316.04%
Revenue Required from User Rates	4,373,397	4,421,310	47,913	4,276,590	(144,720)	-3.27%



Haldimand County 2022 Rate Supported Operating Budget

Water Treatment General

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Expenses:						
Materials	4,755,214	4,392,400	(362,814)	5,392,400	1,000,000	22.77%
Contracted Services	2,144,453	2,140,190	(4,263)	2,222,020	81,830	3.82%
Rents and Financial Expenses	3,240	-	(3,240)	-	-	0.00%
Interfunctional Adjustments	70	70	-	70	-	0.00%
Total Expenses:	6,902,977	6,532,660	(370,317)	7,614,490	1,081,830	16.56%
Revenues:						
General Recoveries	(1,767,820)	(2,127,970)	(360,150)	(2,144,350)	(16,380)	0.77%
Total Revenues:	(1,767,820)	(2,127,970)	(360,150)	(2,144,350)	(16,380)	0.77%
Revenue Required from User Rates	5,135,157	4,404,690	(730,467)	5,470,140	1,065,450	24.19%



Haldimand County 2022 Rate Supported Operating Budget

Water Distribution General

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Expenses:						
Salaries, Wages & Benefits	1,069,150	1,069,150	-	1,090,370	21,220	1.98%
Materials	305,073	306,340	1,267	306,340	-	0.00%
Contracted Services	281,540	282,520	980	282,520	-	0.00%
Rents and Financial Expenses	6,394	7,800	1,406	7,800	-	0.00%
Interfunctional Adjustments	152,815	150,730	(2,085)	155,900	5,170	3.43%
Total Expenses:	1,814,973	1,816,540	1,567	1,842,930	26,390	1.45%
Revenue Required from User Rates	1,814,973	1,816,540	1,567	1,842,930	26,390	1.45%



Water Fees and Charges

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Revenues:						
General Recoveries	(4,410,292)	(4,224,820)	185,472	(4,506,710)	(281,890)	6.67%
Development Charges Reserve Funds	(502,130)	(502,130)	-	(501,930)	200	-0.04%
Total Revenues:	(4,912,422)	(4,726,950)	185,472	(5,008,640)	(281,690)	5.96%
Revenue Required from User Rates	(4,912,422)	(4,726,950)	185,472	(5,008,640)	(281,690)	5.96%



Water User Rates Revenues

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Revenues:						
General Recoveries	(6,025,074)	(5,915,590)	109,484	(6,581,020)	(665,430)	11.25%
Total Revenues:	(6,025,074)	(5,915,590)	109,484	(6,581,020)	(665,430)	11.25%
Revenue Required from User Rates	(6,025,074)	(5,915,590)	109,484	(6,581,020)	(665,430)	11.25%



Wastewater

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Expenses:						
Salaries, Wages & Benefits	1,045,270	1,045,270	-	1,033,290	(11,980)	-1.15%
Long Term Debt Charges	1,647,685	1,647,710	25	2,537,030	889,320	53.97%
Materials	1,316,765	1,336,090	19,325	1,363,260	27,170	2.03%
Contracted Services	2,972,373	3,002,710	30,337	3,159,510	156,800	5.22%
Rents and Financial Expenses	3,400	3,400	-	3,400	-	0.00%
Transfers to Reserves/Reserve Funds	2,084,480	2,084,480	-	2,118,450	33,970	1.63%
Interfunctional Adjustments	320,340	308,460	(11,880)	321,390	12,930	4.19%
Total Expenses:	9,390,313	9,428,120	37,807	10,536,330	1,108,210	11.75%
Revenues:						
General Recoveries	(9,376,492)	(9,006,120)	370,372	(9,198,840)	(192,720)	2.14%
Development Charges Reserve Funds	(421,980)	(422,000)	(20)	(1,337,490)	(915,490)	216.94%
Total Revenues:	(9,798,472)	(9,428,120)	370,352	(10,536,330)	(1,108,210)	11.75%
Projected Surplus/(Deficit)	(408,159)	-	408,159	-	-	0.00%



Wastewater Administration

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Expenses:						
Salaries, Wages & Benefits	784,660	784,660	-	768,620	(16,040)	-2.04%
Long Term Debt Charges	1,647,685	1,647,710	25	2,537,030	889,320	53.97%
Materials	163,300	190,190	26,890	217,360	27,170	14.29%
Contracted Services	257,407	279,950	22,543	280,660	710	0.25%
Rents and Financial Expenses	3,300	3,300	-	3,300	-	0.00%
Transfers to Reserves/Reserve Funds	2,084,480	2,084,480	-	2,118,450	33,970	1.63%
Interfunctional Adjustments	229,105	218,730	(10,375)	228,290	9,560	4.37%
Total Expenses:	5,169,936	5,209,020	39,084	6,153,710	944,690	18.14%
Revenues:						
General Recoveries	(34,518)	(22,700)	11,818	(24,600)	(1,900)	8.37%
Total Revenues:	(34,518)	(22,700)	11,818	(24,600)	(1,900)	8.37%
Revenue Required from User Rates	5,135,419	5,186,320	50,901	6,129,110	942,790	18.18%



Wastewater Treatment General

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Expenses:						
Materials	1,053,347	1,047,130	(6,217)	1,047,130	-	0.00%
Contracted Services	2,667,426	2,677,320	9,894	2,833,410	156,090	5.83%
Total Expenses:	3,720,773	3,724,450	3,677	3,880,540	156,090	4.19%
Revenue Required from User Rates	3,720,773	3,724,450	3,677	3,880,540	156,090	4.19%



Wastewater Collection General

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Expenses:						
Salaries, Wages & Benefits	260,610	260,610	-	264,670	4,060	1.56%
Materials	100,119	98,770	(1,349)	98,770	-	0.00%
Contracted Services	47,540	45,440	(2,100)	45,440	-	0.00%
Rents and Financial Expenses	100	100	-	100	-	0.00%
Interfunctional Adjustments	91,235	89,730	(1,505)	93,100	3,370	3.76%
Total Expenses:	499,603	494,650	(4,953)	502,080	7,430	1.50%
Revenue Required from User Rates	499,603	494,650	(4,953)	502,080	7,430	1.50%



Wastewater Fees and Charges

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Revenues:						
General Recoveries	(2,051,728)	(1,933,110)	118,618	(1,932,170)	940	-0.05%
Development Charges Reserve Funds	(421,980)	(422,000)	(20)	(1,337,490)	(915,490)	216.94%
Total Revenues:	(2,473,708)	(2,355,110)	118,598	(3,269,660)	(914,550)	38.83%
Revenue Required from User Rates	(2,473,708)	(2,355,110)	118,598	(3,269,660)	(914,550)	38.83%



Wastewater User Rates Revenues

	2021 Current Forecast	2021 Revised Budget	2021 Surplus/ (Deficit)	2022 Proposed Budget	2022 Budget \$ Incr/(Decr)	2022 Budget % Incr/(Decr)
Revenues:						
General Recoveries	(7,290,246)	(7,050,310)	239,936	(7,242,070)	(191,760)	2.72%
Total Revenues:	(7,290,246)	(7,050,310)	239,936	(7,242,070)	(191,760)	2.72%
Revenue Required from User Rates	(7,290,246)	(7,050,310)	239,936	(7,242,070)	(191,760)	2.72%



Rate Stabilization Reserves

OPERATING APPENDIX A

F	ORECAST OF RATE ST	ABILIZATION RES					
	2020 ACTUALS	2021 FORECAST	2022 FORECAST	2023 FORECAST	2024 FORECAST	2024 FORECAST	2024 FORECAST
	\$	\$	\$	\$	\$	\$	\$
Opening Balance January 1st	1,919,473	2,850,105	2,546,878	2,312,025	1,458,267	1,397,043	1,436,161
Source of Funds:							
Budgeted Annual Contribution							
Surplus/(Deficit) from Operations	874,638	(383,030)					
Interest Earned	55,994	79,803	65,148	46,242	38,776	39,117	40,212
Total Source of Funds	930,631	(303,227)	65,148	46,242	38,776	39,117	40,212
Use of Funds:							
Commitment for Active Projects							
Contribution to Operations			300,000	200,000	100,000		
Potential Contribution to CRRF - Water				700,000			
Total Use of Funds	0	0	300,000	900,000	100,000	0	0
Closing Balance December 31st	2,850,105	2,546,878	2,312,025	1,458,267	1,397,043	1,436,161	1,476,373
Balance in Reserve as a Percentage of Rates Revenue	49.40%	43.05%	39.08%	24.65%	23.62%	24.28%	24.96%
Rates Revenue	5,769,160	5,915,590	5,915,590	5,915,590	5,915,590	5,915,590	5,915,590
Budgeted Annual Contribution as a % of Rates Revenue	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ECAST OF RATE STABI	LIZATION RESERV	F - WASTEWATE	R			
		EARS 2016 TO 20					
	2020	2021	2022	2023	2024	2024	2024
	ACTUALS	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST
	\$	\$	\$	\$	\$	\$	\$
Opening Balance January 1st	3,567,538	1,727,545	2,353,075	2,418,961	2,486,692	2,556,319	1,709,401
Source of Funds:	• •	, ,	• •		• •		
Budgeted Annual Contribution							
Leachate/Overstrength contributions	169,972	169,000					
Surplus/(Deficit) from Operations	435,234	408,159					
Interest Earned	104,587	48,371	65,886	67,731	69,627	53,082	47,863
Total Source of Funds	709,792	625,530	65,886	67,731	69,627	53,082	47,863
Use of Funds:	·	·	·	•	•	·	-
Commitment for Active Projects							
Potential Contribution to CRRF - Wastewater	2,549,786					900,000	
Total Use of Funds	2,549,786	0	0	0	0	900,000	0
Closing Balance December 31st	1,727,545	2,353,075	2,418,961	2,486,692	2,556,319	1,709,401	1,757,264
Balance in Reserve as a Percentage of Rates Revenue	25.39%	33.38%	34.31%	35.27%	36.26%	24.25%	24.92%
Rates Revenue	6,803,540	7,050,310	7,050,310	7,050,310	7,050,310	7,050,310	7,050,310
Budgeted Annual Contribution as a % of Rates Revenue	2.50%	2.40%	0.00%	0.00%	0.00%	0.00%	0.00%

Utilizing historical deficits data, it is prudent to ensure a reserve balance of 25% of rates revenue; this was a four year plan to ensure the annual contribution is approximately 3% of rates revenue starting in 2014. As both the water and wastewater rate stabilization reserves contain healthy balances, contributions ceased in 2018.

Staff will continue to monitor the reserve balances for the potential requirement of additional contributions.

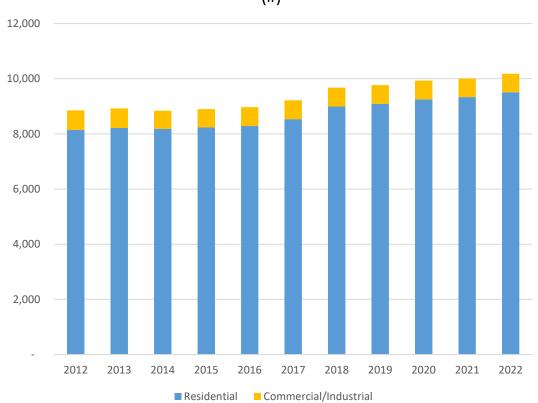
If the balance within the reserve is greater than 25% of rates revenue for four years in a row, the additional amount will be contributed to CRRF to assist in offsetting potential increases required for the capital program and implementation of asset management.

Due to budget pressures in the water operations budget, the rate stabilization reserve is being utilized over the period of 2022 to 2024 to help reduce the impact on the end users.



Consumer and Consumption Statistics

Residential & Commercial/Industrial Water Consumers (#)



Includes all water customers, including standby regardless of consumption usage.

Validation of customer data has been completed since 2014. Previous years are based on estimates.

2022 Consumers based on validation of current users and anticipated growth.

Water Consumption (m3) 3,500,000 3,000,000 2,500,000 2,000,000 1,500,000 1,000,000 500,000 2013 2014 2015 2016 2017 2018 2019 2020 2021

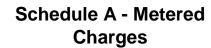
2022 average monthly residential consumption is forecasted to be approximately 15 m3

■ Residential Water Consumption (m3) ■ Commercial/Industrial Water Consumption (m3)



WATER AND WASTEWATER FEES AND SERVICE CHARGES BY-LAW INDEX OF SCHEDULES

Schedule	Division
Α	Water and Wastewater Metered Charges
В	Water and Wastewater Bulk Service Charges
С	Water and Wastewater General Fees
D	Water and Wastewater Access Refusal and Tampering Charges
E	Fees and Charges Cost Calculation Template
Note	 Housekeeping changes, if any, will been highlighted on the related schedule.



Water and Wastewater l Charges	Metered	Description	2021 Charge	2022 Charge	% Increase		
Water							
Consumption Charges		\$/m3	\$0.9747	\$1.0139	4.03%		
Consumption Charges	\$/month l	pased on domestic service size	ψ0.9747	ψ1.0109	4.0370		
Pagia Chargos:	φ/1110111111	Service Size:	see below	see below	2/0		
Basic Charges:			See below	See below	n/a		
D4/04	mm	inches	#00.00	#00.05	0.070/		
R1/C1	16 & 19	5/8 & 3/4	\$20.38	\$22.35	9.67%		
R2/C2	25	1	\$20.38	\$22.35	9.67%		
R3/C3	37	1.5	\$115.14	\$126.28	9.67%		
R4/C4	50	2	\$250.25	\$274.46	9.68%		
C5	75	3	\$440.39	\$482.99	9.67%		
C6	100	4	\$875.89	\$960.62	9.67%		
C7	150	6	\$1,629.30	\$1,786.91	9.67%		
C8	200	8	\$2,782.96	\$3,052.17	9.67%		
	•	Consumption charge: 15					
		m3/month (20 m3/month in	\$14.62	\$15.21	4.03%		
Flat Rate		2020)	ψ 0 2	ψ.σ. <u>=</u> .	110070		
. iai riaio		R1/C1 Basic Charge	\$20.38	\$22.35	9.67%		
		Total Flat Rate	\$35.00	\$37.56	7.31%		
	When	property temporarily discontinu					
Standby Charge	арріісаві	e service size until connection is	s in piace. The stan /ater charge.	aby charge represe	ents the Basic		
Wastewater							
	1	\$/m3	¢4 E40E	¢4 4000	4.020/		
Consumption Charges	(↑/ma a m t la l	•	\$1.5425	\$1.4803	-4.03%		
Dania Ohanna	\$/monum	pased on domestic service size	1 . 1 .	and balance	/ n		
Basic Charges:		Service Size:	see below	see below	n/a		
2.12.	mm	inches	^	A -1-1			
R1/C1	16 & 19	5/8 & 3/4	\$24.60	\$24.71	0.42%		
R2/C2	25	1	\$24.60	\$24.71	0.42%		
R3/C3	37	1.5	\$139.00	\$139.59	0.42%		
R4/C4	50	2	\$302.10	\$303.38	0.42%		
C5	75	3	\$531.63	\$533.89	0.42%		
C6	100	4	\$1,057.36	\$1,061.84	0.42%		
C7	150	6	\$1,966.87	\$1,975.20	0.42%		
C8	200	8	\$3,359.54	\$3,373.78	0.42%		
Flat Rate		Consumption charge: 15 m3/month (20 m3/month in 2020)	\$23.14	\$22.20	-4.03%		
		R1/C1 Basic Charge	\$24.60	\$24.71	0.42%		
		Total Flat Rate	\$47.74	\$46.91	-1.74%		
Standby Charge	propert system	a property temporarily disconting is being developed or re-devenue, a standby charge is billed base nection is in place. The standby	nues the use of the sloped and discontined on the basic rate	wastewater system ues the use of the for the applicable	or when a wastewater service size		
Water and Wastewater Arrea	ars						
Transfer to Taxes	Non-pa	ayment will result in the outstand property owners	_	-	the current		
Transfer to Taxes - Tenants	Non-pay	Property owners tax account within 60 days. Non-payment by a tenant will result in the outstanding amount due being transferred to the property owner's tax account within 60 days.					



Schedule B - Bulk Service Charges

Water and Wastewater Bulk Service Charges	Description	2021 Charge	2022 Charge	% Increase
Water				
Bulk Water Consumption Rate	\$/m3	\$3.14	\$3.23	3.00%
Bulk Water Administration Fee	for months with billable consumption	\$17.97	\$18.51	3.00%
Bulk Water	Account Activation Fee (note: accounts will be deactivated if there is no consumption in the prior twelve month calendar year)	\$29.48	\$30.36	3.00%
Bulk Water	Re-Activation Fee	\$29.48	\$30.36	3.00%
New Credit Wholesale Rate	\$/m3 (12% reduction of metered water charge based on agreement)	\$0.86	\$0.89	4.03%
Wastewater				
Bulk Wastewater Disposal	Leachate - Local Volumetric Charge (\$/m3)	\$20.47	\$20.90	2.13%
Bulk Wastewater Disposal	Leachate - Base Charge	\$724,200	\$724,200	0.00%
Bulk Wastewater Disposal	Leachate - Haldimand Leachate Capital Charge (annual)	\$27,137	\$27,137	0.00%
Effluents exceeding the wastewater use by- law limits		cost recovery plus Admin Fee	cost recovery plus Admin Fee	n/a
Bulk Wastewater Disposal Consumption Rate	Blended Septic/Holding Toilet Waste (per m3)	\$15.00	\$15.45	3.00%
Bulk Wastewater Disposal Administration Fee	Septic/Holding Tank/Portable Toilet Hauler Administration Fee (per month) for months with billable disposable volumes	\$17.97	\$18.51	3.00%



Schedule C - General Fees

Schedules should be read in conjunction with the By-Law for all applicable terms and conditions.

Water and Wastewater General Fees	Description	2021 Charge	2022 Charge	% Increase
Connection Permits and Fees				
Charges payable to the Corporation of H	Haldimand County for permits, inspections, material and labour. connection.	Charges vary dep	ending on type and	d size of
Missed Appointment Fee		\$97	\$100	3.09%
Water Connection	Main to Street Line: Includes Inspection and Main Tap (contractor to supply all materials)	\$371	\$382	2.96%
Water Meter	Water Meter for new construction	Meter Cost	Meter Cost	n/a
	5/8" or 3/4" Meter	\$299	\$308	3.01%
	1' Meter	\$352	\$363	3.13%
	1.5" Meter	\$682	\$702	2.93%
	2" Meter	\$885	\$912	3.05%
Water Main Service Connection 100mm (4") Diameter and Larger	Inspection includes: operating valves to isolate main, installation inspection, pressure test verification, meter and backflow installation, hi range chlorine sampling, flushing (contractor to tap main and supply all materials)	\$97 per hour	\$99 per hour	3.09%
Bacteriological Testing for New 100mm (4") Diameter & Larger	Water Mains or Services - includes sampling and transport to accredited laboratory per sampling site	\$201	\$207	2.99%
Water Disconnection Inspection	Inspection Only (contractor to supply all materials)	\$97	\$100	3.09%
Sanitary Sewer Service Connection 100mm (4") Diameter	Main to Street Line - Includes Inspection and Main Tap (contractor to supply all materials)	\$371	\$382	2.96%
Other Sanitary Sewer Service Connection Diameters	Main to Street Line: 150mm (6") or Greater Diameter: Inspection Only	\$176	\$181	2.84%
Sanitary Sewer Disconnection Inspection	Inspection Only (contractor to supply all materials)	\$97	\$100	3.09%
Connection Fees	Existing house to connect to the water system - per Development Charges By-law for Singles and Semis	per Development Charges By-law	per Development Charges By-law	n/a
Connection Fees	Existing house to connect to the sewer system - per Development Charges By-law for Singles and Semis		per Development Charges By-law	n/a
Connection Fees	Monthly Fee for new construction prior to the meter installation. Based on Flat Rate of 20 m3 volume for Water and Wastewater. Monthly fee will be charged until a water meter is installed.	Flat Rate Water and Wastewater	Flat Rate Water and Wastewater	n/a
Testing of Water Meters				
·	Customers may request that their water meter be tested. If must pay carrying charges and cost of testing, in addition following is an excerpt from Haldimand County's Water Use meters works	to payment in full o By-Law describing	f the bill(s) in quest	ion. The
Testing Requests	"No person shall test any meter except the Water Purveyor. meter by an owner or agent of the owner. If the meter is for water bill accordingly. A new or rebuilt displacement meter deemed to be inaccurate if it records outside of the accurating intermediate flows and 95.0 to 101.0 percent on low flows. Normalti-jet meters and propeller meters from 50mm (2") to 250r they record 2 percent higher or lower than the manufacturers of all sizes will be deemed to be inaccurate if they record out A rebuilt meter is defined as one that has had the measuring repaired meter is defined as one that has had the old meter is defined as one that has had the old meter is defined as one that has had the old meter is defined as one that has had the old meter is defined as one that has had the old meter is defined as one that has had the old meter is defined as one that has had the old meter is defined as one that has had the old meter is defined as one that has had the old meters.	and to be inaccurated from 17mm (5/8) acy limits of 98.5 to ew and rebuilt comm (10") in size will recommended accurate element replaced v	te, Haldimand shall to 50mm (2") in size to 101.5 percent on apound meters, turk I be deemed to be curacy limits. Repay limit of 90 percer with a factory-made	adjust the ze will be high and bine meters, inaccurate if aired meters at minimum. new unit. A
External Testing	Testing done at customer's request - includes meter removal, shipment and cost of test	100% cost recovery	100% cost recovery	n/a
Water Turn On/Off				
	ed on or off due to an internal plumbing problem or for seasonalue to non-payment of a bill. The following is an excerpt of Hale			and County

"No person shall turn off or turn on a water service except the Water Purveyor. If the Water Purveyor is requested to turn off or turn on a water service, a service charge as detailed in Miscellaneous Charges is to be paid, it being understood that no water service will be turned off or turned on unless the consumer or another person authorized in writing to act on his behalf, is present on the premises."

During Normal Working Hours	Water Turn On	\$97	\$100	3.09%
During Normal Working Hours	Water Turn Off	\$97	\$100	3.09%



Schedule C - General Fees

Water and Wastewater General Fees	Description	2021 Charge	2022 Charge	% Increase
During Normal Working Hours	Water Turn On/Off Same Day for Fix and Repair	\$109	\$112	2.75%
During Normal Working Hours	Water Turn On and Meter Reconnection	\$109	\$112	2.75%
During Normal Working Hours	Water Turn Off and Meter Disconnection	\$109	\$112	2.75%
During Normal Working Hours	Water Meter Removal or Install	\$20	\$21	5.00%
Outside of Normal Working Hours	Water Turn On	\$213	\$219	2.82%
Outside of Normal Working Hours	Water Turn Off	\$213	\$219	2.82%
Outside of Normal Working Hours	Water Turn On and Meter Reconnection	\$256	\$264	3.13%
Outside of Normal Working Hours	Water Turn Off and Meter Disconnection	\$256	\$264	3.13%
Outside of Normal Working Hours	Water Meter Removal or Install	\$43	\$44	2.33%
Winter Control Service Calls				
	ay call the County to perform certain services caused by cold w			
Thawing Frozen Water Service Lines	During Normal Working Hours (per hour) (min. 1 hr)	\$145 	\$149	2.76%
Thawing Frozen Water Service Lines	Outside of Normal Working Hours (per hour) (min. 2 hrs)	\$255	\$263	3.14%
Replacement of Water Meter due to Frost Plate damage	During Normal Working Hours	Meter Cost plus \$97	Meter Cost plus \$99	3.09%
Replacement of Water Meter due to Frost Plate damage	Outside of Normal Working Hours	Meter Cost plus \$254	Meter Cost plus \$259	1.97%
	5/8" or 3/4" Meter	\$299	\$308	3.01%
	1" Meter	\$352	\$363	3.13%
	1.5" Meter	\$682	\$702	2.93%
	2" Meter	\$885	\$912	3.05%
Sanitary Sewer Rodding/Teley Video				
If County staff determine that a sewer line blo	ockage is the property owner's responsibility, the charges below working hours will be charged a minimum 2 hours.	will be billed. Serv	ices provided outsi	de of normal
Sanitary Sewer Rodding	During Normal Working Hours - each full or additional hours (min. 1 hr)	\$284	\$293	3.17%
Sanitary Sewer Rodding	Outside of Normal Working Hours - each full or additional hours (min. 2 hrs)	\$499	\$514	3.01%
Sewer Video	Sewers will be videoed during normal working hours only. Rate is per hour with a minimum of a one (1) hour charge	\$241	\$248	2.90%
Dye Testing	During normal working hours (min. 1 hr)	\$142	\$146	2.82%
Dye Testing	Outside of normal working hours (min. 2 hrs)	\$250	\$258	3.20%
Vactor Charge	During normal working hours (min. 1 hr)	\$296	\$305	3.04%
Vactor Charge	Outside of normal working hours (min. 2 hrs)	\$542	\$558	2.95%
Wastewater Charges Sewer Sludge Storage Costs	Sludge Storage - Townsend Lagoon per Cubic Meter (m3)	\$4.846	\$4.992	3.00%
Sanitary Discharge Agreement	Over-strength discharge fee formula "R" value ("R" means the rate for sewage treatment in\$/m3 of sewage flow as set out from time to time by the County)	\$1.07	\$1.10	3.00%
Sanitary Discharge Agreement Sanitary Discharge Agreement	New discharger information report administrative fee Existing discharger information report administration fee	\$258 \$258	\$266 \$266	3.10% 3.10%
Sanitary Discharge Agreement Sanitary Discharge Agreement	Sanitary discharge agreement annual administration fee	\$258 \$1,547	\$266 \$1,593	3.10% 2.97%
Sanitary Discharge Agreement	Sanitary discharge agreement amendment request application processing fee	\$258	\$266	3.10%
Sanitary Discharge Agreement	Application for a hauled sewage discharge permit processing fee	\$258 \$266		3.10%
Sanitary Discharge Agreement	Annual hauled sewage discharge permit processing fee	\$258	\$266	3.10%
Sanitary Discharge Agreement	Haldimand County assistance with all other additional requests	100% Cost Recovery	100% Cost Recovery	n/a
Wastewater Discharge Program	Application fee	\$258	\$266	3.10%
Wastewater Discharge Program	Engineering Compliance Report	100% Cost Recovery	100% Cost Recovery	n/a



Schedule C - General Fees

Water and Wastewater General Fees	Description	2021 Charge	2022 Charge	% Increase
Wastewater Discharge Program	Meter Testing, Meter Calibration, Meter Installation, Other administrative costs	100% Cost Recovery	100% Cost Recovery	n/a
Other Services				
Inspection of external services		100% Cost Recovery	100% Cost Recovery	n/a
Installation of Communication Antennae System on County Facilities	Other Agencies or Departments of the County	No Charge	No Charge	n/a
Installation of Communication Antennae System on County Facilities	Local Emergency Services, Provincial and Federal Agencies or Ministries per year, per mounting	\$2,821	\$2,906	3.01%
Installation of Communication Antennae System on County Facilities	Private Enterprises	Per Contract	Per Contract	n/a
Administration Fees and Late Payment Int	erest Charges			
Note: the	following charges may be administered by a 3rd party on behal	If of the County		
Arrears Certificate		\$16.75	\$17.50	4.48%
Non-sufficient Funds Charge (NSF)		\$36.50	\$38.00	4.11%
Credit Reference/Credit Check		\$17.00	\$17.50	2.94%
Account Setup Charge		\$34.00	\$35.00	2.94%
Late Payment Interest Charges:				
	Per Month	1.25%	1.25%	n/a
	Per Year	15.00%	15.00%	n/a
Transfer to Property Tax Account for Collection	\$34.00	\$35.00	2.94%	



Schedule D - Refusal & Tampering

Water and Wastewater Access Refusal and Tampering Charges	Description	2021 Charge	2022 Charge	% Increase									
Refusal of Entry for Inspection, Installation	n, Repair or Replacement of Meters/Equipment, \	Nater Service Lea	ks										
These fees outline the applicable charges to residents who refuse access required for maintenance, inspection, installation, repair or replacement of meters/equipment.													
Disconnect from the System	Applicable to non-paying derelict properties. Costs to be recovered by the owner. Disconnect at property line or main is at the discretion of the County. Charges unpaid will be added to tax account following proper process	100% Cost Recovery	100% Cost Recovery	n/a									
Refuse Access	Shut off - this is only an option if owner is refusing access and not paying their bill	100% Cost Recovery + continuation of monthly basic charge fee	100% Cost Recovery + continuation of monthly basic charge fee	n/a									
Refuse Access	Monthly meter read estimate	\$32.00	\$64.00	100.00%									
Refuse Access	Police attendance for enforcement	100% Cost Recovery	100% Cost Recovery	n/a									
Refuse Access	Court costs to gain entry	100% Cost Recovery	100% Cost Recovery	n/a									
Meter Pit Installation	Applicable cost for owners who refuse access to property	100% Cost Recovery	100% Cost Recovery	n/a									
Tampering	Charge for tampering with Water Meter and/or Water Service. All costs of repairs to services and equipment will be recovered 100% in addition to the Tampering Charge and estimated consumption charges.	\$541.00	\$557.00	2.96%									
When it is determined that a meter fails to re	egister accurately the quantity of water consumed, dues timated by the County.	ring the period of s	such failure the qua	ntity shall be									

OPERATING APPENDIX C SCHEDULE F FEES AND CHARGES COST CALCULATION TEMPLATE Service/Activity to be calculated: Description of Service/Activity: Input required in yellow cells only. The only items requiring input on this tab are those highlighted in yellow. This sheet is a summary tab of all of the input completed on the subsequent tabs and is used to calculate the final costs for the fee to be charged. There are hyperlinks in the title of each section below which will bring you directly to the tab where the input is required. Please insert the name of the user fee under Service/Activity to be calculated along with a description of the fee under Description of Service/Activity If the fee is to be offset by a revenue source (i.e. Subsidized by levy, grant funding, etc), enter the percentage or the dollar value of the reduction under Ancillary Revenues on this tab. Once all information has been input, the total fee will be calculated in cell <u>G59.</u> If you plan on adjusting the fee (i.e. Rounding, or changing for any other purpose), please input the adjust amount, or duplicate the amount in cell G59 in cell G60. Ensure you document why the value is different in the Comment section. Finally, please select from the drop down beside Applicable Taxes. If you are unsure what applies here, please contact your financial analyst for assistance. COSTS: DESCRIPTION OF COSTS/SERVICES: HOURS/UNI ESTIMATED COSTS: HOURS/UNITS: DIRECT COSTS: GES & BENEFITS: Staffing Costs: Hours x Hourly Rate 0.00 \$0.00 \$0.00 Staffing Benefit Costs: County Average Benefit Percentage 48% 0.00 \$0.00 Supervisor Costs: Hours x Hourly Rate County Average Benefit Percentage Supervisor Benefit Costs: 48% \$0.00 VEHICLE COSTS: Vehicles Used: # of Vehicles Used: Operating Hours: 0 \$0.00 \$0.00 \$0.00 MINSITRATIVE COSTS: Inspection Costs: Number of Staff x Hours x Hourly Rate 0.00 \$0.00 Benefits: County Average Benefit Percentage 48% \$0.00 Cost of Photocopying & Paper Photocopying \$0.00 Cost for Regular Mail Mailing \$0.00 Filing Copying & Filing Internal Copies \$0.00 OTHER COSTS: Description: Cost Per Unit: Units: \$0.00 \$0.00 0 \$0.00 0 \$0.00 \$0.00 \$0.00 TOTAL DIRECT COSTS: \$0.00 Department Overhead Allocation Allocation to Department of Allocation (%) \$0.00 Council, CAO, Finance, Clerk's & General Overhead (%) County General Admin Overhead \$0.00 TOTAL INDIRECT COSTS: \$0.00 TOTAL COSTS: \$0.00 Grants & Offsetting Revenues Less: Ancillary Revenues: \$0.00 Percentage: \$ Amount: \$0.00 \$0.00 CALCULATED USER FEE \$0.00 ADJUSTED USER FEE APPROVED BY COUNCIL Applicable Taxes Final User Fee Including

	rillar Oser ree ilicidulii	Ψ0.00
Comments:		

DRAFT RATE SUPPORTED CAPITAL FORECAST WATER & WASTEWATER







Project Title	Stage of Good Repair/Nev	v Explanation	Change Type	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
rioject ritie	Initiative	LAPIGNATION	Change Type	2022	2023	2024	2023	2020	2027	2020	2023	2030	2031	Total
Water														
Caledonia Water Distribution														
North Water Storage Expansion	New/Enhanced Service	Costing reassessed in 2022 and resulted in an increase	Scope Increase					25,700		81,500		947,400		1,054,600
Twinning of 450mm Water Main on Hwy 6	New/Enhanced Service	Costing reassessed in 2022 and resulted in an increase	Scope Increase					101,100						101,100
Twinning of 350mm Water Main on Hald Rd	New/Enhanced Service	Costing reassessed in 2022 and resulted in an increase	Scope Increase									273,600		273,600
Booster Station Upgrades	Replacement/State of Good	Costing reassessed in 2022 and resulted in an increase	Scope Increase					155,700						155,700
	Repair		•											
Caithness Street - Cameron to Argyle [CIW] [R] Replacement/State of Good	Project added in 2031 for construction	Project Added									1,023,300		1,023,300
[SS]	Repair													
Aberdeen St - Burke to Sutherland [CIW] [R]	Replacement/State of Good	Project identified for 2022 for 2025 Construction, previously a	Scope Increase				115,300							115,300
	Repair	Placeholder for Replacement of Cast Iron Watermains					454 200							454 200
Gypsum Ave - Argyle to End [CIW] [R] [SS]	Replacement/State of Good	,	Scope Increase				161,300							161,300
Inverness St - Caithness St to Sutherland [CIW	Repair	Placeholder for Replacement of Cast Iron Watermains Project identified for 2022 for 2025 Construction, previously a	Coope Increase				201,700							201.700
[R] [SS]	Repair	Placeholder for Replacement of Cast Iron Watermains	Scope Increase				201,700							201,700
Inverness St - Sutherland to Orkney [CIW] [R]			Scope Increase				241,900							241,900
inversions of outriending to original ferry [in]	Repair	Placeholder for Replacement of Cast Iron Watermains	ocope morease				•							
Sutherland St W - Shetland to Inverness [CIW]		Project identified for 2022 for 2025 Construction, previously a	New Project				230,500							230,500
[R]	Repair	Placeholder for Replacement of Cast Iron Watermains	,											
Shetland St - Caithness St to Sutherland [CIW]	Replacement/State of Good	Project identified for 2022 for 2030 Construction, previously a	Scope Increase									208,500		208,500
[R]	Repair	Placeholder for Replacement of Cast Iron Watermains												
Nairne St - Sutherland to Orkney [CIW] [R]	Replacement/State of Good	,	Scope Increase									280,300		280,300
	Repair	Placeholder for Replacement of Cast Iron Watermains						202 202				0.000.100		
Total							950,700	282,500		81,500		2,733,100		4,047,800
Cayuga Water Distribution														
Ouse St N - Talbot to Cayuga St N[CIW] [R]	Replacement/State of Good	Project reassessed for 2022 and resulted in a decrease	Scope Decrease	(135,000)										(135,000)
	Repair													
Mohawk Street West - Munsee to Ottawa		Project added for 2028 Construction	Project Added							161,300				161,300
[CIW] [R]	Repair	Due is set added for 2020 County setting	Duniont Addod							161,300				161,300
Norton Street West - Munsee to Ottawa [CIW	Repair	Project added for 2028 Construction	Project Added							101,300				101,300
Mohawk St E - Munsee to Winnet [CIW] [R]	Replacement/State of Good	Project identified for 2022 for 2028 Construction, previously a	Project Added							155,100				155,100
Worldwick E. Warisee to Winner [e.w] [N]	Repair	Placeholder for Replacement of Cast Iron Watermains	1 Toject Added											
Ottawa St N - Talbot to Kerr [CIW] [R]	Replacement/State of Good		Project Added							117,900				117,900
	Repair	Placeholder for Replacement of Cast Iron Watermains	•											
Ottawa St N - Kerr to Mohawk [CIW] [R]	Replacement/State of Good	Project identified for 2022 for 2028 Construction, previously a	Project Added							142,800				142,800
	Repair	Placeholder for Replacement of Cast Iron Watermains												
Talbot St W - Alley behind Back 40 [CIW] [R]	Replacement/State of Good	Project identified for 2022 for 2028 Construction, previously a	Project Added							155,100				155,100
	Repair	Placeholder for Replacement of Cast Iron Watermains		(40= 05=)						000 5				
Total				(135,000)						893,500				758,500



Project Title	Stage of Good Repair/Nev	N Explanation	Change Type	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Dunnville Water Distribution														
Chestnut ST W - South Cayuga to Alder [CIW]	Replacement/State of Good	Project added for 2031 Construction	Project Added										180,400	180,400
Cross Street - Pine to Tamarac [CIW] [R] [SS]	Repair Replacement/State of Good	Project added for 2026 Construction	Project Added					637,800						637,800
Lock St - Cedar to Queen [CIW] [R]		Project added for 2031 Construction	Project Added										254,000	254,000
Queen Street- Chestnut to Maple [CIW] [R]	Replacement/State of Good Repair	Project added for 2031 Construction	Project Added										142,900	142,900
Cross St W - Eliz Cr to Pine [CIW] [R] [SS]	Replacement/State of Good	Project identified for 2022 for 2026 Construction, previously a Placeholder for Replacement of Cast Iron Watermains	Project Added					159,500						159,500
George St - Cross - North to End [CIW] [R]	Repair Replacement/State of Good	Project identified for 2022 for 2027 Construction, previously a	Project Added						946,700					946,700
Main St W - George - West to Cemetery [CIW]		Placeholder for Replacement of Cast Iron Watermains Project identified for 2022 for 2031 Construction, previously a	Project Added										400,800	400,800
Total	Repair	Placeholder for Replacement of Cast Iron Watermains						797,300	946,700				978,100	2,722,100
Dunnville Water Treatment Plant														
WTP Reservoir Expansion	New/Enhanced Service	Project reassessed for 2022 and resulted in an increase	Scope Change							194,800				194,800
Raw Water Supply Valve Chamber Refurb	Replacement/State of Good	•	Project Added			42,000	43,100	44,200						129,300
Total	Repair					42,000	43,100	44,200		194,800				324,100
Hagersville Water Distribution														
Fairfield Dr - Elm to Hunter [CIW] [R]	Replacement/State of Good	Project reassessed for 2022 and added in for 2029 Construction	Project Added								381,500			381,500
Hunter St - King to Church [CIW] [R]	Repair Replacement/State of Good Repair	Project reassessed for 2022 and added for 2029 Construction	Project Added								254,400			254,400
Hunter St - Fairfield to King [CIW] [R]	Replacement/State of Good Repair	Project identified for 2022 for 2029 Construction	Project Added								127,200			127,200
Elm Ave - Sherring to Fairfield [CIW] [R]	Replacement/State of Good Repair	Project identified for 2022 for 2029 Construction, previously a Placeholder for Replacement of Cast Iron Watermains	Project Added								152,600			152,600
Elm Ave - Fairfield to Hunter [CIW] [R]	Replacement/State of Good	Project identified for 2022 for 2029 Construction, previously a	Project Added								292,600			292,600
Total	Repair	Placeholder for Replacement of Cast Iron Watermains									1,208,300			1,208,300
Jarvis Water Distribution														, ,
Peel St - Walpole to End [CIW] [R]	Replacement/State of Good	Project added in for 2022 for 2024 Construction	Project Added	10,000		197,500								207,500
Peel St E - Main to Walpole [CIW] [R]	'	Project identified for 2022 for 2024 Construction, previously a	Project Added	15,000		231,100								246,100
Peel St E - Craddock to End [CIW] [R]	Repair Replacement/State of Good	Placeholder for Replacement of Cast Iron Watermains Project added in for 2022 for 2024 Construction	Project Added	20,000		197,500								217,500
Total	Repair			45,000		626,100							_	671,100
LEIP Water Distribution				,		,							_	,
Nanticoke Transmission Main Service	Replacement/State of Good	•	Project Added	3,500,000										3,500,000
Extension LEIP Total	Repair	Norfolk County		3,500,000									_	3,500,000
1000				_,500,000										2,300,003



	w/Enhanced Service												2031	Total
	w/Enhanced Service													
Nanticoko W/TD Intako Coffordam Installation Nov		Project need reassessed for 2022 and resulted in removing the project due to pending upgrades required to service Norfolk water demands.	Project Deleted	(200,000)										(200,000)
Nanticoke WTP Intake Cofferdam Installation New	•	Project need reassessed for 2022 and resulted in removing the project due to needs assessment with OPG.	Project Deleted	(393,000)										(393,000)
Nanticoke WTP Intake Source Protection New Measurers	w/Enhanced Service		Project Shift	(100,000)	100,000									
	w/Enhanced Service	Project need reassessed for 2022 and resulted in removing the project due to needs assessment with OPG.	Project Deleted	(100,000)										(100,000)
I	w/Enhanced Service	Project identified in 2022 and to be funded from recoveries from Norfolk County	Project Added	8,000,000	52,000,000									60,000,000
Project Management Support (WW) New	w/Enhanced Service	Budget added to allow for sufficient management of critical water projects within the County	Project Added	70,000	70,000	70,000	70,000	70,000						350,000
1	placement/State of Good	Project reassessed for 2022 and resulted in an increase, and taking away Projects 2022-2023, 2025-2026, & 2028-2029	Project Scope	(50,000)	(50,000)	25,000	(50,000)	(50,000)	25,000	(50,000)	(50,000)	25,000		(225,000)
Reservoir Valvehouse AHU Rep	placement/State of Good	New project identified in 2022 budget for 2024 construction based on 2021 Facility Condition Assessment Report.	Project Added			136,600								136,600
1	placement/State of Good	Project added to 2022, to be funded from industry	Project Added	4,000,000										4,000,000
	placement/State of Good	Project added to 2022, to be funded from industry	Project Added	1,500,000										1,500,000
Total	paii			12,727,000	52,120,000	231,600	20,000	20,000	25,000	(50,000)	(50,000)	25,000		65,068,600
Townsend Water Distribution														
Nanticoke Transmission Main Service Rep	placement/State of Good	Project identified in 2022 and to be funded from recoveries from		4,000,000										4,000,000
•		Norfolk County		, ,										
Total	pan	Noticin County		4,000,000										4,000,000
Water Distribution General														
	pair	Location of projects have been identified within the capital forecast, with the exception of 2031, therefore this placeholder has been reduced for the years where the detailed projects have been identified	Project Deleted				(325,000)	(325,000)	(325,000)	(325,000)	(325,000)	(325,000)	(650,000)	(2,600,000)
		Project removed and replaced by project 471020 below	Project Deleted		(100,000)									(100,000)
Cast Iron Watermain Engineering Rep	pair placement/State of Good pair	Project identified for 2022 for Engineering in 2023-2025	Project Added		61,500	63,000	21,500	66,200	67,900	23,200	71,300	73,100	25,000	472,700
Total Rep	paii				(38,500)	63,000	(303,500)	(258,800)	(257,100)	(301,800)	(253,700)	(251,900)	(625,000)	(2,227,300)
Water Treatment General					,		,	,						
Plant Capital Improvements Rep		Costing reassessed in 2022 and resulted in an increase	Scope Change				213,500		354,000		542,400			1,109,900
Total Rep	pair						213.500		354.000		542.400		_	1,109,900
									,000		2, .00			_,
Total Water				20,137,000	52,081,500	962,700	923,800	885,200	1,068,600	818,000	1,447,000	2,506,200	353,100	81,183,100



Project Title	Stage of Good Repair/New Initiative	v Explanation	Change Type	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
<u>Wastewater</u>														
Caledonia Wastewater Collection														
Nairne St. Forcemain Replacement	New/Enhanced Service	Originally planned as a rehabilitation. Further investigation revealed replacement required. See expanded project brief for more details in Capital Summary 2	Scope Increase	4,421,500										4,421,500
Sanitary Sewer Relining/Repair [CIW][W][R]	Replacement/State of Good Repair	Inspections have indicated replacement required within 3-10 years. Budget updated to reflect these recommendations	New Project	130,000	135,900		148,600	155,300	162,400	169,800	177,500	185,600	194,100	1,459,200
Total		Danger aparted to remove more recommendations		4,551,500	135,900		148,600	155,300	162,400	169,800	177,500	185,600	194,100	5,880,700
Caledonia Wastewater Treatment Plant														
Caledonia Wastewater Treatment Plant	New/Enhanced Service	Identified budget increased to reflect updating costing based on 2021 market pricing.	Scope Increase	(72,400)	(397,500)		7,975,900							7,506,000
Project Management Support (W)	New/Enhanced Service	Budget added to allow for proper management of critical water and wastewater projects within the County	New Project	70,000	70,000	70,000	70,000	70,000						350,000
Blower Replmts	Replacement/State of Good Repair	Project shifted from 2022 to 2024 as a result of workload realignment and to align with other works associated with the Caledonia WWTP.	Project Shift	(350,000)		367,700								17,700
Total				(352,400)	(327,500)	437,700	8,045,900	70,000						7,873,700
Cayuga Wastewater Collection														
Ouse St Forcemain Twinning	New/Enhanced Service	Project deferred to 2024 to reflect priority and resources available to support project management.	Project Shift	(306,900)		367,500								60,600
Ouse St PS Replacements	Replacement/State of Good Repair	Project deferred to 2024 to reflect priority and resources available to support project management.	Project Shift	(1,272,200)		1,470,900								198,700
Total				(1,579,100)		1,838,400								259,300
Cayuga Wastewater Treatment Plant														
Twinning of Headworks Screen	New/Enhanced Service	Project deferred to 2024 to reflect priority and resources available to support project management.	Project Shift	(275,000)		336,200								61,200
Total				(275,000)		336,200								61,200
Dunnville Wastewater Treatment Plant														
Sludge Storage Cell #4 Upgrades and Screen	New/Enhanced Service	Project combines restoration work with the addition of new equipment and servicing (screen/receiving station). Project deferred to 2024/2025 to reflect priority and resources available to support project management.	t Project Shift	(95,000)	(450,000)	99,800	484,600							39,400
Aeration Diffuser System Replacement	Replacement/State of Good Repair	Project deferred to 2023 to reflect priority and resources available to support project management.	Project Shift	(150,000)	153,800	7,600								11,400
WWTP Wet-Well Valve Replacements	Replacement/State of Good Repair	Project deferred to 2023 to reflect priority and resources available to support project management.	Project Shift	(200,000)	200,000									
Total	<u> </u>			(445,000)	(96,200)	107,400	484,600							50,800
Jarvis Wastewater Collection														
Peel St E - Sewer Pipe Upsize (Walpole to End)	New/Enhanced Service	Project shifted to align with other work in the area and costing increased to reflect cost estimates	Project Shift/ Scope Increase	35,000		333,800								368,800
Total				35,000		333,800								368,800
Oswego Park Wastewater Collection	<u> </u>													
Oswego Pump Station Forcemain Replacement	Replacement/State of Good Repair	Identified budget increased to reflect updating costing based on 2021 market pricing.	Project Shift/ Scope Increase	(175,000)	200,000									25,000
Total				(175,000)	200,000									25,000



Project Title	Stage of Good Repair/New Initiative	v Explanation	Change Type	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Wastewater Collection General														
Sanitary Sewer Rehabilitations (I&I)	Replacement/State of Good Repair	Costing reassessed for 2022, and resulted in an increase	Scope Increase			10,100		20,800		31,900		43,700		106,500
Pump Station Repairs/Replacement		Review determined that work not required	Project Deleted	(350,000)	(350,000)									(700,000)
Total	-1.			(350,000)	(350,000)	10,100		20,800		31,900		43,700		(593,500)
Wastewater Collection General														
Plant Capital Improvements	Replacement/State of Good Repair	Costing reassessed in 2022 and resulted in an increase	Scope Increase						434,000	486,500	669,700	757,000		2,347,200
Total	-1.								434,000	486,500	669,700	757,000		2,347,200
Total Wastewater				1,410,000	(437,800)	3,063,600	8,679,100	246,100	596,400	688,200	847,200	986,300	194,100	16,273,200
Total Water & Wastewater				21,547,000	51,643,700	4,026,300	9,602,900	1,131,300	1,665,000	1,506,200	2,294,200	3,492,500	547,200	97,456,300



CAPITAL SUMMARY 2



Project:

Nairne Street Forcemain Replacement (Caledonia) – Ward 3

Description:

Replacement of a 175 m section of 300 mm sanitary forcemain that runs underneath the Grand River and conveys flows from the north side of Caledonia to the wastewater treatment plant located on the south side of the Grand River (see Figure 1).

Background:

There are currently two forcemains that run under the Grand River. The original 200 mm forcemain, constructed in 1954 and a newer 300 mm forcemain, constructed in 1990.

The design intent of the 1990 project was to replace the original 200 mm forcemain with a new 300 mm forcemain. However, due to construction issues with the 300 mm forcemain, a portion of the pipe was damaged resulting in a reduction in pipe diameter and the inability of the forcemain to achieve design capacity. The solution at the time was to re-line the original forcemain and continue the use of it to maintain flows.

In order to address capacity concerns, reduce the risk of failure and to improve operation and maintenance practices, a project to replace the existing 300 mm forcemain was identified and approved in the 2019 Rate Supported Budget and 10 Year Forecast. The project cost identified at the time was \$1,350,000 and was based on a directional drilling construction practice.

Additional geotechnical investigation and study into design and construction options for the forcemain replacement occurred in 2019 and 2020. In June 2021, the County publicly issued a request for proposal for the design and build of a replacement forcemain. Results of the procurement process clearly indicated the need to adopt a micro-tunneling construction approach as opposed to the much riskier directional drilling practice on which the original budget was based.

<u>Timeframe:</u>

With procurement requirements already satisfied, upon approval of the 2022 Rate Supported Budget, award of the design and build work can immediately take place. From the project schedule submitted as part of the successful bid, construction is planned to be completed within six months. As a result, this project is anticipated to be completed by the end of 2022.

Estimated Cost:

\$5,650,000 including a 15% contingency.



Budget Impact:

It is anticipated that this project would be funded from Development Charges related debt. This funding plan has been incorporated into the capital forecast. Debt for the original planned work has already been issued, therefore the total impact in 2022 has an adjusted value of \$4,421,500.

Operating Cost Impacts:

Operating costs may slightly decrease as a result of increased pumping efficiency associated with not having to overcome pipe restriction.

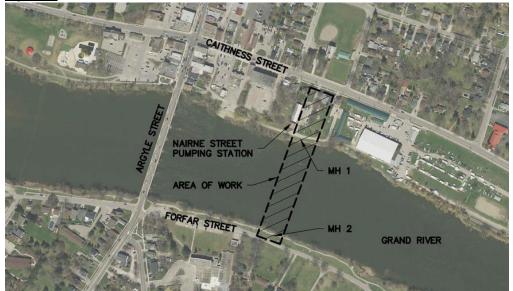
Impact on other Projects:

This project is closely related to the construction of the new Gateway Sewage Pumping Station and the gravity sewer main upsizing along Sutherland St. and Edinburgh Square which are required to service proposed development on the north side of Caledonia.

Impact on Staff Workload:

All project support and management for this initiative has been identified and accommodated within the Water and Wastewater Engineering 2022 staffing work plan.







CO-ORDINATED PROJECTS FOR THE YEARS 2022 to 2031

			TA	X CAPITAL (prelimi	nary informatio	n)		W	ATER AND WAS	TEWATER CAPITAI	-	
		Roads	Roads	Storm	Storm	Other	Other	Water	Water	Wastewater	Wastewater	Project
Project	Timing	2021 Open	10 Year	2021 Open	10 Year	2021 Open	10 Year	2021 Open	10 Year	2021 Open	10 Year	Total
		Projects	Forecast	Projects	Forecast	Projects	Forecast	Projects	Forecast	Projects	Forecast	
Caledonia												
Master Servicing Plan	2021, 2026	150,000	55,200	33,600	33,200		-	50,000	50,000	50,000	50,000	472,000
East Edinburgh Square - Caithness to												
Sutherland	2021-2022	20,000	155,000		-		-	20,000	200,000	30,000	285,000	710,000
West Edinburgh Square - Caithness to												
Sutherland	2021-2022	20,000	155,000		-		-	20,000	195,000	25,000	-	415,000
Sutherland - Argyle to E Edinburgh Sq	2021-2022	20,000	285,000		-		-	20,000	215,000		370,000	910,000
Caithness St - West Edinburgh Square to												
Nairne St	2021-2022	20,000	75,000		-		-		-	25,000	155,000	275,000
Nairne St - Caithness St - End	2021-2022	20,000	140,000		-		-		-	15,000	145,000	320,000
Aberdeen St - Burke to Sutherland	2025		53,800		-		-		115,300		-	169,100
Gypsum Ave - Argyle to End	2025		75,400		82,900		-		161,300		-	319,600
Inverness St - Caithness to Orkney	2025		207,300		103,700		-		443,600		-	754,600
Sutherland St W - Shetland to Inverness	2025		107,700		-		-		230,500		-	338,200
Caithness Street - Cameron to Argyle	2030		487,400		536,100		-		1,023,300		-	2,046,800
Shetland St - Caithness St to Sutherland	2030		97,500		-		-		208,500		-	306,000
Nairne St - Sutherland to Orkney	2030		131,000		-		-		280,300		-	411,300
Cayuga					-		-		-		-	
Master Servicing Plan	2024, 2030		68,200		34,100		-		50,000		50,000	202,300
Ouse St N - Talbot to Cayuga St N	2022		175,000		-		-		195,000		-	370,000
Kerr St E - Winniet to 100 m west of												
Winniet	2022		80,000		-		-		100,000		-	180,000
Norton St E - Winniet to 60 m west of												
Winniet	2022		40,000		-		-		60,000		-	100,000
Norton St W - Ottawa St west to end	2022		50,000		-		-		100,000		-	150,000
Kerr St W - Ottawa St to Munsee	2022		105,000		-		-		120,000		-	225,000
Mohawk St E - Winniet east to end	2022		150,000		-		-		200,000		-	350,000
Mohawk Street West - Munsee to Ottawa	2027-2028		73,500		-		-		161,300		-	234,800
Norton Street West - Munsee to Ottawa	2028		75,400		-		-		161,300		-	236,700
Mohawk St E - Munsee to Winnet	2028		72,500		-		-		155,100		-	227,600



CO-ORDINATED PROJECTS FOR THE YEARS 2022 to 2031

			TA	X CAPITAL (prelimi	nary information		I	W	ATER AND WAS	TEWATER CAPITA		
		Roads	Roads	Storm	Storm	Other	Other	Water	Water	Wastewater	Wastewater	Project
Project	Timing	2021 Open Projects	10 Year Forecast	Total								
Ottawa St N - Talbot to Mohawk	2028		121,800		-		-		260,700		-	382,500
Talbot St W - Alley behind Back 40	2028		36,200		=		-		155,100		-	191,300
Dunnville					-		-		-		-	
Master Servicing Plan	2023, 2029		66,500		66,500		-		60,000		60,000	253,000
Alley way - Broad to Central Lane	2023		51,300		-		-		205,200		-	256,500
Main St E - 710 Main E to 50 m south	2023		20,500		-		-		71,800		-	92,300
Cross St W - Eliz Cr to Tamarac	2026		372,500		409,800		-		797,300		-	1,579,600
George St - Cross - North to End	2027		221,200		-		-		946,700		-	1,167,900
Bridge Street - Queen to Maple	2030-2031		58,400		-		-		87,000		-	145,400
Chestnut ST W - South Cayuga to Alder	2031		84,300		-		-		180,400		-	264,700
Lock St - Cedar to Queen	2031		118,600		-		-		254,000		-	372,600
Queen Street- Chestnut to Maple	2031		103,000		-		-		142,900		-	245,900
Main St W - George - West to Cemetary	2031		187,300		-		-		400,800		-	588,100
Hagersville					-		-		-		-	
Master Servicing Plan	2022, 2028		64,800		32,400		-		60,000		60,000	217,200
Victoria St - Tuscarora to Main St N	2023		205,000		-		-		307,600		-	512,600
Foundry St - Tuscarora to end	2023		41,000		-		-		112,700		-	153,700
Elm Ave - Sherring to Hunter	2029		208,000		-		-		445,200		-	653,200
Fairfield Dr - Elm to Hunter	2029		178,300		-		-		381,500		-	559,800
Hunter St - Fairfield to Church	2029		172,400		-		-		381,600		-	554,000
Jarvis					-		-		-		-	
Master Servicing Plan	2025, 2031		35,000		35,000		-		46,500		34,900	151,400
Walpole St - Monson to Talbot	2022-2024		167,300		435,300		-		354,500		-	957,100
Keen St	2022-2024		52,000		-		-		99,900		-	151,900
Peel St E - Main to Craddock	2022-2024		323,200		-		-		671,100		-	994,300
Lake Erie Industrial Park					-		-		-		-	
Master Servicing Plan	2021, 2027	50,000	56,600	30,000	34,000		-	50,000	50,000	50,000	50,000	370,600
County Wide					-		-		-		-	
Asbestos Annual Inspection and												
Remediation	2021-2031		-		-	9,500	106,500	3,100	34,800	4,000	44,800	202,700
CCTV Inspection Program	2021-2031		-	25,000	280,100		-		-	60,000	630,100	995,200



CO-ORDINATED PROJECTS FOR THE YEARS 2022 to 2031

			TA	X CAPITAL (prelimi	nary informatio	n)		W	ATER AND WAS	TEWATER CAPITAL	L	
		Roads	Roads	Storm	Storm	Other	Other	Water	Water	Wastewater	Wastewater	Project
Project	Timing	2021 Open	10 Year	2021 Open	10 Year	2021 Open	10 Year	2021 Open	10 Year	2021 Open	10 Year	Total
		Projects	Forecast	Projects	Forecast	Projects	Forecast	Projects	Forecast	Projects	Forecast	
Facility Condition Assessments	2021-2031		-		-		-	83,900	110,500	44,200	138,400	377,000
Project Management Support	2022-2026		-		-		-		350,000		350,000	700,000
SCADA Master Plan	2021, 2026		-		-		-	70,000	38,600	70,000	38,600	217,200
SCADA Maintenance	2021-2031		-		-		-	73,900	336,400	25,800	224,100	660,200
SCADA Technical Support	2021-2031		-		-		=	120,300	448,200	77,400	448,200	1,094,100
Total - Water and Wastewater		300,000	5,860,100	88,600	2,083,100	9,500	106,500	511,200	12,216,500	476,400	3,134,100	24,786,000

Note - does not include prior year closed projects or prior year open projects with no impact in 2022-2031 or co-ordinated projects that do not have a water/wastewater component.





2022 Net Capital Financing from Water and Wastewater Rates

		2021			2022			2023			2024			2025			2026			2027			2028			2029			2030			2031	
	WATER	SEWER	COMBINED	WATER	SEWER	COMBINED	WATER	SEWER C	COMBINED	WATER	SEWER C	COMBINED	WATER	SEWER (COMBINED	WATER	SEWER (COMBINED	WATER	SEWER (COMBINED	WATER	SEWER C	OMBINED	WATER	SEWER (COMBINED	WATER	SEWER (COMBINED	WATER	SEWER	COMBINED
DEBT CHARGES (Existing Debt)																																	
- Gross debt repayments	777,310	1,225,210	2,002,520	774,380	1,199,540	1,973,920	771,907	1,173,358	1,945,265	691,005	992,694	1,683,699	690,421	971,451	1,661,872	691,144	950,523	1,641,667	690,564	929,595	1,620,159	0	908,753	908,753	0	887,739	887,739	0	0	0	0	0	0
- Development related debt repayments	502,100	422,480	924,580	501,930	1,337,490	1,839,420	502,040	1,312,958	1,814,998	502,096	1,094,886	1,596,982	501,671	1,077,534	1,579,205	502,197	1,994,221	2,496,418	501,775	1,043,698	1,545,473	0	943,332	943,332	0	926,237	926,237	0	807,773	807,773	0	793,298	793,298
- Less funding from: - Develop. Charges Reserve	(502,100)	(422,480)	(924,580)	(501,930)	(1,337,490)	(1,839,420)	(502,040)	(1,312,958)	(1,814,998)	(502,096)	(1,094,886)	(1,596,982)	(501,671)	(1,077,534)	(1,579,205)	(502,197)	(1,994,221)	(2,496,418)	(501,775)	(1,043,698)	(1,545,473)	0	(943,332)	(943,332)	0	(926,237)	(926,237)	0	(807,773)	(807,773)	0	(793,298)	(793,298)
Net Existing Debt Charges	777,310	1,225,210	2,002,520	774,380	1,199,540	1,973,920	771,907	1,173,358	1,945,265	691,005	992,694	1,683,699	690,421	971,451	1,661,872	691,144	950,523	1,641,667	690,564	929,595	1,620,159	0	908,753	908,753	0	887,739	887,739	0	0	0	0	0	0
DEBT CHARGES (Proposed Debt for Active Projects)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEBT CHARGES (Proposed Debt for Development Related Active Projects)	0	0	0	0	0	0	406,300	0	406,300	397,110	0	397,110	387,440	60,510	447,950	378,010	59,070	437,080	368,580	57,670	426,250	359,280	56,260	415,540	349,720	54,880	404,600	340,290	53,460	393,750	330,857	52,053	382,910
OFFSETTING FUNDING for Development Related Active Projects	0	0	0	0	0	0	(406,300)	0	(406,300)	(397,110)	0	(397,110)	(387,440)	(60,510)	(447,950)	(378,010)	(59,070)	(437,080)	(368,580)	(57,670)	(426,250)	(359,280)	(56,260)	(415,540)	(349,720)	(54,880)	(404,600)	(340,290)	(53,460)	(393,750)	(330,857)	(52,053)	(382,910)
DEBT CHARGES (Proposed New Debt) DEBT CHARGES (Proposed New Debt for Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Related Projects)	0	0	0	0	0	0	0	747,890	747,890	0	1,676,040	1,676,040	0	1,635,730	1,635,730	0	5,401,710	5,401,710	214,000	5,668,870	5,882,870	209,150	5,546,600	5,755,750	466,370	5,414,930	5,881,300	455,310	5,287,950	5,743,260	1,807,967	5,160,982	6,968,949
OFFSETTING FUNDING for Development Related New Projects	0	0	0	0	0	0	0	(747,890)	(747,890)	0	(1,676,040)	(1,676,040)	0	(1,635,730)	(1,635,730)	0	(5,401,710)	(5,401,710)	(214,000)	(5,668,870)	(5,882,870)	(209,150)	(5,546,600)	(5,755,750)	(466,370)	(5,414,930)	(5,881,300)	(455,310)	(5,287,950)	(5,743,260)	(1,807,967)	(5,160,982)	(6,968,949)
DEBT CHARGES SUB-TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL DEBT CHARGES	777,310	1,225,210	2,002,520	774,380	1,199,540	1,973,920	771,907	1,173,358	1,945,265	691,005	992,694	1,683,699	690,421	971,451	1,661,872	691,144	950,523	1,641,667	690,564	929,595	1,620,159	0	908,753	908,753	0	887,739	887,739	0	0	0	0	0	0
Capital Replacement Reserve Fund	ı																																
- Budgeted annual contribution	1,417,000	1,896,640	3,313,640	1,549,590	1,922,310	3,471,900	1,681,723	1,948,492	3,630,215	1,762,625	2,129,156	3,891,781	1,763,209	2,150,399	3,913,608	1,762,486	2,171,327	3,933,813	1,763,066	2,192,255	3,955,321	2,453,630	2,213,097	4,666,727	2,453,630	2,234,111	4,687,741	2,453,630	3,121,850	5,575,480	2,453,630	3,121,850	5,575,480
Total Capital Related Financing:	2,194,310	3,121,850	5,316,160	2,323,970	3,121,850	5,445,820	2,453,630	3,121,850	5,575,480	2,453,630	3,121,850	5,575,480	2,453,630	3,121,850	5,575,480	2,453,630	3,121,850	5,575,480	2,453,630	3,121,850	5,575,480	2,453,630	3,121,850	5,575,480	2,453,630	3,121,850	5,575,480	2,453,630	3,121,850	5,575,480	2,453,630	3,121,850	5,575,480
IMPACT ON USER RATES																																	
% INCREASE - YEAR TO YEAR \$ INCREASE - YEAR TO YEAR	6.08% 125,730	0.00%	2.42% 125,730	5.91% 129,660	0.00%	2.44% 129,660	5.58% 129,660	0.00% 0	2.38% 129,660	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00% 0	0.00%	0.00%	0.00%	0.00%
Net Revenue from User Rates	5,915,590	7,050,310	12,965,900	5,915,590	7,050,310	12,965,900	5,915,590	7,050,310	12,965,900	5,915,590	7,050,310	12,965,900	5,915,590	7,050,310	12,965,900	5,915,590	7,050,310	12,965,900	5,915,590	7,050,310	12,965,900	5,915,590	7,050,310	12,965,900	5,915,590	7,050,310	12,965,900	5,915,590	7,050,310	12,965,900	5,915,590	7,050,310	12,965,900
Estimated Impact of Proposed Capital Related Expenditures on User Rates	2.1%	0.0%	1.0%	2.2%	0.0%	1.0%	2.2%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

NOTE: New debt requirements included in the capital forecast all relate to development charges debt. Project information can be found in Appendix D.

NOTE: The 1% of combined user rates revenue contribution to the capital replacement reserves was established in 2014 as a resolution to the water capital replacement reserve, staff may revisit this contribution for 2022.





FIR Category: Water	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total	Grants	General	Development	Reserves/	Debenture	Total
Stage: SMT Review	2022	2023	2024	2023	2020	2027	2028	2029	2030	2031	Expenditures	Subsidies	Recoveries	Charges	Reserve Funds	Financing	Financing
Summary Water																	
Water Administration	20,000	30,000		10,800		30,000			2,950,600		3,041,400	(2,939,000)			(102,400)		(3,041,400)
Water Treatment	14,540,100	52,775,000	858,900	3,453,100	497,100	3,578,000	2,321,300	3,706,800	479,000	267,500	82,476,800	(6,669,500)	(66,998,900)	(3,413,500)	(5,394,900)		(82,476,800)
Water Distribution/Transmission	9,515,000	8,510,200	1,223,500	1,152,600	4,903,500	1,131,000	1,964,000	1,387,600	10,751,600	1,195,100	41,734,100	(7,752,500)	(7,500,000)	(15,381,200)	(11,100,400)		(41,734,100)
Water Technical Reviews and Studies	290,000	30,000	25,000	21,500	50,000	50,000	30,000	30,000	25,000	25,000	576,500		(16,200)	(361,500)	(198,800)		(576,500)
Total Water	24,365,100	61,345,200	2,107,400	4,638,000	5,450,600	4,789,000	4,315,300	5,124,400	14,206,200	1,487,600	127,828,800	(17,361,000)	(74,515,100)	(19,156,200)	(16,796,500)		(127,828,800)
Summary Wastewater																	
Wastewater Collection/Conveyance	6,011,500	748,600	2,749,900	389,000	3,530,800	404,600	580,800	424,100	597,400	364,000	15,800,700			(8,837,950)	(6,962,750)		(15,800,700)
Wastewater Treatment and Disposal	3,583,500	7,354,100	2,177,200	46,217,000	1,168,600	4,197,900	4,188,800	4,447,000	4,414,100	163,700	77,911,900			(54,273,150)	(23,638,750)		(77,911,900)
Wastewater Technical Reviews and Studies	55,000	30,000	25,000	16,200	50,000	50,000	30,000	30,000	25,000	18,700	329,900			(329,900)			(329,900)
Total Wastewater	9,650,000	8,132,700	4,952,100	46,622,200	4,749,400	4,652,500	4,799,600	4,901,100	5,036,500	546,400	94,042,500			(63,441,000)	(30,601,500)		(94,042,500)
Total Water and Wastewater	34,015,100	69,477,900	7,059,500	51,260,200	10,200,000	9,441,500	9,114,900	10,025,500	19,242,700	2,034,000	221,871,300	(17,361,000)	(74,515,100)	(82,597,200)	(47,398,000)		(221,871,300)
Funding																	
Summary Water																	
Grants/Subsidies	500,000	3,980,100	197,500	2,033,500	1,655,700	2,072,600		2,959,300	3,962,300		17,361,000						
General Recoveries	21,196,900	52,266,600	217,200	150,000	150,000	147,200	80,000	80,000	147,200	80,000	74,515,100						
Development Charges	249,700	3,239,100	51,900	353,900	2,360,900	380,400	3,016,200	389,200	9,071,500	43,400	19,156,200						
Reserve/Reserve Funds	2,418,500	1,859,400	1,640,800	2,100,600	1,284,000	2,188,800	1,219,100	1,695,900	1,025,200	1,364,200	16,796,500						
Debenture Financing	, ,		, ,			, ,	, ,		, ,	, ,	, ,						
<u>Total Water</u>	24,365,100	61,345,200	2,107,400	4,638,000	5,450,600	4,789,000	4,315,300	5,124,400	14,206,200	1,487,600	127,828,800						
Summary Wastewater																	
Grants/Subsidies																	
General Recoveries																	
Development Charges	7,094,300	5,563,100	928,300	45,155,400	3,216,200	342,400	399,400	317,500	339,300	85,100	63,441,000						
Reserve/Reserve Funds	2,555,700	2,569,600	4,023,800	1,466,800	1,533,200	4,310,100	4,400,200	4,583,600	4,697,200	461,300	30,601,500						
Debenture Financing	2,555,750	2,505,000	.,020,000	2, .00,000	2,000,200	.,010,100	., .00,200	.,555,555	.,05.,200	.02,000	50,002,300						
Total Wastewater	9,650,000	8,132,700	4,952,100	46,622,200	4,749,400	4,652,500	4,799,600	4,901,100	5,036,500	546,400	94,042,500						
	-,,	-, - ,	, ,	-,- ,	, -,	, ,	,,	, ,	-,,	,	, , , , , , , , , , , , , , , , , , , ,						
Total Wastewater and Water	34,015,100	69,477,900	7,059,500	51,260,200	10,200,000	9,441,500	9,114,900	10,025,500	19,242,700	2,034,000	221,871,300						



FIR Category: Water Stage: Draft Budget	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Water Administration	20,000	30,000		10,800		30,000		,	2,950,600		3,041,400	(2,939,000)			(102,400)		(3,041,400)
Total Water Administration	20,000	30,000		10,800		30,000			2,950,600		3,041,400	(2,939,000)			(102,400)		(3,041,400)
Dunnville Water Treatment Plant	130,000	271,700	285,800	102,300	77,300	101,800	2,035,300		140,100		3,144,300		(700)	(2,104,000)	(1,039,600)		(3,144,300)
Nanticoke Water Treatment Plant	14,297,000	52,362,700	456,200	214,700	260,400	277,200	161,200	133,500	209,800	136,200	68,508,900	(240,000)	(66,998,200)	(191,200)	(1,079,500)		(68,508,900)
Water Treatment General	113,100	140,600	116,900	3,136,100	159,400	3,199,000	124,800	3,573,300	129,100	131,300	10,823,600	(6,429,500)		(1,118,300)	(3,275,800)		(10,823,600)
Total Water Treatment	14,540,100	52,775,000	858,900	3,453,100	497,100	3,578,000	2,321,300	3,706,800	479,000	267,500	82,476,800	(6,669,500)	(66,998,900)	(3,413,500)	(5,394,900)		(82,476,800)
Caledonia Water Distribution	755,000	7,600,300		1,013,200	3,929,500	5,700	927,800	3,000	10,558,800		24,793,300	(6,659,100)		(15,381,200)	(2,753,000)		(24,793,300)
Cayuga Water Distribution	810,000			12,900			893,500		14,700		1,731,100				(1,731,100)		(1,731,100)
Dunnville Water Distribution		287,200			797,300	952,400				1,065,100	3,102,000				(3,102,000)		(3,102,000)
Hagersville Water Distribution	250,000	456,200					14,500	1,208,300			1,929,000	(885,900)			(1,043,100)		(1,929,000)
Jarvis Water Distribution	70,000		1,055,500		5,500						1,131,000	(207,500)			(923,500)		(1,131,000)
LEIP Water Distribution	3,500,000										3,500,000		(3,500,000)				(3,500,000)
Townsend Water Distribution	4,025,000										4,025,000		(4,000,000)		(25,000)		(4,025,000)
Water Distribution General	105,000	166,500	168,000	126,500	171,200	172,900	128,200	176,300	178,100	130,000	1,522,700				(1,522,700)		(1,522,700)
Total Water Distribution/Transmission	9,515,000	8,510,200	1,223,500	1,152,600	4,903,500	1,131,000	1,964,000	1,387,600	10,751,600	1,195,100	41,734,100	(7,752,500)	(7,500,000)	(15,381,200)	(11,100,400)		(41,734,100)
Caledonia Water Technical Reviews and Studies					50,000						50,000			(50,000)			(50,000)
Cayuga Water Technical Reviews and Studies	20,000		25,000						25,000		70,000			(70,000)			(70,000)
Dunnville Water Technical Reviews and Studies	105,000	30,000						30,000			165,000			(85,000)	(80,000)		(165,000)
Hagersville Water Technical Reviews and Studies	30,000						30,000				60,000			(60,000)			(60,000)
Jarvis Water Technical Reviews and Studies				21,500						25,000	46,500			(46,500)			(46,500)



FIR Category: Water Stage: Draft Budget	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
LEIP Water Technical Reviews and Studies						50,000					50,000			(50,000)			(50,000)
Water Technical Reviews and Studies General	135,000										135,000		(16,200)		(118,800)		(135,000)
Total Water Technical Reviews and Studies	290,000	30,000	25,000	21,500	50,000	50,000	30,000	30,000	25,000	25,000	576,500		(16,200)	(361,500)	(198,800)		(576,500)
Total Water	24,365,100	61,345,200	2,107,400	4,638,000	5,450,600	4,789,000	4,315,300	5,124,400	14,206,200	1,487,600	127,828,800	(17,361,000)	(74,515,100)	(19,156,200)	(16,796,500)		(127,828,800)



FIR Category: Water Stage: Draft Budget Water Administration	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Water Administration																	
Replacement/State of Good Repair																	
441004 WWW Financial Plan Update (O. Reg. 453/07)				10,800					11,600		22,400				(22,400)		(22,400)
441009 Caledonia Meter Replacement									2,009,000		2,009,000	(2,009,000)					(2,009,000)
441011 Dunnville Meter Replacement									930,000		930,000	(930,000)					(930,000)
Total Replacement/State of Good Repair	,			10,800	1			,	2,950,600		2,961,400	(2,939,000)			(22,400)		(2,961,400)
New/Enhanced Service	,	,			1		,	,									
441007 WWW Rate Study		30,000				30,000					60,000				(60,000)		(60,000)
441008 Depot Software for Pay-at-the-Pump	20,000										20,000				(20,000)		(20,000)
Total New/Enhanced Service	20,000	30,000			1	30,000		,			80,000				(80,000)		(80,000)
Total Water Administration	20,000	30,000		10,800		30,000			2,950,600		3,041,400	(2,939,000)			(102,400)		(3,041,400)
Total Water Administration	20,000	30,000		10,800		30,000			2,950,600		3,041,400	(2,939,000)			(102,400)		(3,041,400)



FIR Category: Water Stage: Draft Budget Water Treatment	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Duran illa Water Transfer ant Dlant																	
Dunnville Water Treatment Plant																	
Replacement/State of Good Repair 456033 Backwash Pump #1 Refurb																	
·		56,400									56,400				(56,400)		(56,400)
456034 Backwash Pump #2 Refurb			57,800								57,800				(57,800)		(57,800)
456035 Floc Tank Refurb			36,800								36,800				(36,800)		(36,800)
456036 Chem Feed System Replacements				32,300	33,100						65,400				(65,400)		(65,400)
476002 Granular Activated Carbon change out			94,600			101,800			109,700		306,100				(306,100)		(306,100)
476026 WTP SCADA Computer & Network Replmt				26,900					30,400		57,300			(11,900)	(45,400)		(57,300)
476029 WTP PLC Replacements		215,300									215,300			(45,300)	(170,000)		(215,300)
476032 Remotes PLC Replacements			54,600								54,600			(11,500)	(43,100)		(54,600)
476038 Port Maitland Low Lift Facility Roof Repairs	10,000										10,000		(700)		(9,300)		(10,000)
476080 Raw Water Supply Valve Chamber Refurb			42,000	43,100	44,200						129,300				(129,300)		(129,300)
Total Replacement/State of Good Repair	10,000	271,700	285,800	102,300	77,300	101,800			140,100		989,000		(700)	(68,700)	(919,600)		(989,000)
New/Enhanced Service																	
476033 WTP Reservoir Expansion							2,035,300				2,035,300			(2,035,300)			(2,035,300)
476036 Pre-treatment, Disinfection and Storage Improvements Study	120,000										120,000				(120,000)		(120,000)
Total New/Enhanced Service	120,000						2,035,300				2,155,300			(2,035,300)	(120,000)		(2,155,300)
Total Dunnville Water Treatment Plant	130,000	271,700	285,800	102,300	77,300	101,800	2,035,300		140,100		3,144,300		(700)	(2,104,000)	(1,039,600)		(3,144,300)
Nanticoke Water Treatment Plant																	
Replacement/State of Good Repair																	
479002 Nant - WTP Lagoon Clean Out	45,000	46,100	47,300	48,500	49,700	50,900	52,200	53,500	54,800	56,200	504,200				(504,200)		(504,200)
479003 Stelco IPS Operating Capital	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	400,000		(400,000)				(400,000)



FIR Category: Water Stage: Draft Budget Water Treatment	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Nanticoke Water Treatment Plant																	
479004 Imperial Oil IPS Operating Capital	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	400,000		(400,000)				(400,000)
479011 SCADA Computer & Network Replmt	25,000					28,300					53,300				(53,300)		(53,300)
479055 Stelco Transmission Main Leak Detection		66,600									66,600		(66,600)				(66,600)
479059 WTP PLC Replacements				16,200	60,700	43,000	29,000				148,900			(31,200)	(117,700)		(148,900)
479061 Lowlift Pump Replacement	400,000										400,000	(240,000)		(160,000)			(400,000)
479064 Filter valve actuator replacements	45,000										45,000				(45,000)		(45,000)
479065 Nanticoke WTP Facility Building Roof Repairs			26,300								26,300				(26,300)		(26,300)
479071 Nanticoke WTP Intake Annual Site Maintenance & Inspections			75,000			75,000			75,000		225,000		(201,600)		(23,400)		(225,000)
479074 Nanticoke Reservoir Inlet Foundation Repairs	30,000										30,000				(30,000)		(30,000)
479075 Reservoir Valvehouse AHU			136,600								136,600				(136,600)		(136,600)
479076 Nanticoke Reservoir Inlet Heater Replacements	12,000										12,000				(12,000)		(12,000)
479077 Nanticoke Reservoir Access Grating Replacements	25,000										25,000				(25,000)		(25,000)
479078 Nanticoke Highlift Chemical Feed System Repalcement	15,000										15,000				(15,000)		(15,000)
479079 Imperial Oil Raw Water Supply Line Replacement	4,000,000										4,000,000		(4,000,000)				(4,000,000)
479080 Nanticoke IPS Pump #7 Restoration	1,500,000										1,500,000		(1,500,000)				(1,500,000)
479081 Nanticoke IPS Isolation Valve Replacements	30,000										30,000		(30,000)				(30,000)
479082 Nanticoke Transmission Main Valve Replacements	20,000		21,000								41,000				(41,000)		(41,000)
Total Replacement/State of Good Repair	6,227,000	192,700	386,200	144,700	190,400	277,200	161,200	133,500	209,800	136,200	8,058,900	(240,000)	(6,598,200)	(191,200)	(1,029,500)		(8,058,900)
New/Enhanced Service																	
479070 Nanticoke WTP Intake Source Protection Measurers		100,000									100,000		(50,000)		(50,000)		(100,000)
479073 Nanticoke WTP Capacity Expansion	8,000,000	52,000,000									60,000,000		(60,000,000)			52	(60,000,000)



FIR Category: Water Stage: Draft Budget Water Treatment	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Nanticoke Water Treatment Plant																	
479099 Project Management Support (WW)	70,000	70,000	70,000	70,000	70,000						350,000		(350,000)				(350,000)
Total New/Enhanced Service	8,070,000	52,170,000	70,000	70,000	70,000						60,450,000		(60,400,000)		(50,000)		(60,450,000)
Total Nanticoke Water Treatment Plant	14,297,000	52,362,700	456,200	214,700	260,400	277,200	161,200	133,500	209,800	136,200	68,508,900	(240,000)	(66,998,200)	(191,200)	(1,079,500)		(68,508,900)
						,			'			,					
Water Treatment General																	
Replacement/State of Good Repair																	
471003 Facility Condition Assessment [WW]		25,600		26,900		28,300		29,700			110,500				(110,500)		(110,500)
471004 SCADA Master Plan					38,600						38,600			(8,100)	(30,500)		(38,600)
471007 SCADA Maintenance	30,000	30,800	31,600	32,400	33,200	34,000	34,800	35,600	36,600	37,400	336,400			(70,700)	(265,700)		(336,400)
471009 Water Operating Capital	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	400,000				(400,000)		(400,000)
471010 Asbestos Annual Inspection and Remediation [WW]	3,100	3,200	3,300	3,300	3,400	3,500	3,600	3,700	3,800	3,900	34,800				(34,800)		(34,800)
471012 SCADA Technical Support	40,000	41,000	42,000	43,100	44,200	45,300	46,400	47,500	48,700	50,000	448,200			(94,000)	(354,200)		(448,200)
471017 Plant Capital Improvements				2,990,400		3,047,900		3,416,800			9,455,100	(6,429,500)		(945,500)	(2,080,100)		(9,455,100)
Total Replacement/State of Good Repair	113,100	140,600	116,900	3,136,100	159,400	3,199,000	124,800	3,573,300	129,100	131,300	10,823,600	(6,429,500)		(1,118,300)	(3,275,800)		(10,823,600)
Total Water Treatment General	113,100	140,600	116,900	3,136,100	159,400	3,199,000	124,800	3,573,300	129,100	131,300	10,823,600	(6,429,500)		(1,118,300)	(3,275,800)		(10,823,600)
Total Water Treatment	14,540,100	52,775,000	858,900	3,453,100	497,100	3,578,000	2,321,300	3,706,800	479,000	267,500	82,476,800	(6,669,500)	(66,998,900)	(3,413,500)	(5,394,900)	•	(82,476,800)



County																	
FIR Category: Water Stage: Draft Budget Water Distribution/Transmission	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
DISTIBUTION/Transmission																	
Caledonia Water Distribution																	
Replacement/State of Good Repair																	
472005 Elevated Storage Tank Replacement		7,590,100									7,590,100	(3,980,100)		(3,148,700)	(461,300)		(7,590,100)
472010 Forfar St. Storage Building Roof Replacement								3,000			3,000				(3,000)		(3,000)
472011 Reservoir–SCADA Computer & Network Replmt				21,600					24,400		46,000				(46,000)		(46,000)
472018 Booster Station PLC Replacements				40,900							40,900			(8,600)	(32,300)		(40,900)
472019 Distribution Flow/Pressure Control Improvements	120,000										120,000				(120,000)		(120,000)
472021 Caledonia Reservoir Roof Rehab						5,700					5,700				(5,700)		(5,700)
472022 Caledonia Standpipe Building Roof Repairs		10,200									10,200				(10,200)		(10,200)
472025 Booster Station Upgrades					1,655,700						1,655,700	(1,655,700)					(1,655,700)
472027 East Edinburgh Square - Caithness to Sutherland [CIW] [R] [WW]	200,000										200,000				(200,000)		(200,000)
472028 West Edinburgh Square - Caithness to Sutherland [CIW] [R] [WW]	195,000										195,000				(195,000)		(195,000)
472029 Caithness Street - Cameron to Argyle [CIW] [R] [SS]									1,023,300		1,023,300	(1,023,300)					(1,023,300)
472030 Sutherland - Argyle to E Edinburgh Sq [CIW] [R] [WW]	215,000										215,000				(215,000)		(215,000)
472031 Aberdeen St - Burke to Sutherland [CIW] [R]				115,300							115,300				(115,300)		(115,300)
472032 Gypsum Ave - Argyle to End [CIW] [R] [SS]				161,300							161,300				(161,300)		(161,300)
472033 Inverness St - Caithness St to Sutherland [CIW] [R] [SS]				201,700							201,700				(201,700)		(201,700)
472034 Inverness St - Sutherland to Orkney [CIW] [R]				241,900							241,900				(241,900)		(241,900)
472035 Sutherland St W - Shetland to Inverness [CIW] [R]				230,500							230,500				(230,500)		(230,500)
472036 Shetland St - Caithness St to Sutherland [CIW] [R]									208,500		208,500				(208,500)		(208,500)



FIR Category: Water Stage: Draft Budget Water Distribution/Transmission	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Caledonia Water Distribution																	
472037 Nairne St - Sutherland to Orkney [CIW] [R]									280,300		280,300				(280,300)	,	(280,300)
Total Replacement/State of Good Repair	730,000	7,600,300		1,013,200	1,655,700	5,700		3,000	1,536,500		12,544,400	(6,659,100)		(3,157,300)	(2,728,000)	1	(12,544,400)
New/Enhanced Service																	
472020 North Water Storage Expansion					612,600		927,800		7,188,600		8,729,000			(8,729,000)			(8,729,000)
472023 Twinning of 450mm Water Main on Hwy 6					1,661,200						1,661,200			(1,661,200)			(1,661,200)
472024 Twinning of 350mm Water Main on Hald Rd 66									1,833,700		1,833,700			(1,833,700)			(1,833,700)
472038 Security Cameras - Caledonia Reservoir	25,000										25,000				(25,000))	(25,000)
Total New/Enhanced Service	25,000				2,273,800		927,800		9,022,300		12,248,900			(12,223,900)	(25,000)	,	(12,248,900)
Total Caledonia Water Distribution	755,000	7,600,300		1,013,200	3,929,500	5,700	927,800	3,000	10,558,800		24,793,300	(6,659,100)	,	(15,381,200)	(2,753,000))	(24,793,300)
Cayuga Water Distribution																	
Replacement/State of Good Repair										,							
475011 Reservoir–SCADA Computer & Network Replmt				12,900					14,700		27,600				(27,600))	(27,600)
475013 Ouse St N - Talbot to Cayuga St N [CIW] [R]	195,000										195,000				(195,000))	(195,000)
475015 Kerr St E - Winniet to 100 m west of Winniet[CIW] [R]	100,000										100,000				(100,000))	(100,000)
475016 Norton St E - Winniet to 60 m west of Winniet[CIW] [R]	60,000										60,000				(60,000))	(60,000)
475018 Chemical Dosing Equipment	10,000										10,000				(10,000))	(10,000)
475019 Cay - Norton St W - Ottawa St west to end [W]	100,000										100,000				(100,000))	(100,000)
475020 Cay - Kerr St W - Ottawa St to Munsee [W]	120,000										120,000				(120,000))	(120,000)
475021 Cay - Mohawk St E - Winniet east to end [W]	200,000										200,000				(200,000))	(200,000)
475024 Mohawk Street West - Munsee to Ottawa [CIW] [R]							161,300				161,300				(161,300))	(161,300)
Ottawa [Otti] [14]																	



FIR Category: Water Stage: Draft Budget Water Distribution/Transmission	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Cayuga Water Distribution										7		ı					
475026 Norton Street West - Munsee to Ottawa [CIW] [R]							161,300				161,300	I			(161,300)	1	(161,300)
475029 Mohawk St E - Munsee to Winnet [CIW] [R]							155,100				155,100	I			(155,100)	1	(155,100)
475030 Ottawa St N - Talbot to Kerr [CIW] [R]							117,900				117,900	ı			(117,900)	,	(117,900)
475031 Ottawa St N - Kerr to Mohawk [CIW] [R]							142,800				142,800	ı			(142,800)	,	(142,800)
475032 Talbot St W - Alley behind Back 40 [CIW] [R]							155,100				155,100				(155,100)		(155,100)
Total Replacement/State of Good Repair	785,000			12,900			893,500		14,700		1,706,100				(1,706,100)		(1,706,100)
New/Enhanced Service										7		ı					
475033 Security Cameras - Cayuga Reservoir	25,000										25,000	ı <u></u>			(25,000)		(25,000)
Total New/Enhanced Service	25,000										25,000				(25,000)		(25,000)
Total Cayuga Water Distribution	810,000			12,900			893,500		14,700		1,731,100	<u> </u>			(1,731,100)		(1,731,100)
																,	
Dunnville Water Distribution										7		1					
Replacement/State of Good Repair										7		ı					
476030 Alley way - Broad to Central Lane [CIW] [R]		205,200									205,200	ı			(205,200)	,	(205,200)
476031 Main St E - 710 Main E to 50 m south [CIW] [R]		71,800									71,800	ı			(71,800)	ı	(71,800)
476037 Dunnville Bulk Water Depot Roof Repairs						5,700					5,700	ı			(5,700)	,	(5,700)
476039 Dunnville Standpipe Building Roof Repairs		10,200									10,200	ı			(10,200)	,	(10,200)
476041 Chestnut ST W - South Cayuga to Alder [CIW] [R]										180,400	180,400	ı			(180,400)	1	(180,400)
476043 Cross Street - Pine to Tamarac [CIW] [R] [SS]					637,800						637,800	I			(637,800)	1	(637,800)
476044 Lock St - Cedar to Queen [CIW] [R]										254,000	254,000	ı			(254,000)		(254,000)
476045 Bridge Street - Queen to Maple [CIW] [R]										87,000	87,000				(87,000)	1	(87,000)



County																	
FIR Category: Water Stage: Draft Budget Water Distribution/Transmission	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
-													1				
Dunnville Water Distribution																	
476046 Queen Street- Chestnut to Maple [CIW] [R]										142,900	142,900				(142,900)		(142,900)
476049 Cross St W - Eliz Cr to Pine [CIW] [R] [SS]					159,500						159,500				(159,500)		(159,500)
476050 George St - Cross - North to End [CIW] [R]						946,700					946,700				(946,700)		(946,700)
476051 Main St W - George - West to Cemetary [CIW] [R]										400,800	400,800				(400,800)		(400,800)
Total Replacement/State of Good Repair		287,200			797,300	952,400				1,065,100	3,102,000				(3,102,000)		(3,102,000)
Total Dunnville Water Distribution		287,200			797,300	952,400				1,065,100	3,102,000				(3,102,000)		(3,102,000)
													I				
Hagersville Water Distribution																	
Replacement/State of Good Repair																	
473001 Booster Stn Roof Replacement							5,800				5,800				(5,800)		(5,800)
473003 Hagersville Tuscarora St Operations Building Roof							2,900				2,900				(2,900)		(2,900)
473005 Standpipe Coating Maintenance	250,000										250,000	(250,000)					(250,000)
473006 Victoria St - Tuscarora to Main St N [CIW] [R]		307,600									307,600				(307,600)		(307,600)
473007 Foundry St - Tuscarora to end[CIW] [R]		112,700									112,700				(112,700)		(112,700)
473008 Hagersville Rechlorination Building Roof Repairs		10,300									10,300				(10,300)		(10,300)
473010 Hagersville Standpipe Building Roof Repairs							5,800				5,800				(5,800)		(5,800)
473012 Fairfield Dr - Elm to Hunter [CIW] [R]								381,500			381,500	(381,500)					(381,500)
473013 Hunter St - King to Church [CIW] [R]								254,400			254,400	(254,400)					(254,400)
473015 Hunter St - Fairfield to King [CIW] [R]								127,200			127,200				(127,200)		(127,200)
473016 Elm Ave - Sherring to Fairfield [CIW] [R]								152,600			152,600				(152,600)		(152,600)
473017 Elm Ave - Fairfield to Hunter [CIW] [R]								292,600			292,600				(292,600)		(292,600)



FIR Category: Water Stage: Draft Budget Water Distribution/Transmission	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031 Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Hagersville Water Distribution																
473018 Hagersville Booster Station Isolation Valve Replace		25,600								25,600				(25,600)		(25,600)
Total Replacement/State of Good Repair	250,000	456,200					14,500	1,208,300		1,929,000	(885,900)			(1,043,100)		(1,929,000)
Total Hagersville Water Distribution	250,000	456,200					14,500	1,208,300		1,929,000	(885,900)			(1,043,100)		(1,929,000)
Jarvis Water Distribution																
Replacement/State of Good Repair																
474002 Jarvis Bulk Water Depot Roof Repairs					5,500					5,500				(5,500)		(5,500)
474003 Walpole St- Monson to Talbot [CIW] [R] [SS]	15,000		339,500							354,500				(354,500)		(354,500)
474004 Keen St [CIW] [R]	10,000		89,900							99,900				(99,900)		(99,900)
474005 Peel St - Walpole to End [CIW] [R]	10,000		197,500							207,500	(207,500)					(207,500)
474007 Peel St E - Main to Walpole [CIW] [R]	15,000		231,100							246,100				(246,100)		(246,100)
474008 Peel St E - Craddock to End [CIW] [R]	20,000		197,500							217,500				(217,500)		(217,500)
Total Replacement/State of Good Repair	70,000		1,055,500	'	5,500	,	,	,	,	1,131,000	(207,500)			(923,500)		(1,131,000)
Total Jarvis Water Distribution	70,000		1,055,500		5,500					1,131,000	(207,500)			(923,500)		(1,131,000)
				l l												
LEIP Water Distribution																
Replacement/State of Good Repair																
479085 Nanticoke Transmission Main Service Extension LEIP	3,500,000									3,500,000		(3,500,000)				(3,500,000)
Total Replacement/State of Good Repair	3,500,000									3,500,000		(3,500,000)				(3,500,000)
Total LEIP Water Distribution	3,500,000									3,500,000		(3,500,000)				(3,500,000)
Townsend Water Distribution																
Replacement/State of Good Repair																
477004 Townsend Elevated Tank Isolation Valve Replace	25,000									25,000				(25,000)	58	(25,000)
															00	



FIR Category: Water Stage: Draft Budget Water Distribution/Transmission	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Townsend Water Distribution																	
479086 Nanticoke Transmission Main Service Extension Townsend	4,000,000										4,000,000		(4,000,000)				(4,000,000)
Total Replacement/State of Good Repair	4,025,000			,		,					4,025,000		(4,000,000)		(25,000)		(4,025,000)
Total Townsend Water Distribution	4,025,000										4,025,000		(4,000,000)		(25,000)		(4,025,000)
Water Distribution General																	
Replacement/State of Good Repair																	
471005 Distribution System - Annual Repair & Replac't	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	850,000				(850,000)		(850,000)
471008 Distribution Leak Detection Program	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	200,000				(200,000)		(200,000)
471020 Cast Iron Watermain Engineering		61,500	63,000	21,500	66,200	67,900	23,200	71,300	73,100	25,000	472,700				(472,700)		(472,700)
Total Replacement/State of Good Repair	105,000	166,500	168,000	126,500	171,200	172,900	128,200	176,300	178,100	130,000	1,522,700				(1,522,700)		(1,522,700)
Total Water Distribution General	105,000	166,500	168,000	126,500	171,200	172,900	128,200	176,300	178,100	130,000	1,522,700				(1,522,700)		(1,522,700)
Total Water Distribution/Transmission	9,515,000	8,510,200	1,223,500	1,152,600	4,903,500	1,131,000	1,964,000	1,387,600	10,751,600	1,195,100	41,734,100	(7,752,500)	(7,500,000)	(15,381,200)	(11,100,400)		(41,734,100)



FIR Category: Water Stage: Draft Budget Water Technical Reviews and Studies	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Caledonia Water Technical Reviews and Studies																	
Replacement/State of Good Repair 472002 Cal - Master Servicing Plan Update [WW][R][SS]					50,000						50,000			(50,000)			(50,000)
Total Replacement/State of Good Repair	,	,			50,000						50,000			(50,000)			(50,000)
Total Caledonia Water Technical Reviews and Studies					50,000						50,000			(50,000)			(50,000)
Cayuga Water Technical Reviews and Studies																	
Replacement/State of Good Repair																	
475017 Cay - Master Servicing Plan Update [WW][R][SS]			25,000						25,000		50,000			(50,000)			(50,000)
475028 Cayuga Water Modelling Update and Calibration	20,000										20,000			(20,000)			(20,000)
4 									-					· · · · · · · · · · · · · · · · · · ·			
Total Replacement/State of Good Repair	20,000		25,000						25,000		70,000			(70,000)			(70,000)
Total Replacement/State of Good Repair Total Cayuga Water Technical Reviews and Studies	20,000		25,000						25,000		70,000			(70,000)			(70,000)
Total Cayuga Water Technical			,						,								
Total Cayuga Water Technical Reviews and Studies Dunnville Water Technical Reviews			,						,								
Total Cayuga Water Technical Reviews and Studies Dunnville Water Technical Reviews and Studies		30,000	,					30,000	,								
Total Cayuga Water Technical Reviews and Studies Dunnville Water Technical Reviews and Studies Replacement/State of Good Repair 476028 Dun - Master Servicing Plan Update [WW][R][SS] 476040 Raw Water Transmission Main Condition Assessment		30,000	,					30,000	,		70,000			(70,000)))	(70,000)
Total Cayuga Water Technical Reviews and Studies Dunnville Water Technical Reviews and Studies Replacement/State of Good Repair 476028 Dun - Master Servicing Plan Update [WW][R][SS] 476040 Raw Water Transmission Main	20,000	30,000	,					30,000	,		70,000 60,000			(70,000)	(80,000)	(70,000)
Total Cayuga Water Technical Reviews and Studies Dunnville Water Technical Reviews and Studies Replacement/State of Good Repair 476028 Dun - Master Servicing Plan Update [WW][R][SS] 476040 Raw Water Transmission Main Condition Assessment 476047 Dunnville Water Modelling Update and	20,000	30,000	,					30,000	,		70,000 60,000 80,000			(70,000) (60,000)	(80,000		(70,000) (60,000) (80,000)
Total Cayuga Water Technical Reviews and Studies Dunnville Water Technical Reviews and Studies Replacement/State of Good Repair 476028 Dun - Master Servicing Plan Update [WW][R][SS] 476040 Raw Water Transmission Main Condition Assessment 476047 Dunnville Water Modelling Update and Calibration	20,000 80,000 25,000	,	,					,	,		70,000 60,000 80,000 25,000			(70,000) (60,000) (25,000)	(80,000))	(70,000) (60,000) (80,000) (25,000)
Total Cayuga Water Technical Reviews and Studies Dunnville Water Technical Reviews and Studies Replacement/State of Good Repair 476028 Dun - Master Servicing Plan Update [WW][R][SS] 476040 Raw Water Transmission Main Condition Assessment 476047 Dunnville Water Modelling Update and Calibration Total Replacement/State of Good Repair Total Dunnville Water Technical	20,000 80,000 25,000 105,000	30,000	,					30,000	,		70,000 60,000 80,000 25,000 165,000			(70,000) (60,000) (25,000) (85,000)	(80,000))	(70,000) (60,000) (80,000) (25,000) (165,000)



FIR Category: Water Stage: Draft Budget Water Technical Reviews and Studies	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Hagersville Water Technical Reviews and Studies																	
473004 Hag - Master Servicing Plan Update [WW][R][SS]	30,000						30,000				60,000			(60,000)			(60,000)
Total Replacement/State of Good Repair	30,000						30,000				60,000			(60,000)			(60,000)
Total Hagersville Water Technical Reviews and Studies	30,000						30,000				60,000			(60,000)			(60,000)
Jarvis Water Technical Reviews and Studies																	
Replacement/State of Good Repair																	
474001 Jar - Master Servicing Plan Update [WW][R][SS]				21,500						25,000	46,500			(46,500)			(46,500)
Total Replacement/State of Good Repair				21,500						25,000	46,500			(46,500)			(46,500)
Total Jarvis Water Technical Reviews and Studies				21,500						25,000	46,500			(46,500)			(46,500)
LEIP Water Technical Reviews and Studies					·				·								
Replacement/State of Good Repair																	
479066 LEIP - Master Servicing Plan [WW][R] [S]						50,000					50,000			(50,000)			(50,000)
Total Replacement/State of Good Repair						50,000					50,000			(50,000)			(50,000)
Total LEIP Water Technical Reviews and Studies						50,000					50,000			(50,000)			(50,000)
Water Technical Reviews and Studies General																	
Replacement/State of Good Repair																	
479083 Nanticoke Highlift IPS Electrical Condition Study	70,000										70,000				(70,000)		(70,000)
479084 Nanticoke Water Intake Options & Feasibility Study	65,000				,						65,000		(16,200)	,	(48,800)		(65,000)
Total Replacement/State of Good Repair	135,000										135,000		(16,200)		(118,800)		(135,000)
Total Water Technical Reviews and Studies General	135,000										135,000		(16,200)		(118,800)		(135,000)



FIR Category: Water Stage: Draft Budget	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
LEIP Water Technical Reviews and Studies						50,000					50,000			(50,000)			(50,000)
Water Technical Reviews and Studies General	135,000										135,000		(16,200)		(118,800)		(135,000)
Total Water Technical Reviews and Studies	290,000	30,000	25,000	21,500	50,000	50,000	30,000	30,000	25,000	25,000	576,500		(16,200)	(361,500)	(198,800)		(576,500)
Total Water	24,365,100	61,345,200	2,107,400	4,638,000	5,450,600	4,789,000	4,315,300	5,124,400	14,206,200	1,487,600	127,828,800	(17,361,000)	(74,515,100)	(19,156,200)	(16,796,500)		(127,828,800)



FIR Category: Wastewater Stage: Draft Budget	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Caledonia Wastewater Collection	5,516,500	325,500		148,600	3,148,800	162,400	169,800	180,500	185,600	194,100	10,031,800			(7,847,900)	(2,183,900)		(10,031,800)
Cayuga Wastewater Collection			1,838,400								1,838,400			(491,000)	(1,347,400)		(1,838,400)
Dunnville Wastewater Collection			10,600								10,600				(10,600)		(10,600)
Hagersville Wastewater Collection							2,900				2,900				(2,900)		(2,900)
Jarvis Wastewater Collection	50,000		532,700			5,700					588,400			(233,100)	(355,300)		(588,400)
Oswego Park Wastewater Collection	80,000	200,000									280,000				(280,000)		(280,000)
Wastewater Collection General	365,000	223,100	368,200	240,400	382,000	236,500	408,100	243,600	411,800	169,900	3,048,600			(265,950)	(2,782,650)		(3,048,600)
Total Wastewater Collection/Conveyance	6,011,500	748,600	2,749,900	389,000	3,530,800	404,600	580,800	424,100	597,400	364,000	15,800,700			(8,837,950)	(6,962,750)		(15,800,700)
Caledonia Wastewater Treatment Plant	2,184,500	5,485,200	467,700	45,312,300	70,000	90,500	168,200				53,778,400			(52,471,700)	(1,306,700)		(53,778,400)
Cayuga Wastewater Treatment Plant	464,000		509,600			21,500	5,800				1,000,900			(45,300)	(955,600)		(1,000,900)
Dunnville Wastewater Treatment Plant	616,000	640,900	257,400	501,800	496,800	18,100		19,000			2,550,000				(2,550,000)		(2,550,000)
Hagersville Wastewater Treatment Plant	80,000	1,047,500	10,500			135,800	298,000				1,571,800			(402,700)	(1,169,100)		(1,571,800)
Jarvis Lagoons			472,800								472,800				(472,800)		(472,800)
LEIP Lagoons	40,000				386,300						426,300				(426,300)		(426,300)
Oswego Park Lagoons			288,900					5,900			294,800				(294,800)		(294,800)
Townsend Lagoons				215,400							215,400				(215,400)		(215,400)
Wastewater Treatment General	199,000	180,500	170,300	187,500	215,500	3,932,000	3,716,800	4,422,100	4,414,100	163,700	17,601,500			(1,353,450)	(16,248,050)		(17,601,500)
Total Wastewater Treatment and Disposal	3,583,500	7,354,100	2,177,200	46,217,000	1,168,600	4,197,900	4,188,800	4,447,000	4,414,100	163,700	77,911,900			(54,273,150)	(23,638,750)		(77,911,900)
Caledonia Wastewater Technical Reviews and Studies					50,000						50,000			(50,000)			(50,000)
Cayuga Wastewater Technical Reviews and Studies	10,000		25,000						25,000		60,000			(60,000)			(60,000)



FIR Category: Wastewater Stage: Draft Budget	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Dunnville Wastewater Technical Reviews and Studies	15,000	30,000						30,000			75,000			(75,000)			(75,000)
Hagersville Wastewater Technical Reviews and Studies	30,000						30,000				60,000			(60,000)			(60,000)
Jarvis Wastewater Technical Reviews and Studies				16,200						18,700	34,900			(34,900)			(34,900)
LEIP Wastewater Technical Reviews and Studies						50,000					50,000			(50,000)			(50,000)
Total Wastewater Technical Reviews and Studies	55,000	30,000	25,000	16,200	50,000	50,000	30,000	30,000	25,000	18,700	329,900			(329,900)			(329,900)
Total Wastewater	9,650,000	8,132,700	4,952,100	46,622,200	4,749,400	4,652,500	4,799,600	4,901,100	5,036,500	546,400	94,042,500			(63,441,000)	(30,601,500)		(94,042,500)



FIR Category: Wastewater Stage: Draft Budget Wastewater Collection/Conveyance	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
-								,		_							
Caledonia Wastewater Collection																	
Replacement/State of Good Repair																	
452024 Forfar St. Storage Building Roof Replacement								3,000			3,000				(3,000)		(3,000)
452032 Nairne St. Pump Station GENSET Replacement		189,600									189,600				(189,600)		(189,600)
452041 Nairne Pump Station Roof Repairs	10,000										10,000				(10,000)		(10,000)
452043 Gravity Sewer Main Upsizing - Sutherland - Argyle to E. Edinburgh Sq [CIW] [W] [R]	370,000										370,000				(370,000)		(370,000)
452050 Gravity Sewer Main Upsizing - E. Edinburgh Sq to Caithness [CIW] [W] [R]	285,000										285,000			(210,900)	(74,100)		(285,000)
452051 Gravity Sewer Main Upsizing - Caithness to Nairne [R]	155,000										155,000			(114,700)	(40,300)		(155,000)
452052 Gravity Sewer Main Upsizing - Nairne to Pump Station	145,000										145,000			(107,300)	(37,700)		(145,000)
452053 Sanitary Sewer Relining/Repair [CIW] [W][R]	130,000	135,900		148,600	155,300	162,400	169,800	177,500	185,600	194,100	1,459,200				(1,459,200)		(1,459,200)
Total Replacement/State of Good Repair	1,095,000	325,500		148,600	155,300	162,400	169,800	180,500	185,600	194,100	2,616,800			(432,900)	(2,183,900)		(2,616,800)
New/Enhanced Service																	
452004 Nairne St. Forcemain Replacement	4,421,500										4,421,500			(4,421,500)			(4,421,500)
452044 McClung SPS Forcemain Extension					1,330,100						1,330,100			(1,330,100)			(1,330,100)
452045 Nairne St. SPS Forcemain Extension					1,330,100						1,330,100			(1,330,100)			(1,330,100)
452046 McClung SPS Upgrades					333,300					_	333,300			(333,300)			(333,300)
Total New/Enhanced Service	4,421,500				2,993,500					_	7,415,000			(7,415,000)			(7,415,000)
Total Caledonia Wastewater Collection	5,516,500	325,500		148,600	3,148,800	162,400	169,800	180,500	185,600	194,100	10,031,800			(7,847,900)	(2,183,900)		(10,031,800)
Cayuga Wastewater Collection Replacement/State of Good Repair 455004 Ouse St PS Replacements			1,470,900								1,470,900			(371,900)	(1,099,000)		(1,470,900)



FIR Category: Wastewater Stage: Draft Budget Wastewater Called in Accounts	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Collection/Conveyance													1				
Cayuga Wastewater Collection																	
Total Replacement/State of Good Repair			1,470,900								1,470,900		1	(371,900)	(1,099,000)		(1,470,900)
New/Enhanced Service																	
455009 Ouse St Forcemain Twinning			367,500								367,500			(119,100)	(248,400)		(367,500)
Total New/Enhanced Service			367,500								367,500			(119,100)	(248,400)		(367,500)
Total Cayuga Wastewater Collection			1,838,400								1,838,400			(491,000)	(1,347,400)		(1,838,400)
	1			1									1				
Dunnville Wastewater Collection																	
Replacement/State of Good Repair																	
456023 Broad St Pump Station Roof Repairs			10,600								10,600				(10,600)		(10,600)
Total Replacement/State of Good Repair	'		10,600	,	,	,					10,600				(10,600)		(10,600)
Total Dunnville Wastewater Collection			10,600								10,600				(10,600)		(10,600)
					,				,								
Hagersville Wastewater Collection																	
Replacement/State of Good Repair 453009 Hagersville Tuscarora St Operations																	
Building Roof							2,900				2,900				(2,900)		(2,900)
Total Replacement/State of Good Repair							2,900				2,900				(2,900)		(2,900)
Total Hagersville Wastewater Collection							2,900				2,900				(2,900)		(2,900)
Jarvis Wastewater Collection																	
Replacement/State of Good Repair																	
454012 Jarvis/Talbot Pump Station Roof						5,700					5,700				(5,700)		(5,700)
Total Replacement/State of Good Repair						5,700					5,700				(5,700)		(5,700)
New/Enhanced Service																	
454006 Walpole St - Sewer Pipe Upsize (Peel to Talbot)	15,000		101,900								116,900			(46,800)	(70,100)		(116,900)



County																	
FIR Category: Wastewater Stage: Draft Budget Wastewater Collection/Conveyance	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Jarvis Wastewater Collection										,							
454007 Peel St E - Sewer Pipe Upsize										,							
(Walpole to End)	35,000		430,800								465,800			(186,300)	(279,500)		(465,800)
Total New/Enhanced Service	50,000		532,700								582,700			(233,100)	(349,600)		(582,700)
Total Jarvis Wastewater Collection	50,000		532,700			5,700					588,400			(233,100)	(355,300)		(588,400)
													4				
Oswego Park Wastewater Collection										,							
Replacement/State of Good Repair										,							
458002 Oswego Pump Station Forcemain Replacement	50,000	200,000									250,000				(250,000)		(250,000)
458004 Oswego Pump Station Control Logic Reprogramming	30,000										30,000				(30,000)		(30,000)
Total Replacement/State of Good Repair	80,000	200,000									280,000				(280,000)		(280,000)
Total Oswego Park Wastewater Collection	80,000	200,000									280,000				(280,000)		(280,000)

Wastewater Collection General										,							
Replacement/State of Good Repair										,							
451001 Inflow & Infiltration Program Support	35,000	25,600	36,800	26,900	38,600	28,300	40,600	29,700	42,600	31,200	335,300			(50,250)	(285,050)		(335,300)
451005 CCTV Inspections - Structural Ass'ments [SS] - Engineering	25,000	25,600	26,300	26,900	27,600	28,300	29,000	29,700	30,500	31,200	280,100				(280,100)		(280,100)
451008 Collection System - Annual Repair	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	600,000				(600,000)		(600,000)
451012 Sewer Manhole Repairs (I&I)		76,900		80,800		84,900		89,200		-	331,800			(49,700)	(282,100)		(331,800)
451013 Sanitary Sewer Rehabilitations (I&I)	200,000		210,100		220,800		231,900		243,700		1,106,500			(166,000)	(940,500)		(1,106,500)
451017 CCTV Inspections - Operations	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	350,000				(350,000)		(350,000)
451022 Confined Space Entry Equipment Replacements	10,000			10,800			11,600			12,500	44,900				(44,900)		(44,900)
Total Replacement/State of Good Repair	365,000	223,100	368,200	240,400	382,000	236,500	408,100	243,600	411,800	169,900	3,048,600			(265,950)	(2,782,650)		(3,048,600)
Total Wastewater Collection General	365,000	223,100	368,200	240,400	382,000	236,500	408,100	243,600	411,800	169,900	3,048,600			(265,950)	(2,782,650)		(3,048,600)
4																	



FIR Category: Wastewater Stage: Draft Budget Wastewater Collection/Conveyance	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Total Wastewater Collection/Conveyance	6,011,500	748,600	2,749,900	389,000	3,530,800	404,600	580,800	424,100	597,400	364,000	15,800,700			(8,837,950)	(6,962,750)		(15,800,700)



FIR Category: Wastewater Stage: Draft Budget Wastewater Treatment and Disposal	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
<u> </u>																	
Caledonia Wastewater Treatment Plant																	
Replacement/State of Good Repair																	
452003 WWTP – SCADA Computer & Network Replmt		20,500					23,200				43,700				(43,700)		(43,700)
452023 WWTP Filter Building Roof Replacement		205,100									205,100				(205,100)		(205,100)
452026 Blower Replmts			367,700								367,700				(367,700)		(367,700)
452029 WTP Electrical Panels and VFD Inspection/Maintenance			10,500				11,600				22,100				(22,100)		(22,100)
452031 Remotes–Control Equipment Replacement(SCADA)	34,500		19,500			90,500					144,500				(144,500)		(144,500)
452033 WWTP GENSET Replacement				242,300							242,300				(242,300)		(242,300)
452034 WWTP PLC Replacements							133,400				133,400			(32,000)	(101,400)		(133,400)
452039 Control Building Roof Repairs		10,200									10,200				(10,200)		(10,200)
452048 Filter #2 Refurbishment and Media Replacement	80,000										80,000				(80,000)		(80,000)
Total Replacement/State of Good Repair	114,500	235,800	397,700	242,300	,	90,500	168,200		,		1,249,000			(32,000)	(1,217,000)		(1,249,000)
New/Enhanced Service																	
452025 Caledonia Wastewater Treatment Plant	2,000,000	5,000,000		45,000,000							52,000,000			(52,000,000)			(52,000,000)
452027 Sludge Storage Tank Retrofit		179,400									179,400			(89,700)	(89,700)		(179,400)
452058 Project Management Support (W)	70,000	70,000	70,000	70,000	70,000						350,000			(350,000)			(350,000)
Total New/Enhanced Service	2,070,000	5,249,400	70,000	45,070,000	70,000						52,529,400			(52,439,700)	(89,700)		(52,529,400)
Total Caledonia Wastewater Treatment Plant	2,184,500	5,485,200	467,700	45,312,300	70,000	90,500	168,200				53,778,400			(52,471,700)	(1,306,700)		(53,778,400)
Cayuga Wastewater Treatment Plant																	
Replacement/State of Good Repair																	
455005 Remotes–Control Equipment Replacement(SCADA)	50,000										50,000			(5,000)	(45,000)		(50,000)



FIR Category: Wastewater Stage: Draft Budget Wastewater Treatment and Disposal	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
	,	,															
Cayuga Wastewater Treatment Plant																	
455012 WTP Electrical Panel and VFD Inspection/Maintenance			5,300				5,800				11,100				(11,100)		(11,100)
455013 Mechanical Aerator (rotor) Replacement	395,000										395,000				(395,000)		(395,000)
455015 WWTP SCADA Computer & Network Replmt	19,000					21,500					40,500				(40,500)		(40,500)
455016 WWTP PLC Replacements			168,100								168,100			(40,300)	(127,800)		(168,100)
Total Replacement/State of Good Repair	464,000	,	173,400	,	,	21,500	5,800		,		664,700			(45,300)	(619,400)		(664,700)
New/Enhanced Service	,	,															
455011 Twinning of Headworks Screen			336,200								336,200				(336,200)		(336,200)
Total New/Enhanced Service			336,200	'					'		336,200				(336,200)		(336,200)
Total Cayuga Wastewater Treatment Plant	464,000		509,600			21,500	5,800				1,000,900			(45,300)	(955,600)		(1,000,900)
	ı			ı	ll la l	ll la l			l								
Dunnville Wastewater Treatment Plant																	
Replacement/State of Good Repair																	
452056 Dunnville HVAC Replacement	25,000										25,000				(25,000)		(25,000)
452057 Dunnville - Lighting & Electrical Replacements	70,000										70,000				(70,000)		(70,000)
456011 Blower Replacement - High Efficiency & VFD					220,800						220,800				(220,800)		(220,800)
456012 Aeration Diffuser System Replacement		153,800	157,600								311,400				(311,400)		(311,400)
456015 Odour Control Media Replacement				17,200				19,000			36,200				(36,200)		(36,200)
456016 WWTP Wet-Well Valve Replacements	200,000	200,000									400,000				(400,000)		(400,000)
456018 WWTP SCADA Computer & Network Replmt	16,000					18,100					34,100				(34,100)		(34,100)
456021 Digester Transfer Pump Replacement		30,800									30,800				(30,800)		(30,800)
456022 Digester Building Roof Repairs	10,000										10,000				(10,000)		(10,000)



FIR Category: Wastewater Stage: Draft Budget														
Wastewater Treatment and Disposal	4 2025	2026	2027	2028	2029	2030 2	2031 Ex	Total expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Dunnville Wastewater Treatment Plant														
456027 Clarifiers 1 & 2 Cross Collector Replacements 295,000								295,000				(295,000)		(295,000)
456028 Clarifiers 1 & 2 Rebuild 256,300								256,300				(256,300)		(256,300)
456029 Clarifiers 3 & 4 Rebuild		276,000						276,000				(276,000)		(276,000)
Total Replacement/State of Good Repair 616,000 640,900 157,600	17,200	496,800	18,100		19,000			1,965,600				(1,965,600)		(1,965,600)
New/Enhanced Service		,												
456017 Sludge Storage Cell #4 Upgrades and 99,800 Screen	3 484,600							584,400				(584,400)		(584,400)
Total New/Enhanced Service 99,800	0 484,600							584,400				(584,400)		(584,400)
Total Dunnville Wastewater Treatment Plant 616,000 640,900 257,400	501,800	496,800	18,100		19,000			2,550,000				(2,550,000)		(2,550,000)
Hagersville Wastewater Treatment Plant														
Replacement/State of Good Repair														
452054 Hagersville Admin Building HVAC 45,000								45,000				(45,000)		(45,000)
452055 Hagersville Blower Electrical Replace 35,000								35,000				(35,000)		(35,000)
453002 WWTP SCADA Computer & Network Replmt 22,500				25,600				48,100				(48,100)		(48,100)
453022 Remotes–Control Equipment Replacement(SCADA)				63,700				63,700			(15,300)	(48,400)		(63,700)
453023 WWTP Electrical Panel and VFD	r			11,600				22,100				(22,100)		(22,100)
Inspection/Maintenance			425.000	197,100				332,900			(79,900)	(253,000)		(332,900)
Inspection/Maintenance 453027 WWTP PLC Replacements			135,800	101,100				332,900			(13,300)	(233,000)		(002,000)
Inspection/Maintenance			135,800	298,000				546,800			(95,200)	(451,600)		(546,800)
unspection/Maintenance 453027 WWTP PLC Replacements														
Total Replacement/State of Good Repair 80,000 22,500 10,500														
Total Replacement/State of Good Repair 80,000 22,500 10,500 New/Enhanced Service	1							546,800			(95,200)	(451,600)		(546,800)



County																	
FIR Category: Wastewater Stage: Draft Budget Wastewater Treatment and	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve	Debenture Financing	Total Financing
Disposal										,	Experientares	Cubolulos	1000701100	Ondigos	Funds	1 manong	
Jarvis Lagoons										1							
Replacement/State of Good Repair										,							
454010 Jarvis Lagoon Clean Out			472,800							P	472,800				(472,800)		(472,800)
Total Replacement/State of Good Repair			472,800								472,800				(472,800)		(472,800)
Total Jarvis Lagoons			472,800								472,800				(472,800)		(472,800)
LEIP Lagoons										ľ							
Replacement/State of Good Repair										P							
457008 LEIP Lagoon Berm Restoration	40,000									1	40,000				(40,000)		(40,000)
459005 LEIP Lagoon Clean Out					386,300					1	386,300				(386,300)		(386,300)
Total Replacement/State of Good Repair	40,000				386,300						426,300				(426,300)		(426,300)
Total LEIP Lagoons	40,000				386,300						426,300				(426,300)		(426,300)
						,				,							
Oswego Park Lagoons										P							
Replacement/State of Good Repair										ľ							
458001 Main Pump Station Roof Replacement								5,900		P	5,900				(5,900)		(5,900)
458003 Oswego Lagoon Clean Out			288,900							1	288,900				(288,900)		(288,900)
Total Replacement/State of Good Repair			288,900					5,900			294,800				(294,800)		(294,800)
Total Oswego Park Lagoons			288,900					5,900			294,800				(294,800)		(294,800)
Townsend Lagoons										1							
Replacement/State of Good Repair										P							
457005 Townsend Lagoon Clean Out				215,400						1	215,400				(215,400)		(215,400)
Total Replacement/State of Good Repair				215,400							215,400				(215,400)		(215,400)
Total Townsend Lagoons				215,400							215,400				(215,400)		(215,400)



FIR Category: Wastewater Stage: Draft Budget Wastewater Treatment and Disposal	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Wastewater Treatment General Replacement/State of Good Repair																	
451003 Facility Condition Assessment [W]	25,000		26,300		27,600		29,000		30,500		138,400				(138,400)		(138,400)
451004 SCADA Master Plan Optimization					38,600						38,600			(9,300)	(29,300)		(38,600)
451007 SCADA Maintenance	20,000	20,500	21,000	21,500	22,100	22,600	23,200	23,800	24,400	25,000	224,100			(53,700)	(170,400)		(224,100)
451009 Composite Sampler-Replacement Program		39,000		40,900		43,000		45,200			168,100				(168,100)		(168,100)
451010 Plant Optimization Program Support	35,000										35,000			(5,250)	(29,750)		(35,000)
451011 SCADA Technical Support	40,000	41,000	42,000	43,100	44,200	45,300	46,400	47,500	48,700	50,000	448,200			(107,500)	(340,700)		(448,200)
451015 Wastewater Operating Capital	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	400,000				(400,000)		(400,000)
451018 Asbestos Annual Inspection and Remediation [W]	4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,800	4,900	5,000	44,800				(44,800)		(44,800)
451024 Plant Capital Improvements						3,737,000	3,533,000	4,219,200	4,223,000		15,712,200			(785,600)	(14,926,600)		(15,712,200)
Total Replacement/State of Good Repair	164,000	144,600	133,500	149,800	176,900	3,892,400	3,676,200	4,380,500	4,371,500	120,000	17,209,400			(961,350)	(16,248,050)		(17,209,400)
New/Enhanced Service	,			,	,				,								
451014 Effluent Water Quality & Impact Assessment	35,000	35,900	36,800	37,700	38,600	39,600	40,600	41,600	42,600	43,700	392,100			(392,100)			(392,100)
Total New/Enhanced Service	35,000	35,900	36,800	37,700	38,600	39,600	40,600	41,600	42,600	43,700	392,100			(392,100)			(392,100)
Total Wastewater Treatment General	199,000	180,500	170,300	187,500	215,500	3,932,000	3,716,800	4,422,100	4,414,100	163,700	17,601,500			(1,353,450)	(16,248,050)		(17,601,500)
Total Wastewater Treatment and Disposal	3,583,500	7,354,100	2,177,200	46,217,000	1,168,600	4,197,900	4,188,800	4,447,000	4,414,100	163,700	77,911,900			(54,273,150)	(23,638,750)		(77,911,900)



County																	
FIR Category: Wastewater Stage: Draft Budget Wastewater Technical Reviews and Studies	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Caledonia Wastewater Technical Reviews and Studies																	
Replacement/State of Good Repair										ľ							
452001 Cal - Master Servicing Plan Update [W] [R][SS]					50,000						50,000			(50,000)			(50,000)
Total Replacement/State of Good Repair					50,000						50,000			(50,000)			(50,000)
Total Caledonia Wastewater Technical Reviews and Studies					50,000						50,000			(50,000)			(50,000)
Cayuga Wastewater Technical Reviews and Studies																	
Replacement/State of Good Repair										ľ							
455014 Cay - Master Servicing Plan Update [W][R][SS]			25,000						25,000	1	50,000			(50,000)			(50,000)
455017 Cayuga Wastewater Modelling Update and Calibration	10,000										10,000			(10,000)			(10,000)
Total Replacement/State of Good Repair	10,000		25,000						25,000		60,000			(60,000)			(60,000)
Total Cayuga Wastewater Technical Reviews and Studies	10,000		25,000						25,000		60,000			(60,000)			(60,000)
Dunnville Wastewater Technical Reviews and Studies																	
Replacement/State of Good Repair										ľ							
456014 Dun - Master Servicing Plan Update [W][R][SS]		30,000						30,000		1	60,000			(60,000)			(60,000)
456030 Dunnville Wastewater Modelling Update and Calibration	15,000										15,000			(15,000)			(15,000)
Total Replacement/State of Good Repair	15,000	30,000						30,000			75,000			(75,000)			(75,000)
Total Dunnville Wastewater Technical Reviews and Studies	15,000	30,000						30,000			75,000			(75,000)			(75,000)
Hagersville Wastewater Technical Reviews and Studies																	
Replacement/State of Good Repair										ľ							
453020 Hag - Master Servicing Plan Update [W][R][SS]	30,000						30,000			1	60,000			(60,000)			(60,000)



FIR Category: Wastewater Stage: Draft Budget Wastewater Technical Reviews and Studies	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total Expenditures	Grants Subsidies	General Recoveries	Development Charges	Reserves/ Reserve Funds	Debenture Financing	Total Financing
Hagersville Wastewater Technical Reviews and Studies																	
Total Replacement/State of Good Repair	30,000						30,000				60,000			(60,000)			(60,000)
Total Hagersville Wastewater Technical Reviews and Studies	30,000						30,000				60,000			(60,000)			(60,000)
Jarvis Wastewater Technical Reviews and Studies																	
Replacement/State of Good Repair																	
454001 Jar - Master Servicing Plan Update [W] [R][SS]				16,200						18,700	34,900			(34,900)	1		(34,900)
Total Replacement/State of Good Repair				16,200						18,700	34,900			(34,900)			(34,900)
Total Jarvis Wastewater Technical Reviews and Studies				16,200						18,700	34,900			(34,900)			(34,900)
LEIP Wastewater Technical Reviews and Studies																	
Replacement/State of Good Repair																	
459006 LEIP - Master Servicing Plan [W][R][S]						50,000					50,000			(50,000)	l		(50,000)
Total Replacement/State of Good Repair				,	,	50,000			,		50,000			(50,000)			(50,000)
Total LEIP Wastewater Technical Reviews and Studies						50,000					50,000			(50,000)			(50,000)
Total Wastewater Technical Reviews and Studies	55,000	30,000	25,000	16,200	50,000	50,000	30,000	30,000	25,000	18,700	329,900			(329,900)			(329,900)



2022 Capital Financial Principles

<u>Principles</u>									
<u>Source</u>	<u>Sub-category</u>	<u>Principle</u>							
External Sources	External Financing - Donation/Contributions	Municipal Drains based on legislative assessment. Partnership with community groups based on Community Partnership Framework for new service/enhanced infrastructure projects, or acceleration of replacement of infrastructure.							
	External Financing - Donation towards Decorative Streetlights	Upgrades from standard to decorative streetlights will be funded by BIA or community group							
	External Financing - Municipal Recoveries	Based on agreed cost sharing principles							
Grants	Allocation of Federal Gas Tax Funds	Allocate 50/50 between water/wastewater and tax supported capital projects. Apply to incremental projects, new/enhanced services. Gas Tax will be used in order to avoid debt financing. Need to ensure the project meets eligibility requirements for Gas Tax funding.							
	Ontario Community Infrastructure Fund - formula component	As the intention of this program is to assist municipalities in funding critical projects identified within their Asset Management Plans in the eligible "core infrastructure" areas, and as the County's current Asset Management Plan (AMP) identifies funding needs within the core infrastructure areas of Roads, Bridges, and Water, with the largest infrastructure deficit shown within the roads program, this funding will be utilized within the roads program. Future year's allocations will be assigned to eligible capital projects through the annual capital budget review process.							
	Clean Water and Wastewater Fund	To be utilized for acceleration of the rehabilitation and modernization of drinking water, wastewater and stormwater infrastructure; to foster economic growth and support a cleaner and healthier environment for communities; to improve the reliability of drinking water, wastewater and stormwater systems and meet federal or provincial regulations, standards or guidelines.							
	Other Grants	As available based on eligibility of funds							
County Reserves/Reserve Funds Capital Replacement Reserves/Reserve Funds	Capital Replacement Reserves/Reserve Funds	Capital Replacement Reserves/Reserve Funds will have a positive balance at the end of the 10 year forecast. Interim financing during the forecast will not exceed 25% of annual contributions in any given year. All projects requiring interim financing will have interest charges applied to the capital project.							
	Land Sales Reserve	To be utilized for to provide a source of funds for land purchases, building construction or major capital improvements to County-owned buildings.							
	Parkland Dedication Reserve fund	To be utilized for to provide a source of funds for acquisition and development of public parks, recreation facilities and trails.							
	Development Charge Reserve Funds	Development Charges reserve funds will remain positive in aggregate over the 10 year forecast.							
Debt Financing		Annual debt repayments will not exceed 10% of own source revenues. Debt will only be applied to projects under the following principles:							
		Gross Project Costs < \$1 million: Not eligible for debt							
	County Debt Portion	Gross Project Costs between \$1 Million and \$10 Million : Debt financed for a period of 10 years.							
	333, 233 3	Gross Project Costs > \$10 million and asset life >20 years: Debt financed for a period of 20 years.							
		Debt to be issued at time of project initiation (i.e. award of tender)							
		Engineering components less than 25% of project cost, if initiated more than 2 years before construction, will not be eligible for debt financing.							
		DC debt will be applied under the following circumstances:							
	DC Debt (growth related debt)	Projects where issuing debt for County share of project, and development charges funding is applicable, DC debt will be considered if insufficient development charge receipts are available.							
		Debt to be issued at time of project initiation (i.e. award of tender)							
		If the DCRF results in a negative balance, a review of significant DC funded projects will occur to review for potential DC debt issuance							

Nature of Project	Hierarchy of Funding Source							
Replacements/SOGR	External Revenues							
	Applicable Grants							
	Development Charges (if applicable)							
	Specific Capital Replacement Reserve/Reserve Funds							
	Debt Financing							
New Initiatives/Enhancements	External Revenues							
	Applicable Grants							
	Development Charges (if applicable)							
	Specific Capital Replacement Reserve/Reserve Funds							
	Debt Financing							



Capital Replacement Reserve Funds - Water and Wastewater

FORECAST OF CAPITAL REPLACEMENT RESERVE FUND - WATER FOR THE YEARS 2022 TO 2031

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	<u>WATER</u> \$										
Opening Balance January 1st	8,688,157	1,474,824	605,914	1,143,237	1,265,062	933,071	1,411,557	1,000,823	2,235,353	2,993,083	4,427,313
Source of Funds:											
Budgeted Annual Contribution	1,417,000	1,549,590	1,681,723	1,762,625	1,763,209	1,762,486	1,763,066	2,453,630	2,453,630	2,453,630	2,453,630
Contribution: Leachate Contribution from Rate Stabilization Reserve			700,000								
Interest Earned			700,000								
Total Source of Funds	1,417,000	1,549,590	2,381,723	1,762,625	1,763,209	1,762,486	1,763,066	2,453,630	2,453,630	2,453,630	2,453,630
Use of Funds:											
Commitment for Active Projects	8,630,333										
New Initiative/Enhanced Service		195,200	15,000				15,000				
Replacement/State of Good Repair		2,223,300	1,829,400	1,640,800	2,095,200	1,284,000	2,158,800	1,219,100	1,695,900	1,019,400	1,364,200
Total Use of Funds	8,630,333	2,418,500	1,844,400	1,640,800	2,095,200	1,284,000	2,173,800	1,219,100	1,695,900	1,019,400	1,364,200
Closing Balance December 31st	1,474,824	605,914	1,143,237	1,265,062	933,071	1,411,557	1,000,823	2,235,353	2,993,083	4,427,313	5,516,743

FORECAST OF CAPITAL REPLACEMENT RESERVE FUND - SEWER FOR THE YEARS 2022 TO 2031

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	<u>SEWER</u> \$	<u>SEWER</u> \$	<u>SEWER</u> \$	<u>SEWER</u> \$	<u>SEWER</u> \$	<u>SEWER</u> \$	<u>SEWER</u> \$	<u>SEWER</u> \$	<u>SEWER</u> \$	<u>SEWER</u> \$	<u>SEWER</u> \$
Opening Balance January 1st	16,185,174	13,164,479	12,558,229	11,949,261	10,981,757	11,687,096	12,352,363	10,246,658	8,086,695	5,764,346	4,210,336
Source of Funds:											
Budgeted Annual Contribution Contribution from Rate Stabilization Reserve	1,896,640	1,922,310	1,948,492	2,129,156 900,000	2,150,399	2,171,327	2,192,255	2,213,097	2,234,111	3,121,850	3,121,850
Contribution: Leachate				300,000							
Leachate Norfolk Capital component											
Leachate Haldimand Capital component Interest Earned	27,140	27,140	27,140	27,140	27,140	27,140	27,140	27,140	27,140	27,140	27,140
Total Source of Funds	1,923,780	1,949,450	1,975,632	3,056,296	2,177,539	2,198,467	2,219,395	2,240,237	2,261,251	3,148,990	3,148,990
Use of Funds:											
Commitment for Active Projects	4,944,475										
New Initiative/Enhanced Service			822,200	497,100	484,600		15,000				
Replacement/State of Good Repair		2,555,700	1,762,400	3,526,700	987,600	1,533,200	4,310,100	4,400,200	4,583,600	4,703,000	461,300
Total Use of Funds	4,944,475	2,555,700	2,584,600	4,023,800	1,472,200	1,533,200	4,325,100	4,400,200	4,583,600	4,703,000	461,300
Closing Balance December 31st	13,164,479	12,558,229	11,949,261	10,981,757	11,687,096	12,352,363	10,246,658	8,086,695	5,764,346	4,210,336	6,898,026



Federal Gas Tax Reserve Fund

FORECAST OF FEDERAL GAS TAX REVENUE RESERVE FUND FOR THE YEARS 2022 TO 2031

	2020	2021	2022	2023	2024 \$	2025	2026	2027	2028	2029	2030	2031
Opening Balance January 1st	5,385,989	2,413,334	4,807,869	5,875,798	4,159,407	6,047,616	3,354,725	3,613,934	2,545,943	3,419,252	1,951,261	70
Source of Funds:		_										
Budgeted Contribution One Time Additional Contribution	2,767,150	2,892,929 2,781,055	2,892,929	3,018,709	3,018,709	3,018,709	3,018,709	3,018,709	3,018,709	3,018,709	3,018,709	3,018,709
Interest Earned Total Source of Funds	2,884,000	5,673,985	2,892,929	3,018,709	3,018,709	3,018,709	3,018,709	3,018,709	3,018,709	3,018,709	3,018,709	3,018,709
Use of Funds: Commitment for Active Projects (Tax) Commitment for Active Projects (Water/Wastewater) Contribution to State of Good Repair Projects (Tax Supported)		1,693,100 1,586,350	1,325,000	755,000	933,000	3,678,100	1,103,800	2,014,100	2,145,400	1,527,400	1,007,600	2,947,900
Contribution to New Initiatives/Enhanced Service Projects (Tax Supported) Contribution to New Initiatives/Enhanced Service Projects (Water) Contribution to State of Good Repair Projects (Water) Gravel Road Conversion One-Time Funding	5,856,655	- 1	500,000	3,980,100	197,500	2,033,500	1,655,700	2,072,600		2,959,300	3,962,300	
Total Use of Funds	5,856,655	3,279,450	1,825,000	4,735,100	1,130,500	5,711,600	2,759,500	4,086,700	2,145,400	4,486,700	4,969,900	2,947,900
Closing Balance December 31st	2,413,334	4,807,869	5,875,798	4,159,407	6,047,616	3,354,725	3,613,934	2,545,943	3,419,252	1,951,261	70	70,879

NOTE: Tax Supported Capital project funding is based on preliminary figures and will be finalized through the Tax Supported Capital Budget.



Development Charges Reserve Fund - Water

DEVELOPMENT CHARGES RESERVE FUND - WATER FOR THE YEARS 2022 TO 2031

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Opening Balance January 1st	240,057	233,734	194,807	(99,421)	(317,152)	(820,080)	(1,025,327)	(1,726,571)	(1,565,554)	(1,968,068)	(2,004,269)
Source of Funds: Actual Receipts to December 31	_										
Receipts expected per DC study (prorated if part year)	695,460	709,370	723,560	738,030	752,790	793,680	809,560	825,750	842,260	859,110	862,030
Interest Earned	3,799	3,332	(148)	(4,655)	(12,707)	(20,620)	(30,749)	(37,403)	(39,484)	(44,411)	(60,406)
Total Source of Funds	699,259	712,702	723,412	733,375	740,083	773,060	778,811	788,347	802,776	814,699	801,624
Use of Funds:	_										
DC debt repayment (note 1)	502,100	501,930	502,040	502,096	501,671	502,197	501,775				
Forecasted DC debt repayment (note 2)		•	406,300	397,110	387,440	378,010	582,580	568,430	816,090	795,600	2,138,825
Proposed Projects-Capital Forecast (Tax)	24,724		13,500				15,300				
Proposed Projects-Capital Forecast (WWW) (note 3)	178,757	249,700	95,800	51,900	353,900	98,100	380,400	58,900	389,200	55,300	60,300
Total Use of Funds	705,581	751,630	1,017,640	951,106	1,243,011	978,307	1,480,055	627,330	1,205,290	850,900	2,199,125
Closing Balance December 31st	233,734	194,807	(99,421)	(317,152)	(820,080)	(1,025,327)	(1,726,571)	(1,565,554)	(1,968,068)	(2,004,269)	(3,401,770)

Note 1: Debt repayment includes previously initiated or completed projects for which debt has already been issued.

Note 2: Forecasted debt repayment includes estimates for the following projects budgeted for construction to be initiatied between 2022-2031: Caledonia North Water Storage Upgrades (2031-2040), Dunnville WTP Reservoir Expansion (2029-2038); Twinning of 350mm Water Main on Hald Rd 66 (2031-2040) and Twinning of 450mm Water Main on Hwy 6 (2027-2036); Caledonia Elevated Storage Tank Replacement (2023-2032).

Proposed project expenditures are based on the 2022 10 year capital forecast (2022-2031). Additional projects have been added to the 10 year forecast that were not included in the Haldimand County Development Charge Background Study, March 5, Note 3:

Note 4: Though the Development Charges Reserve Fund - Wastewater is currently projecting to be in a negative balance at the end of the 10 year forecasted period, all DC related expenditures are forecasted over a 20 year period, at which time the reserve fund will come to a zero balance. A comprehensive Development Charges study is completed every five years and will be completed again in 2023.



Development Charges Reserve Fund - Wastewater

DEVELOPMENT CHARGES RESERVE FUND - WASTEWATER FOR THE YEARS 2022 TO 2031

	<u>2021</u>	2022 \$	2023 \$	2024 \$	2025 \$	2026 \$	2027	2028 \$	2029 \$	2030 \$	2031 \$
Out to Deliver to the second of	(4.702.047)	(4 245 224)	(4.257.404)	(4 444 204)	(2.406.760)	(2.454.450)	(0.500.040)	(42,422,652)	(40.470.466)	(22.752.225)	(27.474.255)
Opening Balance January 1st	(1,703,917)	(1,346,084)	(1,257,191)	(1,441,281)	(2,496,769)	(3,164,460)	(8,539,913)	(13,420,653)	(18,179,466)	(22,762,326)	(27,171,355)
Source of Funds:											
Actual Receipts to December 31											
Receipts expected per DC study (prorated if part year)	2,091,800	2,133,640	2,176,310	2,219,840	2,264,230	2,387,160	2,434,910	2,483,610	2,533,280	2,583,940	2,592,760
Interest Earned	(35,304)	(29,457)	(30,152)	(44,003)	(63,257)	(130,782)	(245,382)	(353,091)	(457,473)	(557,946)	(653,210)
Total Source of Funds	2,056,496	2,104,183	2,146,158	2,175,837	2,200,973	2,256,378	2,189,528	2,130,519	2,075,807	2,025,994	1,939,550
Use of Funds:											
DC debt repayment (note 1)	422,480	1,337,490	1,312,958	1,094,886	1,077,534	1,994,221	1,043,698	943,332	926,237	807,773	793,298
Forecasted DC debt repayment (note 2)			747,890	1,676,040	1,635,730	5,401,710	5,668,870	5,546,600	5,414,930	5,287,950	5,160,982
Proposed Projects-Capital Forecast (Tax)	24,724		13,800				15,300				
Proposed Projects-Capital Forecast (WWW) (note 3)	1,251,458	677,800	255,600	460,400	155,400	235,900	342,400	399,400	317,500	339,300	102,000
Total Use of Funds	1,698,662	2,015,290	2,330,248	3,231,326	2,868,664	7,631,831	7,070,268	6,889,332	6,658,667	6,435,023	6,056,280
Closing Balance December 31st	(1,346,084)	(1,257,191)	(1,441,281)	(2,496,769)	(3,164,460)	(8,539,913)	(13,420,653)	(18,179,466)	(22,762,326)	(27,171,355)	(31,288,085)

Note 1: Debt repayment includes previously initiated or completed projects for which debt has already been issued.

Note 2: Forecasted debt repayment includes estimates for the following projects budgeted for construction to be initiatied between 2022-2031: Hagersville Grit Removal System (2024-2033), McClung Pump Station Upgrades (2027-2036), McClung Pump Station Forcemain Extension (2027-2036), Nairne Pump Station Forcemain Extension (2027-2036), New Caledonia Wastewater Treatment Plant Phase 1 & 2 (2024-2033 and 2026-2045); Ouse St PS Replacement (2025-2034); Ouse St Forcemain Twinning (2025-2034); Caledonia WWTP Wet Well Expansion (2023-2032); amd Nairne St Forcemain Replacement (2023-2032)

Note 3: Proposed project expenditures are based on the 2022 10 year capital forecast (2022-2031). Additional projects have been added to the 10 year forecast that were not included in the Haldimand County Development Charge Background Study, March 5, 2019.

Note 4: Though the Development Charges Reserve Fund - Wastewater is currently projecting to be in a negative balance at the end of the 10 year forecasted period, all DC related expenditures are forecasted over a 20 year period, at which time the reserve fund will come to a zero balance. A comprehensive Development Charges study is completed every five years and will be completed again in 2023.