



# 2019

**DRAFT RATE SUPPORTED  
WATER & WASTEWATER**

**CAPITAL FORECAST**

**&**

**OPERATING BUDGET**

# 2019 Rate Supported Water & Wastewater Capital Forecast and Operating Budget

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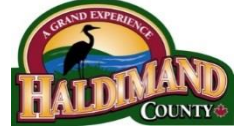
# HALDIMAND COUNTY

## Chief Financial Officer Report

### 2019 Draft Rate Supported Capital Forecast and Operating Budget

Committee of the Whole on January 24, 2019

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#### Message from the Chief Financial Officer

Mayor and Members of the Council,

This document presents the 2019 Draft Rate Supported Capital Forecast and Operating Budget, 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 2019 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 2019 Draft Rate Supported Capital Forecast and Operating Budget 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;
- Annual indexing of all miscellaneous revenues based on the annual increase to the underlying costs;
- 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);

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 2019 Draft Rate Supported Operating Budget, as outlined in this document, represents an overall net **increase** in total rate revenue requirements of \$232,560 or 1.94% compared to the 2018 budgeted total rates revenue of \$12.0 million (the water system requires a decrease of \$75,700 or 1.32% in rates revenue; while the wastewater system reflects an increase of \$308,260 or 4.90% in rates revenue). The relative impact on each system varies: a 1% impact in the water system is equal to approximately \$57,000 in user rates revenue; while a 1% impact on the wastewater system is equal to \$63,000 (\$120,000 combined).

Based on the total net rate revenue requirements, the typical residential user will see a monthly **decrease** of approximately **\$1.00 or 1.2%** (based on a residential service of 1" or less and average consumption of 15 m<sup>3</sup> per month – as outlined in Appendix Q). This is primarily due to the increased consumption and basic charges realized as a result of increased development (particularly in Caledonia) which is anticipated to offset budgetary pressures.

**Key Financial Messages - 2019 Draft Rate Supported Capital Forecast and Operating Budget**

- 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;
- Despite an overall increase in net costs, driven primarily by:
  - Combined overall increase in capital related costs of 1.0%;
  - Review of distribution of administrative wages/benefits (primarily related to staff managing coordinated capital projects including roads, water and wastewater) – transferred costs of \$221,000 to water and wastewater operations resulting in 1.8% increase in rates;
  - Offset partially by reduced hydro costs of approximately \$122,000 - due mainly to savings for Global adjustment billings based on Class “A” rate (as applied for by staff in early 2017)
- Overall consumption increases and new users resulted in an overall reduction to the average residential user of 1.2% or a savings of approximately \$1.00 per month

| <b>Average Monthly Residential Customer Impact (15 m3)</b> |                |                |                 |               |
|--|----------------|----------------|-----------------|---------------|
|  | <b>2018</b>    | <b>2019</b>    | <b>\$</b>       | <b>%</b>      |
| Total Water  | \$36.55        | \$34.65        | (\$1.90)        |               |
| Total Wastewater   | \$46.20        | \$47.12        | \$0.92          |               |
| <b>Total</b>   | <b>\$82.75</b> | <b>\$81.77</b> | <b>(\$0.98)</b> | <b>(1.2%)</b> |

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 2.0% based on increases to the overall underlying costs.

The 2019 Draft Rate Supported Capital Forecast and Operating Budget 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 very stable over the next three years. 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

## 2019 Draft Rate Supported Capital Forecast and Operating Budget For Consideration by Committee of the Whole on January 24, 2019



### 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.

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

- Rate Supported – includes Water and Wastewater Operating Budget and Capital Budget (including upcoming year and 9 year forecast)
- Tax Supported Capital Budget (including upcoming year and 9 year forecast)
- Tax Supported Operating Budget.

Council has approved the following 2019 Budget Timetable:

| Draft Budget                                | Review Date(s)    | Additional/Conditional Dates         |
|---|-------------------|--------------------------------------|
| Rate Supported Capital and Operating Budget | January 24, 2019  | n/a                                  |
| Tax Supported Capital Budget                | February 28, 2019 | March 1, 2019<br>(if required)       |
| Tax Supported Operating Budget              | April 2, 2019     | April 3 and 4, 2019<br>(if required) |

The review and approval of the 2019 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 2019 Draft Tax Supported Operating Budget will provide the basis for the 2019 levy impacts for tax supported operations.

### Legislative Framework and Budget Process:

#### Legislative Framework:

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 **fully funded by the users**, 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.

The Province has enacted specific legislation to ensure safe, clean and affordable potable water is available to people in every community. These regulatory requirements have significantly impacted the water and wastewater operations over time and have adversely impacted the associated rates. Increased staffing and treatment costs have been realized to accommodate the substantial workload to respond to these regulatory requirements and rigorous reporting/enforcement by the Ministry of the Environment. The legislative environment in which municipalities operate is continually evolving, inevitably placing additional constraints and pressures on resources and finances. The ideology of sustainable services and the allocation of limited resources are paramount in the budgeting decisions of all municipalities across the Province.

Although the Municipal Act provides the legislative authority for multi-year budgets, sustainable long range financing principles go beyond "multi-year budgeting" and involve the integration of long range strategic planning with service delivery plans and the appropriate annual budgets to facilitate the financial resources required.

It is generally accepted that municipalities do not currently have the financial resources to fully fund the essential replacements associated with their current infrastructure needs. A recent study estimates that nearly 60% of all public infrastructure is provided by local municipal governments. This is a significant change from the early 50's when local municipal governments represented just over 20% of all public infrastructure. As such, it would take a collaborative effort by all levels of government to be committed to sustained increases in municipal infrastructure investments to ensure municipalities are providing safe, reliable and environmentally responsible services. The current underfunding of government infrastructure investments has been commonly referred to as the "infrastructure deficit" being *"the total value of physical infrastructure investments that should have occurred to maintain optimal performance but did not. This would include any delayed rehabilitation and replacement of assets that are worn out"*. It is anticipated, through current and future asset management plans, long range funding plans will be developed to fund infrastructure replacements at the optimal time within the available resources, thereby reducing the current "infrastructure deficit".

With respect to meeting full cost recovery pricing for water and wastewater systems, past studies/surveys indicate the impacts of these legislative requirements are more dramatic on the smaller rural systems that also service large geographic areas (i.e. servicing less than 10,000 customers). Across the Province, there are several systems that fall into this category (i.e. there are more than 600 municipal systems across the Province that have fewer than 10,000 customers). Haldimand County's water and wastewater systems currently have approximately 9,800 customers and are further hampered by a diverse topography and numerous independent water supply and wastewater treatment networks. These factors can negatively impact the County's long range financial sustainability plan.

### Economic Environment

The current economic environment in Canada and Provincially will undoubtedly have impacts on the local economy. Based on the National Bank's January 2019 Economic Forecast, Canada's annualized rate of change in key financial areas is projected as follows:

| <b>Annualized Rate of Change</b>  | <b>2016<br/>Actual</b>                   | <b>2017<br/>Actual</b> | <b>2018<br/>Actual</b> | <b>2019<br/>Forecast</b> |
|-----------------------------------|--|------------------------|------------------------|--------------------------|
| Gross Domestic Product            | 1.1%                                     | 3.0%                   | 2.1%                   | <b>1.8%</b>              |
| Residential Construction          | 3.5%                                     | 2.4%                   | (0.7%)                 | <b>(1.1%)</b>            |
| Unemployment Rate                 | 7.0%                                     | 6.3%                   | 5.8%                   | <b>5.7%</b>              |
| Inflation                         | 1.4%                                     | 1.6%                   | 2.2%                   | <b>1.7%</b>              |
| Bank of Canada Prime Lending rate | Currently at 3.95% (major banks = 3.95%) |                        |                        |                          |

Recent economists' reports indicate temporary slowing in the fourth quarter of 2018 and the first quarter of 2019, revising the growth forecast for 2019 to 1.7%. Inflation forecasts have also been lowered. These potential impacts have influenced the guidelines and recommendations contained within the 2019 Draft Rate Supported Operating Budget. The affordability of the County's investments in water and wastewater infrastructure has been weighed against the need to provide safe, sustainable and reliable services to our customers.

### Rate Supported Budget Process

An integral part of the budget process is to adopt guidelines to ensure a consistent approach in developing the draft budget. The budget process is a culmination of collaborating efforts between supervisors, managers and senior staff. The budget guidelines establish the framework to develop the proposed budgetary needs to meet existing service levels, as well as identify proposed changes to these service levels. 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 2019 Draft Rate Supported (Water and Wastewater) Capital and Operating Budget, including:

- Full cost recovery of all operating and capital costs;
- 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;
- Blended Holding and Septic tank treatment costs to be allocated based on loading and revenues will include a fixed monthly charge and annual consumption charges to be indexed annually (annual indexing began in 2016);
- Bulk water based on full cost recovery (based on bulk water depot direct cost allocation and water treatment & supply cost (per m3)); administration fee and bulk water activation fee (annual indexing began in 2018);
- 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 24<sup>th</sup>, 2019. It is recommended that the required rate increases take effect February 1<sup>st</sup>, 2019, upon approval of the draft budget by Council.

## A. 2019 DRAFT RATE SUPPORTED CAPITAL BUDGET AND FORECAST TO 2028

### Capital Budget Process/Principles

Similar to the Tax Supported Capital Budget, the County's Rate Supported Capital Budget process has been focused on strategic objectives and long term financial plans. 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 2019 Draft Rate Supported Capital Budget focuses on the following key principles:

- Focus on Replacement/Rehabilitation: Focus on replacement/rehabilitation projects that support the overall objectives of the system and long range infrastructure plan. Using the comprehensive inventory of our current infrastructure needs, a long range financing strategy can be implemented to ensure the system is financially sustainable and affordable.
- Studies/Reviews/Evaluations: Continue comprehensive performance evaluations and condition reviews of the facilities. These evaluations and studies provide the basis for determining future infrastructure needs as well as the timing of these requirements. By identifying physical or operational "bottlenecks", operational and capital plans can be put in place to address these issues. Also, continued inflow and infiltration (I/I) studies/reviews are planned to identify sources of extraneous flow. These studies will assist in identifying areas of concern to provide additional future capacity and delay costly infrastructure upgrades/replacements (as well as address lost water management – a component of pending legislative requirements under the Water Opportunities Act).
- Provide Service Capacity for Anticipated Growth: Provide the necessary new/upgraded infrastructure at the critical timelines identified in the long range infrastructure plan based on existing capacity and future needs. This provides a more realistic opportunity to develop a financial plan that is affordable to the rate payers. The ten year forecast focuses on replacement of existing infrastructure but given the substantial growth that is anticipated over the next 10 years, there are a significant number of growth related projects, particularly for wastewater infrastructure, within the draft 10 year capital forecast which are to be funded in part from the applicable development charges reserve fund (i.e. approximately 51% of the required funding over the ten year forecast is budgeted from development charges, primarily influenced by the need for additional wastewater service capacity in Caledonia).

### 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 \$125.5 million for the period 2019 to 2028. Relative to the approved forecast in 2018, this represents an increase of approximately \$6.8 million over the ten year forecast (this increase is driven by better identification of costs and projects related to cast iron watermain replacements, re-identification of the pump installation project at the Nanticoke Industrial Pumping Station (funded by industry) and increased costs related to the Caledonia Wastewater Treatment Plant (funded by development charges). Typically gross capital costs decrease significantly in the later part of the forecast. As a result, some non-specific capital costs have been identified in these later years (primarily years 5 through 10). The specifics of these projects will be identified as better replacement information is developed through updates to the County's asset management plan in future years.

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 2019 Capital Budget and Forecast). As indicated below, there are fairly consistent average gross costs relative to the prior year's approved budget over the 10 year forecasted period. As identified through the rate study, average gross capital costs were projected in excess of the costs included in the current forecast period and projected additional costs into the future (i.e. 25 year plan). Average costs now exceed those identified in the rate study, mainly due to the inclusion of the construction for a new/enhanced wastewater treatment plant in Caledonia in the year 2027. It is anticipated that, as a result of substantial growth in the Caledonia area, a new/enhanced wastewater treatment facility will be required (to be funded from Development Charges).



| Gross Expenditures | 2018 Budget<br>Average Annual Gross Expenditures | 2019 Draft Budget<br>Average Annual Gross Expenditures | 10 Year Forecast from<br>2013 Rate Study<br>(average annual gross expenditures) |
|--------------------|--|--|---|
| Water System       | \$3.5 Million                                    | \$3.9 Million  | \$4.7 Million   |
| Wastewater System  | \$8.4 Million                                    | \$8.6 Million  | \$4.3 Million   |
| <b>Total</b>       | <b>\$11.9 Million</b>                            | <b>\$12.5 Million</b>                                  | <b>\$9.0 Million</b>  |

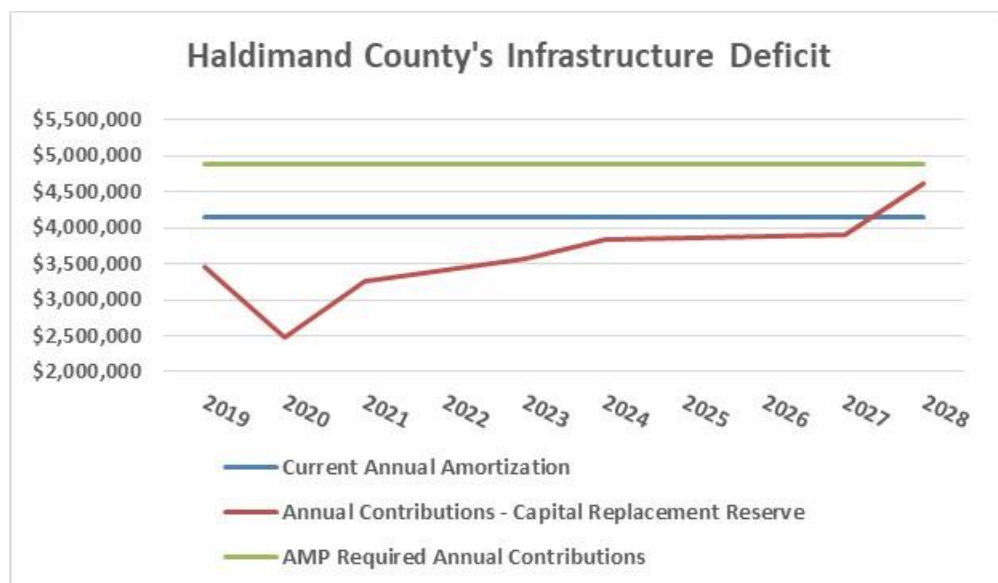
## Estimated Haldimand County Water/Wastewater “Infrastructure Deficit”

It is generally accepted that municipalities do not currently have the financial resources to fully fund the essential replacements associated with their current infrastructure needs. The County’s current capital asset inventory, as reported for audited financial statement purposes, reflects the historical value of the assets, less the accumulated amortization (i.e. value used/utilized over its useful life to date). The resulting “Net Book Value” (NBV = historical cost less accumulated amortization) represents the remaining value of the asset over its remaining useful life. The net book value of assets, as a % of historical cost, is a good financial indicator of the state of good repair of the County’s infrastructure – the lower the percentage, the greater percentage of infrastructure that is nearing its replacement/end of useful life. Based on the audited 2017 financial statements, the County’s net book value of assets for water and wastewater only (excludes tax supported infrastructure) was as follows:

| 2017 Net Book Value<br><i>(water and wastewater assets only)</i> | Haldimand     |
|--|---------------|
| Historical Cost  | \$214,805,896 |
| Net Book value   | \$137,805,601 |
| Percentage   | <b>64.2%</b>  |

The County’s NBV as a % of historical cost has remained relatively constant from 2009 to 2017 albeit trending down over this period (this information has only been reported in the County’s financial statements since 2009). This is a good indicator that capital asset investments have kept pace with the utilization of existing assets in relative terms. In comparison to other single tier municipalities in southern Ontario (the Province completes a annual “Financial Indicator Review” of Ontario municipalities – Haldimand is grouped with 28 single tier municipalities in southern Ontario, ranging in size, but excluding Toronto), their average NBV as a % of historical cost (based on all asset categories) is approximately 59% over the same time period, based on the most recent available information (Haldimand’s tax supported NBV is approximately 50%). Ultimately, as assets age and near the end of their useful life, the County needs to develop a long term financial plan to meet these requirements.

As noted previously, the County completed a comprehensive Asset Management Plan (AMP) in 2014 for the following asset categories: roads, bridges/culverts, storm sewer, water and wastewater. The plan included the required annual capital reserve contributions based on the anticipated cost and timing of replacement of the underlying assets in these categories. This plan identified significant annual funding shortfalls, particularly in the roads/bridges and water categories. By utilizing the information from the AMP, an “**estimated** infrastructure deficit” can be calculated for the County’s water and wastewater infrastructure. Although based on incomplete information (not every single asset is reported for financial reporting purposes) and several assumptions, it provides an indication as to whether the County is currently providing sustainable capital funding to replace the current infrastructure.



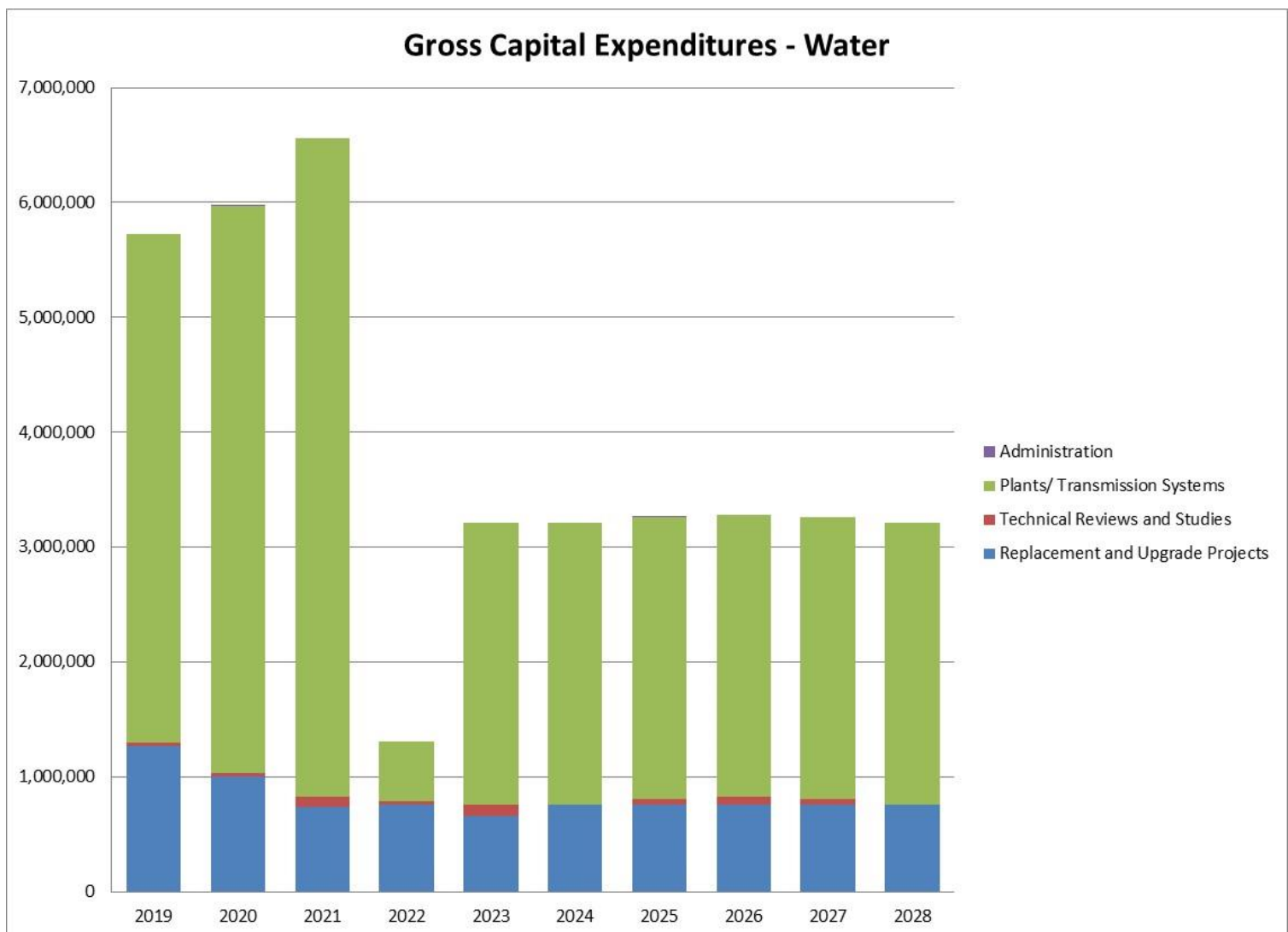
Note: reduced 2020 annual contribution is due to new debt payments beginning related to Dunnville WWTP

Although the above information is based on several assumptions (i.e. rate of inflation, interest earnings on applicable reserves, estimated useful life, anticipated debenture issuances, etc.), it is a good indication that there are future funding issues to be addressed in order to fully finance future asset replacements. As capital contributions are the sum of debt payments and capital reserve contributions, increased debt payments limit the ability to increase annual reserve contributions (as is the case in years 2019 through 2021). The “draft” asset management plan for water and wastewater also indicates a funding shortfall averaging approximately \$700,000 over the forecast period (particularly in water). These estimates provide a fundamental basis to assist in developing future sustainable funding plans that can be evaluated and monitored.

**Water Gross Capital Costs:**

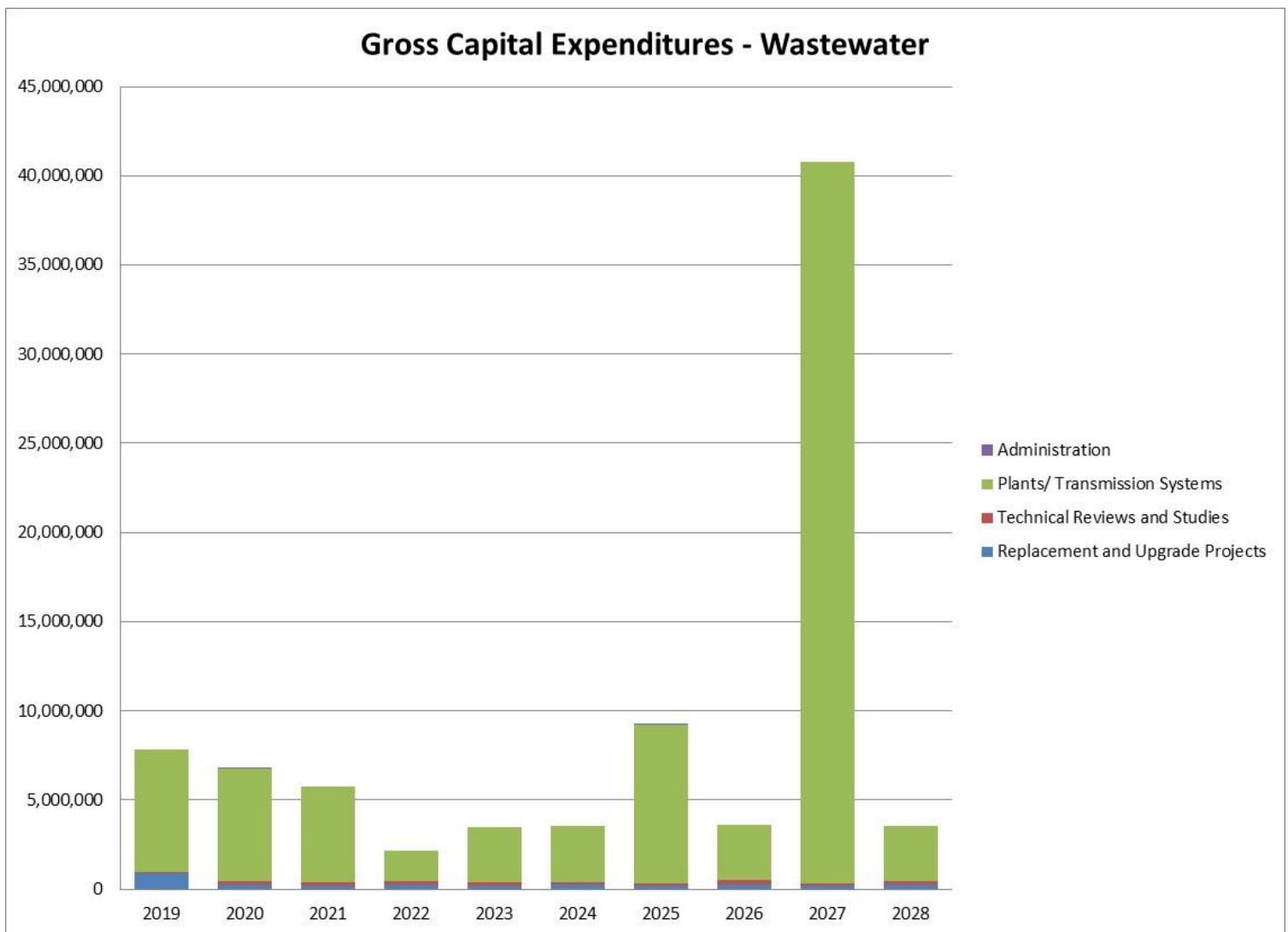
A summary of the planned gross capital costs for Water services is presented in the chart below. Although there are limited overall changes, there are shifts in timing/scope changes for projects that will affect the long range financing plan (primarily due to the changes in the early years of the forecast – 2019 to 2021). 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. Specifics of some of the identified water system capital projects, by major category, are as follows:

Average annual costs for replacement of watermains are approximately \$819,000. Increased costs in the 2019 forecast reflects a better defined cast iron watermain program. Technical studies and reviews are a key component in maintaining system efficiencies and determining optimal replacement of existing infrastructure. As a result, a consistent and comprehensive multi-year plan has been established over the forecasted period (averaging approximately \$46,000 annually). Water plants/transmission system expenditures represent replacement of existing infrastructure over the forecasted period. Average annual costs for replacement/upgrades to plants/transmission are approximately \$3.0 million – annual fluctuations would reflect growth related projects funded from Development Charges or one-time significant replacements. The replacement of the existing water standpipe in Caledonia began in 2018 with the project spanning a four year period at an estimated total cost of \$5.4 million (\$5.2 million identified in 2020 and 2021), funded primarily by development Charges (\$3.2 million). A review of current projects related to the Dunnville Water Treatment plant has resulted in a new project identified for repairs and upgrades, for a total of \$4.3 million, beginning in 2019. As well, pump installation at the Nanticoke industrial pumping station has been added (\$2.4 million) funded by the impacted industries. Administrative costs represent one-half (50%) of the administrative capital cost. As all urban communities have had their meters replaced over the last 3 years, there are limited administrative projects over the 10 year forecast period.



**Wastewater Gross Capital Costs** – As depicted in the chart below, there is a fairly consistent focus on replacement and upgrades to existing wastewater infrastructure over the forecasted period. The details of some of the wastewater capital projects, by major category, are as follows:

Average annual wastewater replacement and upgrade costs is approximately \$297,000. Annual fluctuations reflect the timing of planned replacements with spikes for major projects as can be noted in 2019 with the final phase of the Dunnville Alder Street replacement. A comprehensive annual wastewater main replacement program has been developed over the forecast period resulting in better specific replacement plans and the elimination of non-specific replacement costs in the later years of the forecast period. Technical studies and reviews are a key component in maintaining system efficiencies and determining optimal replacement of existing infrastructure. As a result, a comprehensive, multi-year plan has been established over the forecasted period (averaging approximately \$160,000 annually). Wastewater plants/transmission system expenditures represent replacement of existing infrastructure over the forecasted period. There are major plant repairs/upgrades planned within the first 3 years of the forecast, averaging \$6.2 million, including the Jarvis Additional Wastewater Treatment Capacity project, totaling \$6.4 million over the years 2018 to 2019 (\$5.2 shown within this forecast); and the Caledonia Wet Well Expansion totaling \$1.4 million over 2018 to 2020. Planned for the last half of the ten year forecast is also the new/upgraded Caledonia Wastewater Treatment at a total cost of \$47 million over the years 2019 to 2027 (funded fully from Development Charges). As discussed, it is anticipated based on current growth in the Caledonia area, that a new/enhanced WWTP will be required to cope with the increased wastewater flows in that area. The Administrative costs represent one-half (50%) of the administrative capital cost. As all urban communities have had their meters replaced over the last 3 years, there are limited administrative projects over the forecast period.



**Financing Methodology**

Similar to the Tax Supported Capital Budget, 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 9,800 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. Similar to the Tax Supported Capital Budget, 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 2019 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.

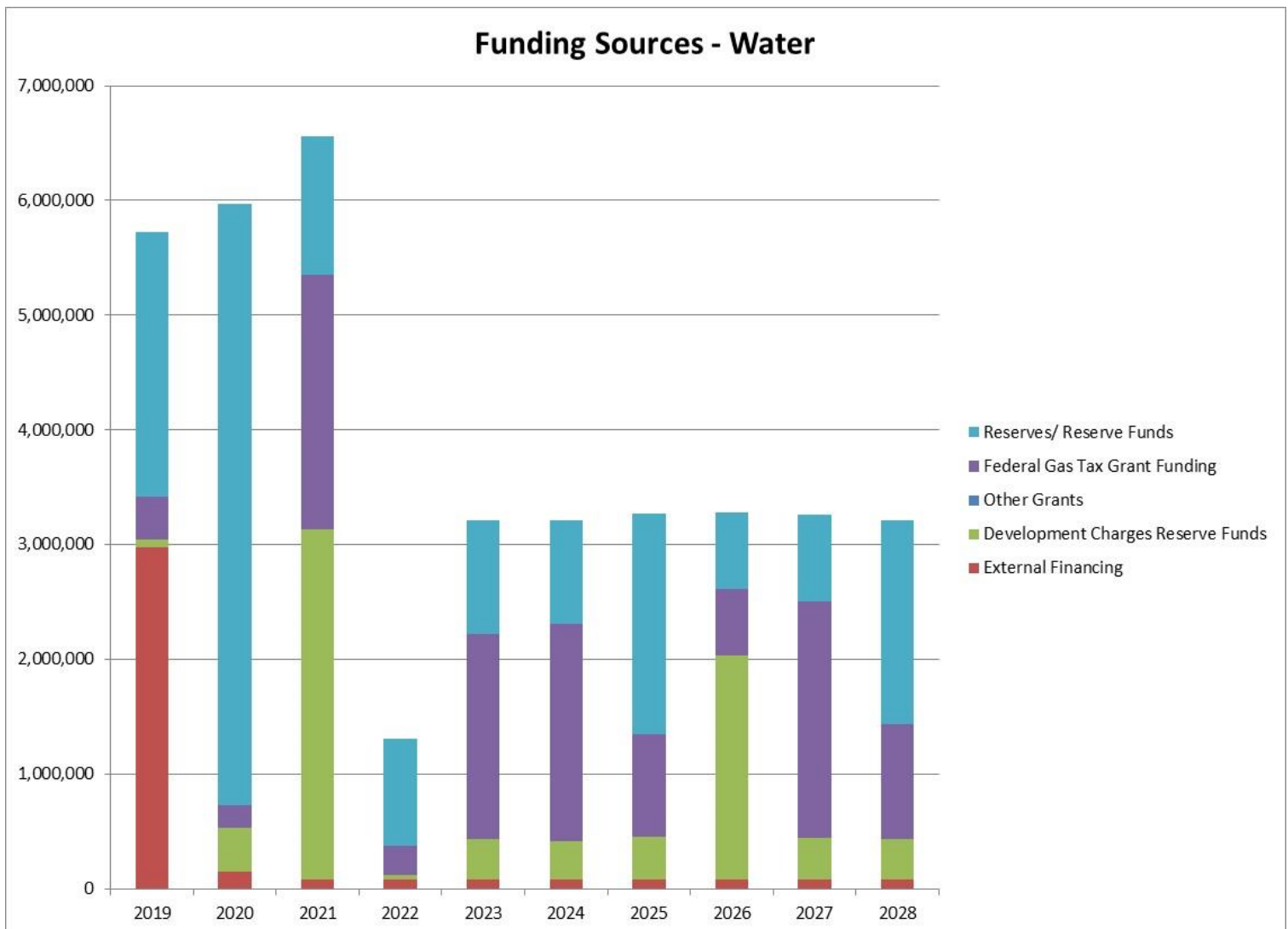
Typically, water and wastewater capital projects are funded in specific ways, depending mainly on whether the expenditure is for replacement or enhancement, as follows:

**Replacements/Rehabilitation** – These projects are typically financed from the applicable capital replacement reserve (i.e. water and wastewater respectively). Where sufficient reserves are not available, these projects must be debt financed. When available, external sources of financing will be utilized, including grants, recoveries from joint partners or developer contributions. The County’s Capital Financing Principles allocate 50% of the annual Federal Gas Tax funds, Appendix E, to water or wastewater replacements; plant upgrades and the meter replacement program. In addition, master plan studies are funded from the development charges reserve funds as identified in the development charges background study. Replacements at water plants for capital works specific to supplying non-potable water to industry is recovered 100% from the industries supplied by this infrastructure. As outlined in the chart below, the majority of financing over the forecasted period for replacements is funded from the applicable reserve fund (i.e. water or wastewater) and from an allocation of annual Federal Gas Tax grant funding. There is no new debt for replacement/upgrades related to major water/wastewater treatment plant capital projects over the forecasted period.

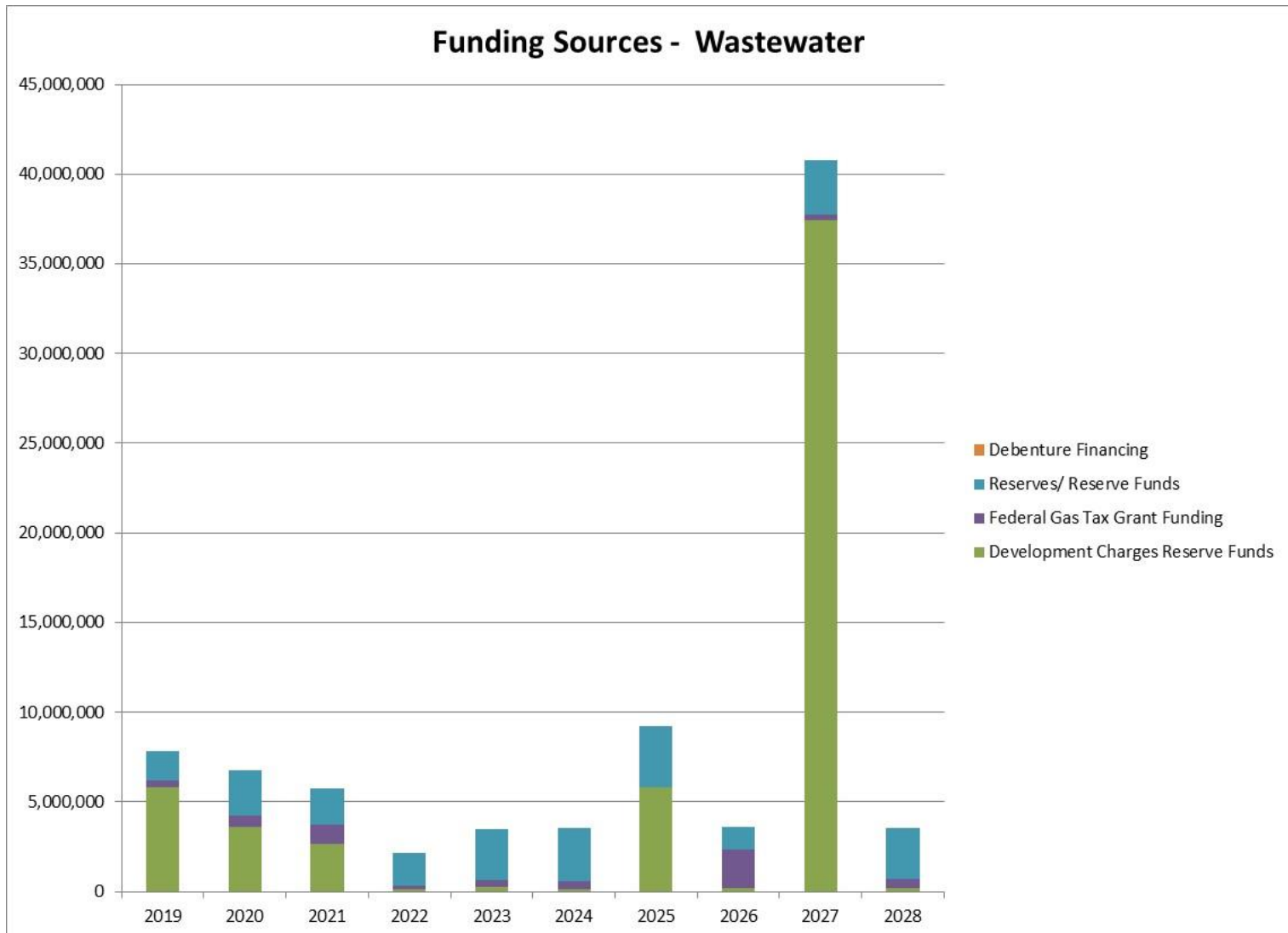
**Plant Upgrades/Enhancement Projects:** Typically, these projects are financed from external revenue sources. Enhancements to existing services/processes, not growth related, are internally financed. Development charges are collected for specifically identified projects. External sources of funds may be available as new grants are made available or third party groups partner with the County to initiate these activities. The County currently does not have an established predictable source of new funding for these initiatives other than the development charges collected on the specifically identified projects.

**Funding Sources**

**Funding Sources – Water Projects:** As depicted below, the majority of funding for water capital projects is from the water capital replacement reserve fund (in aggregate, approximately 43% of total funding over the forecast period). Federal Gas Tax grant funding represents the next largest portion totaling 29%. There have been no announcements regarding grant funding on a go forward basis, therefore no funding is included within this forecast. There is limited use of development charges (approximately 19% related to growth related share of identified projects). The external funding is 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. This includes a large pump installation (\$2.4 million) in 2019. Total external funding represents 10%.



**Funding Sources – Wastewater:** As depicted below, the majority of funding for straight replacement wastewater capital projects is from the wastewater capital replacement reserve fund (in aggregate, approximately 28% of total funding over the forecasted period). Grant funding (i.e. Federal Gas Tax) represents approximately 7% of the annual funding. Use of Development Charges for wastewater financing is substantial and represents approximately 65% of total projects financing. As mentioned, the main driver of the increase in 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 \$47 million (which is fully financed by Development Charges over the ten year forecast period).



## Grant Funding

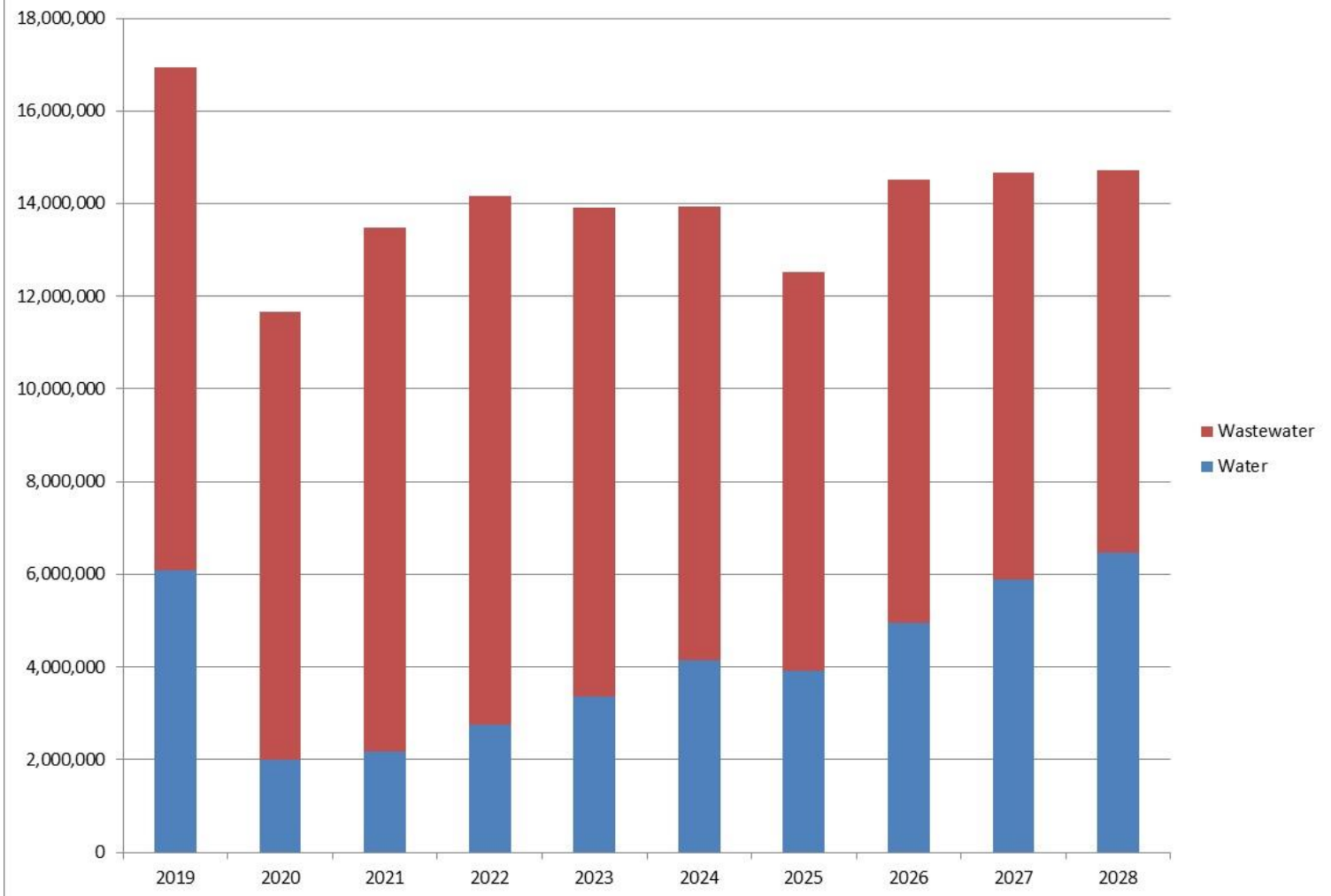
As indicated above, the only predictable grant funding is the County’s annual Federal Gas Tax Allocation (our current allocation is approximately \$2.77 million per year). As outlined in the capital financing principles, 50% of the annual allocation is applied to water/wastewater capital needs. Of the approximately \$17.3 million allocated to water/wastewater capital projects over the forecast period, \$11.3 million is allocated to water replacements/plant upgrades and \$6.1 million is allocated to wastewater replacements/plant upgrades. As there is currently a funding deficit in water; more Gas Tax funds have been allocated to the water system.

If additional grant funding is available in future years, staff will need to reassess the allocation principles for the Federal Gas Tax funds, between water and wastewater and tax supported capital needs, in conjunction with the asset management plans and revised funding needs.

## 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 2019 Draft Rate Supported Capital Budget and Forecast to 2028. 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).

## Forecast - Capital Replacement Reserve Funds



The capital financing principles approved by Council, included in 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. As new debt requirements to fund water/wastewater related capital infrastructure start in 2020 (for debt to be issued in 2019), the increased debt payments reduce the ability to transfer funds to the applicable capital replacement reserve. Although this is not an issue for early years of the capital forecast, 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.

As identified during the 2014 Rate Supported Budget, the water capital replacement reserve was violating the above noted financing principles. As a result, staff proposed a shift in contributions to capital replacement reserves from wastewater to water, to be phased in over 10 years starting in 2014, this shift is identified in Appendix B. Overall, annual capital related impacts on the user rates were held to approximately \$119,000 or 1.0% of combined rates revenue per year. The impact in 2019 specific to water is \$86,000 or 1.5% and for wastewater is \$34,000 or 0.5%.

Capital related impacts include the combination of annual capital replacement reserve fund contributions and debt repayments. As outlined in Appendix B, it is recommended that increases to these capital replacement reserve funds continue until 2024 to offset the anticipated future disbursements, particularly for water. The annual shift in additional contributions to water from wastewater will be phased in over 10 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 2014, 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 2019 Rate Supported Capital Budget and Forecast include the projects outlined in the 2014 Development Charges Background Study, as adjusted for revisions, if any, to the originally estimated costs or new growth related projects not originally identified at the time of the 2014 study.

In aggregate, there is \$7.3 million of growth related water capital projects to be financed from development charges (Caledonia Elevated Tank – approximately \$3,160,000; Dunnville WTP reservoir expansion – approximately \$1,841,000, and the majority of the balance, approximately \$2.3 million, represents estimated costs related to future replacements/plant upgrades yet to be identified). Wastewater capital projects includes approximately \$56.2 million funded from development charges (the majority of which represents the new/upgraded Caledonia WWTP in the amount of approximately \$46.7 million – which was not identified during

the 2014 study; the next largest balance, of approximately \$5.2 million, representing Additional Wastewater Treatment Capacity in Jarvis; and the Caledonia wet well expansion, of approximately \$1.4 million). The remaining balance of the Wastewater DC projects are distributed throughout the 2019 ten year capital forecast.

During the setting of the development charges rates in 2014, 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 Appendix F (which includes the impacts of any required DC debt). A new DC Study, which is nearing completion in early 2019 will reflect the changes noted above (i.e. new growth related projects and changes in estimated future development). It is anticipated that these changes will result in higher DC rates.

### Impact on Long Term Debt

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

*Existing Debt:* The County has future repayments related to debt issued for to water and wastewater projects, with total remaining principal payments of approximately \$11.8 million. The annual debt repayments (interest and principal) are committed over the forecast term and are included in the Net Capital Financing page in Appendix B as part of the overall capital financing. Typically debt payments begin the year after the debt proceeds are received (e.g. for debt issued in 2017; repayments began in 2018). Existing debt have maturity dates ranging from 2020 to 2027 – see Appendix B.

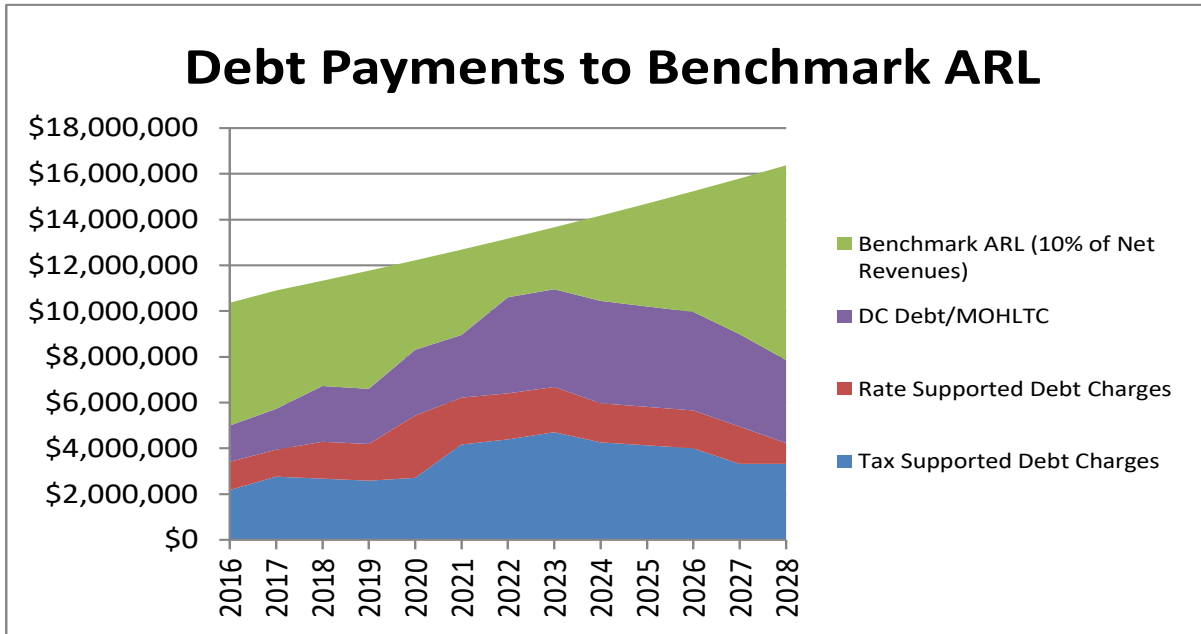
*Proposed New Debt:* Over the ten year forecast, there is **NO** new proposed debt financed projects for water or wastewater projects. New debt to be issued over the forecast term includes existing projects where construction is to be completed and debt financed in 2019 or beyond. New debt financed projects in wastewater relate to replacements/upgrades at the Dunnville wastewater treatment facility, expected to be issued in 2019, with the first payment in 2020.

*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 \$62 million of new debt issuances required to fund specifically identified projects (approximately \$15 million when excluding the new/upgraded Caledonia WWTP). Of which, new debt financed projects in wastewater relate to replacements/upgrades at the Jarvis lagoon system to be initiated in 2018, totaling \$6 million, the Caledonia Wet Well Expansion at the Caledonia WWTP initiated in 2018, totaling \$1.37 million and the requirements for the New Caledonia WWTP to be initiated in 2022, totaling approximately \$47 million. New debt financed projects in water relate to Caledonia Elevated Tanks (\$3.1 million in 2020) and Dunnville WTP reservoir expansion (\$1.75 million in 2026). Other new debt to be issued over the forecast term also includes existing projects where construction is to be completed and debt financed in 2019 or beyond.

Annual debt repayments for DC debt will be offset by future development charges. All existing and proposed DC debt related payments are included in the Net Capital Financing page in Appendix B as part of the overall capital financing.

The Ministry of Municipal Affairs and Housing regulates the level of debt that may be incurred by municipalities - no more than 25% of the total own purpose revenue can be used to service debt and other long-term obligations. It should be noted that, despite the limits imposed by the Province, a prudent municipality in a low growth area would not consider a debt burden to this level. A typical guideline established by municipalities is a 10% maximum.

The following analysis projects the annual debt charges, in comparison to the County’s annual repayment limit (ARL) and in relation to the County’s Financial Principles Guideline of 10% (this analysis also includes the tax supported debt payments as approved in the 2018-2027 tax supported 10 year capital forecast and all proposed DC Debt).



*The above graph includes debt required to offset the timing of cash flows related to Development Charge receipts (typically referred to as "DC Debt"), CVF receipts and offsetting grants for Grandview Lodge Debt (until 2027).*

Based on projected annual debt repayments (assuming approximately a 3% increase in net revenues annually), the County is well within its established financing principles of a maximum of 10% of annual net revenues (Municipal sources only). Over the forecasted period, the County's total debt payments (i.e. DC debt, tax and rate supported) reach a maximum of nearly \$11 million (tax supported \$4.7 million; rate supported \$2.0 million, DC debt \$4.3 million) or 8.0% of annual net revenues in 2023. Given the significant infrastructure requirements, the future use of debt is unavoidable. However, proper debt policies ensure:

- That outstanding debt obligations will not threaten long-term financial stability;
- That the amount of outstanding debt will not place undue burden on future water and wastewater users;
- That the municipality maintains the flexibility to take advantage of opportunities that arise;
- Continued investment in long-term infrastructure;
- A better matching of the Water and Wastewater user's cost of financing the proposed project with the future benefits derived from the infrastructure investment.

Not included in the above chart, is DC debt to be issued for the new Caledonia WWTP for the project portion to take place in 2027. Staff will continue to monitor the ARL limits for debt in future years when the payments for the new facility will take effect (i.e., beyond the 10 year forecast).

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## B. 2019 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 2019 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 9,800 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.

### 2018 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 (recovery principles are outlined in Appendix L). 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 2019 operating budget document, the combined water/wastewater forecasted year end 2018 operating **surplus** is approximately \$1,489,000.

The following chart outlines the forecasted 2018 surplus/(deficit) for water operations:

| <b><u>2018 Projected Operating Variance</u></b>  |                          |
|--|--------------------------|
| <b><u>Water Operations</u></b>   |                          |
|  | <b>Surplus/(Deficit)</b> |
| <b>Revenues:</b>   |                          |
| Residential and Commercial/Industrial Consumption - Mainly from large industrial users   | \$410,866                |
| Recoveries from New Credit (residential and bulk water increased consumption)  | \$92,227                 |
| Nanticoke Industrial Pumping Station - Stelco and Imperial Oil recoveries offset by expenditures below                         | (\$62,799)               |
| Port Maitland Raw Water (due to reserve below)   | (\$249,434)              |
| Bulk Water Sales (surplus for Hagersville, Jarvis and Dunnville)   | \$105,011                |
| Water Meter Installations  | (\$46,136)               |
| Connection permits - Due to timing of transfer to Building Division  | \$8,544                  |
| Water turn on/off  | \$8,059                  |
| Miscellaneous Net Items (Individually under \$25,000)  | \$1,120                  |
| <b>Sub-total Revenues</b>  | <b>\$267,458</b>         |
| <b>Expenditures:</b>   |                          |
| Salaries & Wages - Shift in distributed wages and water portion of gapping related to Asset Management position                | \$55,447                 |
| Hamilton Water Supply - Wholesale water purchase   | \$235,880                |
| Billing and Collecting Costs   | \$33,791                 |
| Hydro - County share only  | \$80,695                 |
| Nanticoke Industrial Pumping Station - Stelco and Imperial Oil share of expenditures - mainly hydro savings                    | \$62,779                 |
| Interdepartmental Charges - 2018 rates estimated prior to preparation of final rates in of 2018 Tax Supported Operating Budget | (\$26,475)               |
| Transfer to Reserves (Port Maitland Raw Water)   | \$249,434                |
| Miscellaneous Net Items (Individually under \$25,000)  | (\$4,981)                |
| <b>Sub-total Expenditures</b>  | <b>\$686,570</b>         |
| <b>Total Water Operating Surplus / (Deficit)</b>   | <b>\$954,028</b>         |

The following chart outlines the forecasted 2018 surplus/(deficit) for wastewater operations:

| <b><u>2018 Projected Operating Variance</u></b>   |                          |
|---|--------------------------|
| <b><u>Wastewater Operations</u></b>   |                          |
|   | <b>Surplus/(Deficit)</b> |
| <b>Revenues:</b>  |                          |
| Residential and Industrial/Commercial Consumption   | \$194,229                |
| Norfolk Sludge Storage  | (\$19,349)               |
| Service Charge on Accounts  | \$10,590                 |
| Bulk Processing Leachate - Higher treatment levels  | \$196,828                |
| Holding/Septic Tank Revenues  | \$73,986                 |
| Wastewater Portion of Water Meter Installations   | (\$46,118)               |
| Overstrength Charges - offset by contribution to reserve  | \$98,658                 |
| Rodding Service Charges   | \$10,274                 |
| Connection Permits - Due to timing of transfer to Building Division   | \$12,577                 |
| Miscellaneous net items (individually under \$25,000)   | (\$18)                   |
| <b>Subtotal Revenues</b>  | <b><u>\$531,657</u></b>  |
| <b>Expenditures</b>   |                          |
| Salaries & Wages - Shift in distributed wages   | (\$15,288)               |
| Billing and Collecting costs  | \$33,791                 |
| Hydro   | \$89,225                 |
| Taxes & Local Improvements  | \$12,844                 |
| Interdepartmental Charges - 2018 rates estimated prior to preparation of final rates in 2018 Tax Supported Operating Budget | (\$24,805)               |
| Wastewater Rate Stabilization Reserve - Offset to Overstrength Charges  | (\$98,658)               |
| Miscellaneous net items (individually under \$25,000)   | \$6,244                  |
| <b>Subtotal Expenditures</b>  | <b><u>\$3,353</u></b>    |
| <b>Total Wastewater Operating Surplus / (Deficit)</b>   | <b><u>\$535,010</u></b>  |

There were several items with significant 2018 variances that impact the 2019 operations as follows:

- Fluctuating annual consumption (particularly industrial and commercial water users though residential consumption is rising slightly as a result of new development as well);
- Greater than budgeted bulk water usage (including bulk water usage in New Credit), although it was a wet summer season;
- Variable hydro costs (decreased hydro costs at treatment facilities – mainly due to a switch from Class B to Class A Global Adjustment charge at the Nanticoke Industrial Pumping Station facility);
- Hamilton Water Supply costs impacted by fluctuating volumes;
- Higher than budgeted leachate treatment levels.

### **2019 Draft Rate Supported Operating Budget Overview**

The 2019 Draft Rate Supported Operating Budget, as outlined in this document, represents an overall net **increase** in total rate revenue requirements of \$232,560 or 1.94% compared to the 2018 budgeted total rates revenue of \$12.0 million: the water system requires a decrease of \$75,700 or 1.32% in rates revenue; the wastewater system reflects an increase of \$308,260 or 4.90% in rates revenue. The relative impact on each system varies: a 1% impact in the water system is equal to approximately \$57,000 in user rates revenue; while a 1% impact on the wastewater system is equal to \$63,000.

The budget summary by major function is outlined below. Though the 2019 Draft Rate Supported Budget includes a number of impacts as discussed below, the typical residential user will see a monthly decrease of approximately \$1 or 1.2% (based on a residential service of 1" or less and average consumption of 15 m<sup>3</sup> per month – as outlined in Appendix P) as the increased consumption and basic charges realized as a result of the increased development (particularly in Caledonia) is anticipated to offset budgetary pressures.

**2019 Budget Drivers – Water Operations**

| <b>WATER OPERATIONS</b>                      |                    |                    |                            |               |
|--|--------------------|--------------------|----------------------------|---------------|
|  | <b>2018 Budget</b> | <b>2019 Budget</b> | <b>increase/(decrease)</b> |               |
|  | <b>\$</b>          | <b>\$</b>          | <b>\$</b>                  | <b>%</b>      |
| <i>Expenditures</i>                          |                    |                    |                            |               |
| Salaries, Wages & Benefits                   | 1,850,430          | 1,863,630          | 13,200                     | 0.71%         |
| Supplies & Materials                         | 130,800            | 140,800            | 10,000                     | 7.65%         |
| Hamilton Water Supply                        | 2,347,930          | 2,348,400          | 470                        | 0.02%         |
| Services                                     | 2,828,880          | 2,659,260          | (169,620)                  | -6.00%        |
| Veolia Operating Services Charges            | 2,147,060          | 2,201,740          | 54,680                     | 2.55%         |
| Interdepartmental Charges                    | 383,650            | 422,750            | 39,100                     | 10.19%        |
| Long Term Debt Charges                       | 1,443,500          | 1,441,050          | (2,450)                    | -0.17%        |
| Transfers to Reserves/Reserve Funds          | 1,216,310          | 1,611,570          | 395,260                    | 32.50%        |
| <b>Total Expenditures</b>                    | <b>12,348,560</b>  | <b>12,689,200</b>  | <b>340,640</b>             | <b>2.76%</b>  |
| <i>Revenues</i>                              |                    |                    |                            |               |
| Recoveries from New Credit                   | 248,300            | 288,500            | 40,200                     | 16.19%        |
| Fees & Recoveries                            | 5,879,790          | 6,255,860          | 376,070                    | 6.40%         |
| Transfers from Reserves/Reserve Funds        | 502,300            | 502,370            | 70                         | 0.01%         |
| <b>Total Revenues</b>                        | <b>6,630,390</b>   | <b>7,046,730</b>   | <b>416,340</b>             | <b>6.28%</b>  |
| <b>Net Revenues Required from User Rates</b> | <b>5,718,170</b>   | <b>5,642,470</b>   | <b>(75,700)</b>            | <b>-1.32%</b> |

As noted above, the overall 2019 rates revenue requirement from water users has decreased by \$75,700 or 1.32%.

| <b><u>Driver</u></b>                     | <b><u>Net Rate Revenues Impact</u></b> | <b><u>% Impact</u></b> |
|--|--|------------------------|
| A. Base Budget (net)                     | (\$174,330)                            | (3.05%)                |
| B. Council Approved/ New Initiatives     | \$12,970                               | 0.23%                  |
| C. Water Additional Capital Contribution | \$85,660                               | 1.50%                  |
| <b>Total</b>                             | <b>(\$75,700)</b>                      | <b>(1.32%)</b>         |

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 decrease by approximately \$174,330. This net change is driven primarily by: increased New Credit and bulk water consumption and fire protection charges. Expenditure drivers for 2019 include reductions in the overall and hydro accounts, and increases to Veolia Operations for standard annual increase and interdepartmental charges based on 2018 actuals. A decrease in hydro costs at treatment facilities mainly due to a switch from Class B to Class A Global Adjustment charge at the Nanticoke Industrial Pumping Station facility has also resulted in a decrease in the net base costs (though the majority of these savings impact Stelco and Imperial Oil which are directly offset by adjustments to recoveries).

As outlined in Appendix K, based on the anticipated 2018 surplus, there will be an ability to transfer excess funds of approximately \$4.6 million from the rate stabilization reserve to the Water Capital Replacement Reserve Fund. This transfer will have a positive impact on the long term capital financing plan for water infrastructure. It should be noted that any major loss of revenues (i.e. major industrial water user) will instead need to be offset from this reserve to mitigate annual impacts on the users.

The major detailed net operational impacts are outlined below:

| <b>2019 Draft Water Operating Budget</b>  |                                 |
|---|---------------------------------|
| <b>Summary of Impact of Base Budget Drivers on Rate Revenue Requirements</b>  |                                 |
| <b>Base Budget:</b>   | <b>Increase/<br/>(Decrease)</b> |
| <b>Revenues (excludes rate revenues):</b>   |                                 |
| New Credit Water Depot and Residential - 3 year average consumption   | (\$40,200)                      |
| Bulk Water Sales - 2 year average consumption   | (\$141,600)                     |
| Fire Hydrant Fees - Estimated 2% increase   | (\$43,450)                      |
| Water Meter Installations   | \$20,620                        |
| Dunville Microstrainer - Increased recoverable capital planned for Port Maitland offset by increased contribution to Reserve Fund                               | (\$307,040)                     |
| Nanticoke Industrial Pumping Station - Stelco and Imperial Oil recoveries offset by expenditures below  | \$95,760                        |
| Miscellaneous Fees & Recoveries   | (\$430)                         |
| <b>Sub-total Revenues</b>   | <b>(\$416,340)</b>              |
| <b>Expenditures:</b>  |                                 |
| Salaries & Wages - Regular economic increases and shift in administrative work from water to wastewater   | \$230                           |
| Hamilton Water Supply - Wholesale water purchase (based on rates per agreements and 5 year average consumption with predicted residential consumption increase) | \$470                           |
| County Hydro Costs  | (\$44,960)                      |
| Dunville Microstrainer (offset) - Increased recoverable capital planned for Port Maitland   | \$307,040                       |
| Nanticoke Industrial Pumping Station - Stelco and Imperial Oil share of expenditures - mainly hydro savings   | (\$95,760)                      |
| Veolia Operations - Standard annual increase  | \$54,680                        |
| Interdepartmental Charges - based on 2018 actuals   | \$39,100                        |
| Miscellaneous Supplies & Services   | (\$18,790)                      |
| <b>Sub-total Expenditures</b>   | <b>\$242,010</b>                |
| <b>Total Base Budget Impact on Rate Revenue Requirements</b>  | <b>(\$174,330)</b>              |

### B. New Initiatives

New initiatives are identified in two categories: Council Approved Initiatives and New Initiatives. There is one Council Approved Initiative for 2019, as outlined in Appendix J. As a part of the corporate revised organization structure, a more comprehensive review of staff time spent on both the water and wastewater systems was completed. As a result, the rate supported budget shows an increase overall for water and wastewater, for staff time related to managing coordinated capital projects, but a greater emphasis on wastewater operations. There are no New Initiatives proposed for Council's consideration for 2019. Overall, the net rate revenue impact of this initiative in water operations is an increase of \$12,970 as outlined below:

| <b>Description</b>   | <b>Rate Revenue<br/>Increase/<br/>(Decrease)</b> |
|--|--|
| <b>Council Approved Initiatives</b>  |  |
| Salaries, Wages, Administrative Charges impact of Revised Organizational Structure | \$12,970   |
| <b>Sub-total</b>   | <b>\$12,970</b>                                  |
| <b>Total Initiatives Impact on Rate Revenue Requirements</b>                       | <b>\$12,970</b>                                  |

### C. Infrastructure Capital Financing Requirements

Overall, water annual capital financing related impacts on the user rates were held to **1.5%** in 2019. Capital related impacts include the combination of annual capital replacement reserve fund contributions and debt repayments, as outlined in Appendix B. Essentially, the combined water reserve fund contributions and changes to debt repayments for 2019 increased by \$85,656. As indicated previously, it is recommended to maintain an annual combined 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. It is recommended that increases to these capital replacement reserve funds continue until 2024 to offset the anticipated future disbursements, particularly for water. This plan will be revisited on an annual basis based on projected sources of capital financing and relative capital replacement reserves.

**2019 Budget Drivers – Wastewater Operations**

| <b>WASTEWATER OPERATIONS</b>                 |                  |                  |                     |              |
|--|------------------|------------------|---------------------|--------------|
|  | 2018 Budget      | 2019 Budget      | increase/(decrease) |              |
|  | \$               | \$               | \$                  | %            |
| <i>Expenditures</i>                          |                  |                  |                     |              |
| Salaries, Wages & Benefits                   | 665,240          | 914,610          | 249,370             | 37.49%       |
| Supplies & Materials                         | 20,110           | 21,550           | 1,440               | 7.16%        |
| Services                                     | 1,571,230        | 1,490,390        | (80,840)            | -5.15%       |
| Veolia Operating Services Charges            | 2,477,170        | 2,548,490        | 71,320              | 2.88%        |
| Interdepartmental Charges                    | 290,310          | 319,250          | 28,940              | 9.97%        |
| Long Term Debt Charges                       | 1,150,900        | 1,139,060        | (11,840)            | -1.03%       |
| Transfers to Reserves/Reserve Funds          | 2,490,760        | 2,585,640        | 94,880              | 3.81%        |
| <b>Total Expenditures</b>                    | <b>8,665,720</b> | <b>9,018,990</b> | <b>353,270</b>      | <b>4.08%</b> |
| <i>Revenues</i>                              |                  |                  |                     |              |
| Municipal Recoveries                         | 58,320           | 49,000           | (9,320)             | -15.98%      |
| Fees & Recoveries                            | 1,833,240        | 1,894,170        | 60,930              | 3.32%        |
| Transfers from Reserves/Reserve Funds        | 480,240          | 473,640          | (6,600)             | -1.37%       |
| <b>Total Revenues</b>                        | <b>2,371,800</b> | <b>2,416,810</b> | <b>45,010</b>       | <b>1.90%</b> |
| <b>Net Revenues Required from User Rates</b> | <b>6,293,920</b> | <b>6,602,180</b> | <b>308,260</b>      | <b>4.90%</b> |

As noted above, the overall 2019 rates revenue requirement from wastewater users has increased by \$308,260 or 4.90%. Detailed budget drivers are outlined below.

| <i>Driver</i>                                 | <i>Net Rate Revenues Impact</i> | <i>% Impact</i>     |
|---|---------------------------------|---------------------|
| A. Base Budget (net)                          | \$66,610                        | 1.06%               |
| B. Council Approved/ New Initiatives          | \$208,030                       | 3.31%               |
| C. Wastewater Additional Capital Contribution | <u>\$33,620</u>                 | <u>0.53%</u>        |
| <b>Total</b>                                  | <b><u>\$308,260</u></b>         | <b><u>4.90%</u></b> |

**A. Base Budget Drivers (net)**

As indicated above, total net base expenditures increased by approximately \$66,610. The major revenue related impact is increased holding and septic tank processing based on increased volumes. Expenditure related impacts include a shift in administrative staff time from water to wastewater, Veolia operating impacts, hydro savings at treatment plants and increased interdepartmental charges based on 2018 actuals. The major detailed net operational impacts are outlined below:

| <b>2019 Draft Wastewater Operating Budget</b>   |                                 |
|---|---------------------------------|
| <b>Summary of Impact of Base Budget Drivers on Rate Revenue Requirements</b>                            |                                 |
| <b>Base Budget:</b>   | <b>Increase/<br/>(Decrease)</b> |
| <b>Other Revenues (excludes rate revenues):</b>   |                                 |
| Norfolk Sludge Storage - Based on 3 year average volume and 2% rate increase                            | \$9,320                         |
| Overstrength charges offset by increased contribution to Rate Stabilization Reserve below               | (\$56,020)                      |
| Septic/Holding  | (\$20,820)                      |
| Miscellaneous Fees & Recoveries   | \$15,910                        |
| <b>Sub-total Revenues</b>   | <b>(\$51,610)</b>               |
| <b>Expenditures:</b>  |                                 |
| Salaries & Wages - Regular economic increases and shift in administrative work from water to wastewater | \$41,340                        |
| Veolia Operations - Standard annual increase  | \$71,320                        |
| Hydro - 3 year average consumption with estimated rate increase and Global Adjustment decrease          | (\$77,400)                      |
| Increase in Contribution to Rate Stabilization Reserve - Overstrength Revenue                           | \$56,020                        |
| Miscellaneous Supplies & Services   | (\$2,000)                       |
| Increased Interdepartmental Charges based on 2018 actuals   | \$28,940                        |
| <b>Sub-total Expenditures</b>   | <b>\$118,220</b>                |
| <b>Total Base Budget Impact on Rate Revenue Requirements</b>  | <b><u>\$66,610</u></b>          |

### B. New Initiatives

New initiatives are identified in two categories: Council Approved Initiatives and New Initiatives. There is one Council Approved Initiative for 2019, as outlined in Appendix J. As a part of the corporate revised organization structure, a more comprehensive review of staff time spent on both the water and wastewater systems was completed. As a result, the rate supported budget shows an increase overall for water and wastewater, for staff time related to managing coordinated capital projects, but a greater emphasis on wastewater operations. There are no New Initiatives proposed for 2019. Overall, the net rate revenue impact of this initiative in wastewater operations is an increase of \$208,030 as outlined below:

| <u>Description</u>   | <u>Rate Revenue Increase/ (Decrease)</u> |
|--|--|
| <b><i>Council Approved</i></b>   |  |
| Salaries, Wages, Administrative Charges impact of Revised Organizational Structure | <u>\$208,030</u>                         |
| <b><i>Subtotal</i></b>   | <b><u>\$208,030</u></b>                  |
|  |  |
| <b>Total Initiatives Impact on Rate Revenue Requirements</b>                       | <b><u>\$208,030</u></b>                  |

### C. Infrastructure Capital Financing Requirements

Overall, wastewater annual capital financing related impacts on the user rates were **0.5%** in 2019. Capital related impacts include the combination of annual capital replacement reserve fund contributions and debt repayments, as outlined in Appendix B. Essentially, the combined wastewater reserve fund contributions and changes to debt repayments for 2019 increased by \$33,616. As indicated previously, it is recommended to maintain an annual combined 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. It is recommended that increases to these capital replacement reserve funds continue until 2024 to offset the anticipated future disbursements, particularly for water. 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

As outlined above, both water and wastewater operations are benefitted by higher charges from miscellaneous revenue sources. A comprehensive list of all fees and charges is included in Appendices M – Schedules B through D, inclusive. Various housekeeping amendments to the schedules contained in Appendix M have been shaded in blue, including revisions to water meter costs for 2019 in order to address inconsistencies with these fees on the 2018 schedules. 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, 2019.

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 (see Appendix L for the applicable methodologies). 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 2019.

### Water Miscellaneous Revenues

Miscellaneous revenues represent approximately \$7.0 million in annual revenues for the water system, reducing the user rates revenue by a corresponding amount. Of these fees approximately \$2.0 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. An additional \$574,000 relates to industry recoveries from Port Maitland, the bulk of which is related to funding required for related capital projects. Bulk water recoveries represent total revenues of approximately \$1.2 million, with the impacts on the end user outlined below. A further \$502,000 relates to development charges funding to offset related development related debt payments. Fire protection charges represent approximately \$2.2 million which includes an increase of \$43,450 or 2.0%. The remaining miscellaneous fees total approximately \$570,000 and include: water supply charges to New Credit of \$288,000 (which is established by agreement as a percentage of the County's water rate and includes increased consumption related to usage of the bulk water depot in New Credit); property tax recoveries from industry of approximately \$95,000; and miscellaneous charges of approximately \$187,000. 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 2.0% (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.

The following summarizes the proposed changes for bulk processing fees:

(i) Bulk Water Charges

As outlined in Appendix L, 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 (2% for 2019), 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 2019 monthly fee is \$17.19 which represents a 2.0% **increase**. 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 (approximately 80% of the water consumption is billed directly to approximately 17 large haulers).

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

|                          | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | Proposed 2019 |
|--------------------------|--------|--------|--------|--------|--------|--------|---------------|
| Bulk Water Rate (per m3) | \$3.02 | \$2.96 | \$2.93 | \$2.96 | \$2.89 | \$2.94 | \$3.00        |

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

| <b>Bulk Water Rate</b>  | <b>2018 Rates</b>      | <b>2019 Proposed Rates</b> | <b>Change</b>        |                    |
|---|------------------------|----------------------------|----------------------|--------------------|
|   |                        |                            | <b>(\$)</b>          | <b>(%)</b>         |
| <i>(per cubic metre)</i>  |                        |                            |                      |                    |
| <b><u>Controlled by Haldimand County</u></b>                            |                        |                            |                      |                    |
| Bulk Water Rate (charged to hauler)                                     | <u>\$2.94</u>          | <u>\$3.00</u>              | <u>\$0.06</u>        | <u>2.0%</u>        |
| Monthly Administration Fee (charged to hauler)                          | <u>\$16.85</u>         | <u>\$17.19</u>             | <u>\$0.34</u>        | <u>2.0%</u>        |
| <b><u>Per Load Impact on "Typical End User" (3,000 gallon load)</u></b> |                        |                            |                      |                    |
| Water Commodity (determined by Haldimand County)                        | \$40.10                | \$40.90                    | \$0.80               | 2.0%               |
| Estimated hauler delivery charge (determined by hauler)                 | <u>\$85.45</u>         | <u>\$85.45</u>             | \$0.00               | 0.0%               |
| <b>Total "End User" estimated cost</b>                                  | <b><u>\$125.54</u></b> | <b><u>\$126.35</u></b>     | <b><u>\$0.80</u></b> | <b><u>0.6%</u></b> |

The following assumptions were used in the above chart: average load is 3,000 gallons (i.e. approximately 13.6 cubic metres); no change in the hauler’s 2018 delivery charge; and excludes any allocation of administration fee. It should be noted that a customer using one load of 3,000 gallons per month would be equivalent to the County’s annual average of 13.6 cubic metres for potable water supplied directly to metered water residents (i.e. typically urban residents). Additionally, rural customers have the ability to reduce their required purchases of water by capturing rainwater for personal use (typically not available to urban residents). In wet seasons, this has the potential of significantly reducing the need to purchase water directly from water haulers.

Wastewater Miscellaneous Revenues

Miscellaneous revenues represent approximately \$2.4 million in annual income for the wastewater system which helps reduce the impact on user rates revenue. Of these fees, approximately \$1.4 million relates to the leachate treatment cost recovery. The 2019 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 2020 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. The holding/septic tank treatment charges total approximately \$171,000. This is a increase of \$20,820 in aggregate due to a proposed increase of 2% in the per cubic meter rate and what appears to be the evening out of volumes after a number of years of declining volumes (see analysis of impact on end user below). The remaining miscellaneous fees total approximately \$796,000 and include: “overstrength” charges established under the Sewer Use By-law of \$138,500; sludge storage charges to Norfolk County of approximately \$49,000; a decrease in meter installation charges of \$20,600; transfer from Development Charges Reserve Fund – Sewer of approximately \$473,000 for the growth related share of debenture charges; and miscellaneous charges of approximately \$136,000. The miscellaneous fees reflect an inflationary increase of 2.0% (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 outlined in Appendix L and 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 operating 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 \$17.19 or 2.0%. 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 2019 holding/septic tank rates have been increased by 2.0% similar to other miscellaneous fees. Due to an increase in volumetric rates, coupled with an increase in volumes, the annual revenues are expected to increase by \$20,820. Holding/septic volumes treated on an annual basis declined steadily from 2010 to 2016 (from a high of 24,000 cubic meters to a low of approximately 9,000 cubic metres). During 2017 and 2018, volumes have rebound, with a three year average volume utilized for the projected 2019 volumes of approximately 12,000 cubic metres.

The impact on the holding/septic tank rates for 2019 is as follows:

| <b>Holding/Septic/Portable Toilet Tank Treatment Charge</b>      | <b>2018</b>            | <b>2019<br/>Proposed</b> | <b>Change</b>        |                    |
|--|------------------------|--------------------------|----------------------|--------------------|
| <i>(per cubic metre)</i>   |                        |                          | <i>(\$)</i>          | <i>(%)</i>         |
| <b>Controlled by Haldimand County:</b>                           |                        |                          |                      |                    |
| Proposed Rate (charged to hauler)                                | <u>\$14.07</u>         | <u>\$14.35</u>           | <u>\$0.28</u>        | <u>2.0%</u>        |
| Monthly Administration Fee (charged to hauler)                   | <u>\$16.85</u>         | <u>\$17.19</u>           | <u>\$0.34</u>        | <u>2.0%</u>        |
| <b>Per Load Impact on "Typical End User" (2,000 gallon load)</b> |                        |                          |                      |                    |
| Treatment Cost (determined by Haldimand)                         | \$127.90               | \$130.45                 | \$2.56               | 2.0%               |
| Estimated hauler delivery charge (determined by Hauler)          | <u>\$87.70</u>         | <u>\$87.70</u>           | <u>\$0.00</u>        | <u>0.0%</u>        |
| <b>Total "End User" cost</b>                                     | <b><u>\$215.60</u></b> | <b><u>\$218.15</u></b>   | <b><u>\$2.56</u></b> | <b><u>1.2%</u></b> |

The proposed administration and treatment fees are paid by all customers that discharge holding tank/septic/portable toilet waste to County treatment facilities. As this represents only a handful (approximately 6) of commercial haulers, the cost to the end user (i.e. household) includes additional haulage charges. To determine the per use impact on the "typical end user" (i.e. predominantly rural residents), the following assumptions were used: average load is 2,000 gallons (i.e. approximately 9.1 cubic metres); and an estimated delivery charge of \$87.70. The impacts on specific users will vary considerably based on the number of times a year this service is required.

**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 not 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 200 water only customers and approximately 100 wastewater only customers), the funding of these two systems must remain autonomous. The rate revenue consumption assumptions are outlined in Appendix L.

For 2019, the water users are required to generate approximately \$5.6 million, which represents an decrease in water rate revenue requirements of 1.32%. These revenues are collected by a combination of base water fixed fees and volumetric consumption charges per cubic metre consumed. As outlined in Appendix L, one of the principles adopted as part of the rate study was to increase the relative portion of the "fixed"/base fees. As the costs of the systems are approximately 50% fixed, the fixed component of the billing is set at 50% of the total revenues. This fixed component will help to offset any fluctuations in revenues due to shifts in annual consumption patterns.

The required rate revenue for the wastewater users is approximately \$6.6 million in 2019, representing an increased requirement of 4.90%. Similar to water customers, these revenues are recovered through a combination of basic wastewater charges and volumetric charges based on the water consumed (other than those users that qualify for the Wastewater Discharge Program – which allows for billing based on a wastewater meter). The fixed component is also set at 50% of the total rate revenue requirement. As there are several customers with water service but no corresponding wastewater service (particularly large industrial and commercial customers), the rate model compensates for these deviations.

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 following outlines the estimated consumption for 2019:

### Water Customers and Consumption Comparison

|                       | 2018          |                |                  |                | 2019          |                |                  |                |
|-----------------------|---------------|----------------|------------------|----------------|---------------|----------------|------------------|----------------|
|                       | Forecast      |                | Budget           |                | Budget        |                |                  |                |
|                       | Users         | %              | Consumption      | %              | Users         | %              | Consumption      | %              |
| Residential           | 9,116         | 90.47%         | 1,366,547        | 41.46%         | 9,244         | 90.43%         | 1,402,322        | 41.52%         |
| Commercial/Industrial | 680           | 6.75%          | 604,525          | 18.34%         | 679           | 6.64%          | 609,511          | 18.05%         |
| Large Industrial      | 4             | 0.04%          | 804,002          | 24.40%         | 4             | 0.04%          | 837,598          | 24.80%         |
| <b>Subtotal</b>       | <b>9,800</b>  | <b>97.26%</b>  | <b>2,775,075</b> | <b>84.20%</b>  | <b>9,927</b>  | <b>97.11%</b>  | <b>2,849,432</b> | <b>84.37%</b>  |
| Bulk Water            | 276           | 2.74%          | 385,927          | 11.71%         | 295           | 2.89%          | 370,984          | 10.98%         |
| New Credit Wholesale  |               |                | 73,065           | 2.22%          |               |                | 84,594           | 2.50%          |
| New Credit Depot      |               |                | 61,626           | 1.87%          |               |                | 72,493           | 2.15%          |
| <b>Total</b>          | <b>10,076</b> | <b>100.00%</b> | <b>3,295,693</b> | <b>100.00%</b> | <b>10,222</b> | <b>100.00%</b> | <b>3,377,503</b> | <b>100.00%</b> |

The number of customers for budgeting purposes reflects the totals from an in-year review, with an incremental increase related to the known development coming on in 2019 and beyond.

Large industrial consumption can fluctuate significantly based on changing operations (i.e. closures/labour disputes) and possible conversion of operations to different water sources (i.e. potable water to raw water). Given the current reliance on these industries and potential negative impacts of uncontrolled reductions in water consumption, the estimated usage projected for large industrial customers for 2019 is comparable to the 2018 budgeted consumption. This will ensure the rates are not impacted by changes in estimates in consumption for these industries. This methodology will also help offset any potential large consumption changes in the future. The consumption of these industries will be closely monitored on a go-forward basis. The balance in the current Water Rate Stabilization Reserve, Appendix K, will provide some relief to offset any negative consumption impacts as they become known.

### Wastewater Customers and Consumption Comparison

|                       | 2018         |                |                  |                | 2019         |                |                  |                |
|-----------------------|--------------|----------------|------------------|----------------|--------------|----------------|------------------|----------------|
|                       | Forecast     |                | Budget           |                | Budget       |                |                  |                |
|                       | Users        | %              | Consumption      | %              | Users        | %              | Consumption      | %              |
| Residential           | 8,870        | 93.14%         | 1,309,129        | 61.54%         | 9,083        | 93.25%         | 1,344,153        | 61.71%         |
| Commercial/Industrial | 644          | 6.76%          | 489,259          | 23.00%         | 649          | 6.66%          | 480,157          | 22.05%         |
| Large Industrial      | 3            | 0.03%          | 294,108          | 13.83%         | 3            | 0.03%          | 316,089          | 14.51%         |
| <b>Subtotal</b>       | <b>9,517</b> | <b>99.94%</b>  | <b>2,092,496</b> | <b>98.36%</b>  | <b>9,735</b> | <b>99.94%</b>  | <b>2,140,399</b> | <b>98.27%</b>  |
| Septic/Holding        | 6            | 0.06%          | 10,250           | 0.48%          | 6            | 0.06%          | 10,712           | 0.49%          |
| Leachate              |              | 0.00%          | 24,568           | 1.15%          |              |                | 26,956           | 1.24%          |
| <b>Total</b>          | <b>9,523</b> | <b>100.00%</b> | <b>2,127,314</b> | <b>100.00%</b> | <b>9,741</b> | <b>100.00%</b> | <b>2,178,067</b> | <b>100.00%</b> |

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 2019.

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).

The resulting 2019 water and wastewater user rates are included in Appendix M in this budget document. The proposed rates would be effective on all billings for consumption **effective February 1, 2019**. 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.

As a result of the proposed changes, the effective monthly impact on selected standard services is as follows (for bulk services – water and wastewater – based on a “per use” basis including treatment and transportation):

### AVERAGE CUSTOMER IMPACTS

| User                    |       |              | 2018            | 2019            | \$ Change        | % Change      |
|-------------------------|-------|--------------|-----------------|-----------------|------------------|---------------|
| <b>Monthly Services</b> |       |              |                 |                 |                  |               |
| Residential<br>(15 m3)  | Water | Basic        | \$ 21.10        | \$ 19.80        | \$ (1.29)        | (6.1%)        |
|                         |       | Consumption  | \$ 15.45        | \$ 14.85        | \$ (0.60)        | (3.9%)        |
|                         |       | <b>Total</b> | <b>\$ 36.55</b> | <b>\$ 34.65</b> | <b>\$ (1.90)</b> | <b>(5.2%)</b> |
|                         | Sewer | Basic        | \$ 24.14        | \$ 24.03        | \$ (0.12)        | (0.5%)        |
|                         |       | Consumption  | \$ 22.05        | \$ 23.09        | \$ 1.04          | 4.7%          |
|                         |       | <b>Total</b> | <b>\$ 46.20</b> | <b>\$ 47.12</b> | <b>\$ 0.92</b>   | <b>2.0%</b>   |
| <b>Total</b>            |       |              | <b>\$ 82.75</b> | <b>\$ 81.77</b> | <b>\$ (0.98)</b> | <b>(1.2%)</b> |

|                           |       |              |                    |                    |                   |               |
|---------------------------|-------|--------------|--------------------|--------------------|-------------------|---------------|
| Commercial<br>(2" 500 m3) | Water | Basic        | \$ 259.05          | \$ 243.17          | \$ (15.87)        | (6.1%)        |
|                           |       | Consumption  | \$ 515.14          | \$ 495.05          | \$ (20.08)        | (3.9%)        |
|                           |       | <b>Total</b> | <b>\$ 774.18</b>   | <b>\$ 738.23</b>   | <b>\$ (35.96)</b> | <b>(4.6%)</b> |
|                           | Sewer | Basic        | \$ 296.48          | \$ 295.06          | \$ (1.42)         | (0.5%)        |
|                           |       | Consumption  | \$ 735.14          | \$ 769.66          | \$ 34.52          | 4.7%          |
|                           |       | <b>Total</b> | <b>\$ 1,031.62</b> | <b>\$ 1,064.72</b> | <b>\$ 33.10</b>   | <b>3.2%</b>   |
| <b>Total</b>              |       |              | <b>\$ 1,805.81</b> | <b>\$ 1,802.95</b> | <b>\$ (2.86)</b>  | <b>(0.2%)</b> |

|                             |       |              |                     |                     |                    |               |
|-----------------------------|-------|--------------|---------------------|---------------------|--------------------|---------------|
| Industrial<br>(4" 4,000 m3) | Water | Basic        | \$ 906.66           | \$ 851.11           | \$ (55.56)         | (6.1%)        |
|                             |       | Consumption  | \$ 4,121.09         | \$ 3,960.42         | \$ (160.68)        | (3.9%)        |
|                             |       | <b>Total</b> | <b>\$ 5,027.76</b>  | <b>\$ 4,811.52</b>  | <b>\$ (216.23)</b> | <b>(4.3%)</b> |
|                             | Sewer | Basic        | \$ 1,037.69         | \$ 1,032.70         | \$ (4.99)          | (0.5%)        |
|                             |       | Consumption  | \$ 5,881.12         | \$ 6,157.30         | \$ 276.19          | 4.7%          |
|                             |       | <b>Total</b> | <b>\$ 6,918.81</b>  | <b>\$ 7,190.01</b>  | <b>\$ 271.20</b>   | <b>3.9%</b>   |
| <b>Total</b>                |       |              | <b>\$ 11,946.56</b> | <b>\$ 12,001.53</b> | <b>\$ 54.97</b>    | <b>0.5%</b>   |

| <b>Bulk Services (per use basis)</b> |   |  |                 |                 |               |             |
|--------------------------------------|---|--|-----------------|-----------------|---------------|-------------|
| Bulk Water<br>(3,000 gallons)        | Potable Water Costs (County)                |  | \$40.10         | \$40.90         | \$ 0.80       | 2.0%        |
|                                      | Estimated Delivery Charges (Private Hauler) |  | \$85.45         | \$85.45         | \$-           | 0.0%        |
|                                      | <b>Total</b>                                |  | <b>\$125.54</b> | <b>\$126.35</b> | <b>\$0.80</b> | <b>0.6%</b> |
| Septic/Holding<br>(2,000 gallons)    | Treatment Costs (County)                    |  | \$127.90        | \$130.45        | \$ 2.56       | 2.0%        |
|                                      | Estimated Delivery Charges (Private Hauler) |  | \$91.57         | \$91.57         | \$-           | 0.0%        |
|                                      | <b>Total</b>                                |  | <b>\$219.47</b> | <b>\$222.02</b> | <b>\$2.56</b> | <b>1.2%</b> |

The majority of the County's customers have both water and wastewater services and, for residential users, will see a slight decrease in their overall monthly costs as a result of the proposed 2019 rates. Bulk water rates will see a 2% increase based on the change in methodology implemented with the 2018 budget. Holding/septic tank customers will experience overall increases relative to the inflationary increase of 2% on treatment costs for 2019.

### Future Impacts/Budget Constraints

Although the County has consistently established the Rate Supported Operating Budget as full cost recovery from the users of these systems (i.e. no property tax revenues support the water or wastewater operations), 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. These users currently represent approximately 25% of total water rates revenue consumption and 15% of wastewater revenue consumption in 2019. In addition, Raw Water revenues account for approximately \$2.0 million in cost recovery, not all of which could be eliminated if consumption was reduced.
- Maintenance Costs Associated with Ontario Power Generation (OPG) Water Intake – The current budget does not include any future costs associated with the shared water intake at OPG that has been traditionally maintained by OPG.
- 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. This will ultimately shift costs to other users of the systems thereby affecting future rates. 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. 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. As these issues are resolved or completed, a more strategic and long range financial plan can be developed and implemented.

### **Conclusion/Recommendations**

In light of the current economic times and from a financial perspective, the 2019 Draft Rate Supported Capital Forecast and Operating Budget 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.

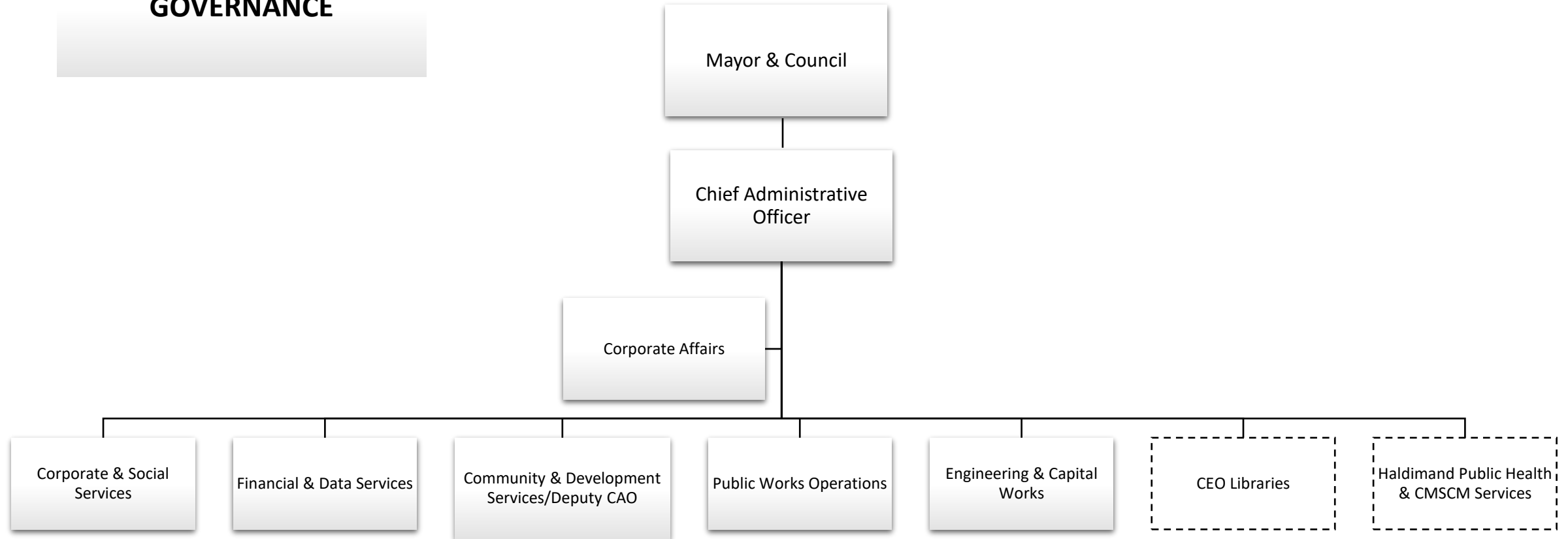
Continual revisions to the operating budget process will help the County better allocate resources to manage its operations and develop a long range financial plan with predictable water and wastewater rates.

It is, therefore, recommended that Council adopt the 2019 Draft Rate Supported Capital Forecast and Operating Budget and associated revisions to user rates and miscellaneous fees and charges.

**Prepared by:** Charmaine Corlis, Treasurer

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

# GOVERNANCE



**HALDIMAND COUNTY COUNCIL**

**2018-2022**

MAYOR

KEN HEWITT

WARD 1

STEWART PATTERSON

WARD 2

JOHN METCALFE

WARD 3

DAN LAWRENCE

WARD 4

TONY DALIMONTE

WARD 5

ROB SHIRTON

WARD 6

BERNIE CORBETT

**HALDIMAND COUNTY  
SENIOR MANAGEMENT**

CHIEF ADMINISTRATIVE OFFICER DON BOYLE

GENERAL MANAGER  
CORPORATE & SOCIAL SERVICES CATHY CASE

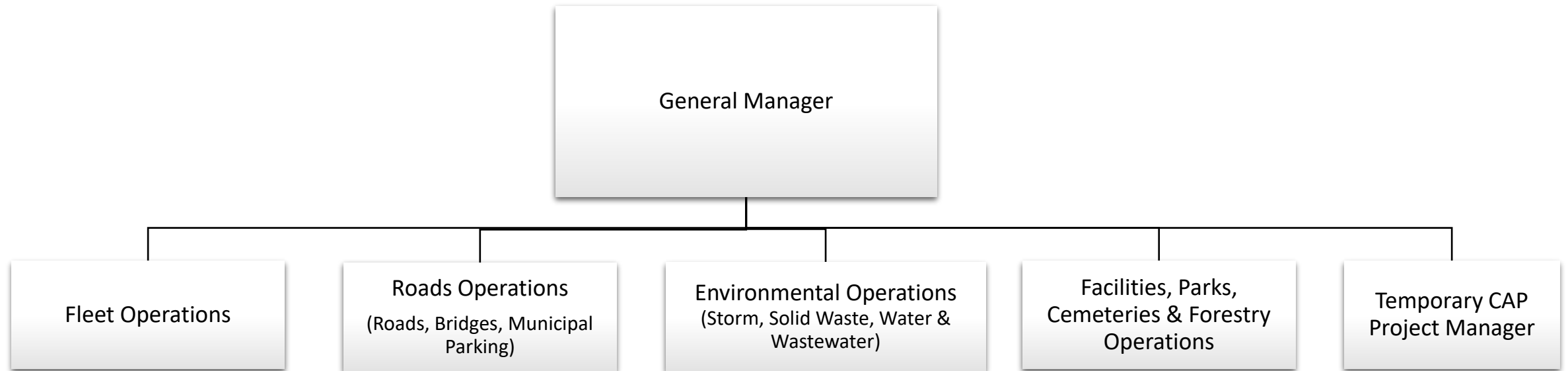
GENERAL MANAGER  
FINANCIAL & DATA SERVICES MARK MERRITT

GENERAL MANAGER  
COMMUNITY & DEVELOPMENT SERVICES CRAIG MANLEY

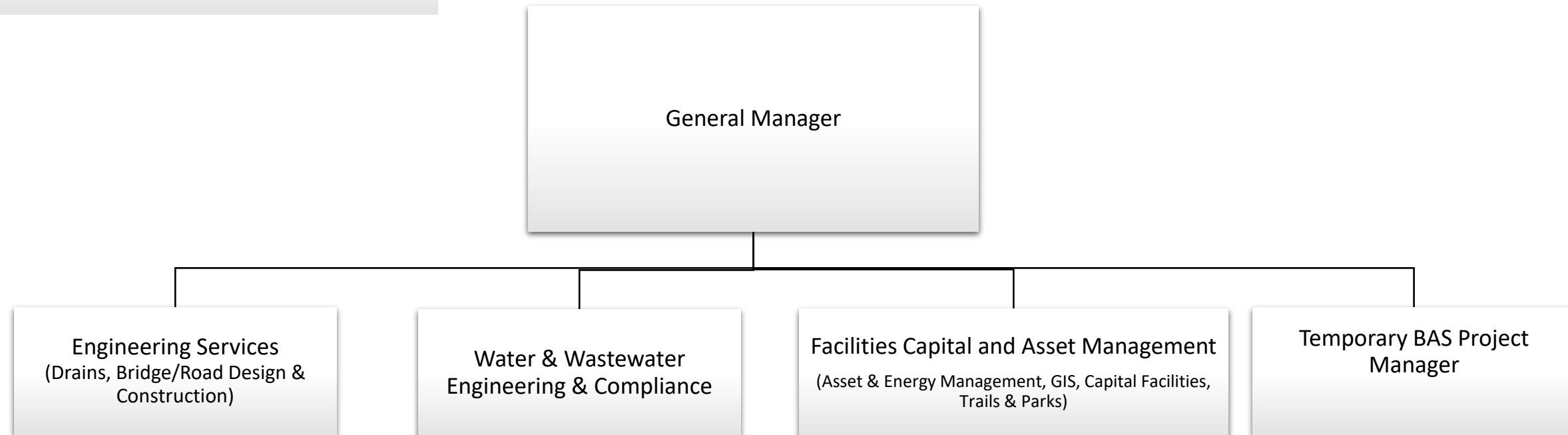
GENERAL MANAGER  
PUBLIC WORKS OPERATIONS PHIL METE

GENERAL MANAGER  
ENGINEERING & CAPITAL WORKS TYSON HAEDRICH

# **PUBLIC WORKS OPERATIONS**



## ENGINEERING & CAPITAL WORKS







# WATER & WASTEWATER CAPITAL FORECAST

### Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: SUMMARY-Water and Wastewater**

|  | 2019         | 2020         | 2021         | 2022        | 2023        | 2024        | 2025         | 2026        | 2027         | 2028        | Total Expenditures | Grants Subsidies | External Financing | Development Charges Rsvs Funds | Reserves/Reserve Funds | Debtenture Financing |
|--|--------------|--------------|--------------|-------------|-------------|-------------|--------------|-------------|--------------|-------------|--------------------|------------------|--------------------|--------------------------------|------------------------|----------------------|
| <b>SUMMARY-Water &amp; Wastewater Administration</b>       |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| Water & Wastewater Administration                          |              | 5,500        |              |             |             |             | 5,500        |             |              |             | 11,000             |                  |                    |                                | (11,000)               |                      |
| <b>Total SUMMARY-Water &amp; Wastewater Administration</b> |              | 5,500        |              |             |             |             | 5,500        |             |              |             | 11,000             |                  |                    |                                | (11,000)               |                      |
| <b>SUMMARY-Water</b>                                       |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| Water - Replacement and Upgrade Projects                   | 1,267,000    | 1,005,000    | 735,000      | 755,000     | 655,000     | 755,000     | 755,000      | 755,000     | 755,000      | 755,000     | 8,192,000          | (1,778,000)      |                    | (42,000)                       | (6,372,000)            |                      |
| Water - Technical Reviews and Studies                      | 28,100       | 28,100       | 93,100       | 28,100      | 98,100      | 3,100       | 53,100       | 68,100      | 53,100       | 3,100       | 456,000            |                  |                    | (244,700)                      | (211,300)              |                      |
| Water - Plants/Transmission Systems                        | 4,429,250    | 4,935,000    | 5,731,800    | 520,000     | 2,455,000   | 2,455,000   | 2,455,000    | 2,455,000   | 2,455,000    | 2,455,000   | 30,346,050         | (9,489,600)      | (3,759,210)        | (6,972,810)                    | (10,124,430)           |                      |
| <b>Total SUMMARY-Water</b>                                 | 5,724,350    | 5,968,100    | 6,559,900    | 1,303,100   | 3,208,100   | 3,213,100   | 3,263,100    | 3,278,100   | 3,263,100    | 3,213,100   | 38,994,050         | (11,267,600)     | (3,759,210)        | (7,259,510)                    | (16,707,730)           |                      |
| <b>SUMMARY-Wastewater</b>                                  |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| Wastewater - Replacement and Upgrade Projects              | 854,000      | 270,000      | 183,000      | 280,000     | 183,000     | 270,000     | 193,000      | 270,000     | 183,000      | 280,000     | 2,966,000          | (1,210,000)      |                    | (291,250)                      | (1,464,750)            |                      |
| Wastewater - Technical Reviews and Studies                 | 114,000      | 174,000      | 179,000      | 174,000     | 179,000     | 139,000     | 149,000      | 204,000     | 149,000      | 139,000     | 1,600,000          |                  |                    | (635,300)                      | (964,700)              |                      |
| Wastewater - Plants  | 6,845,250    | 6,312,700    | 5,370,400    | 1,681,500   | 3,100,000   | 3,100,000   | 8,859,600    | 3,100,000   | 40,442,900   | 3,100,000   | 81,912,350         | (4,864,620)      |                    | (55,225,680)                   | (21,822,050)           |                      |
| <b>Total SUMMARY-Wastewater</b>                            | 7,813,250    | 6,756,700    | 5,732,400    | 2,135,500   | 3,462,000   | 3,509,000   | 9,201,600    | 3,574,000   | 40,774,900   | 3,519,000   | 86,478,350         | (6,074,620)      |                    | (56,152,230)                   | (24,251,500)           |                      |
| <b>Total SUMMARY-Water and Wastewater</b>                  | 13,537,600   | 12,730,300   | 12,292,300   | 3,438,600   | 6,670,100   | 6,722,100   | 12,470,200   | 6,852,100   | 44,038,000   | 6,732,100   | 125,483,400        | (17,342,220)     | (3,759,210)        | (63,411,740)                   | (40,970,230)           |                      |
| <b>Funding</b>   |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| Water & Wastewater Administration                          |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| Grants   |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| External Financing   |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| Development charges reserve Funds                          |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| Reserves/Reserve Funds                                     |              | (5,500)      |              |             |             |             | (5,500)      |             |              |             | (11,000)           |                  |                    |                                |                        |                      |
| Debtenture Financing                                       |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| <b>Total SUMMARY-Water &amp; Wastewater Administration</b> |              | (5,500)      |              |             |             |             | (5,500)      |             |              |             | (11,000)           |                  |                    |                                |                        |                      |
| Water  |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| Grants   | (378,000)    | (200,000)    | (2,225,000)  | (250,000)   | (1,783,650) | (1,892,750) | (900,200)    | (575,250)   | (2,062,750)  | (1,000,000) | (11,267,600)       |                  |                    |                                |                        |                      |
| External Financing   | (2,974,210)  | (145,000)    | (80,000)     | (80,000)    | (80,000)    | (80,000)    | (80,000)     | (80,000)    | (80,000)     | (80,000)    | (3,759,210)        |                  |                    |                                |                        |                      |
| Development charges reserve Funds                          | (66,450)     | (385,550)    | (3,047,600)  | (39,700)    | (355,150)   | (337,320)   | (368,040)    | (1,952,770) | (357,730)    | (349,200)   | (7,259,510)        |                  |                    |                                |                        |                      |
| Reserves/Reserve Funds                                     | (2,305,690)  | (5,237,550)  | (1,207,300)  | (933,400)   | (989,300)   | (903,030)   | (1,914,860)  | (670,080)   | (762,620)    | (1,783,900) | (16,707,730)       |                  |                    |                                |                        |                      |
| Debtenture Financing                                       |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| <b>Total SUMMARY-Water</b>                                 | (5,724,350)  | (5,968,100)  | (6,559,900)  | (1,303,100) | (3,208,100) | (3,213,100) | (3,263,100)  | (3,278,100) | (3,263,100)  | (3,213,100) | (38,994,050)       |                  |                    |                                |                        |                      |
| Wastewater   |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| Grants   | (379,110)    | (646,990)    | (1,060,000)  | (170,000)   | (380,000)   | (430,320)   |              | (2,179,400) | (329,400)    | (499,400)   | (6,074,620)        |                  |                    |                                |                        |                      |
| External Financing   |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| Development charges reserve Funds                          | (5,784,290)  | (3,568,460)  | (2,655,400)  | (154,730)   | (224,400)   | (157,770)   | (5,822,820)  | (161,150)   | (37,419,750) | (203,460)   | (56,152,230)       |                  |                    |                                |                        |                      |
| Reserves/Reserve Funds                                     | (1,649,850)  | (2,541,250)  | (2,017,000)  | (1,810,770) | (2,857,600) | (2,920,910) | (3,378,780)  | (1,233,450) | (3,025,750)  | (2,816,140) | (24,251,500)       |                  |                    |                                |                        |                      |
| Debtenture Financing                                       |              |              |              |             |             |             |              |             |              |             |                    |                  |                    |                                |                        |                      |
| <b>Total SUMMARY-Wastewater</b>                            | (7,813,250)  | (6,756,700)  | (5,732,400)  | (2,135,500) | (3,462,000) | (3,509,000) | (9,201,600)  | (3,574,000) | (40,774,900) | (3,519,000) | (86,478,350)       |                  |                    |                                |                        |                      |
| <b>Total SUMMARY-Water and Wastewater</b>                  | (13,537,600) | (12,730,300) | (12,292,300) | (3,438,600) | (6,670,100) | (6,722,100) | (12,470,200) | (6,852,100) | (44,038,000) | (6,732,100) | (125,483,400)      |                  |                    |                                |                        |                      |

## Haldimand County

### 2019 to 2028 CAPITAL FORECAST

Division: **SUMMARY-Water & Wastewater Administration**

|  | 2019 | 2020  | 2021 | 2022 | 2023 | 2024 | 2025  | 2026 | 2027 | 2028 | Total Expenditures | Grants Subsidies | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debenture Financing |
|--|------|-------|------|------|------|------|-------|------|------|------|--------------------|------------------|--------------------|--------------------------------|-------------------------|---------------------|
| Water & Wastewater Administration                  |      |       |      |      |      |      |       |      |      |      |                    |                  |                    |                                |                         |                     |
| Replacement/State of Good Repair                   |      |       |      |      |      |      |       |      |      |      |                    |                  |                    |                                |                         |                     |
| WWW Financial Plan Update (O. Reg. 453/07)         |      | 5,500 |      |      |      |      | 5,500 |      |      |      | 11,000             |                  |                    |                                |                         | (11,000)            |
| <b>Total Replacement/State of Good Repair</b>      |      | 5,500 |      |      |      |      | 5,500 |      |      |      | 11,000             |                  |                    |                                |                         | (11,000)            |
| <b>Total Water &amp; Wastewater Administration</b> |      | 5,500 |      |      |      |      | 5,500 |      |      |      | 11,000             |                  |                    |                                |                         | (11,000)            |

## Haldimand County

2019 to 2028 CAPITAL FORECAST

Division: **SUMMARY-Water**

|  | 2019             | 2020             | 2021             | 2022             | 2023             | 2024             | 2025             | 2026             | 2027             | 2028             | Total Expenditures | Grants Subsidies    | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debenture Financing |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|---------------------|--------------------|--------------------------------|-------------------------|---------------------|
| Water - Replacement and Upgrade Projects | 1,267,000        | 1,005,000        | 735,000          | 755,000          | 655,000          | 755,000          | 755,000          | 755,000          | 755,000          | 755,000          | <b>8,192,000</b>   | (1,778,000)         |                    | (42,000)                       | (6,372,000)             |                     |
| Water - Technical Reviews and Studies    | 28,100           | 28,100           | 93,100           | 28,100           | 98,100           | 3,100            | 53,100           | 68,100           | 53,100           | 3,100            | <b>456,000</b>     |                     |                    | (244,700)                      | (211,300)               |                     |
| Water - Plants/Transmission Systems      | 4,429,250        | 4,935,000        | 5,731,800        | 520,000          | 2,455,000        | 2,455,000        | 2,455,000        | 2,455,000        | 2,455,000        | 2,455,000        | <b>30,346,050</b>  | (9,489,600)         | (3,759,210)        | (6,972,810)                    | (10,124,430)            |                     |
| <b>Total SUMMARY-Water</b>               | <b>5,724,350</b> | <b>5,968,100</b> | <b>6,559,900</b> | <b>1,303,100</b> | <b>3,208,100</b> | <b>3,213,100</b> | <b>3,263,100</b> | <b>3,278,100</b> | <b>3,263,100</b> | <b>3,213,100</b> | <b>38,994,050</b>  | <b>(11,267,600)</b> | <b>(3,759,210)</b> | <b>(7,259,510)</b>             | <b>(16,707,730)</b>     |                     |

## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: Water - Replacement and Upgrade Projects**

|  | 2019           | 2020           | 2021           | 2022           | 2023           | 2024           | 2025           | 2026           | 2027           | 2028           |                       | Grants<br>Subsidies | External<br>Financing | Development<br>Charges<br>Rsve Funds | Reserves/<br>Reserve<br>Funds | Debt<br>Financing  |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------------|---------------------|-----------------------|--------------------------------------|-------------------------------|--------------------|
|  |                |                |                |                |                |                |                |                |                |                | Total<br>Expenditures |                     |                       |                                      |                               |                    |
| <b>Water - Replacement and Upgrade Projects</b>        |                |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               |                    |
| Water Operations Administration                        |                |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               |                    |
| Replacement/State of Good Repair                       |                |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               |                    |
| Standpipe and Reservoir Inspections                    | 10,000         | 10,000         | 10,000         | 10,000         | 10,000         | 10,000         | 10,000         | 10,000         | 10,000         | 10,000         |                       |                     |                       |                                      |                               | (100,000)          |
| Distribution System - Annual Repair & Replac't         | 75,000         | 75,000         | 75,000         | 75,000         | 75,000         | 75,000         | 75,000         | 75,000         | 75,000         | 75,000         |                       |                     |                       |                                      |                               | (750,000)          |
| 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)          |
| Replacement of Cast Iron Watermains                    |                |                |                |                |                | 650,000        | 650,000        | 650,000        | 650,000        | 650,000        |                       | (1,400,000)         |                       |                                      |                               | (1,850,000)        |
| <b>Total Replacement/State of Good Repair</b>          | <b>105,000</b> | <b>105,000</b> | <b>105,000</b> | <b>105,000</b> | <b>105,000</b> | <b>755,000</b> | <b>755,000</b> | <b>755,000</b> | <b>755,000</b> | <b>755,000</b> |                       | <b>(1,400,000)</b>  |                       |                                      |                               | <b>(2,900,000)</b> |
| <b>Total Water Operations Administration</b>           | <b>105,000</b> | <b>105,000</b> | <b>105,000</b> | <b>105,000</b> | <b>105,000</b> | <b>755,000</b> | <b>755,000</b> | <b>755,000</b> | <b>755,000</b> | <b>755,000</b> |                       | <b>(1,400,000)</b>  |                       |                                      |                               | <b>(2,900,000)</b> |
| Caledonia Water  |                |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               |                    |
| Replacement/State of Good Repair                       |                |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               |                    |
| Argyle Bridge Watermain Relocation [WW] (2017)         | 82,000         |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (82,000)           |
| Blair St - Caithness to Park Lane[CIW] [R]             |                |                | 120,000        |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (120,000)          |
| Cameron St - Caithness to Ross[CIW] [R]                |                |                | 150,000        |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (150,000)          |
| Fife St W - Peebles to Argyle[CIW] [WW] [R]            | 300,000        |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (300,000)          |
| Park Lane - Inverness to end[CIW] [R]                  |                |                | 180,000        |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (180,000)          |
| Queen Ave - Caithness to end[CIW] [R]                  |                |                | 180,000        |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (180,000)          |
| Renfrew St E - Wigton to Berwick[CIW] [WW] [R]         | 360,000        |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (360,000)          |
| <b>Total Replacement/State of Good Repair</b>          | <b>742,000</b> |                | <b>630,000</b> |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | <b>(1,372,000)</b> |
| <b>Total Caledonia Water</b>                           | <b>742,000</b> |                | <b>630,000</b> |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | <b>(1,372,000)</b> |
| Hagersville Water                                      |                |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               |                    |
| Replacement/State of Good Repair                       |                |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               |                    |
| Foundry St - Tuscarora to end[CIW] [R]                 |                |                |                |                | 100,000        |                |                |                |                |                |                       |                     |                       |                                      |                               | (100,000)          |
| Victoria St - Tuscarora to Main St N[CIW] [R]          |                |                |                |                | 250,000        |                |                |                |                |                |                       |                     |                       |                                      |                               | (250,000)          |
| <b>Total Replacement/State of Good Repair</b>          |                |                |                |                | <b>350,000</b> |                |                |                |                |                |                       |                     |                       |                                      |                               | <b>(350,000)</b>   |
| <b>Total Hagersville Water</b>                         |                |                |                |                | <b>350,000</b> |                |                |                |                |                |                       |                     |                       |                                      |                               | <b>(350,000)</b>   |
| Cayuga Water   |                |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               |                    |
| Replacement/State of Good Repair                       |                |                |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               |                    |
| Chippewa St W - Ottawa to Cayuga[CIW] [R]              |                | 220,000        |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (220,000)          |
| Johnston St - Echo to end[CIW] [R]                     |                |                |                | 160,000        |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (160,000)          |
| Kerr St E - Winniet to 100 m west of Winniet[CIW] [R]  |                |                |                | 100,000        |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (100,000)          |
| Norton St E - Winniet to 60 m west of Winniet[CIW] [R] |                |                |                | 60,000         |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (60,000)           |
| Ouse St N - Talbot to Cayuga St N[CIW] [R]             |                |                |                | 330,000        |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (330,000)          |
| Ouse St S - Talbot to Tuscarora[CIW] [R]               |                | 300,000        |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (300,000)          |
| Seneca St S - Tuscarora to McKay[CIW] [R]              |                | 180,000        |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (180,000)          |
| Cayuga St S - Seneca to Brant[CIW] [R]                 |                | 110,000        |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (110,000)          |
| Brant St - Ouse St S to Cayuga St S [CIW] [R]          |                | 90,000         |                |                |                |                |                |                |                |                |                       |                     |                       |                                      |                               | (90,000)           |
| <b>Total Replacement/State of Good Repair</b>          |                | <b>900,000</b> |                | <b>650,000</b> |                |                |                |                |                |                |                       |                     |                       |                                      |                               | <b>(1,550,000)</b> |

Note: [CIW] Cast Iron Watermain; [W] Water; [WW] Wastewater; [SS] Storm Sewer; [R] Roads

## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: Water - Replacement and Upgrade Projects**

|   | 2019             | 2020             | 2021           | 2022           | 2023           | 2024           | 2025           | 2026           | 2027           | 2028           | Total Expenditures | Grants Subsidies | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debt/ure Financing |
|---|------------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|------------------|--------------------|--------------------------------|-------------------------|--------------------|
| <b>Total Cayuga Water</b>                             |                  | 900,000          |                | 650,000        |                |                |                |                |                |                | <b>1,550,000</b>   |                  |                    |                                | (1,550,000)             |                    |
| Dunnville Water                                       |                  |                  |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| Replacement/State of Good Repair                      |                  |                  |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| Alder St - Cedar to West [WW] [S] [R]                 | 420,000          |                  |                |                |                |                |                |                |                |                | <b>420,000</b>     | (378,000)        |                    | (42,000)                       |                         |                    |
| Alley way - Broad to Central Lane [CIW] [R]           |                  |                  |                |                | 150,000        |                |                |                |                |                | <b>150,000</b>     |                  |                    |                                | (150,000)               |                    |
| Main St E - 710 Main E to 50 m south [CIW] [R]        |                  |                  |                |                | 50,000         |                |                |                |                |                | <b>50,000</b>      |                  |                    |                                | (50,000)                |                    |
| <b>Total Replacement/State of Good Repair</b>         | <b>420,000</b>   |                  |                |                | <b>200,000</b> |                |                |                |                |                | <b>620,000</b>     | (378,000)        |                    | (42,000)                       | (200,000)               |                    |
| <b>Total Dunnville Water</b>                          | <b>420,000</b>   |                  |                |                | <b>200,000</b> |                |                |                |                |                | <b>620,000</b>     | (378,000)        |                    | (42,000)                       | (200,000)               |                    |
| <b>Total Water - Replacement and Upgrade Projects</b> | <b>1,267,000</b> | <b>1,005,000</b> | <b>735,000</b> | <b>755,000</b> | <b>655,000</b> | <b>755,000</b> | <b>755,000</b> | <b>755,000</b> | <b>755,000</b> | <b>755,000</b> | <b>8,192,000</b>   | (1,778,000)      |                    | (42,000)                       | (6,372,000)             |                    |

Note: [CIW] Cast Iron Watermain; [W] Water; [WW] Wastewater; [SS] Storm Sewer; [R] Roads

## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: Water - Technical Reviews and Studies**

|  | 2019          | 2020          | 2021          | 2022          | 2023          | 2024         | 2025          | 2026          | 2027          | 2028         | Total Expenditures | Grants Subsidies | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debt/ Debt Financing |
|--|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|--------------|--------------------|------------------|--------------------|--------------------------------|-------------------------|----------------------|
| <b>Water - Technical Reviews and Studies</b>       |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Water Operations Administration                    |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Replacement/State of Good Repair                   |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Facility Condition Assessment [WW]                 | 25,000        |               | 25,000        |               | 25,000        |              | 25,000        |               | 25,000        |              | 125,000            |                  |                    |                                | (125,000)               |                      |
| SCADA Master Plan                                  |               |               | 35,000        |               |               |              |               | 35,000        |               |              | 70,000             |                  |                    | (14,700)                       | (55,300)                |                      |
| Asbestos Annual Inspection and Remediation [WW]    | 3,100         | 3,100         | 3,100         | 3,100         | 3,100         | 3,100        | 3,100         | 3,100         | 3,100         | 3,100        | 31,000             |                  |                    |                                | (31,000)                |                      |
| <b>Total Replacement/State of Good Repair</b>      | <b>28,100</b> | <b>3,100</b>  | <b>63,100</b> | <b>3,100</b>  | <b>28,100</b> | <b>3,100</b> | <b>28,100</b> | <b>38,100</b> | <b>28,100</b> | <b>3,100</b> | <b>226,000</b>     |                  |                    | (14,700)                       | (211,300)               |                      |
| <b>Total Water Operations Administration</b>       | <b>28,100</b> | <b>3,100</b>  | <b>63,100</b> | <b>3,100</b>  | <b>28,100</b> | <b>3,100</b> | <b>28,100</b> | <b>38,100</b> | <b>28,100</b> | <b>3,100</b> | <b>226,000</b>     |                  |                    | (14,700)                       | (211,300)               |                      |
| Caledonia Water                                    |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Replacement/State of Good Repair                   |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Cal - MSP - Update [WW][R][SS]                     |               |               |               |               | 50,000        |              |               |               |               |              | 50,000             |                  |                    | (50,000)                       |                         |                      |
| <b>Total Replacement/State of Good Repair</b>      |               |               |               |               | <b>50,000</b> |              |               |               |               |              | <b>50,000</b>      |                  |                    | (50,000)                       |                         |                      |
| <b>Total Caledonia Water</b>                       |               |               |               |               | <b>50,000</b> |              |               |               |               |              | <b>50,000</b>      |                  |                    | (50,000)                       |                         |                      |
| Hagersville Water                                  |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Replacement/State of Good Repair                   |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Hag - MSP - Update [WW][R][SS]                     |               | 25,000        |               |               |               |              | 25,000        |               |               |              | 50,000             |                  |                    | (50,000)                       |                         |                      |
| <b>Total Replacement/State of Good Repair</b>      |               | <b>25,000</b> |               |               |               |              | <b>25,000</b> |               |               |              | <b>50,000</b>      |                  |                    | (50,000)                       |                         |                      |
| <b>Total Hagersville Water</b>                     |               | <b>25,000</b> |               |               |               |              | <b>25,000</b> |               |               |              | <b>50,000</b>      |                  |                    | (50,000)                       |                         |                      |
| Jarvis Water                                       |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Replacement/State of Good Repair                   |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Jar - MSP Update [WW][R][SS]                       |               |               |               |               | 20,000        |              |               |               |               |              | 20,000             |                  |                    | (20,000)                       |                         |                      |
| <b>Total Replacement/State of Good Repair</b>      |               |               |               |               | <b>20,000</b> |              |               |               |               |              | <b>20,000</b>      |                  |                    | (20,000)                       |                         |                      |
| <b>Total Jarvis Water</b>                          |               |               |               |               | <b>20,000</b> |              |               |               |               |              | <b>20,000</b>      |                  |                    | (20,000)                       |                         |                      |
| Cayuga Water                                       |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Replacement/State of Good Repair                   |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Cay - MSP Update [WW][R][SS]                       |               |               |               | 25,000        |               |              |               |               | 25,000        |              | 50,000             |                  |                    | (50,000)                       |                         |                      |
| <b>Total Replacement/State of Good Repair</b>      |               |               |               | <b>25,000</b> |               |              |               |               | <b>25,000</b> |              | <b>50,000</b>      |                  |                    | (50,000)                       |                         |                      |
| <b>Total Cayuga Water</b>                          |               |               |               | <b>25,000</b> |               |              |               |               | <b>25,000</b> |              | <b>50,000</b>      |                  |                    | (50,000)                       |                         |                      |
| Dunnville Water                                    |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Replacement/State of Good Repair                   |               |               |               |               |               |              |               |               |               |              |                    |                  |                    |                                |                         |                      |
| Dun - MSP - Update [WW][R][SS]                     |               |               | 30,000        |               |               |              |               | 30,000        |               |              | 60,000             |                  |                    | (60,000)                       |                         |                      |
| <b>Total Replacement/State of Good Repair</b>      |               |               | <b>30,000</b> |               |               |              |               | <b>30,000</b> |               |              | <b>60,000</b>      |                  |                    | (60,000)                       |                         |                      |
| <b>Total Dunnville Water</b>                       |               |               | <b>30,000</b> |               |               |              |               | <b>30,000</b> |               |              | <b>60,000</b>      |                  |                    | (60,000)                       |                         |                      |
| <b>Total Water - Technical Reviews and Studies</b> | <b>28,100</b> | <b>28,100</b> | <b>93,100</b> | <b>28,100</b> | <b>98,100</b> | <b>3,100</b> | <b>53,100</b> | <b>68,100</b> | <b>53,100</b> | <b>3,100</b> | <b>456,000</b>     |                  |                    | (244,700)                      | (211,300)               |                      |

Note: [CIW] Cast Iron Watermain; [W] Water; [WW] Wastewater; [SS] Storm Sewer; [R] Roads

## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: Water - Plants/Transmission Systems**

|   | 2019           | 2020           | 2021             | 2022           | 2023             | 2024             | 2025             | 2026           | 2027             | 2028             |  | Total Expenditures | Grants Subsidies   | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debt/Debt Service Financing |
|---|----------------|----------------|------------------|----------------|------------------|------------------|------------------|----------------|------------------|------------------|--|--------------------|--------------------|--------------------|--------------------------------|-------------------------|-----------------------------|
| <b>Water - Plants/Transmission Systems</b>                  |                |                |                  |                |                  |                  |                  |                |                  |                  |  |                    |                    |                    |                                |                         |                             |
| Water Operations Administration                             |                |                |                  |                |                  |                  |                  |                |                  |                  |  |                    |                    |                    |                                |                         |                             |
| Replacement/State of Good Repair                            |                |                |                  |                |                  |                  |                  |                |                  |                  |  |                    |                    |                    |                                |                         |                             |
| Plant Optimization Program Support                          | 65,000         | 65,000         |                  |                |                  |                  |                  |                |                  |                  |  | 130,000            |                    |                    | (19,500)                       | (110,500)               |                             |
| SCADA Maintenance   | 30,000         | 30,000         | 30,000           | 30,000         | 30,000           | 30,000           | 30,000           | 30,000         | 30,000           | 30,000           |  | 300,000            |                    |                    | (63,000)                       | (237,000)               |                             |
| Plant Capital Improvements                                  |                |                |                  |                | 2,010,000        | 2,078,000        | 2,110,000        | 324,500        | 2,067,000        | 2,195,000        |  | 10,784,500         | (6,814,600)        |                    | (1,537,980)                    | (2,431,920)             |                             |
| 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)               |                             |
| SCADA Technical Support                                     | 40,000         | 40,000         | 40,000           | 40,000         | 40,000           | 40,000           | 40,000           | 40,000         | 40,000           | 40,000           |  | 400,000            |                    |                    | (84,000)                       | (316,000)               |                             |
| SCADA Virtualization Software License - Infrastructure (WW) | 4,500          |                |                  |                |                  |                  |                  |                |                  |                  |  | 4,500              |                    |                    |                                | (4,500)                 |                             |
| SCADA Virtualization Software License - Host (WW)           | 1,500          |                |                  |                |                  |                  |                  |                |                  |                  |  | 1,500              |                    |                    |                                | (1,500)                 |                             |
| <b>Total Replacement/State of Good Repair</b>               | <b>181,000</b> | <b>175,000</b> | <b>110,000</b>   | <b>110,000</b> | <b>2,120,000</b> | <b>2,188,000</b> | <b>2,220,000</b> | <b>434,500</b> | <b>2,177,000</b> | <b>2,305,000</b> |  | <b>12,020,500</b>  | <b>(6,814,600)</b> |                    | <b>(1,704,480)</b>             | <b>(3,501,420)</b>      |                             |
| <b>Total Water Operations Administration</b>                | <b>181,000</b> | <b>175,000</b> | <b>110,000</b>   | <b>110,000</b> | <b>2,120,000</b> | <b>2,188,000</b> | <b>2,220,000</b> | <b>434,500</b> | <b>2,177,000</b> | <b>2,305,000</b> |  | <b>12,020,500</b>  | <b>(6,814,600)</b> |                    | <b>(1,704,480)</b>             | <b>(3,501,420)</b>      |                             |
| Caledonia Water   |                |                |                  |                |                  |                  |                  |                |                  |                  |  |                    |                    |                    |                                |                         |                             |
| Replacement/State of Good Repair                            |                |                |                  |                |                  |                  |                  |                |                  |                  |  |                    |                    |                    |                                |                         |                             |
| Reservoir-SCADA Computer & Network Replmt                   |                | 16,500         |                  |                |                  |                  | 20,000           |                |                  |                  |  | 36,500             |                    |                    |                                |                         | (36,500)                    |
| Online Analyzer Replacements                                | 30,000         |                |                  |                |                  |                  |                  |                |                  |                  |  | 30,000             |                    |                    |                                |                         | (30,000)                    |
| Chemical Dosing Equipment Replacement                       |                |                | 25,000           |                |                  |                  |                  |                |                  |                  |  | 25,000             |                    |                    |                                |                         | (25,000)                    |
| Elevated Storage Tank Replacement                           |                | 523,500        | 4,636,800        |                |                  |                  |                  |                |                  |                  |  | 5,160,300          | (2,000,000)        |                    | (3,160,300)                    |                         |                             |
| Chloramination Feasibility Study                            |                |                | 35,000           |                |                  |                  |                  |                |                  |                  |  | 35,000             |                    |                    | (8,750)                        | (26,250)                |                             |
| Booster Station PLC Replacements                            |                |                |                  |                |                  |                  | 38,000           |                |                  |                  |  | 38,000             |                    |                    | (7,980)                        | (30,020)                |                             |
| Forfar St. Storage Building Roof Replacement                | 21,250         |                |                  |                |                  |                  |                  |                |                  |                  |  | 21,250             |                    |                    |                                | (21,250)                |                             |
| <b>Total Replacement/State of Good Repair</b>               | <b>51,250</b>  | <b>540,000</b> | <b>4,696,800</b> |                |                  |                  | <b>58,000</b>    |                |                  |                  |  | <b>5,346,050</b>   | <b>(2,000,000)</b> |                    | <b>(3,177,030)</b>             | <b>(169,020)</b>        |                             |
| <b>Total Caledonia Water</b>                                | <b>51,250</b>  | <b>540,000</b> | <b>4,696,800</b> |                |                  |                  | <b>58,000</b>    |                |                  |                  |  | <b>5,346,050</b>   | <b>(2,000,000)</b> |                    | <b>(3,177,030)</b>             | <b>(169,020)</b>        |                             |
| Hagersville Water   |                |                |                  |                |                  |                  |                  |                |                  |                  |  |                    |                    |                    |                                |                         |                             |
| Replacement/State of Good Repair                            |                |                |                  |                |                  |                  |                  |                |                  |                  |  |                    |                    |                    |                                |                         |                             |
| Standpipe Coating Maintenance                               |                |                |                  | 250,000        |                  |                  |                  |                |                  |                  |  | 250,000            | (250,000)          |                    |                                |                         |                             |
| <b>Total Replacement/State of Good Repair</b>               |                |                |                  | <b>250,000</b> |                  |                  |                  |                |                  |                  |  | <b>250,000</b>     | <b>(250,000)</b>   |                    |                                |                         |                             |
| <b>Total Hagersville Water</b>                              |                |                |                  | <b>250,000</b> |                  |                  |                  |                |                  |                  |  | <b>250,000</b>     | <b>(250,000)</b>   |                    |                                |                         |                             |
| Cayuga Water  |                |                |                  |                |                  |                  |                  |                |                  |                  |  |                    |                    |                    |                                |                         |                             |
| Replacement/State of Good Repair                            |                |                |                  |                |                  |                  |                  |                |                  |                  |  |                    |                    |                    |                                |                         |                             |
| Reservoir Roof Replacement                                  | 58,000         |                |                  |                |                  |                  |                  |                |                  |                  |  | 58,000             |                    |                    |                                |                         | (58,000)                    |
| Reservoir Pump Rebuild/Replacement                          | 20,000         |                |                  |                |                  |                  |                  |                |                  |                  |  | 20,000             |                    |                    |                                |                         | (20,000)                    |
| Reservoir-SCADA Computer & Network Replmt                   |                | 12,000         |                  |                |                  |                  | 12,000           |                |                  |                  |  | 24,000             |                    |                    |                                |                         | (24,000)                    |
| Online Analyzer Replacements                                |                |                | 25,000           |                |                  |                  |                  |                |                  |                  |  | 25,000             |                    |                    |                                |                         | (25,000)                    |
| Chemical Dosing Equipment                                   |                |                |                  | 10,000         |                  |                  |                  |                |                  |                  |  | 10,000             |                    |                    |                                |                         | (10,000)                    |
| <b>Total Replacement/State of Good Repair</b>               | <b>78,000</b>  | <b>12,000</b>  | <b>25,000</b>    | <b>10,000</b>  |                  |                  | <b>12,000</b>    |                |                  |                  |  | <b>137,000</b>     |                    |                    |                                |                         | <b>(137,000)</b>            |
| New/Enhanced Service  |                |                |                  |                |                  |                  |                  |                |                  |                  |  |                    |                    |                    |                                |                         |                             |
| Cayuga Storage Building Extension [WW]                      | 25,000         |                |                  |                |                  |                  |                  |                |                  |                  |  | 25,000             |                    |                    |                                |                         | (25,000)                    |

Note: [CIW] Cast Iron Watermain; [W] Water; [WW] Wastewater; [SS] Storm Sewer; [R] Roads



## Haldimand County

2019 to 2028 CAPITAL FORECAST

Division: Water - Plants/Transmission Systems

|  | 2019           | 2020             | 2021           | 2022          | 2023           | 2024           | 2025          | 2026             | 2027          | 2028   | Total Expenditures | Grants Subsidies | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debt/Debture Financing |
|--|----------------|------------------|----------------|---------------|----------------|----------------|---------------|------------------|---------------|--------|--------------------|------------------|--------------------|--------------------------------|-------------------------|------------------------|
| Cayuga Standpipe Security Fence                      | 12,000         |                  |                |               |                |                |               |                  |               |        | 12,000             |                  |                    |                                | (12,000)                |                        |
| <b>Total New/Enhanced Service</b>                    | <b>37,000</b>  |                  |                |               |                |                |               |                  |               |        | <b>37,000</b>      |                  |                    |                                | <b>(37,000)</b>         |                        |
| <b>Total Cayuga Water</b>                            | <b>115,000</b> | <b>12,000</b>    | <b>25,000</b>  | <b>10,000</b> |                |                | <b>12,000</b> |                  |               |        | <b>174,000</b>     |                  |                    |                                | <b>(174,000)</b>        |                        |
| Dunnville Water                                      |                |                  |                |               |                |                |               |                  |               |        |                    |                  |                    |                                |                         |                        |
| Replacement/State of Good Repair                     |                |                  |                |               |                |                |               |                  |               |        |                    |                  |                    |                                |                         |                        |
| Granular Activated Carbon change out                 |                |                  | 90,000         |               |                | 90,000         |               |                  | 90,000        |        | 270,000            |                  |                    |                                | (270,000)               |                        |
| WTP SCADA Computer & Network Replmt                  |                | 25,000           |                |               |                |                | 25,000        |                  |               |        | 50,000             |                  |                    | (10,500)                       | (39,500)                |                        |
| Potable Water Isolation Valve Replacements           | 22,000         |                  |                |               |                |                |               |                  |               |        | 22,000             |                  |                    |                                | (22,000)                |                        |
| Raw Water Isolation Valve Replacements               | 18,000         |                  |                |               |                |                |               |                  |               |        | 18,000             |                  |                    |                                | (18,000)                |                        |
| WTP Upgrades   | 550,000        | 3,750,000        |                |               |                |                |               |                  |               |        | 4,300,000          |                  |                    |                                | (4,300,000)             |                        |
| WTP PLC Replacements                                 |                |                  |                |               | 210,000        |                |               |                  |               |        | 210,000            |                  |                    | (44,100)                       | (165,900)               |                        |
| Remotes PLC Replacements                             |                |                  |                |               |                | 52,000         |               |                  |               |        | 52,000             |                  |                    | (10,920)                       | (41,080)                |                        |
| Port Maitland Manual Screen Replacement              |                |                  | 110,000        |               |                |                |               |                  |               |        | 110,000            |                  |                    |                                | (110,000)               |                        |
| <b>Total Replacement/State of Good Repair</b>        | <b>590,000</b> | <b>3,775,000</b> | <b>200,000</b> |               | <b>210,000</b> | <b>142,000</b> | <b>25,000</b> |                  | <b>90,000</b> |        | <b>5,032,000</b>   |                  |                    | <b>(65,520)</b>                | <b>(4,966,480)</b>      |                        |
| New/Enhanced Service                                 |                |                  |                |               |                |                |               |                  |               |        |                    |                  |                    |                                |                         |                        |
| WTP Reservoir Expansion                              |                |                  |                |               |                |                |               | 1,840,500        |               |        | 1,840,500          |                  |                    |                                | (1,840,500)             |                        |
| <b>Total New/Enhanced Service</b>                    |                |                  |                |               |                |                |               | <b>1,840,500</b> |               |        | <b>1,840,500</b>   |                  |                    |                                | <b>(1,840,500)</b>      |                        |
| <b>Total Dunnville Water</b>                         | <b>590,000</b> | <b>3,775,000</b> | <b>200,000</b> |               | <b>210,000</b> | <b>142,000</b> | <b>25,000</b> | <b>1,840,500</b> | <b>90,000</b> |        | <b>6,872,500</b>   |                  |                    | <b>(1,906,020)</b>             | <b>(4,966,480)</b>      |                        |
| Nanticoke Water                                      |                |                  |                |               |                |                |               |                  |               |        |                    |                  |                    |                                |                         |                        |
| Replacement/State of Good Repair                     |                |                  |                |               |                |                |               |                  |               |        |                    |                  |                    |                                |                         |                        |
| Nant - WTP Lagoon Clean Out                          | 45,000         | 45,000           | 45,000         | 45,000        | 45,000         | 45,000         | 45,000        | 45,000           | 45,000        | 45,000 | 450,000            |                  |                    |                                | (450,000)               |                        |
| 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)          |                                |                         |                        |
| 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)          |                                |                         |                        |
| Transmission Main Valve Chamber Repr Pgm             | 35,000         |                  |                |               |                |                |               |                  |               |        | 35,000             |                  |                    |                                | (35,000)                |                        |
| Turbidity Meter Replmt                               | 12,000         |                  |                |               |                |                |               |                  |               |        | 12,000             |                  |                    |                                | (12,000)                |                        |
| Lowlift Pump Replmt                                  |                |                  | 375,000        |               |                |                |               |                  |               |        | 375,000            | (225,000)        |                    | (150,000)                      |                         |                        |
| Stelco Transmission Main Leak Detection              |                | 65,000           |                |               |                |                |               |                  |               |        | 65,000             |                  | (65,000)           |                                |                         |                        |
| SCADA Computer & Network Replmt                      |                |                  |                | 25,000        |                |                |               |                  | 25,000        |        | 50,000             |                  |                    |                                | (50,000)                |                        |
| IPS - Pump Installation                              | 2,400,000      |                  |                |               |                |                |               |                  |               |        | 2,400,000          |                  | (2,400,000)        |                                |                         |                        |
| IPS Travelling Screen Refurbishment                  | 90,000         |                  |                |               |                |                |               |                  |               |        | 90,000             |                  | (81,110)           |                                | (8,890)                 |                        |
| WTP Residuals Lagoon Structural Repairs              |                | 90,000           |                |               |                |                |               |                  |               |        | 90,000             |                  |                    |                                | (90,000)                |                        |
| IPS Wet Well Piping and Valve Replacements (Phase 1) | 225,000        |                  |                |               |                |                |               |                  |               |        | 225,000            |                  | (202,770)          |                                | (22,230)                |                        |
| Valve House Recirc Pump Rebuild                      | 25,000         |                  |                |               |                |                |               |                  |               |        | 25,000             |                  |                    |                                | (25,000)                |                        |
| Valve House Sump Pump & Chamber Rebuild              | 30,000         |                  |                |               |                |                |               |                  |               |        | 30,000             |                  |                    |                                | (30,000)                |                        |
| High Lift Sump Pumps (2) Rebuild                     | 20,000         |                  |                |               |                |                |               |                  |               |        | 20,000             |                  |                    |                                | (20,000)                |                        |
| Suspended Ceiling in Lab/Control Room                | 8,000          |                  |                |               |                |                |               |                  |               |        | 8,000              |                  |                    |                                | (8,000)                 |                        |
| IPS Lighting Replacements [LED]                      | 24,000         |                  |                |               |                |                |               |                  |               |        | 24,000             |                  | (21,630)           |                                | (2,370)                 |                        |
| IPS Forebay Headwall Structural Repairs              | 165,000        |                  |                |               |                |                |               |                  |               |        | 165,000            |                  | (148,700)          |                                | (16,300)                |                        |

Note: [CIW] Cast Iron Watermain; [W] Water; [WW] Wastewater; [SS] Storm Sewer; [R] Roads

## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: Water - Plants/Transmission Systems**

|  | 2019             | 2020             | 2021             | 2022           | 2023             | 2024             | 2025             | 2026             | 2027             | 2028             | Total Expenditures | Grants Subsidies   | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debt/ure Financing |
|--|------------------|------------------|------------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|--------------------|--------------------|--------------------------------|-------------------------|--------------------|
| Imperial Oil GENSET Diesel Fuel Pump             | 20,000           |                  |                  |                |                  |                  |                  |                  |                  |                  | 20,000             |                    | (20,000)           |                                |                         |                    |
| IPS Diesel Exhaust System Assessment             | 20,000           |                  |                  |                |                  |                  |                  |                  |                  |                  | 20,000             |                    | (20,000)           |                                |                         |                    |
| Reservoir Inlet Building Sump Pump Rebuild       | 18,000           |                  |                  |                |                  |                  |                  |                  |                  |                  | 18,000             |                    |                    |                                | (18,000)                |                    |
| High Lift Pump #3 Rebuild                        | 55,000           |                  |                  |                |                  |                  |                  |                  |                  |                  | 55,000             |                    |                    |                                | (55,000)                |                    |
| East Reservoir Rehab                             | 140,000          |                  |                  |                |                  |                  |                  |                  |                  |                  | 140,000            |                    |                    |                                | (140,000)               |                    |
| Actiflo #2 Hydro-Cyclone Modifications           | 7,000            |                  |                  |                |                  |                  |                  |                  |                  |                  | 7,000              |                    |                    |                                | (7,000)                 |                    |
| High Lift Chlorine Storage System Refurbishment  |                  | 28,000           |                  |                |                  |                  |                  |                  |                  |                  | 28,000             |                    |                    |                                | (28,000)                |                    |
| WTP PLC Replacements                             |                  | 35,000           |                  |                |                  |                  | 15,000           | 55,000           | 38,000           | 25,000           | 168,000            |                    |                    | (35,280)                       | (132,720)               |                    |
| Potable Water Pump Guide Rail Replacement        |                  | 45,000           |                  |                |                  |                  |                  |                  |                  |                  | 45,000             |                    |                    |                                | (45,000)                |                    |
| <b>Total Replacement/State of Good Repair</b>    | <b>3,419,000</b> | <b>388,000</b>   | <b>500,000</b>   | <b>150,000</b> | <b>125,000</b>   | <b>125,000</b>   | <b>140,000</b>   | <b>180,000</b>   | <b>188,000</b>   | <b>150,000</b>   | <b>5,365,000</b>   | <b>(225,000)</b>   | <b>(3,759,210)</b> | <b>(185,280)</b>               | <b>(1,195,510)</b>      |                    |
| New/Enhanced Service                             |                  |                  |                  |                |                  |                  |                  |                  |                  |                  |                    |                    |                    |                                |                         |                    |
| Pre-Treatment Upgrades                           |                  |                  | 200,000          |                |                  |                  |                  |                  |                  |                  | 200,000            | (200,000)          |                    |                                |                         |                    |
| 2nd Back Wash Pump                               | 68,000           |                  |                  |                |                  |                  |                  |                  |                  |                  | 68,000             |                    |                    |                                | (68,000)                |                    |
| Maturation Tank Lighting                         | 5,000            |                  |                  |                |                  |                  |                  |                  |                  |                  | 5,000              |                    |                    |                                | (5,000)                 |                    |
| Filter Building (Basement) Dehumidifier          |                  | 45,000           |                  |                |                  |                  |                  |                  |                  |                  | 45,000             |                    |                    |                                | (45,000)                |                    |
| <b>Total New/Enhanced Service</b>                | <b>73,000</b>    | <b>45,000</b>    | <b>200,000</b>   |                |                  |                  |                  |                  |                  |                  | <b>318,000</b>     | <b>(200,000)</b>   |                    |                                | <b>(118,000)</b>        |                    |
| <b>Total Nanticoke Water</b>                     | <b>3,492,000</b> | <b>433,000</b>   | <b>700,000</b>   | <b>150,000</b> | <b>125,000</b>   | <b>125,000</b>   | <b>140,000</b>   | <b>180,000</b>   | <b>188,000</b>   | <b>150,000</b>   | <b>5,683,000</b>   | <b>(425,000)</b>   | <b>(3,759,210)</b> | <b>(185,280)</b>               | <b>(1,313,510)</b>      |                    |
| <b>Total Water - Plants/Transmission Systems</b> | <b>4,429,250</b> | <b>4,935,000</b> | <b>5,731,800</b> | <b>520,000</b> | <b>2,455,000</b> | <b>2,455,000</b> | <b>2,455,000</b> | <b>2,455,000</b> | <b>2,455,000</b> | <b>2,455,000</b> | <b>30,346,050</b>  | <b>(9,489,600)</b> | <b>(3,759,210)</b> | <b>(6,972,810)</b>             | <b>(10,124,430)</b>     |                    |

## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: SUMMARY-Wastewater**

|   | 2019             | 2020             | 2021             | 2022             | 2023             | 2024             | 2025             | 2026             | 2027              | 2028             | Total Expenditures | Grants Subsidies   | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debenture Financing |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|--------------------|--------------------|--------------------|--------------------------------|-------------------------|---------------------|
| Wastewater - Replacement and Upgrade Projects | 854,000          | 270,000          | 183,000          | 280,000          | 183,000          | 270,000          | 193,000          | 270,000          | 183,000           | 280,000          | <b>2,966,000</b>   | (1,210,000)        |                    | (291,250)                      | (1,464,750)             |                     |
| Wastewater - Technical Reviews and Studies    | 114,000          | 174,000          | 179,000          | 174,000          | 179,000          | 139,000          | 149,000          | 204,000          | 149,000           | 139,000          | <b>1,600,000</b>   |                    |                    | (635,300)                      | (964,700)               |                     |
| Wastewater - Plants                           | 6,845,250        | 6,312,700        | 5,370,400        | 1,681,500        | 3,100,000        | 3,100,000        | 8,859,600        | 3,100,000        | 40,442,900        | 3,100,000        | <b>81,912,350</b>  | (4,864,620)        |                    | (55,225,680)                   | (21,822,050)            |                     |
| <b>Total SUMMARY-Wastewater</b>               | <b>7,813,250</b> | <b>6,756,700</b> | <b>5,732,400</b> | <b>2,135,500</b> | <b>3,462,000</b> | <b>3,509,000</b> | <b>9,201,600</b> | <b>3,574,000</b> | <b>40,774,900</b> | <b>3,519,000</b> | <b>86,478,350</b>  | <b>(6,074,620)</b> |                    | <b>(56,152,230)</b>            | <b>(24,251,500)</b>     |                     |

## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: Wastewater - Replacement and Upgrade Projects**

|  | 2019           | 2020           | 2021           | 2022           | 2023           | 2024           | 2025           | 2026           | 2027           | 2028           |  | Grants<br>Subsidies | External<br>Financing | Development<br>Charges<br>Rsve Funds | Reserves/<br>Reserve<br>Funds | Debenture<br>Financing |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--|---------------------|-----------------------|--------------------------------------|-------------------------------|------------------------|
| <b>Wastewater - Replacement and Upgrade Projects</b>       |                |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               |                        |
| Sewer Operations Administration                            |                |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               |                        |
| Replacement/State of Good Repair                           |                |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               |                        |
| Collection System - Annual Repair                          | 70,000         | 70,000         | 70,000         | 70,000         | 70,000         | 70,000         | 70,000         | 70,000         | 70,000         | 70,000         |  |                     |                       |                                      |                               | (700,000)              |
| Composite Sampler-Replacement Program                      | 38,000         |                | 38,000         |                | 38,000         |                | 38,000         |                | 38,000         |                |  |                     |                       |                                      |                               | (190,000)              |
| Sewer Manhole Repairs (I&I)                                | 75,000         |                | 75,000         |                | 75,000         |                | 75,000         |                | 75,000         |                |  |                     |                       | (56,250)                             |                               | (318,750)              |
| Sanitary Sewer Rehabilitations (I&I)                       |                | 200,000        |                | 200,000        |                | 200,000        |                | 200,000        |                | 200,000        |  | (850,000)           |                       | (150,000)                            |                               |                        |
| Confined Space Entry Equipment Replacements                | 10,000         |                |                | 10,000         |                |                | 10,000         |                |                | 10,000         |  |                     |                       |                                      |                               | (40,000)               |
| <b>Total Replacement/State of Good Repair</b>              | <b>193,000</b> | <b>270,000</b> | <b>183,000</b> | <b>280,000</b> | <b>183,000</b> | <b>270,000</b> | <b>193,000</b> | <b>270,000</b> | <b>183,000</b> | <b>280,000</b> |  | <b>(850,000)</b>    |                       | <b>(206,250)</b>                     |                               | <b>(1,248,750)</b>     |
| <b>Total Sewer Operations Administration</b>               | <b>193,000</b> | <b>270,000</b> | <b>183,000</b> | <b>280,000</b> | <b>183,000</b> | <b>270,000</b> | <b>193,000</b> | <b>270,000</b> | <b>183,000</b> | <b>280,000</b> |  | <b>(850,000)</b>    |                       | <b>(206,250)</b>                     |                               | <b>(1,248,750)</b>     |
| Caledonia Sewer  |                |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               |                        |
| Replacement/State of Good Repair                           |                |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               |                        |
| Argyle Bridge Sanitary Sewer Relocation [W] (17-\$40,000)  | 46,000         |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               | (46,000)               |
| Fife St W - Peebles to Argyle [W] [R]                      | 40,000         |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               | (40,000)               |
| Renfrew St E - Wigton to Berwick [W] [R]                   | 60,000         |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               | (60,000)               |
| Argyle St - Kinross to Stirling Sewer Lining               | 70,000         |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               | (70,000)               |
| <b>Total Replacement/State of Good Repair</b>              | <b>216,000</b> |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               | <b>(216,000)</b>       |
| <b>Total Caledonia Sewer</b>                               | <b>216,000</b> |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               | <b>(216,000)</b>       |
| Jarvis Sewer   |                |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               |                        |
| New/Enhanced Service                                       |                |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               |                        |
| Walpole St - Sewer Pipe Upsize (Peel to Talbot)            | 85,000         |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               | (85,000)               |
| <b>Total New/Enhanced Service</b>                          | <b>85,000</b>  |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               | <b>(85,000)</b>        |
| <b>Total Jarvis Sewer</b>                                  | <b>85,000</b>  |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               | <b>(85,000)</b>        |
| Dunnville Sewer  |                |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               |                        |
| Replacement/State of Good Repair                           |                |                |                |                |                |                |                |                |                |                |  |                     |                       |                                      |                               |                        |
| Alder St - Cedar to West [W] [SS] [R]                      | 360,000        |                |                |                |                |                |                |                |                |                |  | (360,000)           |                       |                                      |                               |                        |
| <b>Total Replacement/State of Good Repair</b>              | <b>360,000</b> |                |                |                |                |                |                |                |                |                |  | <b>(360,000)</b>    |                       |                                      |                               |                        |
| <b>Total Dunnville Sewer</b>                               | <b>360,000</b> |                |                |                |                |                |                |                |                |                |  | <b>(360,000)</b>    |                       |                                      |                               |                        |
| <b>Total Wastewater - Replacement and Upgrade Projects</b> | <b>854,000</b> | <b>270,000</b> | <b>183,000</b> | <b>280,000</b> | <b>183,000</b> | <b>270,000</b> | <b>193,000</b> | <b>270,000</b> | <b>183,000</b> | <b>280,000</b> |  | <b>(1,210,000)</b>  |                       | <b>(291,250)</b>                     |                               | <b>(1,464,750)</b>     |

Note: [CIW] Cast Iron Watermain; [W] Water; [WW] Wastewater; [SS] Storm Sewer; [R] Roads

## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: Wastewater - Technical Reviews and Studies**

|  | 2019           | 2020           | 2021           | 2022           | 2023           | 2024           | 2025           | 2026           | 2027           | 2028           | Total Expenditures | Grants Subsidies | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debt/ure Financing |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|------------------|--------------------|--------------------------------|-------------------------|--------------------|
| <b>Wastewater - Technical Reviews and Studies</b>          |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| <b>Sewer Operations Administration</b>                     |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| <b>Replacement/State of Good Repair</b>                    |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| Inflow & Infiltration Program Support                      | 25,000         | 35,000         | 25,000         | 35,000         | 25,000         | 25,000         | 35,000         | 25,000         | 35,000         | 25,000         | 290,000            |                  |                    | (43,500)                       | (246,500)               |                    |
| Facility Condition Assessment [W]                          |                | 25,000         |                | 25,000         |                | 25,000         |                | 25,000         |                | 25,000         | 125,000            |                  |                    |                                | (125,000)               |                    |
| SCADA Master Plan Optimization                             |                |                | 35,000         |                |                |                |                | 35,000         |                |                | 70,000             |                  |                    | (16,800)                       | (53,200)                |                    |
| CCTV Inspections - Structural Ass'ments [SS] - Engineering | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 250,000            |                  |                    |                                | (250,000)               |                    |
| CCTV Inspections - Operations                              | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 25,000         | 250,000            |                  |                    |                                | (250,000)               |                    |
| Asbestos Annual Inspection and Remediation [W]             | 4,000          | 4,000          | 4,000          | 4,000          | 4,000          | 4,000          | 4,000          | 4,000          | 4,000          | 4,000          | 40,000             |                  |                    |                                | (40,000)                |                    |
| <b>Total Replacement/State of Good Repair</b>              | <b>79,000</b>  | <b>114,000</b> | <b>114,000</b> | <b>114,000</b> | <b>79,000</b>  | <b>104,000</b> | <b>89,000</b>  | <b>139,000</b> | <b>89,000</b>  | <b>104,000</b> | <b>1,025,000</b>   |                  |                    | <b>(60,300)</b>                | <b>(964,700)</b>        |                    |
| <b>New/Enhanced Service</b>                                |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| Effluent Water Quality & Impact Assessment                 | 35,000         | 35,000         | 35,000         | 35,000         | 35,000         | 35,000         | 35,000         | 35,000         | 35,000         | 35,000         | 350,000            |                  |                    | (350,000)                      |                         |                    |
| <b>Total New/Enhanced Service</b>                          | <b>35,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>35,000</b>  | <b>350,000</b>     |                  |                    | <b>(350,000)</b>               |                         |                    |
| <b>Total Sewer Operations Administration</b>               | <b>114,000</b> | <b>149,000</b> | <b>149,000</b> | <b>149,000</b> | <b>114,000</b> | <b>139,000</b> | <b>124,000</b> | <b>174,000</b> | <b>124,000</b> | <b>139,000</b> | <b>1,375,000</b>   |                  |                    | <b>(410,300)</b>               | <b>(964,700)</b>        |                    |
| <b>Caledonia Sewer</b>                                     |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| <b>Replacement/State of Good Repair</b>                    |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| Cal - MSP - Update [W][R][SS]                              |                |                |                |                | 50,000         |                |                |                |                |                | 50,000             |                  |                    | (50,000)                       |                         |                    |
| <b>Total Replacement/State of Good Repair</b>              |                |                |                |                | <b>50,000</b>  |                |                |                |                |                | <b>50,000</b>      |                  |                    | <b>(50,000)</b>                |                         |                    |
| <b>Total Caledonia Sewer</b>                               |                |                |                |                | <b>50,000</b>  |                |                |                |                |                | <b>50,000</b>      |                  |                    | <b>(50,000)</b>                |                         |                    |
| <b>Hagersville Sewer</b>                                   |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| <b>Replacement/State of Good Repair</b>                    |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| Hag - MSP - Update [W][R][SS]                              |                | 25,000         |                |                |                |                | 25,000         |                |                |                | 50,000             |                  |                    | (50,000)                       |                         |                    |
| <b>Total Replacement/State of Good Repair</b>              |                | <b>25,000</b>  |                |                |                |                | <b>25,000</b>  |                |                |                | <b>50,000</b>      |                  |                    | <b>(50,000)</b>                |                         |                    |
| <b>Total Hagersville Sewer</b>                             |                | <b>25,000</b>  |                |                |                |                | <b>25,000</b>  |                |                |                | <b>50,000</b>      |                  |                    | <b>(50,000)</b>                |                         |                    |
| <b>Jarvis Sewer</b>  |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| <b>Replacement/State of Good Repair</b>                    |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| Jar - MSP Update [W][R][SS]                                |                |                |                |                | 15,000         |                |                |                |                |                | 15,000             |                  |                    | (15,000)                       |                         |                    |
| <b>Total Replacement/State of Good Repair</b>              |                |                |                |                | <b>15,000</b>  |                |                |                |                |                | <b>15,000</b>      |                  |                    | <b>(15,000)</b>                |                         |                    |
| <b>Total Jarvis Sewer</b>                                  |                |                |                |                | <b>15,000</b>  |                |                |                |                |                | <b>15,000</b>      |                  |                    | <b>(15,000)</b>                |                         |                    |
| <b>Cayuga Sewer</b>  |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| <b>Replacement/State of Good Repair</b>                    |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| Cay - MSP Update [W][R][SS]                                |                |                |                | 25,000         |                |                |                |                | 25,000         |                | 50,000             |                  |                    | (50,000)                       |                         |                    |
| <b>Total Replacement/State of Good Repair</b>              |                |                |                | <b>25,000</b>  |                |                |                |                | <b>25,000</b>  |                | <b>50,000</b>      |                  |                    | <b>(50,000)</b>                |                         |                    |
| <b>Total Cayuga Sewer</b>                                  |                |                |                | <b>25,000</b>  |                |                |                |                | <b>25,000</b>  |                | <b>50,000</b>      |                  |                    | <b>(50,000)</b>                |                         |                    |
| <b>Dunnville Sewer</b>                                     |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| <b>Replacement/State of Good Repair</b>                    |                |                |                |                |                |                |                |                |                |                |                    |                  |                    |                                |                         |                    |
| Dun - MSP - Update [W][R][SS]                              |                |                | 30,000         |                |                |                |                | 30,000         |                |                | 60,000             |                  |                    | (60,000)                       |                         |                    |
| <b>Total Replacement/State of Good Repair</b>              |                |                | <b>30,000</b>  |                |                |                |                | <b>30,000</b>  |                |                | <b>60,000</b>      |                  |                    | <b>(60,000)</b>                |                         |                    |

Note: [CIW] Cast Iron Watermain; [W] Water; [WW] Wastewater; [SS] Storm Sewer; [R] Roads

## Haldimand County

2019 to 2028 CAPITAL FORECAST

Division: Wastewater - Technical Reviews and Studies

|   | 2019    | 2020    | 2021    | 2022    | 2023    | 2024    | 2025    | 2026    | 2027    | 2028    | Total Expenditures | Grants Subsidies | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debenture Financing |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------------|------------------|--------------------|--------------------------------|-------------------------|---------------------|
| <b>Total Dunnville Sewer</b>                            |         |         | 30,000  |         |         |         |         | 30,000  |         |         | <b>60,000</b>      |                  |                    | (60,000)                       |                         |                     |
| <b>Total Wastewater - Technical Reviews and Studies</b> | 114,000 | 174,000 | 179,000 | 174,000 | 179,000 | 139,000 | 149,000 | 204,000 | 149,000 | 139,000 | <b>1,600,000</b>   |                  |                    | (635,300)                      |                         | (964,700)           |

## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: Wastewater - Plants**

|  | 2019           | 2020             | 2021             | 2022           | 2023             | 2024             | 2025             | 2026             | 2027              | 2028             | Total Expenditures | Grants Subsidies   | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debt/ure Financing |
|--|----------------|------------------|------------------|----------------|------------------|------------------|------------------|------------------|-------------------|------------------|--------------------|--------------------|--------------------|--------------------------------|-------------------------|--------------------|
| <b>Wastewater - Plants</b>                                   |                |                  |                  |                |                  |                  |                  |                  |                   |                  |                    |                    |                    |                                |                         |                    |
| <b>Sewer Operations Administration</b>                       |                |                  |                  |                |                  |                  |                  |                  |                   |                  |                    |                    |                    |                                |                         |                    |
| <b>Replacement/State of Good Repair</b>                      |                |                  |                  |                |                  |                  |                  |                  |                   |                  |                    |                    |                    |                                |                         |                    |
| SCADA Maintenance  | 20,000         | 20,000           | 20,000           | 20,000         | 20,000           | 20,000           | 20,000           | 20,000           | 20,000            | 20,000           | 200,000            |                    |                    | (48,000)                       | (152,000)               |                    |
| Plant Capital Improvements                                   |                |                  |                  |                | 1,548,000        | 2,071,500        | 2,466,000        | 2,650,000        | 2,852,000         | 2,265,000        | 13,852,500         | (2,928,520)        |                    | (208,000)                      | (10,715,980)            |                    |
| Plant Optimization Program Support                           | 30,000         | 30,000           |                  |                |                  |                  |                  |                  |                   |                  | 60,000             |                    |                    | (9,000)                        | (51,000)                |                    |
| SCADA Technical Support                                      | 40,000         | 40,000           | 40,000           | 40,000         | 40,000           | 40,000           | 40,000           | 40,000           | 40,000            | 40,000           | 400,000            |                    |                    | (96,000)                       | (304,000)               |                    |
| 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)               |                    |
| Pump Station Repairs/Replacement                             |                |                  | 350,000          | 350,000        |                  |                  |                  |                  |                   |                  | 700,000            |                    |                    | (70,000)                       | (630,000)               |                    |
| SCADA Virtualization Software License - Infrastructure (W)   | 4,500          |                  |                  |                |                  |                  |                  |                  |                   |                  | 4,500              |                    |                    |                                | (4,500)                 |                    |
| SCADA Virtualization Software License - Host (W)             | 1,500          |                  |                  |                |                  |                  |                  |                  |                   |                  | 1,500              |                    |                    |                                | (1,500)                 |                    |
| <b>Total Replacement/State of Good Repair</b>                | <b>136,000</b> | <b>130,000</b>   | <b>450,000</b>   | <b>450,000</b> | <b>1,648,000</b> | <b>2,171,500</b> | <b>2,566,000</b> | <b>2,750,000</b> | <b>2,952,000</b>  | <b>2,365,000</b> | <b>15,618,500</b>  | <b>(2,928,520)</b> |                    | <b>(431,000)</b>               | <b>(12,258,980)</b>     |                    |
| <b>Total Sewer Operations Administration</b>                 | <b>136,000</b> | <b>130,000</b>   | <b>450,000</b>   | <b>450,000</b> | <b>1,648,000</b> | <b>2,171,500</b> | <b>2,566,000</b> | <b>2,750,000</b> | <b>2,952,000</b>  | <b>2,365,000</b> | <b>15,618,500</b>  | <b>(2,928,520)</b> |                    | <b>(431,000)</b>               | <b>(12,258,980)</b>     |                    |
| <b>Caledonia Sewer</b>                                       |                |                  |                  |                |                  |                  |                  |                  |                   |                  |                    |                    |                    |                                |                         |                    |
| <b>Replacement/State of Good Repair</b>                      |                |                  |                  |                |                  |                  |                  |                  |                   |                  |                    |                    |                    |                                |                         |                    |
| Blower Replmts   |                | 350,000          |                  |                |                  |                  |                  |                  |                   |                  | 350,000            |                    |                    |                                | (350,000)               |                    |
| Remotes-Control Equipment Replacement(SCADA)                 |                |                  |                  | 34,500         |                  | 18,500           |                  |                  | 80,000            |                  | 133,000            |                    |                    |                                | (133,000)               |                    |
| WWTP – SCADA Computer & Network Replmt                       |                |                  |                  |                | 20,000           |                  |                  |                  |                   | 20,000           | 40,000             |                    |                    |                                | (40,000)                |                    |
| Nairne Pump Station Wet Well Gas Monitoring Equipment Replac |                | 10,000           |                  |                |                  |                  |                  |                  |                   |                  | 10,000             |                    |                    |                                | (10,000)                |                    |
| Sodium Hypochlorite Storage System Replacement               | 90,000         |                  |                  |                |                  |                  |                  |                  |                   |                  | 90,000             |                    |                    |                                | (90,000)                |                    |
| Nairne St. Pump Station Pump Rebuilds                        | 30,000         |                  |                  |                |                  |                  |                  |                  |                   |                  | 30,000             |                    |                    |                                | (30,000)                |                    |
| Nairne St. Pump Station Wet-Well Lighting Replacement        | 8,000          |                  |                  |                |                  |                  |                  |                  |                   |                  | 8,000              |                    |                    |                                | (8,000)                 |                    |
| WWTP Automatic Transfer Switch Replacement                   | 20,000         |                  |                  |                |                  |                  |                  |                  |                   |                  | 20,000             |                    |                    |                                | (20,000)                |                    |
| WTP Electrical Panels and VFD Inspection/Maintenance         |                | 10,000           |                  |                |                  | 10,000           |                  |                  |                   | 10,000           | 30,000             |                    |                    |                                | (30,000)                |                    |
| West Digester Clean Out and Inspection/Minor Repairs         |                | 40,000           |                  |                |                  |                  |                  |                  |                   |                  | 40,000             |                    |                    |                                | (40,000)                |                    |
| Nairne St. Pump Station GENSET Replacement                   |                |                  |                  |                | 185,000          |                  |                  |                  |                   |                  | 185,000            |                    |                    |                                | (185,000)               |                    |
| WWTP GENSET Replacement                                      |                |                  |                  |                |                  |                  | 225,000          |                  |                   |                  | 225,000            |                    |                    |                                | (225,000)               |                    |
| WWTP PLC Replacements  |                |                  |                  |                |                  |                  |                  |                  |                   | 115,000          | 115,000            |                    |                    | (27,600)                       | (87,400)                |                    |
| WWTP Filter Building Roof Replacement                        | 12,000         |                  | 135,000          |                |                  |                  |                  |                  |                   |                  | 147,000            |                    |                    |                                | (147,000)               |                    |
| Forfar St. Storage Building Roof Replacement                 | 21,250         |                  |                  |                |                  |                  |                  |                  |                   |                  | 21,250             |                    |                    |                                | (21,250)                |                    |
| <b>Total Replacement/State of Good Repair</b>                | <b>181,250</b> | <b>410,000</b>   | <b>135,000</b>   | <b>34,500</b>  | <b>205,000</b>   | <b>28,500</b>    | <b>225,000</b>   |                  | <b>80,000</b>     | <b>145,000</b>   | <b>1,444,250</b>   |                    |                    | <b>(27,600)</b>                | <b>(1,416,650)</b>      |                    |
| <b>New/Enhanced Service</b>                                  |                |                  |                  |                |                  |                  |                  |                  |                   |                  |                    |                    |                    |                                |                         |                    |
| Sludge Storage Tank Retrofit                                 |                | 175,000          |                  |                |                  |                  |                  |                  |                   |                  | 175,000            |                    |                    | (87,500)                       | (87,500)                |                    |
| WWTP Wet Well Expansion                                      | 161,800        | 1,263,600        |                  |                |                  |                  |                  |                  |                   |                  | 1,425,400          |                    |                    | (1,425,400)                    |                         |                    |
| Caledonia Wastewater Treatment Plant                         | 120,000        | 1,500,000        | 2,097,700        |                |                  |                  | 5,682,600        |                  | 37,255,900        |                  | 46,656,200         |                    |                    | (46,656,200)                   |                         |                    |
| <b>Total New/Enhanced Service</b>                            | <b>281,800</b> | <b>2,938,600</b> | <b>2,097,700</b> |                |                  |                  | <b>5,682,600</b> |                  | <b>37,255,900</b> |                  | <b>48,256,600</b>  |                    |                    | <b>(48,169,100)</b>            | <b>(87,500)</b>         |                    |
| <b>Total Caledonia Sewer</b>                                 | <b>463,050</b> | <b>3,348,600</b> | <b>2,232,700</b> | <b>34,500</b>  | <b>205,000</b>   | <b>28,500</b>    | <b>5,907,600</b> |                  | <b>37,335,900</b> | <b>145,000</b>   | <b>49,700,850</b>  |                    |                    | <b>(48,196,700)</b>            | <b>(1,504,150)</b>      |                    |
| <b>Hagersville Sewer</b>                                     |                |                  |                  |                |                  |                  |                  |                  |                   |                  |                    |                    |                    |                                |                         |                    |

## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: Wastewater - Plants**

|   | 2019             | 2020           | 2021             | 2022          | 2023          | 2024           | 2025 | 2026 | 2027           | 2028           | Total Expenditures | Grants Subsidies   | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debt/Debture Financing |
|---|------------------|----------------|------------------|---------------|---------------|----------------|------|------|----------------|----------------|--------------------|--------------------|--------------------|--------------------------------|-------------------------|------------------------|
| <b>Replacement/State of Good Repair</b>               |                  |                |                  |               |               |                |      |      |                |                |                    |                    |                    |                                |                         |                        |
| Remotes-Control Equipment Replacement(SCADA)          |                  | 15,000         |                  | 42,000        |               |                |      |      |                | 55,000         | 112,000            |                    |                    | (26,880)                       | (85,120)                |                        |
| WWTP SCADA Computer & Network Replmt                  |                  |                |                  |               | 22,000        |                |      |      |                |                | 22,000             |                    |                    |                                | (22,000)                |                        |
| Hagersville WWTP Driveway Reconstruction              | 45,000           |                |                  |               |               |                |      |      |                |                | 45,000             |                    |                    |                                | (45,000)                |                        |
| Wet Well Gas Monitoring Equipment Replacement         | 10,000           |                |                  |               |               |                |      |      |                |                | 10,000             |                    |                    |                                | (10,000)                |                        |
| Wet-Well Lighting Replacements                        | 10,000           |                |                  |               |               |                |      |      |                |                | 10,000             |                    |                    |                                | (10,000)                |                        |
| Storm Tank Flow Control Valve Actuator Replacement    | 12,000           |                |                  |               |               |                |      |      |                |                | 12,000             |                    |                    |                                | (12,000)                |                        |
| Turbo Blowers (2) VFD Repairs                         | 55,000           |                |                  |               |               |                |      |      |                |                | 55,000             |                    |                    |                                | (55,000)                |                        |
| Centrifugal Blowers (3) Maintenance                   | 30,000           |                |                  |               |               |                |      |      |                |                | 30,000             |                    |                    |                                | (30,000)                |                        |
| Tuscarora Pump Station HVAC Replacements              | 12,000           |                |                  |               |               |                |      |      |                |                | 12,000             |                    |                    |                                | (12,000)                |                        |
| Parkview Pump Station Upgrades                        | 40,000           | 215,000        |                  |               |               |                |      |      |                |                | 255,000            |                    |                    |                                | (255,000)               |                        |
| WTP Electrical Panel and VFD Inspection/Maintenance   |                  | 10,000         |                  |               |               | 10,000         |      |      |                | 10,000         | 30,000             |                    |                    |                                | (30,000)                |                        |
| WWTP PLC Replcements                                  |                  |                |                  |               |               |                |      |      | 120,000        | 170,000        | 290,000            |                    |                    | (69,600)                       | (220,400)               |                        |
| WWTP Sludge Pumping Building Roof Replacement         |                  | 20,000         |                  |               |               |                |      |      |                |                | 20,000             |                    |                    |                                | (20,000)                |                        |
| WWTP Inlet Works Building Roof Replacement            |                  | 50,000         |                  |               |               |                |      |      |                |                | 50,000             |                    |                    |                                | (50,000)                |                        |
| WWTP Control Building Roof Replacement                |                  |                | 150,000          |               |               |                |      |      |                |                | 150,000            |                    |                    |                                | (150,000)               |                        |
| <b>Total Replacement/State of Good Repair</b>         | <b>214,000</b>   | <b>310,000</b> | <b>150,000</b>   | <b>42,000</b> | <b>22,000</b> | <b>10,000</b>  |      |      | <b>120,000</b> | <b>235,000</b> | <b>1,103,000</b>   |                    |                    | <b>(96,480)</b>                | <b>(1,006,520)</b>      |                        |
| <b>New/Enhanced Service</b>                           |                  |                |                  |               |               |                |      |      |                |                |                    |                    |                    |                                |                         |                        |
| Grit Removal System                                   |                  |                | 1,016,700        |               |               |                |      |      |                |                | 1,016,700          | (700,000)          |                    | (316,700)                      |                         |                        |
| Digester Covers and Insulation                        |                  |                | 450,000          |               |               |                |      |      |                |                | 450,000            | (360,000)          |                    | (90,000)                       |                         |                        |
| <b>Total New/Enhanced Service</b>                     |                  |                | <b>1,466,700</b> |               |               |                |      |      |                |                | <b>1,466,700</b>   | <b>(1,060,000)</b> |                    | <b>(406,700)</b>               |                         |                        |
| <b>Total Hagersville Sewer</b>                        | <b>214,000</b>   | <b>310,000</b> | <b>1,616,700</b> | <b>42,000</b> | <b>22,000</b> | <b>10,000</b>  |      |      | <b>120,000</b> | <b>235,000</b> | <b>2,569,700</b>   | <b>(1,060,000)</b> |                    | <b>(503,180)</b>               | <b>(1,006,520)</b>      |                        |
| <b>Jarvis Sewer</b>                                   |                  |                |                  |               |               |                |      |      |                |                |                    |                    |                    |                                |                         |                        |
| <b>Replacement/State of Good Repair</b>               |                  |                |                  |               |               |                |      |      |                |                |                    |                    |                    |                                |                         |                        |
| Jarvis Lagoon Clean Out                               |                  |                |                  |               |               | 450,000        |      |      |                |                | 450,000            |                    |                    |                                | (450,000)               |                        |
| <b>Total Replacement/State of Good Repair</b>         |                  |                |                  |               |               | <b>450,000</b> |      |      |                |                | <b>450,000</b>     |                    |                    |                                | <b>(450,000)</b>        |                        |
| <b>New/Enhanced Service</b>                           |                  |                |                  |               |               |                |      |      |                |                |                    |                    |                    |                                |                         |                        |
| Jarvis Additional Wastewater Treatment Capacity       | 5,249,100        |                |                  |               |               |                |      |      |                |                | 5,249,100          |                    |                    | (5,249,100)                    |                         |                        |
| <b>Total New/Enhanced Service</b>                     | <b>5,249,100</b> |                |                  |               |               |                |      |      |                |                | <b>5,249,100</b>   |                    |                    | <b>(5,249,100)</b>             |                         |                        |
| <b>Total Jarvis Sewer</b>                             | <b>5,249,100</b> |                |                  |               |               | <b>450,000</b> |      |      |                |                | <b>5,699,100</b>   |                    |                    | <b>(5,249,100)</b>             | <b>(450,000)</b>        |                        |
| <b>Cayuga Sewer</b>                                   |                  |                |                  |               |               |                |      |      |                |                |                    |                    |                    |                                |                         |                        |
| <b>Replacement/State of Good Repair</b>               |                  |                |                  |               |               |                |      |      |                |                |                    |                    |                    |                                |                         |                        |
| Ouse St PS Replacements                               | 169,300          | 1,272,200      |                  |               |               |                |      |      |                |                | 1,441,500          |                    |                    | (493,500)                      | (948,000)               |                        |
| Remotes-Control Equipment Replacement(SCADA)          | 20,000           | 50,000         |                  |               |               |                |      |      |                |                | 70,000             |                    |                    | (7,000)                        | (63,000)                |                        |
| WWTP SCADA Computer & Network Replmt                  |                  |                |                  | 19,000        |               |                |      |      | 19,000         |                | 38,000             |                    |                    |                                | (38,000)                |                        |
| McKay St. Pump Station Upgrades and Pump Replacements | 190,000          |                |                  |               |               |                |      |      |                |                | 190,000            |                    |                    | (19,000)                       | (171,000)               |                        |
| RAS Pump Rebuilds                                     | 18,000           |                |                  |               |               |                |      |      |                |                | 18,000             |                    |                    |                                | (18,000)                |                        |
| Digester Cleanout & Inspection/Minor Repairs          | 20,000           |                |                  |               |               |                |      |      |                |                | 20,000             |                    |                    |                                | (20,000)                |                        |

Note: [CIW] Cast Iron Watermain; [W] Water; [WW] Wastewater; [SS] Storm Sewer; [R] Roads



## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: Wastewater - Plants**

|   | 2019    | 2020      | 2021      | 2022    | 2023      | 2024    | 2025    | 2026 | 2027   | 2028    | Total Expenditures | Grants Subsidies | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debt/ Debture Financing |
|---|---------|-----------|-----------|---------|-----------|---------|---------|------|--------|---------|--------------------|------------------|--------------------|--------------------------------|-------------------------|-------------------------|
| WTP Electrical Panel and VFD Inspection/Maintenance       |         | 5,000     |           |         |           | 5,000   |         |      |        | 5,000   | 15,000             |                  |                    |                                | (15,000)                |                         |
| Mechanical Aerator (rotor) Replacement                    |         |           |           | 375,000 |           |         |         |      |        |         | 375,000            |                  |                    |                                | (375,000)               |                         |
| WWTP PLC Replacements                                     |         |           |           |         |           | 160,000 |         |      |        |         | 160,000            |                  |                    | (38,400)                       | (121,600)               |                         |
| <b>Total Replacement/State of Good Repair</b>             | 417,300 | 1,327,200 |           | 394,000 |           | 165,000 |         |      | 19,000 | 5,000   | 2,327,500          |                  |                    | (557,900)                      | (1,769,600)             |                         |
| <b>New/Enhanced Service</b>                               |         |           |           |         |           |         |         |      |        |         |                    |                  |                    |                                |                         |                         |
| Ouse St Forcemain Twinning                                | 30,800  | 306,900   |           |         |           |         |         |      |        |         | 337,700            | (221,100)        |                    | (116,600)                      |                         |                         |
| Twinning of Headworks Screen                              |         | 275,000   |           |         |           |         |         |      |        |         | 275,000            | (275,000)        |                    |                                |                         |                         |
| Cayuga Storage Building Extension [W]                     | 25,000  |           |           |         |           |         |         |      |        |         | 25,000             |                  |                    |                                | (25,000)                |                         |
| <b>Total New/Enhanced Service</b>                         | 55,800  | 581,900   |           |         |           |         |         |      |        |         | 637,700            | (496,100)        |                    | (116,600)                      | (25,000)                |                         |
| <b>Total Cayuga Sewer</b>                                 | 473,100 | 1,909,100 |           | 394,000 |           | 165,000 |         |      | 19,000 | 5,000   | 2,965,200          | (496,100)        |                    | (674,500)                      | (1,794,600)             |                         |
| <b>Dunnville Sewer</b>                                    |         |           |           |         |           |         |         |      |        |         |                    |                  |                    |                                |                         |                         |
| <b>Replacement/State of Good Repair</b>                   |         |           |           |         |           |         |         |      |        |         |                    |                  |                    |                                |                         |                         |
| Remotes-Control Equipment Replacement(SCADA)              |         |           | 55,000    |         |           |         |         |      |        |         | 55,000             |                  |                    | (13,200)                       | (41,800)                |                         |
| Blower Replacement  |         |           | 600,000   |         |           |         |         |      |        |         | 600,000            |                  |                    |                                | (600,000)               |                         |
| WWTP SCADA Computer & Network Replmt                      |         |           |           | 16,000  |           |         |         |      | 16,000 |         | 32,000             |                  |                    |                                | (32,000)                |                         |
| Odour Control Media Replacement                           |         |           | 16,000    |         |           |         | 16,000  |      |        |         | 32,000             |                  |                    |                                | (32,000)                |                         |
| Aeration Diffuser System Replacement                      |         |           | 400,000   |         |           |         |         |      |        |         | 400,000            |                  |                    |                                | (400,000)               |                         |
| Low Lift Pump Replacements                                | 65,000  | 65,000    |           |         |           |         |         |      |        |         | 130,000            |                  |                    |                                | (130,000)               |                         |
| John St. Pump Station Upgrades                            | 80,000  | 550,000   |           |         |           |         |         |      |        |         | 630,000            |                  |                    | (63,000)                       | (567,000)               |                         |
| Sludge Storage Cell #4 Upgrades and Screen                |         |           |           | 120,000 | 750,000   |         |         |      |        |         | 870,000            |                  |                    |                                | (870,000)               |                         |
| WWTP Wet-Well Valve Replacements                          |         |           |           | 400,000 |           |         |         |      |        |         | 400,000            |                  |                    |                                | (400,000)               |                         |
| <b>Total Replacement/State of Good Repair</b>             | 145,000 | 615,000   | 1,071,000 | 536,000 | 750,000   |         | 16,000  |      | 16,000 |         | 3,149,000          |                  |                    | (76,200)                       | (3,072,800)             |                         |
| <b>New/Enhanced Service</b>                               |         |           |           |         |           |         |         |      |        |         |                    |                  |                    |                                |                         |                         |
| Digester Cover & Insulation                               |         |           |           |         | 475,000   |         |         |      |        |         | 475,000            | (380,000)        |                    | (95,000)                       |                         |                         |
| <b>Total New/Enhanced Service</b>                         |         |           |           |         | 475,000   |         |         |      |        |         | 475,000            | (380,000)        |                    | (95,000)                       |                         |                         |
| <b>Total Dunnville Sewer</b>                              | 145,000 | 615,000   | 1,071,000 | 536,000 | 1,225,000 |         | 16,000  |      | 16,000 |         | 3,624,000          | (380,000)        |                    | (171,200)                      | (3,072,800)             |                         |
| <b>Townsend Sewer</b>                                     |         |           |           |         |           |         |         |      |        |         |                    |                  |                    |                                |                         |                         |
| <b>Replacement/State of Good Repair</b>                   |         |           |           |         |           |         |         |      |        |         |                    |                  |                    |                                |                         |                         |
| Townsend Lagoon Clean Out                                 |         |           |           |         |           |         | 370,000 |      |        | 350,000 | 720,000            |                  |                    |                                | (720,000)               |                         |
| Townsend Lagoons Raw Sewage Influent Chamber & Valving Re | 65,000  |           |           |         |           |         |         |      |        |         | 65,000             |                  |                    |                                | (65,000)                |                         |
| Main Pump Station Roof Replacement                        | 21,000  |           |           |         |           |         |         |      |        |         | 21,000             |                  |                    |                                | (21,000)                |                         |
| <b>Total Replacement/State of Good Repair</b>             | 86,000  |           |           |         |           |         | 370,000 |      |        | 350,000 | 806,000            |                  |                    |                                | (806,000)               |                         |
| <b>Total Townsend Sewer</b>                               | 86,000  |           |           |         |           |         | 370,000 |      |        | 350,000 | 806,000            |                  |                    |                                | (806,000)               |                         |
| <b>Oswego Park Sewer</b>                                  |         |           |           |         |           |         |         |      |        |         |                    |                  |                    |                                |                         |                         |
| <b>Replacement/State of Good Repair</b>                   |         |           |           |         |           |         |         |      |        |         |                    |                  |                    |                                |                         |                         |
| Oswego Lagoon Clean Out                                   |         |           |           |         |           | 275,000 |         |      |        |         | 275,000            |                  |                    |                                | (275,000)               |                         |
| Main Pump Station Roof Replacement                        | 9,000   |           |           |         |           |         |         |      |        |         | 9,000              |                  |                    |                                | (9,000)                 |                         |
| <b>Total Replacement/State of Good Repair</b>             | 9,000   |           |           |         |           | 275,000 |         |      |        |         | 284,000            |                  |                    |                                | (284,000)               |                         |

Note: [CIW] Cast Iron Watermain; [W] Water; [WW] Wastewater; [SS] Storm Sewer; [R] Roads

## Haldimand County

2019 to 2028 CAPITAL FORECAST

**Division: Wastewater - Plants**

|   | 2019      | 2020      | 2021      | 2022      | 2023      | 2024      | 2025      | 2026      | 2027       | 2028      | Total Expenditures | Grants Subsidies | External Financing | Development Charges Rsvs Funds | Reserves/ Reserve Funds | Debt/ure Financing |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|--------------------|------------------|--------------------|--------------------------------|-------------------------|--------------------|
| New/Enhanced Service                                      |           |           |           |           |           |           |           |           |            |           |                    |                  |                    |                                |                         |                    |
| Oswego Pump Station New Forcemain                         |           |           |           | 225,000   |           |           |           |           |            |           | 225,000            |                  |                    |                                | (225,000)               |                    |
| <b>Total New/Enhanced Service</b>                         |           |           |           | 225,000   |           |           |           |           |            |           | 225,000            |                  |                    |                                | (225,000)               |                    |
| <b>Total Oswego Park Sewer</b>                            | 9,000     |           |           | 225,000   |           | 275,000   |           |           |            |           | 509,000            |                  |                    |                                | (509,000)               |                    |
| Nanticoke Sewer   |           |           |           |           |           |           |           |           |            |           |                    |                  |                    |                                |                         |                    |
| Replacement/State of Good Repair                          |           |           |           |           |           |           |           |           |            |           |                    |                  |                    |                                |                         |                    |
| LEIP Lagoon Clean Out                                     |           |           |           |           |           |           |           | 350,000   |            |           | 350,000            |                  |                    |                                | (350,000)               |                    |
| Wet-Well to Lagoon Distribution Chamber - Forcemain Repl. | 70,000    |           |           |           |           |           |           |           |            |           | 70,000             |                  |                    |                                | (70,000)                |                    |
| <b>Total Replacement/State of Good Repair</b>             | 70,000    |           |           |           |           |           |           | 350,000   |            |           | 420,000            |                  |                    |                                | (420,000)               |                    |
| <b>Total Nanticoke Sewer</b>                              | 70,000    |           |           |           |           |           |           | 350,000   |            |           | 420,000            |                  |                    |                                | (420,000)               |                    |
| <b>Total Wastewater - Plants</b>                          | 6,845,250 | 6,312,700 | 5,370,400 | 1,681,500 | 3,100,000 | 3,100,000 | 8,859,600 | 3,100,000 | 40,442,900 | 3,100,000 | 81,912,350         | (4,864,620)      |                    | (55,225,680)                   | (21,822,050)            |                    |



# WATER & WASTEWATER OPERATING

# Haldimand County 2019 Draft Rate Supported Operating Budget

## Water and Wastewater Summary

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### **Function:**

To manage the 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 and Compliance 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 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 New Credit First Nation and the City of Hamilton.

## Haldimand County 2019 Rate Supported Operating Budget

### Water and Wastewater Summary

|   | 2018<br>Current<br>Forecast | 2018<br>Revised<br>Budget | 2019<br>Base<br>Budget | 2019<br>Cncl. Appr.<br>Initiatives | 2019<br>New<br>Initiatives | 2019<br>Total<br>Budget | 2019<br>Budget \$<br>Incr / (Decr) | 2019<br>Budget %<br>Incr / (Decr) |
|---|-----------------------------|---------------------------|------------------------|------------------------------------|----------------------------|-------------------------|------------------------------------|-----------------------------------|
| <b>EXPENDITURES:</b>                        |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Salaries, Wages & Benefits                  | 2,475,510                   | 2,515,670                 | 2,557,240              | 221,000                            |                            | 2,778,240               | 262,570                            | 10.44                             |
| Supplies & Materials                        | 150,570                     | 150,910                   | 162,350                |                                    |                            | 162,350                 | 11,440                             | 7.58                              |
| Hamilton Water Supply                       | 2,112,050                   | 2,347,930                 | 2,348,400              |                                    |                            | 2,348,400               | 470                                | 0.02                              |
| Services                                    | 4,086,124                   | 4,400,110                 | 4,149,650              |                                    |                            | 4,149,650               | (250,460)                          | (5.69)                            |
| Veolia Operating Services Charges           | 4,624,230                   | 4,624,230                 | 4,750,230              |                                    |                            | 4,750,230               | 126,000                            | 2.72                              |
| Interdepartmental Charges                   | 725,240                     | 673,960                   | 742,000                |                                    |                            | 742,000                 | 68,040                             | 10.10                             |
| Long Term Debt Charges                      | 2,594,339                   | 2,594,400                 | 2,580,110              |                                    |                            | 2,580,110               | (14,290)                           | (0.55)                            |
| Transfers to Reserves/Reserve Funds         | 3,556,295                   | 3,707,070                 | 4,197,210              |                                    |                            | 4,197,210               | 490,140                            | 13.22                             |
| <b>TOTAL EXPENDITURES</b>                   | <b>20,324,358</b>           | <b>21,014,280</b>         | <b>21,487,190</b>      | <b>221,000</b>                     |                            | <b>21,708,190</b>       | <b>693,910</b>                     | <b>3.30</b>                       |
| <b>REVENUES:</b>                            |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Revenue Required from User Rates            | (12,617,185)                | (12,012,090)              | (12,023,650)           | (221,000)                          |                            | (12,244,650)            | (232,560)                          | 1.94                              |
| Municipal Recoveries                        | (39,028)                    | (58,320)                  | (49,000)               |                                    |                            | (49,000)                | 9,320                              | (15.98)                           |
| Recoveries from New Credit                  | (340,970)                   | (248,800)                 | (289,000)              |                                    |                            | (289,000)               | (40,200)                           | 16.16                             |
| Fees & Recoveries                           | (7,833,712)                 | (7,712,530)               | (8,149,530)            |                                    |                            | (8,149,530)             | (437,000)                          | 5.67                              |
| Transfers from Reserves/Reserve Funds       | (982,501)                   | (982,540)                 | (976,010)              |                                    |                            | (976,010)               | 6,530                              | (0.66)                            |
| <b>TOTAL REVENUES</b>                       | <b>(21,813,396)</b>         | <b>(21,014,280)</b>       | <b>(21,487,190)</b>    | <b>(221,000)</b>                   |                            | <b>(21,708,190)</b>     | <b>(693,910)</b>                   | <b>3.30</b>                       |
| <b>NET REVENUE Required from User Rates</b> | <b>(1,489,038)</b>          |                           |                        |                                    |                            |                         |                                    |                                   |

#### STAFFING (stated in FTE)

|                              |       |       |      |       |
|------------------------------|-------|-------|------|-------|
| Full Time                    | 26.58 | 26.48 | 1.90 | 28.38 |
| Part Time &/or Temporary F/T | 0.26  | 0.26  | 0.02 | 0.28  |

## Haldimand County 2019 Rate Supported Operating Budget

### Water Summary

|   | 2018<br>Current<br>Forecast | 2018<br>Revised<br>Budget | 2019<br>Base<br>Budget | 2019<br>Cncl. Appr.<br>Initiatives | 2019<br>New<br>Initiatives | 2019<br>Total<br>Budget | 2019<br>Budget \$<br>Incr / (Decr) | 2019<br>Budget %<br>Incr / (Decr) |
|---|-----------------------------|---------------------------|------------------------|------------------------------------|----------------------------|-------------------------|------------------------------------|-----------------------------------|
| <b>EXPENDITURES:</b>                        |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Salaries, Wages & Benefits                  | 1,794,983                   | 1,850,430                 | 1,850,660              | 12,970                             |                            | 1,863,630               | 13,200                             | 0.71                              |
| Supplies & Materials                        | 129,755                     | 130,800                   | 140,800                |                                    |                            | 140,800                 | 10,000                             | 7.65                              |
| Hamilton Water Supply                       | 2,112,050                   | 2,347,930                 | 2,348,400              |                                    |                            | 2,348,400               | 470                                | 0.02                              |
| Services                                    | 2,657,657                   | 2,828,880                 | 2,659,260              |                                    |                            | 2,659,260               | (169,620)                          | (6.00)                            |
| Veolia Operating Services Charges           | 2,147,060                   | 2,147,060                 | 2,201,740              |                                    |                            | 2,201,740               | 54,680                             | 2.55                              |
| Interdepartmental Charges                   | 410,125                     | 383,650                   | 422,750                |                                    |                            | 422,750                 | 39,100                             | 10.19                             |
| Long Term Debt Charges                      | 1,443,484                   | 1,443,500                 | 1,441,050              |                                    |                            | 1,441,050               | (2,450)                            | (0.17)                            |
| Transfers to Reserves/Reserve Funds         | 966,877                     | 1,216,310                 | 1,611,570              |                                    |                            | 1,611,570               | 395,260                            | 32.50                             |
| <b>TOTAL EXPENDITURES</b>                   | <b>11,661,991</b>           | <b>12,348,560</b>         | <b>12,676,230</b>      | <b>12,970</b>                      |                            | <b>12,689,200</b>       | <b>340,640</b>                     | <b>2.76</b>                       |
| <b>REVENUES:</b>                            |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Revenue Required from User Rates            | (6,129,036)                 | (5,718,170)               | (5,629,500)            | (12,970)                           |                            | (5,642,470)             | 75,700                             | (1.32)                            |
| Recoveries from New Credit                  | (340,527)                   | (248,300)                 | (288,500)              |                                    |                            | (288,500)               | (40,200)                           | 16.19                             |
| Fees & Recoveries                           | (5,644,177)                 | (5,879,790)               | (6,255,860)            |                                    |                            | (6,255,860)             | (376,070)                          | 6.40                              |
| Transfers from Reserves/Reserve Funds       | (502,279)                   | (502,300)                 | (502,370)              |                                    |                            | (502,370)               | (70)                               | 0.01                              |
| <b>TOTAL REVENUES</b>                       | <b>(12,616,019)</b>         | <b>(12,348,560)</b>       | <b>(12,676,230)</b>    | <b>(12,970)</b>                    |                            | <b>(12,689,200)</b>     | <b>(340,640)</b>                   | <b>2.76</b>                       |
| <b>NET REVENUE Required from User Rates</b> | <b>(954,028)</b>            |                           |                        |                                    |                            |                         |                                    |                                   |

### STAFFING (stated in FTE)

|                              |       |       |      |       |
|------------------------------|-------|-------|------|-------|
| Full Time                    | 19.50 | 19.06 | 0.23 | 19.29 |
| Part Time &/or Temporary F/T | 0.17  | 0.17  | 0.02 | 0.19  |

## Haldimand County 2019 Rate Supported Operating Budget

### Water Administration

|   | <b>2018<br/>Current<br/>Forecast</b> | <b>2018<br/>Revised<br/>Budget</b> | <b>2019<br/>Base<br/>Budget</b> | <b>2019<br/>Cncl. Appr.<br/>Initiatives</b> | <b>2019<br/>New<br/>Initiatives</b> | <b>2019<br/>Total<br/>Budget</b> | <b>2019<br/>Budget \$<br/>Incr / (Decr)</b> | <b>2019<br/>Budget %<br/>Incr / (Decr)</b> |
|---|--------------------------------------|------------------------------------|---------------------------------|---|-------------------------------------|----------------------------------|---|--|
| <b>EXPENDITURES:</b>                        |                                      |                                    |                                 |   |                                     |                                  |   |  |
| Salaries, Wages & Benefits                  | 904,053                              | 810,150                            | 817,520                         | 12,970                                      |                                     | 830,490                          | 20,340                                      | 2.51                                       |
| Supplies & Materials                        | 1,525                                | 3,600                              | 3,600                           |   |                                     | 3,600                            |   |  |
| Services                                    | 216,106                              | 217,160                            | 217,200                         |   |                                     | 217,200                          | 40  | 0.02                                       |
| Interdepartmental Charges                   | 122,950                              | 110,170                            | 128,970                         |   |                                     | 128,970                          | 18,800                                      | 17.06                                      |
| <b>TOTAL EXPENDITURES</b>                   | <b>1,244,634</b>                     | <b>1,141,080</b>                   | <b>1,167,290</b>                | <b>12,970</b>                               |                                     | <b>1,180,260</b>                 | <b>39,180</b>                               | <b>3.43</b>                                |
| <b>REVENUES:</b>                            |                                      |                                    |                                 |   |                                     |                                  |   |  |
| <b>TOTAL REVENUES</b>                       |                                      |                                    |                                 |   |                                     |                                  |   |  |
| <b>NET REVENUE Required from User Rates</b> | <b>1,244,634</b>                     | <b>1,141,080</b>                   | <b>1,167,290</b>                | <b>12,970</b>                               |                                     | <b>1,180,260</b>                 | <b>39,180</b>                               | <b>3.43</b>                                |
| <b>STAFFING (stated in FTE)</b>             |                                      |                                    |                                 |   |                                     |                                  |   |  |
| Full Time                                   |                                      | 7.47                               | 7.47                            | 0.23  |                                     | 7.70                             |   |  |
| Part Time &/or Temporary F/T                |                                      | 0.17                               | 0.17                            | 0.02  |                                     | 0.19                             |   |  |

## Haldimand County 2019 Rate Supported Operating Budget

Water Financial Administration

|   | 2018<br>Current<br>Forecast | 2018<br>Revised<br>Budget | 2019<br>Base<br>Budget | 2019<br>Cncl. Appr.<br>Initiatives | 2019<br>New<br>Initiatives | 2019<br>Total<br>Budget | 2019<br>Budget \$<br>Incr / (Decr) | 2019<br>Budget %<br>Incr / (Decr) |
|---|-----------------------------|---------------------------|------------------------|------------------------------------|----------------------------|-------------------------|------------------------------------|-----------------------------------|
| <b>EXPENDITURES:</b>                        |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Services                                    | 216,332                     | 251,150                   | 251,100                |                                    |                            | 251,100                 | (50)                               | (0.02)                            |
| Interdepartmental Charges                   | 163,711                     | 155,130                   | 167,550                |                                    |                            | 167,550                 | 12,420                             | 8.01                              |
| Long Term Debt Charges                      | 1,443,484                   | 1,443,500                 | 1,441,050              |                                    |                            | 1,441,050               | (2,450)                            | (0.17)                            |
| Transfers to Reserves/Reserve Funds         | 955,351                     | 955,350                   | 1,043,570              |                                    |                            | 1,043,570               | 88,220                             | 9.23                              |
| <b>TOTAL EXPENDITURES</b>                   | <b>2,778,878</b>            | <b>2,805,130</b>          | <b>2,903,270</b>       |                                    |                            | <b>2,903,270</b>        | <b>98,140</b>                      | <b>3.50</b>                       |
| <b>REVENUES:</b>                            |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Fees & Recoveries                           | (32,605)                    | (23,060)                  | (24,820)               |                                    |                            | (24,820)                | (1,760)                            | 7.63                              |
| <b>TOTAL REVENUES</b>                       | <b>(32,605)</b>             | <b>(23,060)</b>           | <b>(24,820)</b>        |                                    |                            | <b>(24,820)</b>         | <b>(1,760)</b>                     | <b>7.63</b>                       |
| <b>NET REVENUE Required from User Rates</b> | <b>2,746,273</b>            | <b>2,782,070</b>          | <b>2,878,450</b>       |                                    |                            | <b>2,878,450</b>        | <b>96,380</b>                      | <b>3.46</b>                       |

**STAFFING (stated in FTE)**



## Haldimand County 2019 Rate Supported Operating Budget

### Direct Water Operations

|   | <b>2018<br/>Current<br/>Forecast</b> | <b>2018<br/>Revised<br/>Budget</b> | <b>2019<br/>Base<br/>Budget</b> | <b>2019<br/>Cncl. Appr.<br/>Initiatives</b> | <b>2019<br/>New<br/>Initiatives</b> | <b>2019<br/>Total<br/>Budget</b> | <b>2019<br/>Budget \$<br/>Incr / (Decr)</b> | <b>2019<br/>Budget %<br/>Incr / (Decr)</b> |
|---|--------------------------------------|------------------------------------|---------------------------------|---|-------------------------------------|----------------------------------|---|--|
| <b>EXPENDITURES:</b>                        |                                      |                                    |                                 |   |                                     |                                  |   |  |
| Salaries, Wages & Benefits                  | 890,930                              | 1,040,280                          | 1,033,140                       |   |                                     | 1,033,140                        | (7,140)                                     | (0.69)                                     |
| Supplies & Materials                        | 128,230                              | 127,200                            | 137,200                         |   |                                     | 137,200                          | 10,000                                      | 7.86                                       |
| Hamilton Water Supply                       | 2,112,050                            | 2,347,930                          | 2,348,400                       |   |                                     | 2,348,400                        | 470   | 0.02                                       |
| Services                                    | 976,895                              | 1,051,230                          | 989,770                         |   |                                     | 989,770                          | (61,460)                                    | (5.85)                                     |
| Veolia Operating Services Charges           | 1,400,590                            | 1,400,590                          | 1,439,750                       |   |                                     | 1,439,750                        | 39,160                                      | 2.80                                       |
| Interdepartmental Charges                   | 123,464                              | 118,350                            | 126,230                         |   |                                     | 126,230                          | 7,880                                       | 6.66                                       |
| Transfers to Reserves/Reserve Funds         | 11,526                               | 260,960                            | 568,000                         |   |                                     | 568,000                          | 307,040                                     | 117.66                                     |
| <b>TOTAL EXPENDITURES</b>                   | <b>5,643,685</b>                     | <b>6,346,540</b>                   | <b>6,642,490</b>                |   |                                     | <b>6,642,490</b>                 | <b>295,950</b>                              | <b>4.66</b>                                |
| <b>REVENUES:</b>                            |                                      |                                    |                                 |   |                                     |                                  |   |  |
| <b>TOTAL REVENUES</b>                       |                                      |                                    |                                 |   |                                     |                                  |   |  |
| <b>NET REVENUE Required from User Rates</b> | <b>5,643,685</b>                     | <b>6,346,540</b>                   | <b>6,642,490</b>                |   |                                     | <b>6,642,490</b>                 | <b>295,950</b>                              | <b>4.66</b>                                |
| <b>STAFFING (stated in FTE)</b>             |                                      |                                    |                                 |   |                                     |                                  |   |  |
| Full Time                                   |                                      | 12.03                              | 11.59                           |   |                                     | 11.59                            |   |  |

## Haldimand County 2019 Rate Supported Operating Budget

Nanticoke Industrial Pumping Station

|   | 2018<br>Current<br>Forecast | 2018<br>Revised<br>Budget | 2019<br>Base<br>Budget | 2019<br>Cncl. Appr.<br>Initiatives | 2019<br>New<br>Initiatives | 2019<br>Total<br>Budget | 2019<br>Budget \$<br>Incr / (Decr) | 2019<br>Budget %<br>Incr / (Decr) |
|---|-----------------------------|---------------------------|------------------------|------------------------------------|----------------------------|-------------------------|------------------------------------|-----------------------------------|
| <b>EXPENDITURES:</b>                        |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Services                                    | 1,248,324                   | 1,309,340                 | 1,201,190              |                                    |                            | 1,201,190               | (108,150)                          | (8.26)                            |
| Veolia Operating Services Charges           | 746,470                     | 746,470                   | 761,990                |                                    |                            | 761,990                 | 15,520                             | 2.08                              |
| <b>TOTAL EXPENDITURES</b>                   | <b>1,994,794</b>            | <b>2,055,810</b>          | <b>1,963,180</b>       |                                    |                            | <b>1,963,180</b>        | <b>(92,630)</b>                    | <b>(4.51)</b>                     |
| <b>REVENUES:</b>                            |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Fees & Recoveries                           | (2,030,371)                 | (2,093,170)               | (1,997,410)            |                                    |                            | (1,997,410)             | 95,760                             | (4.57)                            |
| <b>TOTAL REVENUES</b>                       | <b>(2,030,371)</b>          | <b>(2,093,170)</b>        | <b>(1,997,410)</b>     |                                    |                            | <b>(1,997,410)</b>      | <b>95,760</b>                      | <b>(4.57)</b>                     |
| <b>NET REVENUE Required from User Rates</b> | <b>(35,577)</b>             | <b>(37,360)</b>           | <b>(34,230)</b>        |                                    |                            | <b>(34,230)</b>         | <b>3,130</b>                       | <b>(8.38)</b>                     |

**STAFFING (stated in FTE)**

## Haldimand County 2019 Rate Supported Operating Budget

### Water User Fees

|   | 2018<br>Current<br>Forecast | 2018<br>Revised<br>Budget | 2019<br>Base<br>Budget | 2019<br>Cncl. Appr.<br>Initiatives | 2019<br>New<br>Initiatives | 2019<br>Total<br>Budget | 2019<br>Budget \$<br>Incr / (Decr) | 2019<br>Budget %<br>Incr / (Decr) |
|---|-----------------------------|---------------------------|------------------------|------------------------------------|----------------------------|-------------------------|------------------------------------|-----------------------------------|
| <b>EXPENDITURES:</b>                        |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| <b>TOTAL EXPENDITURES</b>                   | <hr/>                       |                           |                        |                                    |                            |                         |                                    |                                   |
| <b>REVENUES:</b>                            |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Recoveries from New Credit                  | (340,527)                   | (248,300)                 | (288,500)              |                                    |                            | (288,500)               | (40,200)                           | 16.19                             |
| Fees & Recoveries                           | (3,581,201)                 | (3,763,560)               | (4,233,630)            |                                    |                            | (4,233,630)             | (470,070)                          | 12.49                             |
| Transfers from Reserves/Reserve Funds       | (502,279)                   | (502,300)                 | (502,370)              |                                    |                            | (502,370)               | (70)                               | 0.01                              |
| <b>TOTAL REVENUES</b>                       | <b>(4,424,007)</b>          | <b>(4,514,160)</b>        | <b>(5,024,500)</b>     |                                    |                            | <b>(5,024,500)</b>      | <b>(510,340)</b>                   | <b>11.31</b>                      |
| <b>NET REVENUE Required from User Rates</b> | <b>(4,424,007)</b>          | <b>(4,514,160)</b>        | <b>(5,024,500)</b>     |                                    |                            | <b>(5,024,500)</b>      | <b>(510,340)</b>                   | <b>11.31</b>                      |

### STAFFING (stated in FTE)

## Haldimand County 2019 Rate Supported Operating Budget

### Water User Rates Revenue

|   | 2018<br>Current<br>Forecast | 2018<br>Revised<br>Budget | 2019<br>Base<br>Budget | 2019<br>Cncl. Appr.<br>Initiatives | 2019<br>New<br>Initiatives | 2019<br>Total<br>Budget | 2019<br>Budget \$<br>Incr / (Decr) | 2019<br>Budget %<br>Incr / (Decr) |
|---|-----------------------------|---------------------------|------------------------|------------------------------------|----------------------------|-------------------------|------------------------------------|-----------------------------------|
| <b>REVENUES:</b>                            |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Revenue Required from User Rates            |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Base Charge - Residential                   | (2,281,942)                 | (2,193,410)               | (2,183,610)            | (12,970)                           |                            | (2,196,580)             | (3,170)                            | 0.14                              |
| Consumption - Residential                   | (1,502,661)                 | (1,407,900)               | (1,371,700)            |                                    |                            | (1,371,700)             | 36,200                             | (2.57)                            |
| Base Charge - Commercial                    | (597,042)                   | (665,660)                 | (624,590)              |                                    |                            | (624,590)               | 41,070                             | (6.17)                            |
| Consumption - Commercial                    | (1,747,391)                 | (1,451,200)               | (1,449,600)            |                                    |                            | (1,449,600)             | 1,600                              | (0.11)                            |
| <b>TOTAL REVENUES</b>                       | <b>(6,129,036)</b>          | <b>(5,718,170)</b>        | <b>(5,629,500)</b>     | <b>(12,970)</b>                    |                            | <b>(5,642,470)</b>      | <b>75,700</b>                      | <b>(1.32)</b>                     |
| <b>NET REVENUE Required from User Rates</b> | <b>(6,129,036)</b>          | <b>(5,718,170)</b>        | <b>(5,629,500)</b>     | <b>(12,970)</b>                    |                            | <b>(5,642,470)</b>      | <b>75,700</b>                      | <b>(1.32)</b>                     |

### STAFFING (stated in FTE)

## Haldimand County 2019 Rate Supported Operating Budget

### WasteWater Summary

|   | 2018<br>Current<br>Forecast | 2018<br>Revised<br>Budget | 2019<br>Base<br>Budget | 2019<br>Cncl. Appr.<br>Initiatives | 2019<br>New<br>Initiatives | 2019<br>Total<br>Budget | 2019<br>Budget \$<br>Incr / (Decr) | 2019<br>Budget %<br>Incr / (Decr) |
|---|-----------------------------|---------------------------|------------------------|------------------------------------|----------------------------|-------------------------|------------------------------------|-----------------------------------|
| <b>EXPENDITURES:</b>                        |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Salaries, Wages & Benefits                  | 680,527                     | 665,240                   | 706,580                | 208,030                            |                            | 914,610                 | 249,370                            | 37.49                             |
| Supplies & Materials                        | 20,815                      | 20,110                    | 21,550                 |                                    |                            | 21,550                  | 1,440                              | 7.16                              |
| Services                                    | 1,428,467                   | 1,571,230                 | 1,490,390              |                                    |                            | 1,490,390               | (80,840)                           | (5.15)                            |
| Veolia Operating Services Charges           | 2,477,170                   | 2,477,170                 | 2,548,490              |                                    |                            | 2,548,490               | 71,320                             | 2.88                              |
| Interdepartmental Charges                   | 315,115                     | 290,310                   | 319,250                |                                    |                            | 319,250                 | 28,940                             | 9.97                              |
| Long Term Debt Charges                      | 1,150,855                   | 1,150,900                 | 1,139,060              |                                    |                            | 1,139,060               | (11,840)                           | (1.03)                            |
| Transfers to Reserves/Reserve Funds         | 2,589,418                   | 2,490,760                 | 2,585,640              |                                    |                            | 2,585,640               | 94,880                             | 3.81                              |
| <b>TOTAL EXPENDITURES</b>                   | <b>8,662,367</b>            | <b>8,665,720</b>          | <b>8,810,960</b>       | <b>208,030</b>                     |                            | <b>9,018,990</b>        | <b>353,270</b>                     | <b>4.08</b>                       |
| <b>REVENUES:</b>                            |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Revenue Required from User Rates            | (6,488,149)                 | (6,293,920)               | (6,394,150)            | (208,030)                          |                            | (6,602,180)             | (308,260)                          | 4.90                              |
| Municipal Recoveries                        | (39,028)                    | (58,320)                  | (49,000)               |                                    |                            | (49,000)                | 9,320                              | (15.98)                           |
| Recoveries from New Credit                  | (443)                       | (500)                     | (500)                  |                                    |                            | (500)                   |                                    |                                   |
| Fees & Recoveries                           | (2,189,535)                 | (1,832,740)               | (1,893,670)            |                                    |                            | (1,893,670)             | (60,930)                           | 3.32                              |
| Transfers from Reserves/Reserve Funds       | (480,222)                   | (480,240)                 | (473,640)              |                                    |                            | (473,640)               | 6,600                              | (1.37)                            |
| <b>TOTAL REVENUES</b>                       | <b>(9,197,377)</b>          | <b>(8,665,720)</b>        | <b>(8,810,960)</b>     | <b>(208,030)</b>                   |                            | <b>(9,018,990)</b>      | <b>(353,270)</b>                   | <b>4.08</b>                       |
| <b>NET REVENUE Required from User Rates</b> | <b>(535,010)</b>            |                           |                        |                                    |                            |                         |                                    |                                   |

### STAFFING (stated in FTE)

|                              |      |      |      |      |
|------------------------------|------|------|------|------|
| Full Time                    | 7.08 | 7.42 | 1.67 | 9.09 |
| Part Time &/or Temporary F/T | 0.09 | 0.09 |      | 0.09 |

## Haldimand County 2019 Rate Supported Operating Budget

### Wastewater Administration

|   | <b>2018<br/>Current<br/>Forecast</b> | <b>2018<br/>Revised<br/>Budget</b> | <b>2019<br/>Base<br/>Budget</b> | <b>2019<br/>Cncl. Appr.<br/>Initiatives</b> | <b>2019<br/>New<br/>Initiatives</b> | <b>2019<br/>Total<br/>Budget</b> | <b>2019<br/>Budget \$<br/>Incr / (Decr)</b> | <b>2019<br/>Budget %<br/>Incr / (Decr)</b> |
|---|--------------------------------------|------------------------------------|---------------------------------|---|-------------------------------------|----------------------------------|---|--|
| <b>EXPENDITURES:</b>                        |                                      |                                    |                                 |   |                                     |                                  |   |  |
| Salaries, Wages & Benefits                  | 464,632                              | 449,240                            | 453,490                         | 208,030                                     |                                     | 661,520                          | 212,280                                     | 47.25                                      |
| Supplies & Materials                        | 1,573                                | 2,610                              | 2,550                           |   |                                     | 2,550                            | (60)  | (2.30)                                     |
| Services                                    | 143,428                              | 142,920                            | 145,400                         |   |                                     | 145,400                          | 2,480                                       | 1.74                                       |
| Interdepartmental Charges                   | 70,680                               | 59,230                             | 69,170                          |   |                                     | 69,170                           | 9,940                                       | 16.78                                      |
| <b>TOTAL EXPENDITURES</b>                   | <b>680,313</b>                       | <b>654,000</b>                     | <b>670,610</b>                  | <b>208,030</b>                              |                                     | <b>878,640</b>                   | <b>224,640</b>                              | <b>34.35</b>                               |
| <b>REVENUES:</b>                            |                                      |                                    |                                 |   |                                     |                                  |   |  |
| <b>TOTAL REVENUES</b>                       |                                      |                                    |                                 |   |                                     |                                  |   |  |
| <b>NET REVENUE Required from User Rates</b> | <b>680,313</b>                       | <b>654,000</b>                     | <b>670,610</b>                  | <b>208,030</b>                              |                                     | <b>878,640</b>                   | <b>224,640</b>                              | <b>34.35</b>                               |
| <b>STAFFING (stated in FTE)</b>             |                                      |                                    |                                 |   |                                     |                                  |   |  |
| Full Time                                   |                                      | 4.58                               | 4.58                            | 1.67  |                                     | 6.25                             |   |  |
| Part Time &/or Temporary F/T                |                                      | 0.09                               | 0.09                            |   |                                     | 0.09                             |   |  |

## Haldimand County 2019 Rate Supported Operating Budget

### Wastewater Financial Administration

|   | 2018<br>Current<br>Forecast | 2018<br>Revised<br>Budget | 2019<br>Base<br>Budget | 2019<br>Cncl. Appr.<br>Initiatives | 2019<br>New<br>Initiatives | 2019<br>Total<br>Budget | 2019<br>Budget \$<br>Incr / (Decr) | 2019<br>Budget %<br>Incr / (Decr) |
|---|-----------------------------|---------------------------|------------------------|------------------------------------|----------------------------|-------------------------|------------------------------------|-----------------------------------|
| <b>EXPENDITURES:</b>                        |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Services                                    | 213,440                     | 248,650                   | 248,840                |                                    |                            | 248,840                 | 190                                | 0.08                              |
| Interdepartmental Charges                   | 163,795                     | 155,200                   | 167,620                |                                    |                            | 167,620                 | 12,420                             | 8.00                              |
| Long Term Debt Charges                      | 1,150,855                   | 1,150,900                 | 1,139,060              |                                    |                            | 1,139,060               | (11,840)                           | (1.03)                            |
| Transfers to Reserves/Reserve Funds         | 2,589,418                   | 2,490,760                 | 2,585,640              |                                    |                            | 2,585,640               | 94,880                             | 3.81                              |
| <b>TOTAL EXPENDITURES</b>                   | <b>4,117,508</b>            | <b>4,045,510</b>          | <b>4,141,160</b>       |                                    |                            | <b>4,141,160</b>        | <b>95,650</b>                      | <b>2.36</b>                       |
| <b>REVENUES:</b>                            |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Fees & Recoveries                           | (33,008)                    | (23,070)                  | (24,820)               |                                    |                            | (24,820)                | (1,750)                            | 7.59                              |
| <b>TOTAL REVENUES</b>                       | <b>(33,008)</b>             | <b>(23,070)</b>           | <b>(24,820)</b>        |                                    |                            | <b>(24,820)</b>         | <b>(1,750)</b>                     | <b>7.59</b>                       |
| <b>NET REVENUE Required from User Rates</b> | <b>4,084,500</b>            | <b>4,022,440</b>          | <b>4,116,340</b>       |                                    |                            | <b>4,116,340</b>        | <b>93,900</b>                      | <b>2.33</b>                       |

### STAFFING (stated in FTE)

## Haldimand County 2019 Rate Supported Operating Budget

### Direct Wastewater Operations

|   | <b>2018<br/>Current<br/>Forecast</b> | <b>2018<br/>Revised<br/>Budget</b> | <b>2019<br/>Base<br/>Budget</b> | <b>2019<br/>Cncl. Appr.<br/>Initiatives</b> | <b>2019<br/>New<br/>Initiatives</b> | <b>2019<br/>Total<br/>Budget</b> | <b>2019<br/>Budget \$<br/>Incr / (Decr)</b> | <b>2019<br/>Budget %<br/>Incr / (Decr)</b> |
|---|--------------------------------------|------------------------------------|---------------------------------|---|-------------------------------------|----------------------------------|---|--|
| <b>EXPENDITURES:</b>                        |                                      |                                    |                                 |   |                                     |                                  |   |  |
| Salaries, Wages & Benefits                  | 215,895                              | 216,000                            | 253,090                         |   |                                     | 253,090                          | 37,090                                      | 17.17                                      |
| Supplies & Materials                        | 19,242                               | 17,500                             | 19,000                          |   |                                     | 19,000                           | 1,500                                       | 8.57                                       |
| Services                                    | 1,071,599                            | 1,179,660                          | 1,096,150                       |   |                                     | 1,096,150                        | (83,510)                                    | (7.08)                                     |
| Veolia Operating Services Charges           | 2,477,170                            | 2,477,170                          | 2,548,490                       |   |                                     | 2,548,490                        | 71,320                                      | 2.88                                       |
| Interdepartmental Charges                   | 80,640                               | 75,880                             | 82,460                          |   |                                     | 82,460                           | 6,580                                       | 8.67                                       |
| <b>TOTAL EXPENDITURES</b>                   | <b>3,864,546</b>                     | <b>3,966,210</b>                   | <b>3,999,190</b>                |   |                                     | <b>3,999,190</b>                 | <b>32,980</b>                               | <b>0.83</b>                                |
| <b>REVENUES:</b>                            |                                      |                                    |                                 |   |                                     |                                  |   |  |
| <b>TOTAL REVENUES</b>                       |                                      |                                    |                                 |   |                                     |                                  |   |  |
| <b>NET REVENUE Required from User Rates</b> | <b>3,864,546</b>                     | <b>3,966,210</b>                   | <b>3,999,190</b>                |   |                                     | <b>3,999,190</b>                 | <b>32,980</b>                               | <b>0.83</b>                                |
| <b>STAFFING (stated in FTE)</b>             |                                      |                                    |                                 |   |                                     |                                  |   |  |
| Full Time                                   |                                      | 2.50                               | 2.84                            |   |                                     | 2.84                             |   |  |



## Haldimand County 2019 Rate Supported Operating Budget

### Wastewater User Fees

|   | <b>2018<br/>Current<br/>Forecast</b> | <b>2018<br/>Revised<br/>Budget</b> | <b>2019<br/>Base<br/>Budget</b> | <b>2019<br/>Cncl. Appr.<br/>Initiatives</b> | <b>2019<br/>New<br/>Initiatives</b> | <b>2019<br/>Total<br/>Budget</b> | <b>2019<br/>Budget \$<br/>Incr / (Decr)</b> | <b>2019<br/>Budget %<br/>Incr / (Decr)</b> |
|---|--------------------------------------|------------------------------------|---------------------------------|---|-------------------------------------|----------------------------------|---|--|
| <b>EXPENDITURES:</b>                        |                                      |                                    |                                 |   |                                     |                                  |   |  |
| <b>TOTAL EXPENDITURES</b>                   | <hr/>                                |                                    |                                 |   |                                     |                                  |   |  |
| <b>REVENUES:</b>                            |                                      |                                    |                                 |   |                                     |                                  |   |  |
| Municipal Recoveries                        | (39,028)                             | (58,320)                           | (49,000)                        |   |                                     | (49,000)                         | 9,320                                       | (15.98)                                    |
| Recoveries from New Credit                  | (443)                                | (500)                              | (500)                           |   |                                     | (500)                            |   |  |
| Fees & Recoveries                           | (2,156,527)                          | (1,809,670)                        | (1,868,850)                     |   |                                     | (1,868,850)                      | (59,180)                                    | 3.27                                       |
| Transfers from Reserves/Reserve Funds       | (480,222)                            | (480,240)                          | (473,640)                       |   |                                     | (473,640)                        | 6,600                                       | (1.37)                                     |
| <b>TOTAL REVENUES</b>                       | <b>(2,676,220)</b>                   | <b>(2,348,730)</b>                 | <b>(2,391,990)</b>              |   |                                     | <b>(2,391,990)</b>               | <b>(43,260)</b>                             | <b>1.84</b>                                |
| <b>NET REVENUE Required from User Rates</b> | <b>(2,676,220)</b>                   | <b>(2,348,730)</b>                 | <b>(2,391,990)</b>              |   |                                     | <b>(2,391,990)</b>               | <b>(43,260)</b>                             | <b>1.84</b>                                |

### STAFFING (stated in FTE)

## Haldimand County 2019 Rate Supported Operating Budget

### Wastewater User Rates Revenue

|   | 2018<br>Current<br>Forecast | 2018<br>Revised<br>Budget | 2019<br>Base<br>Budget | 2019<br>Cncl. Appr.<br>Initiatives | 2019<br>New<br>Initiatives | 2019<br>Total<br>Budget | 2019<br>Budget \$<br>Incr / (Decr) | 2019<br>Budget %<br>Incr / (Decr) |
|---|-----------------------------|---------------------------|------------------------|------------------------------------|----------------------------|-------------------------|------------------------------------|-----------------------------------|
| <b>REVENUES:</b>                            |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Revenue Required from User Rates            |                             |                           |                        |                                    |                            |                         |                                    |                                   |
| Base Charge - Residential                   | (2,562,027)                 | (2,493,520)               | (2,441,450)            | (208,030)                          |                            | (2,649,480)             | (155,960)                          | 6.25                              |
| Consumption - Residential                   | (2,157,897)                 | (1,976,370)               | (2,165,350)            |                                    |                            | (2,165,350)             | (188,980)                          | 9.56                              |
| Base Charge - Commercial                    | (572,642)                   | (653,330)                 | (651,630)              |                                    |                            | (651,630)               | 1,700                              | (0.26)                            |
| Consumption - Commercial                    | (1,195,583)                 | (1,170,700)               | (1,135,720)            |                                    |                            | (1,135,720)             | 34,980                             | (2.99)                            |
| <b>TOTAL REVENUES</b>                       | <b>(6,488,149)</b>          | <b>(6,293,920)</b>        | <b>(6,394,150)</b>     | <b>(208,030)</b>                   |                            | <b>(6,602,180)</b>      | <b>(308,260)</b>                   | <b>4.90</b>                       |
| <b>NET REVENUE Required from User Rates</b> | <b>(6,488,149)</b>          | <b>(6,293,920)</b>        | <b>(6,394,150)</b>     | <b>(208,030)</b>                   |                            | <b>(6,602,180)</b>      | <b>(308,260)</b>                   | <b>4.90</b>                       |

### STAFFING (stated in FTE)



# WATER & WASTEWATER APPENDICES

HALDIMAND COUNTY

2019 DRAFT CAPITAL BUDGET AND FORECAST

CAPITAL FINANCING PRINCIPLES

| <u>Principles 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, based on \$650/light   |
|                               | 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 for 2015. 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 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 (50%) and development (50%) 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                | County Debt Portion   | Annual debt repayments will not exceed 10% of own source revenues. Debt will only be applied to projects under the following principles:<br>Gross Project Costs < \$1 million: Not eligible for debt<br>Gross Project Costs between \$1 Million and \$10 Million : Debt financed for a period of 10 years.<br>Gross Project Costs > \$10 million and asset life >20 years: Debt financed for a period of 20 years.<br>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 (growth related debt)                                 | DC debt will be applied under the following circumstances:<br>- projects where issuing debt for County share of project, and development charges funding is applicable, DC debt will be considered if insufficient development charges receipts are available.<br>- if the DCRF results in a negative balance, a review of significant DC funded projects will occur to review for potential DC debt issuance  |

| <u>Application of Funding Sources for Specific Capital Projects</u> |   |
|---|---|
| <u>Nature of Project</u>  | <u>Hierarchy of Funding Source</u>  |
| <b>Replacements/SOGR</b>  | External Revenues<br>Applicable Grants<br>Development Charges (if applicable)<br>Specific Capital Replacement Reserve/Reserve Funds<br>Debt Financing |
| <b>New Initiatives/Enhancements</b>                                 | External Revenues<br>Applicable Grants<br>Development Charges (if applicable)<br>Specific Capital Replacement Reserve/Reserve Funds<br>Debt Financing |



2019 Debt History

| TAX SUPPORTED  |            |       |            |                 |                    |                       |                                     |   |                      |                     |                           |   |          |
|--|------------|-------|------------|-----------------|--------------------|-----------------------|-------------------------------------|---|----------------------|---------------------|---------------------------|---|----------|
| Project  | ByLaw #    | Payee | Pmt Method | date of issue   | Original Principal | Current Interest rate | Annual Principal Payments (average) | Outstanding Principal (as at December 31, 2018) | 2019 Annual Payments | offsetting funding  | Net County Responsibility | Outstanding Principal (as at December 31, 2019) | Maturity |
| Lowbanks - Firehall and Community Centre             | 1392/13    | IO    | PAD        | October 1, 2013 | \$898,500          | 3.36%                 | \$89,850                            | \$449,250                                       | \$104,188            | 0                   | \$104,188                 | \$359,400                                       | 2023     |
| Cayuga Fire Station                                  | 1711/16    | IO    | PAD        | October 3, 2016 | \$1,502,800        | 2.07%                 | \$150,280                           | \$1,202,240                                     | \$174,387            | (119,453)           | \$54,934                  | \$1,051,960                                     | 2026     |
| Hagersville Fire Station                             | 1711/16    | IO    | PAD        | October 3, 2016 | \$1,747,700        | 2.07%                 | \$174,770                           | \$1,398,160                                     | \$202,805            | (27,084)            | \$175,721                 | \$1,223,390                                     | 2026     |
| South Haldimand Fire Station                         | 1711/16    | IO    | PAD        | October 3, 2016 | \$1,236,300        | 2.07%                 | \$123,630                           | \$989,040                                       | \$143,462            | (46,904)            | \$96,558                  | \$865,410                                       | 2026     |
| Cayuga EMS Station                                   | 1711/16    | IO    | PAD        | October 3, 2016 | \$512,900          | 2.07%                 | \$51,290                            | \$410,320                                       | \$59,517             | (8,877)             | \$50,640                  | \$359,030                                       | 2026     |
| Hagersville EMS Station                              | 1711/16    | IO    | PAD        | October 3, 2016 | \$710,400          | 2.07%                 | \$71,040                            | \$568,320                                       | \$82,436             | (11,059)            | \$71,377                  | \$497,280                                       | 2026     |
| Grandview  | 824/07     | IO    | PAD        | July 16, 2007   | \$17,000,000       | 5.27%                 | \$850,000                           | \$7,650,000                                     | \$1,242,048          | (483,552)           | \$758,496                 | \$6,800,000                                     | 2027     |
| Grandview - New Debt                                 | 1393/13    | IO    | PAD        | October 1, 2013 | \$1,686,000        | 3.82%                 | \$112,453                           | \$1,124,534                                     | \$154,334            | \$0                 | \$154,334                 | \$1,012,080                                     | 2028     |
| HCCC - Balloon & New Debt                            | 1392/13    | IO    | PAD        | October 1, 2013 | \$3,658,000        | 3.36%                 | \$365,800                           | \$1,829,000                                     | \$424,173            | (173,911)           | \$250,262                 | \$1,463,200                                     | 2023     |
| Cayuga Arena   | 1394/13    | IO    | PAD        | October 1, 2013 | \$6,620,400        | 4.11%                 | \$331,020                           | \$4,965,300                                     | \$531,683            | (282,145)           | \$249,539                 | \$4,634,280                                     | 2033     |
| Dunnville Arena                                      | 1394/13    | IO    | PAD        | October 1, 2013 | \$7,656,900        | 4.11%                 | \$382,845                           | \$5,742,675                                     | \$614,924            | (185,130)           | \$429,794                 | \$5,359,830                                     | 2033     |
| Dunnville Library                                    | 1829/17    | CDS   | PAD        | July 5, 2017    | \$864,700          | 1.30%                 | \$86,470                            | \$783,994                                       | \$96,323             | (96,323)            | \$0                       | \$702,306                                       | 2027     |
| Caledonia Lions Hall                                 | 1711/16    | IO    | PAD        | October 3, 2016 | \$1,653,000        | 2.07%                 | \$165,300                           | \$1,322,400                                     | \$191,816            | 0                   | \$191,816                 | \$1,157,100                                     | 2026     |
| <b>Total Tax Supported</b>                           |            |       |            |                 |                    |                       |                                     | <b>\$28,435,232</b>                             | <b>\$4,022,096</b>   | <b>-\$1,434,438</b> | <b>\$2,587,659</b>        | <b>\$25,485,266</b>                             |          |
| RATE SUPPORTED WATER AND WASTEWATER                  |            |       |            |                 |                    |                       |                                     |   |                      |                     |                           |   |          |
| Project  | ByLaw #    | Payee | Pmt Method | date of issue   | Original Principal | Current Interest rate | Annual Principal Payments (average) | Outstanding Principal (as at December 31, 2018) | 2019 Annual Payments | offsetting funding  | Net County Responsibility | Outstanding Principal (as at December 31, 2019) | Maturity |
| <b>Water projects</b>                                |            |       |            |                 |                    |                       |                                     |   |                      |                     |                           |   |          |
| Cast Iron Watermain - Orkney Street, Caledonia       | CMHC Loans | CMHC  | PAD        | October 1, 2010 | \$228,000          | 2.87%                 | \$22,800                            | \$50,901  | \$26,552             |                     | \$26,552                  | \$25,811  | 2020     |
| Caithness Street - Argyle to McClung, Caledonia      | 1392/13    | IO    | PAD        | October 1, 2013 | \$789,900          | 3.36%                 | \$78,990                            | \$394,950                                       | \$91,595             |                     | \$91,595                  | \$315,960                                       | 2023     |
| Jarvis Watermain Replacement                         | 1829/17    | CDS   | PAD        | July 5, 2017    | \$2,250,000        | 1.30%                 | \$225,000                           | \$2,039,998                                     | \$250,639            | (62,660)            | \$187,979                 | \$1,827,441                                     | 2027     |
| Cast Iron Watermain - Dunnville                      | CMHC Loans | CMHC  | PAD        | October 1, 2010 | \$1,109,900        | 2.87%                 | \$110,900                           | \$247,586                                       | \$129,148            |                     | \$129,148                 | \$125,544                                       | 2020     |
| Nanticoke Electrical Servicing Upgrades              | 1829/17    | CDS   | PAD        | July 5, 2017    | \$100,000          | 1.30%                 | \$10,000                            | \$90,667  | \$11,140             | (11,140)            | \$0                       | \$81,220  | 2027     |
| Nanticoke Filter Building Expansion                  | 1829/17    | CDS   | PAD        | July 5, 2017    | \$1,704,400        | 1.30%                 | \$170,440                           | \$1,545,321                                     | \$189,862            | (47,465)            | \$142,396                 | \$1,384,307                                     | 2027     |
| Nanticoke High Rate Sedimentation Capacity Expansion | 1829/17    | CDS   | PAD        | July 5, 2017    | \$1,337,400        | 1.30%                 | \$133,740                           | \$1,212,575                                     | \$148,980            | (37,239)            | \$111,740                 | \$1,086,231                                     | 2027     |
| Nanticoke Water System Filter Replacement            | 1829/17    | CDS   | PAD        | July 5, 2017    | \$2,340,900        | 1.30%                 | \$234,090                           | \$2,122,413                                     | \$260,765            | (260,765)           | \$0                       | \$1,901,269                                     | 2027     |
| Nanticoke Water Treatment Process                    | 1829/17    | CDS   | PAD        | July 5, 2017    | \$2,983,200        | 1.30%                 | \$298,320                           | \$2,704,765                                     | \$332,314            | (83,078)            | \$249,235                 | \$2,422,943                                     | 2027     |
| <b>Wastewater Projects</b>                           |            |       |            |                 |                    |                       |                                     |   |                      |                     |                           |   |          |
| Caithness Street - Argyle to McClung                 | 1392/13    | IO    | PAD        | October 1, 2013 | \$502,800          | 3.36%                 | \$50,280                            | \$251,400                                       | \$58,304             |                     | \$58,304                  | \$201,120                                       | 2023     |
| Caledonia Water Pollution Control Upgrade Balloon    | 1392/13    | IO    | PAD        | October 1, 2013 | \$3,024,000        | 3.36%                 | \$302,400                           | \$1,512,000                                     | \$350,656            | (227,926)           | \$122,730                 | \$1,209,600                                     | 2023     |
| Caledonia WWTP Upgrades                              | 1829/17    | CDS   | PAD        | July 5, 2017    | \$628,700          | 1.30%                 | \$62,870                            | \$570,021                                       | \$70,034             | (70,034)            | \$0                       | \$510,628                                       | 2027     |
| Upgrade WTP - Hagersville                            | CMHC Loans | CMHC  | PAD        | October 1, 2010 | \$3,146,000        | 2.87%                 | \$314,600                           | \$702,350                                       | \$366,365            | (162,000)           | \$204,365                 | \$356,143                                       | 2020     |
| Jarvis Lagoon Upgrades                               | 1829/17    | CDS   | PAD        | July 5, 2017    | \$122,700          | 1.30%                 | \$12,270                            | \$111,248                                       | \$13,668             | (13,668)            | \$0                       | \$99,656  | 2027     |
| Upgrade WTP - Cayuga                                 | CMHC Loans | CMHC  | PAD        | October 1, 2010 | \$2,404,300        | 2.87%                 | \$240,430                           | \$536,764                                       | \$279,991            |                     | \$279,991                 | \$272,179                                       | 2020     |
| <b>Total Rate Supported Water and Wastewater</b>     |            |       |            |                 |                    |                       |                                     | <b>\$14,092,959</b>                             | <b>\$2,580,010</b>   | <b>-\$975,976</b>   | <b>\$1,604,034</b>        | <b>\$11,820,052</b>                             |          |

Total Debt:

|                     |                    |                     |                    |                     |
|---------------------|--------------------|---------------------|--------------------|---------------------|
| <b>\$42,528,191</b> | <b>\$6,602,106</b> | <b>-\$2,410,414</b> | <b>\$4,191,693</b> | <b>\$37,305,318</b> |
|---------------------|--------------------|---------------------|--------------------|---------------------|

HALDIMAND COUNTY

FORECAST OF CAPITAL REPLACEMENT RESERVE FUND - WATER  
FOR THE YEARS 2019 TO 2028

|  | 2018             | 2019             | 2020             | 2021             | 2022             | 2023             | 2024             | 2025             | 2026             | 2027             | 2028             |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|  | <u>WATER</u>     | <u>WATER</u>     | <u>WATER</u>     | <u>WATER</u>     | <u>WATER</u>     | <u>WATER</u>     | <u>WATER</u>     | <u>WATER</u>     | <u>WATER</u>     | <u>WATER</u>     | <u>WATER</u>     |
|  | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               |
| <b>Opening Balance January 1st</b>           | <b>6,102,819</b> | <b>7,358,416</b> | <b>6,096,296</b> | <b>1,988,626</b> | <b>2,174,676</b> | <b>2,740,356</b> | <b>3,361,106</b> | <b>4,149,036</b> | <b>3,922,966</b> | <b>4,943,706</b> | <b>5,872,486</b> |
| <b>Source of Funds:</b>                      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Budgeted Annual Contribution                 | 955,350          | 1,043,570        | 1,132,630        | 1,393,350        | 1,499,080        | 1,610,050        | 1,690,960        | 1,691,540        | 1,690,820        | 1,691,400        | 2,381,960        |
| Contribution from Rate Stabilization Reserve | 4,600,000        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Interest Earned                              | 56,929           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| <b>Total Source of Funds</b>                 | <b>5,612,279</b> | <b>1,043,570</b> | <b>1,132,630</b> | <b>1,393,350</b> | <b>1,499,080</b> | <b>1,610,050</b> | <b>1,690,960</b> | <b>1,691,540</b> | <b>1,690,820</b> | <b>1,691,400</b> | <b>2,381,960</b> |
| <b>Use of Funds:</b>                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Commitment for Active Projects               | 4,356,683        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| New Initiative/Enhanced Service              |                  | 110,000          | 45,000           |                  |                  |                  |                  |                  |                  |                  |                  |
| Replacement/State of Good Repair             |                  | 2,195,690        | 5,195,300        | 1,207,300        | 933,400          | 989,300          | 903,030          | 1,917,610        | 670,080          | 762,620          | 1,783,900        |
| <b>Total Use of Funds</b>                    | <b>4,356,683</b> | <b>2,305,690</b> | <b>5,240,300</b> | <b>1,207,300</b> | <b>933,400</b>   | <b>989,300</b>   | <b>903,030</b>   | <b>1,917,610</b> | <b>670,080</b>   | <b>762,620</b>   | <b>1,783,900</b> |
| <b>Closing Balance December 31st</b>         | <b>7,358,416</b> | <b>6,096,296</b> | <b>1,988,626</b> | <b>2,174,676</b> | <b>2,740,356</b> | <b>3,361,106</b> | <b>4,149,036</b> | <b>3,922,966</b> | <b>4,943,706</b> | <b>5,872,486</b> | <b>6,470,546</b> |

FORECAST OF CAPITAL REPLACEMENT RESERVE FUND - SEWER  
FOR THE YEARS 2019 TO 2028

|  | 2018              | 2019              | 2020              | 2021              | 2022              | 2023              | 2024              | 2025             | 2026             | 2027             | 2028             |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|
|  | <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>     |
|  | \$                | \$                | \$                | \$                | \$                | \$                | \$                | \$               | \$               | \$               | \$               |
| <b>Opening Balance January 1st</b>           | <b>11,325,960</b> | <b>10,056,277</b> | <b>10,853,567</b> | <b>9,671,467</b>  | <b>11,297,597</b> | <b>11,424,517</b> | <b>10,543,178</b> | <b>9,785,378</b> | <b>8,594,588</b> | <b>9,579,089</b> | <b>8,798,509</b> |
| <b>Source of Funds:</b>                      |                   |                   |                   |                   |                   |                   |                   |                  |                  |                  |                  |
| Budgeted Annual Contribution                 | 2,381,140         | 2,420,000         | 1,334,760         | 1,865,990         | 1,910,550         | 1,949,120         | 2,135,970         | 2,163,600        | 2,190,810        | 2,218,030        | 2,245,130        |
| Contribution from Rate Stabilization Reserve |                   |                   |                   | 1,750,000         |                   |                   |                   |                  |                  |                  |                  |
| Contribution: Leachate                       |                   |                   |                   |                   |                   |                   |                   |                  |                  |                  |                  |
| Leachate Norfolk Capital component           |                   |                   |                   |                   |                   |                   |                   |                  |                  |                  |                  |
| Leachate Haldimand Capital component         | 27,140            | 27,140            | 27,140            | 27,140            | 27,140            | 27,140            | 27,140            | 27,140           | 27,140           | 27,140           | 27,140           |
| Interest Earned                              | 105,976           |                   |                   |                   |                   |                   |                   |                  |                  |                  |                  |
| <b>Total Source of Funds</b>                 | <b>2,514,256</b>  | <b>2,447,140</b>  | <b>1,361,900</b>  | <b>3,643,130</b>  | <b>1,937,690</b>  | <b>1,976,260</b>  | <b>2,163,110</b>  | <b>2,190,740</b> | <b>2,217,950</b> | <b>2,245,170</b> | <b>2,272,270</b> |
| <b>Use of Funds:</b>                         |                   |                   |                   |                   |                   |                   |                   |                  |                  |                  |                  |
| Commitment for Active Projects               | 3,783,939         |                   |                   |                   |                   |                   |                   |                  |                  |                  |                  |
| New Initiative/Enhanced Service              |                   | 25,000            | 87,500            | 0                 | 225,000           | 0                 | 0                 | 0                | 0                | 0                | 0                |
| Replacement/State of Good Repair             |                   | 1,624,850         | 2,456,500         | 2,017,000         | 1,585,770         | 2,857,600         | 2,920,910         | 3,381,530        | 1,233,450        | 3,025,750        | 2,816,140        |
| <b>Total Use of Funds</b>                    | <b>3,783,939</b>  | <b>1,649,850</b>  | <b>2,544,000</b>  | <b>2,017,000</b>  | <b>1,810,770</b>  | <b>2,857,600</b>  | <b>2,920,910</b>  | <b>3,381,530</b> | <b>1,233,450</b> | <b>3,025,750</b> | <b>2,816,140</b> |
| <b>Closing Balance December 31st</b>         | <b>10,056,277</b> | <b>10,853,567</b> | <b>9,671,467</b>  | <b>11,297,597</b> | <b>11,424,517</b> | <b>10,543,178</b> | <b>9,785,378</b>  | <b>8,594,588</b> | <b>9,579,089</b> | <b>8,798,509</b> | <b>8,254,639</b> |

**HALDIMAND COUNTY**

**FORECAST OF FEDERAL GAS TAX REVENUE RESERVE FUND  
FOR THE YEARS 2019 TO 2028**

|   | <u>2018</u>      | <u>2019</u>      | <u>2020</u>      | <u>2021</u>      | <u>2022</u>      | <u>2023</u>      | <u>2024</u>      | <u>2025</u>      | <u>2026</u>      | <u>2027</u>      | <u>2028</u>      |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|   | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               |
| <b>Opening Balance January 1st</b>  | <b>5,773,309</b> | <b>2,482,391</b> | <b>3,672,441</b> | <b>4,744,260</b> | <b>2,539,480</b> | <b>2,531,709</b> | <b>2,332,328</b> | <b>1,582,567</b> | <b>2,160,176</b> | <b>1,277,715</b> | <b>1,010,124</b> |
| Source of Funds:  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Budgeted Contribution   | 2,858,687        | 2,767,150        | 2,767,150        | 2,892,929        | 2,892,929        | 3,018,709        | 3,018,709        | 3,018,709        | 3,018,709        | 3,018,709        | 3,018,709        |
| Interest Earned   | 53,172           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| <b>Total Source of Funds</b>  | <b>2,911,859</b> | <b>2,767,150</b> | <b>2,767,150</b> | <b>2,892,929</b> | <b>2,892,929</b> | <b>3,018,709</b> | <b>3,018,709</b> | <b>3,018,709</b> | <b>3,018,709</b> | <b>3,018,709</b> | <b>3,018,709</b> |
| Use of Funds:   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Commitment for Active Projects (Tax)                                      | 1,467,756        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Commitment for Active Projects (Water/Wastewater)                         | 4,735,021        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Contribution to State of Good Repair Projects (Tax Supported)             |                  |                  |                  | 650,000          | 1,380,000        |                  |                  | 280,000          | 280,000          |                  | 1,400,000        |
| Contribution to New Initiatives/Enhanced Service Projects (Tax Supported) |                  | 819,990          | 848,340          | 1,162,710        | 1,100,700        | 1,054,440        | 1,445,400        | 1,260,900        | 866,520          | 894,150          | 1,083,790        |
| Contribution to New Initiatives/Enhanced Service Projects (Water)         |                  |                  |                  | 200,000          |                  |                  |                  |                  |                  |                  |                  |
| Contribution to New Initiatives/Enhanced Service Projects (Wastewater)    |                  | 19,110           | 476,990          | 1,060,000        |                  | 380,000          |                  |                  |                  |                  |                  |
| Contribution to State of Good Repair Projects (Water)                     |                  | 378,000          | 200,000          | 2,025,000        | 250,000          | 1,783,650        | 1,892,750        | 900,200          | 575,250          | 2,062,750        | 1,000,000        |
| Contribution to State of Good Repair Projects (Wastewater)                |                  | 360,000          | 170,000          |                  | 170,000          |                  | 430,320          |                  | 2,179,400        | 329,400          | 499,400          |
| <b>Total Use of Funds</b>   | <b>6,202,777</b> | <b>1,577,100</b> | <b>1,695,330</b> | <b>5,097,710</b> | <b>2,900,700</b> | <b>3,218,090</b> | <b>3,768,470</b> | <b>2,441,100</b> | <b>3,901,170</b> | <b>3,286,300</b> | <b>3,983,190</b> |
| <b>Closing Balance December 31st</b>                                      | <b>2,482,391</b> | <b>3,672,441</b> | <b>4,744,260</b> | <b>2,539,480</b> | <b>2,531,709</b> | <b>2,332,328</b> | <b>1,582,567</b> | <b>2,160,176</b> | <b>1,277,715</b> | <b>1,010,124</b> | <b>45,643</b>    |



**HALDIMAND COUNTY**

**DEVELOPMENT CHARGES RESERVE FUND - WATER  
FOR THE YEARS 2019 TO 2028**

|  | 2018             | 2019           | 2020           | 2021           | 2022             | 2023             | 2024               | 2025               | 2026               | 2027               | 2028               |
|--|------------------|----------------|----------------|----------------|------------------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|  | \$               | \$             | \$             | \$             | \$               | \$               | \$                 | \$                 | \$                 | \$                 | \$                 |
| <b>Opening Balance January 1st</b>                               | <b>1,060,269</b> | <b>306,524</b> | <b>343,619</b> | <b>392,541</b> | <b>190,834</b>   | <b>(104,078)</b> | <b>(712,644)</b>   | <b>(1,280,571)</b> | <b>(1,866,286)</b> | <b>(2,273,126)</b> | <b>(2,819,711)</b> |
| <b>Source of Funds:</b>  |                  |                |                |                |                  |                  |                    |                    |                    |                    |                    |
| Actual Receipts to December 18th                                 | 203,557          |                |                |                |                  |                  |                    |                    |                    |                    |                    |
| Receipts expected per DC study (prorated if part year)           |                  | 496,840        | 506,780        | 516,910        | 528,970          | 539,550          | 550,340            | 561,340            | 572,570            | 584,020            | 595,700            |
| Additional Development Growth Estimate - Above DC Study (note 1) | 0                | 118,560        | 120,930        | 123,350        | 124,020          | 126,500          | 129,030            | 131,610            | 134,240            | 136,930            | 139,670            |
| Interest Earned  | 10,048           | 7,995          | 9,052          | 7,732          | 1,858            | (7,886)          | (19,246)           | (30,386)           | (39,970)           | (49,176)           | (56,938)           |
| <b>Total Source of Funds</b>                                     | <b>213,605</b>   | <b>623,395</b> | <b>636,762</b> | <b>647,992</b> | <b>654,848</b>   | <b>658,164</b>   | <b>660,124</b>     | <b>662,564</b>     | <b>666,840</b>     | <b>671,774</b>     | <b>678,432</b>     |
| <b>Use of Funds:</b>   |                  |                |                |                |                  |                  |                    |                    |                    |                    |                    |
| DC debt repayment (note 2)                                       | 502,279          | 502,350        | 502,290        | 502,100        | 501,910          | 502,040          | 502,100            | 501,670            | 502,200            | 501,780            | 0                  |
| Forecasted DC debt repayment (note 3)                            |                  |                |                |                | 408,150          | 398,290          | 388,630            | 378,570            | 368,710            | 358,850            | 575,280            |
| Proposed Projects-Capital Forecast (Tax)                         |                  | 17,500         |                |                |                  | 11,250           |                    |                    |                    |                    | 11,250             |
| Proposed Projects-Capital Forecast (WWW) (note 4)                | 465,072          | 66,450         | 85,550         | 347,600        | 39,700           | 355,150          | 337,320            | 368,040            | 202,770            | 357,730            | 349,200            |
| <b>Total Use of Funds</b>  | <b>967,350</b>   | <b>586,300</b> | <b>587,840</b> | <b>849,700</b> | <b>949,760</b>   | <b>1,266,730</b> | <b>1,228,050</b>   | <b>1,248,280</b>   | <b>1,073,680</b>   | <b>1,218,360</b>   | <b>935,730</b>     |
| <b>Closing Balance December 31st (note 5)</b>                    | <b>306,524</b>   | <b>343,619</b> | <b>392,541</b> | <b>190,834</b> | <b>(104,078)</b> | <b>(712,644)</b> | <b>(1,280,571)</b> | <b>(1,866,286)</b> | <b>(2,273,126)</b> | <b>(2,819,711)</b> | <b>(3,077,009)</b> |

Note 1: Additional development growth greater than estimated for the 2014 DC Study included in above analysis. A DC Study update will be finalized in 2019 which will incorporate updated growth analysis.

Note 2: Debt repayment includes Nanticoke New Pre-Treatment Process, Nanticoke High Rate Sedimentation Capacity Expansion, Nanticoke Filter Building Expansion, Nanticoke Filter Replacements, Nanticoke Electrical Servicing Upgrades (2018-2027) and Jarvis Main St and Talbot St to Town Limits (Engineering) (2018-2027).

Note 3: Forecasted debt repayment includes estimates for the following projects budgeted for completion between 2019 - 2028; Caledonia Elevated Tank (2022-2031) and Dunnville WTP Reservoir Expansion (2028-2037).

Note 4: Proposed project expenditures are based on the 2019 10 year capital forecast. Significant projects have been added to the 10 year forecast that were not included in 2014 DC Study which will be updated during the 2018 DC Study review.

Note 5: Balance of reserve fund at end of current forecast period (2028) is not reflective of actual receipts or costs. DC related Water/Wastewater related expenditure are forecasted over a 20 year period for the purpose of a DC study (end of the current DC Study 20 year period is 2034) and will be updated during the 2018 DC Study review.

**HALDIMAND COUNTY**

**DEVELOPMENT CHARGES RESERVE FUND - WASTEWATER  
FOR THE YEARS 2019 TO 2028**

|  | <u>2018</u>        | <u>2019</u>        | <u>2020</u>        | <u>2021</u>        | <u>2022</u>        | <u>2023</u>        | <u>2024</u>        | <u>2025</u>        | <u>2026</u>        | <u>2027</u>        | <u>2028</u>        |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|  | \$                 | \$                 | \$                 | \$                 | \$                 | \$                 | \$                 | \$                 | \$                 | \$                 | \$                 |
| <b>Opening Balance January 1st</b>                               | <b>(1,808,188)</b> | <b>(2,800,626)</b> | <b>(2,695,969)</b> | <b>(2,610,928)</b> | <b>(2,318,165)</b> | <b>(2,826,098)</b> | <b>(3,400,733)</b> | <b>(4,108,168)</b> | <b>(5,428,755)</b> | <b>(6,035,432)</b> | <b>(8,861,989)</b> |
| <b>Source of Funds:</b>  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Actual Receipts to December 18th                                 | 233,992            |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Receipts expected per DC study (prorated if part year)           |                    | 1,081,020          | 1,102,640          | 1,124,690          | 1,149,160          | 1,172,150          | 1,195,590          | 1,219,500          | 1,243,890          | 1,268,770          | 1,294,140          |
| Additional Development Growth Estimate - Above DC Study (note 1) |                    | 136,320            | 139,050            | 141,830            | 142,600            | 145,450            | 148,360            | 151,330            | 154,360            | 157,440            | 160,590            |
| Interest Earned  | (23,753)           | (52,654)           | (50,879)           | (46,687)           | (49,672)           | (60,125)           | (72,505)           | (92,087)           | (110,697)          | (143,847)          | (175,952)          |
| <b>Total Source of Funds</b>                                     | <b>210,239</b>     | <b>1,164,686</b>   | <b>1,190,811</b>   | <b>1,219,833</b>   | <b>1,242,088</b>   | <b>1,257,475</b>   | <b>1,271,445</b>   | <b>1,278,743</b>   | <b>1,287,553</b>   | <b>1,282,363</b>   | <b>1,278,778</b>   |
| <b>Use of Funds:</b>   |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| DC debt repayment (note 2)                                       | 480,222            | 473,630            | 747,820            | 571,670            | 558,260            | 544,920            | 336,750            | 329,820            | 323,140            | 316,310            | 225,960            |
| Forecasted DC debt repayment (note 3)                            |                    | 0                  | 0                  | 0                  | 1,037,030          | 1,051,540          | 1,484,360          | 1,446,690          | 1,409,940          | 1,372,860          | 1,336,392          |
| Proposed Projects-Capital Forecast (Tax)                         |                    | 17,500             |                    |                    |                    | 11,250             |                    |                    |                    |                    | 11,250             |
| Proposed Projects-Capital Forecast (WWW) (note 4)                | 722,455            | 568,900            | 357,950            | 355,400            | 154,730            | 224,400            | 157,770            | 822,820            | 161,150            | 2,419,750          | 203,460            |
| <b>Total Use of Funds</b>  | <b>1,202,676</b>   | <b>1,060,030</b>   | <b>1,105,770</b>   | <b>927,070</b>     | <b>1,750,020</b>   | <b>1,832,110</b>   | <b>1,978,880</b>   | <b>2,599,330</b>   | <b>1,894,230</b>   | <b>4,108,920</b>   | <b>1,777,062</b>   |
| <b>Closing Balance December 31st (note 5)</b>                    | <b>(2,800,626)</b> | <b>(2,695,969)</b> | <b>(2,610,928)</b> | <b>(2,318,165)</b> | <b>(2,826,098)</b> | <b>(3,400,733)</b> | <b>(4,108,168)</b> | <b>(5,428,755)</b> | <b>(6,035,432)</b> | <b>(8,861,989)</b> | <b>(9,360,272)</b> |

Note 1: Additional development growth greater than estimated for the 2014 DC Study included in above analysis. A DC Study update will be finalized in 2019 which will incorporate updated growth analysis.

Note 2: Caledonia WPCP Refinancing (2014-2023), Hagersville WPCP (2011-2020), Caledonia WWTP (2014-2023), Jarvis Lagoon Upgrades (2018-2027) as well as annual repayments for the following open/active projects in 2017; Caledonia Nairne St. Forcemain (2019-2028), Townsend Lagoon Upgrades (2019-2028), Dunnville WWTP upgrade (2020-2029), and Caledonia WWTP Aeration Head Diffusers (2019-2028).

Note 3: Forecasted debt repayment includes estimates for the following projects budgeted for completion between 2019 - 2028; Hagersville Grit Removal System (2023-2032), Cayuga Ouse St. Forcemain Twinning (2019-2028), Caledonia WWTP Wet Well expansion (2022-2031), Jarvis Additional WW Treatment Capacity (2022-2031), Cayuga Ouse St Pump Station (2022-2031), Caledonia Wastewater Treatment Plant Phase 1 (2024-2033).

Note 4: Proposed project expenditures are based on the 2019 10 year capital forecast. Significant projects have been added to the 10 year forecast that were not included in 2014 DC Study which will be updated during the 2018 DC Study review.

Note 5: Balance of reserve fund at end of current forecast period (2028) is not reflective of actual receipts or costs. DC related Water/Wastewater related expenditure are forecasted over a 20 year period for the purpose of a DC study (end of the current DC Study 20 year period is 2034) and will be updated during the 2018 DC Study review.

# HALDIMAND COUNTY

## APPENDIX G

### 2019 to 2028 RATE SUPPORTED CAPITAL FORECAST CO-ORDINATED PROJECTS

| Project   | Timing     | TAX CAPITAL (preliminary information) |                  |                    |                  |                    |                  | WATER AND WASTEWATER CAPITAL |                  |                    |                  | Project Total    |
|---|------------|---------------------------------------|------------------|--------------------|------------------|--------------------|------------------|------------------------------|------------------|--------------------|------------------|------------------|
|   |            | Roads                                 | Roads            | Storm              | Storm            | Other              | Other            | Water                        | Water            | Wastewater         | Wastewater       |                  |
|   |            | 2018 Open Projects                    | 10 Year Forecast | 2018 Open Projects | 10 Year Forecast | 2018 Open Projects | 10 Year Forecast | 2018 Open Projects           | 10 Year Forecast | 2018 Open Projects | 10 Year Forecast |                  |
| <b>Jarvis</b>   |            |                                       |                  |                    |                  |                    |                  |                              |                  |                    |                  |                  |
| Master Servicing Plan                                 | 2018, 2023 | 15,000                                | 15,000           | 15,000             | 15,000           | -                  | -                | 20,000                       | 20,000           | 15,000             | 15,000           | <b>130,000</b>   |
| <b>Cayuga</b>   |            |                                       |                  |                    |                  |                    |                  |                              |                  |                    |                  |                  |
| Master Servicing Plan                                 | 2022, 2027 | -                                     | 60,000           | -                  | 30,000           | -                  | -                | -                            | 50,000           | -                  | 50,000           | <b>190,000</b>   |
| Chippewa St W - Ottawa to Cayuga                      | 2020       | -                                     | 60,000           | -                  | -                | -                  | -                | -                            | 220,000          | -                  | -                | <b>280,000</b>   |
| Johnston St - Echo to end                             | 2022       | -                                     | 30,000           | -                  | -                | -                  | -                | -                            | 160,000          | -                  | -                | <b>190,000</b>   |
| Kerr St E - Winniet to 100 m west of Winniet          | 2022       | -                                     | 20,000           | -                  | -                | -                  | -                | -                            | 100,000          | -                  | -                | <b>120,000</b>   |
| Norton St E - Winniet to 60 m west of Winniet         | 2022       | -                                     | 20,000           | -                  | -                | -                  | -                | -                            | 60,000           | -                  | -                | <b>80,000</b>    |
| Ouse St N - Talbot to Cayuga St N                     | 2022       | -                                     | 100,000          | -                  | -                | -                  | -                | -                            | 330,000          | -                  | -                | <b>430,000</b>   |
| Ouse St S - Talbot to Tuscarora                       | 2020       | -                                     | 100,000          | -                  | -                | -                  | -                | -                            | 300,000          | -                  | -                | <b>400,000</b>   |
| Seneca St S - Tuscarora to McKay                      | 2020       | -                                     | 40,000           | -                  | -                | -                  | -                | -                            | 180,000          | -                  | -                | <b>220,000</b>   |
| Cayuga St S - Seneca to Brant                         | 2020       | -                                     | 30,000           | -                  | -                | -                  | -                | -                            | 110,000          | -                  | -                | <b>140,000</b>   |
| Brant St - Ouse St S to Cayuga St S                   | 2020       | -                                     | 20,000           | -                  | -                | -                  | -                | -                            | 90,000           | -                  | -                | <b>110,000</b>   |
| <b>Caledonia</b>                                      |            |                                       |                  |                    |                  |                    |                  |                              |                  |                    |                  |                  |
| Master Servicing Plan                                 | 2018, 2023 | 150,000                               | 50,000           | 33,600             | 30,000           | -                  | -                | 50,000                       | 50,000           | 50,000             | 50,000           | <b>463,600</b>   |
| Argyle Bridge Watermain and Sanitary Sewer Relocation | 2018-2019  | -                                     | -                | -                  | -                | -                  | -                | 82,000                       | 82,000           | 46,000             | 46,000           | <b>256,000</b>   |
| Blair St - Caithness to Park Lane                     | 2021       | -                                     | 30,000           | -                  | -                | -                  | -                | -                            | 120,000          | -                  | -                | <b>150,000</b>   |
| Cameron St - Caithness to Ross                        | 2021       | -                                     | 30,000           | -                  | -                | -                  | -                | -                            | 150,000          | -                  | -                | <b>180,000</b>   |
| Fife St W - Peebles to Argyle                         | 2019       | -                                     | 80,000           | -                  | -                | -                  | -                | -                            | 300,000          | -                  | 40,000           | <b>420,000</b>   |
| Park Lane - Inverness to end                          | 2021       | -                                     | 30,000           | -                  | -                | -                  | -                | -                            | 180,000          | -                  | -                | <b>210,000</b>   |
| Queen Ave - Caithness to end                          | 2021       | -                                     | 30,000           | -                  | -                | -                  | -                | -                            | 180,000          | -                  | -                | <b>210,000</b>   |
| Renfrew St E - Wigton to Berwick                      | 2019       | -                                     | 100,000          | -                  | -                | -                  | -                | -                            | 360,000          | -                  | 60,000           | <b>520,000</b>   |
| <b>Hagersville</b>                                    |            |                                       |                  |                    |                  |                    |                  |                              |                  |                    |                  |                  |
| Master Servicing Plan                                 | 2020, 2025 | -                                     | 60,000           | -                  | 30,000           | -                  | -                | -                            | 50,000           | -                  | 50,000           | <b>190,000</b>   |
| Foundry St - Tuscarora to end                         | 2023       | -                                     | 25,000           | -                  | -                | -                  | -                | -                            | 100,000          | -                  | -                | <b>125,000</b>   |
| Victoria St - Tuscarora to Main St N                  | 2023       | -                                     | 80,000           | -                  | -                | -                  | -                | -                            | 250,000          | -                  | -                | <b>330,000</b>   |
| <b>Dunnville</b>                                      |            |                                       |                  |                    |                  |                    |                  |                              |                  |                    |                  |                  |
| Alder St Reconstruction - Cedar to West               | 2018-2019  | 1,120,000                             | 900,000          | 1,731,500          | 1,250,000        | -                  | -                | 450,000                      | 400,000          | 425,000            | 360,000          | <b>6,636,500</b> |
| Master Servicing Plan                                 | 2021, 2026 | -                                     | 60,000           | -                  | 60,000           | -                  | -                | -                            | 60,000           | -                  | 60,000           | <b>240,000</b>   |
| Alley way - Broad to Central Lane                     | 2023       | -                                     | 10,000           | -                  | -                | -                  | -                | -                            | 150,000          | -                  | -                | <b>160,000</b>   |
| Main St E - 710 Main E to 50 m south                  | 2023       | -                                     | 10,000           | -                  | -                | -                  | -                | -                            | 50,000           | -                  | -                | <b>60,000</b>    |

## HALDIMAND COUNTY

## APPENDIX G

### 2019 to 2028 RATE SUPPORTED CAPITAL FORECAST CO-ORDINATED PROJECTS

| Project                                    | Timing      | TAX CAPITAL (preliminary information) |                              |                                |                              |                                |                              | WATER AND WASTEWATER CAPITAL   |                              |                                     |                                   | Project<br>Total  |
|--|-------------|---------------------------------------|------------------------------|--------------------------------|------------------------------|--------------------------------|------------------------------|--------------------------------|------------------------------|-------------------------------------|-----------------------------------|-------------------|
|  |             | Roads<br>2018 Open<br>Projects        | Roads<br>10 Year<br>Forecast | Storm<br>2018 Open<br>Projects | Storm<br>10 Year<br>Forecast | Other<br>2018 Open<br>Projects | Other<br>10 Year<br>Forecast | Water<br>2018 Open<br>Projects | Water<br>10 Year<br>Forecast | Wastewater<br>2018 Open<br>Projects | Wastewater<br>10 Year<br>Forecast |                   |
|  |             | <b>County Wide</b>                    |                              |                                |                              |                                |                              |                                |                              |                                     |                                   |                   |
| CCTV Inspection Program                    | 2018-2028   | -                                     | -                            | 30,000                         | 250,000                      | -                              | -                            | -                              | -                            | 55,000                              | 500,000                           | <b>835,000</b>    |
| Facility Condition Assessments             | 2018-2028   | -                                     | -                            | -                              | -                            | -                              | -                            | 75,000                         | 125,000                      | 109,290                             | 125,000                           | <b>434,290</b>    |
| SCADA Master Plan                          | 2018, 2021, | -                                     | -                            | -                              | -                            | -                              | -                            | 35,000                         | 70,000                       | 35,000                              | 70,000                            | <b>210,000</b>    |
| SCADA Maintenance                          | 2018-2028   | -                                     | -                            | -                              | -                            | -                              | -                            | 65,000                         | 300,000                      | 20,000                              | 200,000                           | <b>585,000</b>    |
| SCADA Technical Support                    | 2018-2028   | -                                     | -                            | -                              | -                            | -                              | -                            | 90,000                         | 400,000                      | 56,000                              | 400,000                           | <b>946,000</b>    |
| Asbestos Annual Inspection and Remediation | 2018-2028   | -                                     | -                            | -                              | -                            | 132,600                        | -                            | 9,600                          | 40,000                       | 9,800                               | 40,000                            | <b>232,000</b>    |
| <b>Total SUMMARY-Water and Wastewater</b>  |             | <b>1,285,000</b>                      | <b>1,990,000</b>             | <b>1,810,100</b>               | <b>1,665,000</b>             | <b>132,600</b>                 | -                            | <b>876,600</b>                 | <b>5,037,000</b>             | <b>821,090</b>                      | <b>2,066,000</b>                  | <b>15,683,390</b> |

**Note** - does not include prior year closed projects or prior year open projects with no impact in 2019-2028 or co-ordinated projects that do not have a water/wastewater component.

HALDIMAND COUNTY

2019 to 2028 RATE SUPPORTED CAPITAL FORECAST  
New Projects Added or Projects Deleted

PROJECTS GREATER THAN \$100,000

| Project  | Division                                 | Description   | New/Enhanced<br>SOGR | 2019      | 2020      | 2021    | 2022    | 2023    | 2024 | 2025 | 2026 | 2027 | 2028 | Total     |         |
|--|--|---|----------------------|-----------|-----------|---------|---------|---------|------|------|------|------|------|-----------|---------|
|  |  |   |                      |           |           |         |         |         |      |      |      |      |      |           |         |
| <b>PROJECTS ADDED - EXCLUDING ADDITION OF 2028 YEAR</b>                  |  |   |                      |           |           |         |         |         |      |      |      |      |      |           |         |
| <b>WATER</b>   |  |   |                      |           |           |         |         |         |      |      |      |      |      |           |         |
| 472.0031 Caledonia - Blair St - Caithness to Park Lane [CIW] [R]         | Water - Replacement and Upgrade Projects | Cast iron water main replacement project and asphalt overlay of existing surface.<br>Existing water main is 100 mm cast iron and has been identified for replacement to improve residential distribution and fireflow.  | SOGR                 | -         | -         | 120,000 | -       | -       | -    | -    | -    | -    | -    | 120,000   |         |
| 472.0032 Caledonia - Cameron St - Caithness to Ross [CIW] [R]            | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | -         | 150,000 | -       | -       | -    | -    | -    | -    | -    | -         | 150,000 |
| 472.0033 Caledonia - Fife St W - Peebles to Argyle [CIW] [WW] [R]        | Water - Replacement and Upgrade Projects |   | SOGR                 | 300,000   | -         | -       | -       | -       | -    | -    | -    | -    | -    | -         | 300,000 |
| 472.0034 Caledonia - Park Lane - Inverness to end [CIW] [R]              | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | -         | 180,000 | -       | -       | -    | -    | -    | -    | -    | -         | 180,000 |
| 472.0035 Caledonia - Queen Ave - Caithness to end [CIW] [R]              | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | -         | 180,000 | -       | -       | -    | -    | -    | -    | -    | -         | 180,000 |
| 472.0036 Caledonia - Renfrew St E - Wigton to Berwick [CIW] [WW] [R]     | Water - Replacement and Upgrade Projects |   | SOGR                 | 360,000   | -         | -       | -       | -       | -    | -    | -    | -    | -    | -         | 360,000 |
| 473.0017 Hagersville - Foundry St - Tuscarora to end [CIW] [R]           | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | -         | -       | -       | 100,000 | -    | -    | -    | -    | -    | -         | 100,000 |
| 473.0018 Hagersville - Victoria St - Tuscarora to Main St N [CIW] [R]    | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | -         | -       | -       | 250,000 | -    | -    | -    | -    | -    | -         | 250,000 |
| 475.0017 Cayuga - Chippewa St W - Ottawa to Cayuga [CIW] [R]             | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | 220,000   | -       | -       | -       | -    | -    | -    | -    | -    | -         | 220,000 |
| 475.0018 Cayuga - Johnston St - Echo to end [CIW] [R]                    | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | -         | -       | 160,000 | -       | -    | -    | -    | -    | -    | -         | 160,000 |
| 475.0019 Cayuga - Kerr St E - Winniet to 100 m west of Winniet [CIW] [R] | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | -         | -       | 100,000 | -       | -    | -    | -    | -    | -    | -         | 100,000 |
| 475.0021 Cayuga - Ouse St N - Talbot to Cayuga St N [CIW] [R]            | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | -         | -       | 330,000 | -       | -    | -    | -    | -    | -    | -         | 330,000 |
| 475.0022 Cayuga - Ouse St S - Talbot to Tuscarora [CIW] [R]              | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | 300,000   | -       | -       | -       | -    | -    | -    | -    | -    | -         | 300,000 |
| 475.0023 Cayuga - Seneca St S - Tuscarora to McKay [CIW] [R]             | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | 180,000   | -       | -       | -       | -    | -    | -    | -    | -    | -         | 180,000 |
| 475.0024 Cayuga - Cayuga St S - Seneca to Brant [CIW] [R]                | Water - Replacement and Upgrade Projects |   | SOGR                 | -         | 110,000   | -       | -       | -       | -    | -    | -    | -    | -    | -         | 110,000 |
| 476.0118 Dunnville - Alley way - Broad to Central Lane [CIW] [R]         | Water - Replacement and Upgrade Projects | SOGR  | -                    | -         | -         | -       | 150,000 | -       | -    | -    | -    | -    | -    | 150,000   |         |
| 476.0122 Dunnville - WTP Upgrades  | Water - Plants/Transmission Systems      | Previously planned projects to upgrade the Dunnville Water Treatment Plant were closed out and all efforts are being combined into this project, with an updated budget.  | SOGR                 | 550,000   | 3,750,000 | -       | -       | -       | -    | -    | -    | -    | -    | 4,300,000 |         |
| 476.0123 Dunnville - WTP PLC Replacements                                | Water - Plants/Transmission Systems      | new project identified by Water & Wastewater Engineering and Compliance Division  | SOGR                 | -         | -         | -       | -       | 210,000 | -    | -    | -    | -    | -    | 210,000   |         |
| 476.0125 Dunnville - Port Maitland Manual Screen Replacement             | Water - Plants/Transmission Systems      | new project identified by Water & Wastewater Engineering and Compliance Division  | SOGR                 | -         | -         | 110,000 | -       | -       | -    | -    | -    | -    | -    | 110,000   |         |
| 479.0087 Nanticoke - IPS - Pump Installation                             | Water - Plants/Transmission Systems      | This is a project from 2014 that was delayed due to Stelco restructuring. The existing pumps providing process water to industry are approaching the end of their service life and their configuration is extremely inefficient. This project will take advantage of grant funding available from the OPA to replace tired infrastructure and achieve a significant reduction in energy demand. The budget has been amended to reflect the current value of the Canadian dollar. Financing from Industries. | SOGR                 | 2,400,000 | -         | -       | -       | -       | -    | -    | -    | -    | -    | 2,400,000 |         |
| 479.0125 Nanticoke - IPS Forebay Headwall Structural Repairs             | Water - Plants/Transmission Systems      | new project identified by Water & Wastewater Engineering and Compliance Division. Partial funding from Industries.  | SOGR                 | 165,000   | -         | -       | -       | -       | -    | -    | -    | -    | -    | 165,000   |         |

**HALDIMAND COUNTY**

**APPENDIX H**

**2019 to 2028 RATE SUPPORTED CAPITAL FORECAST  
New Projects Added or Projects Deleted**

**PROJECTS GREATER THAN \$100,000**

| Project                                   | Division                            | Description  | New/Enhanced<br>SOGR | 2019                | 2020                | 2021              | 2022              | 2023              | 2024        | 2025             | 2026             | 2027             | 2028             | Total                |
|---|-------------------------------------|--|----------------------|---------------------|---------------------|-------------------|-------------------|-------------------|-------------|------------------|------------------|------------------|------------------|----------------------|
|   |                                     |  |                      |                     |                     |                   |                   |                   |             |                  |                  |                  |                  |                      |
| 479.0130 Nanticoke - East Reservoir Rehab | Water - Plants/Transmission Systems | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR                 | 140,000             | -                   | -                 | -                 | -                 | -           | -                | -                | -                | -                | 140,000              |
| 479.0134 Nanticoke - WTP PLC Replacements | Water - Plants/Transmission Systems | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR                 | -                   | 35,000              | -                 | -                 | -                 | -           | 15,000           | 55,000           | 38,000           | 25,000           | 168,000              |
| <b>TOTAL WATER - PROJECTS ADDED</b>       |                                     |  |                      | <b>\$ 3,915,000</b> | <b>\$ 4,595,000</b> | <b>\$ 740,000</b> | <b>\$ 590,000</b> | <b>\$ 710,000</b> | <b>\$ -</b> | <b>\$ 15,000</b> | <b>\$ 55,000</b> | <b>\$ 38,000</b> | <b>\$ 25,000</b> | <b>\$ 10,683,000</b> |

**WASTEWATER**

|   |                     |  |              |                   |                   |                   |                     |                   |                   |                   |             |                   |                   |                     |
|---|---------------------|--|--------------|-------------------|-------------------|-------------------|---------------------|-------------------|-------------------|-------------------|-------------|-------------------|-------------------|---------------------|
| 452.0107 Caledonia - Nairne St. Pump Station GENSET Replacement         | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | -                 | -                 | -                 | -                   | 185,000           | -                 | -                 | -           | -                 | -                 | 185,000             |
| 452.0108 Caledonia - WWTP GENSET Replacement                            | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | -                 | -                 | -                 | -                   | -                 | -                 | 225,000           | -           | -                 | -                 | 225,000             |
| 452.0109 Caledonia - WWTP PLC Replacements                              | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | -                 | -                 | -                 | -                   | -                 | -                 | -                 | -           | -                 | 115,000           | 115,000             |
| 452.0110 Caledonia - WWTP Filter Building Roof Replacement              | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | 12,000            | -                 | 135,000           | -                   | -                 | -                 | -                 | -           | -                 | -                 | 147,000             |
| 453.0059 Caledonia - Parkview Pump Station Upgrades                     | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | 40,000            | 215,000           | -                 | -                   | -                 | -                 | -                 | -           | -                 | -                 | 255,000             |
| 453.0061 Caledonia - WWTP PLC Replacements                              | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | -                 | -                 | -                 | -                   | -                 | -                 | -                 | -           | 120,000           | 170,000           | 290,000             |
| 453.0064 Hagersville - WWTP Control Building Roof Replacement           | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | -                 | -                 | 150,000           | -                   | -                 | -                 | -                 | -           | -                 | -                 | 150,000             |
| 455.0036 Cayuga - McKay St. Pump Station Upgrades and Pump Replacements | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | 190,000           | -                 | -                 | -                   | -                 | -                 | -                 | -           | -                 | -                 | 190,000             |
| 455.0040 Cayuga - Mechanical Aerator (rotor) Replacement                | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | -                 | -                 | -                 | 375,000             | -                 | -                 | -                 | -           | -                 | -                 | 375,000             |
| 455.0041 Cayuga - WWTP PLC Replacements                                 | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | -                 | -                 | -                 | -                   | -                 | 160,000           | -                 | -           | -                 | -                 | 160,000             |
| 456.0065 Dunnville - John St. Pump Station Upgrades                     | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | 80,000            | 550,000           | -                 | -                   | -                 | -                 | -                 | -           | -                 | -                 | 630,000             |
| 456.0074 Dunnville - Sludge Storage Cell #4 Upgrades and Screen         | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | -                 | -                 | -                 | 120,000             | 750,000           | -                 | -                 | -           | -                 | -                 | 870,000             |
| 456.0077 Dunnville - WWTP Wet-Well Valve Replacements                   | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | SOGR         | -                 | -                 | -                 | 400,000             | -                 | -                 | -                 | -           | -                 | -                 | 400,000             |
| 458.0005 Oswego Pump Station New Forcemain                              | Wastewater - Plants | new project identified by Water & Wastewater Engineering and Compliance Division | New/Enhanced | -                 | -                 | -                 | 225,000             | -                 | -                 | -                 | -           | -                 | -                 | 225,000             |
| <b>TOTAL WASTEWATER - PROJECTS ADDED</b>                                |                     |  |              | <b>\$ 322,000</b> | <b>\$ 765,000</b> | <b>\$ 285,000</b> | <b>\$ 1,120,000</b> | <b>\$ 935,000</b> | <b>\$ 160,000</b> | <b>\$ 225,000</b> | <b>\$ -</b> | <b>\$ 120,000</b> | <b>\$ 285,000</b> | <b>\$ 4,217,000</b> |

**HALDIMAND COUNTY**

APPENDIX H

**2019 to 2028 RATE SUPPORTED CAPITAL FORECAST  
New Projects Added or Projects Deleted**

**PROJECTS GREATER THAN \$100,000**

| Project | Division | Description | New/Enhanced<br>SOGR | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |
|---------|----------|-------------|----------------------|------|------|------|------|------|------|------|------|------|------|-------|
|---------|----------|-------------|----------------------|------|------|------|------|------|------|------|------|------|------|-------|

**PROJECTS DELETED - EXCLUDING REMOVAL OF 2018 YEAR**

**WATER**

|  |  |  |              |                   |                  |      |      |                   |                   |                   |                   |                   |      |                     |
|--|--|--|--------------|-------------------|------------------|------|------|-------------------|-------------------|-------------------|-------------------|-------------------|------|---------------------|
| 471.0016 Future Watermain Replacements (various locations) | Water - Replacement and Upgrade Projects | removed due to better identification of specific cast iron watermain program -placeholder no longer required | SOGR         | -                 | -                | -    | -    | 595,000           | 595,000           | 595,000           | 595,000           | 595,000           | -    | <b>2,975,000</b>    |
| 476.0111 Dunnville - Pre-Treatment Upgrades                | Water - Plants/Transmission Systems      | deferred to allow for additional study of raw water treatment requirements                                   | New/Enhanced | 200,000           | -                | -    | -    | -                 | -                 | -                 | -                 | -                 | -    | <b>200,000</b>      |
| 479.0006 Nanticoke - Filter Media Replacement              | Water - Plants/Transmission Systems      | removed based on review of filters as part of the Nanticoke WTP upgrades                                     | SOGR         | -                 | 60,000           | -    | -    | -                 | 60,000            | -                 | -                 | -                 | -    | <b>120,000</b>      |
| <b>TOTAL WATER - PROJECTS DELETED</b>                      |  |  |              | \$ <b>200,000</b> | \$ <b>60,000</b> | \$ - | \$ - | \$ <b>595,000</b> | \$ <b>655,000</b> | \$ <b>595,000</b> | \$ <b>595,000</b> | \$ <b>595,000</b> | \$ - | \$ <b>3,295,000</b> |

**WASTEWATER**

|  |  |  |  |      |      |      |      |      |      |      |      |      |      |      |
|--|--|--|--|------|------|------|------|------|------|------|------|------|------|------|
| <b>TOTAL WASTEWATER - PROJECTS DELETED</b> |  |  |  | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
|--|--|--|--|------|------|------|------|------|------|------|------|------|------|------|

**HALDIMAND COUNTY**  
**2019 to 2028 RATE SUPPORTED CAPITAL FORECAST**  
**Projects Moved - Shifts in Timing**

APPENDIX H

PROJECTS GREATER THAN \$100,000

| PROJECT  | DIVISION                                 | DESCRIPTION   | NEW/ENHANCED SOGR | 2019    | 2020      | 2021      | 2022    | 2023 | 2024    | 2025      | 2026    | 2027       | 2028    | Total      |
|--|--|---|-------------------|---------|-----------|-----------|---------|------|---------|-----------|---------|------------|---------|------------|
| <b>WATER</b>   |  |   |                   |         |           |           |         |      |         |           |         |            |         |            |
| 471.0010 Plant Optimization Program Support (various locations)  | Water - Plants/Transmission Systems      | Additional year (2020) for continued practice of optimization with a focus on public health protection and economics.   | SOGR              | 65,000  | 65,000    | -         | -       | -    | -       | -         | -       | -          | -       | 130,000    |
| 471.0021 Replacement of Cast Iron Watermains (various locations) | Water - Replacement and Upgrade Projects | Future years cast iron watermain replacements, location and section to be identified. (years 2019 to 2023 have been identified)                                 | SOGR              | -       | -         | -         | -       | -    | 650,000 | 650,000   | 650,000 | 650,000    | 650,000 | 3,250,000  |
| 472.0027 Caledonia - Elevated Storage Tank Replacement           | Water - Plants/Transmission Systems      | current study to be completed prior to engineering and construction beginning   | SOGR              | -       | 523,500   | 4,636,800 | -       | -    | -       | -         | -       | -          | -       | 5,160,300  |
| 479.0053 Nanticoke - Lowlift Pump Replacement                    | Water - Plants/Transmission Systems      | change in timing reflects estimated time of need  | SOGR              | -       | -         | 375,000   | -       | -    | -       | -         | -       | -          | -       | 375,000    |
| 479.0109 Nanticoke - Pre-Treatment Upgrades                      | Water - Plants/Transmission Systems      | change in timing based on current and projected water demand  | New/Enhanced      | -       | -         | 200,000   | -       | -    | -       | -         | -       | -          | -       | 200,000    |
| <b>WASTEWATER</b>  |  |   |                   |         |           |           |         |      |         |           |         |            |         |            |
| 451.0039 Pump Station Repairs/Replacement (various locations)    | Wastewater - Plants                      | \$250,000 removed from 2019 and 2020 as detailed projects are identified separately within this budget. Increased by \$100,000/year and added to 2021 and 2022. | SOGR              | -       | -         | 350,000   | 350,000 | -    | -       | -         | -       | -          | -       | 700,000    |
| 452.0093 Caledonia Wastewater Treatment Plant                    | Wastewater - Plants                      | change in timing for siting exercise and environmental assessment   | New/Enhanced      | 120,000 | 1,500,000 | 2,097,700 | -       | -    | -       | 5,682,600 | -       | 37,255,900 | -       | 46,656,200 |
| 458.0002 Oswego Lagoon Clean Out                                 | Wastewater - Plants                      | change in project timing reflects revised estimated time of need  | SOGR              | -       | -         | -         | -       | -    | 275,000 | -         | -       | -          | -       | 275,000    |



**HALDIMAND COUNTY**

**2019-2028 RATE SUPPORTED CAPITAL FORECAST  
Scope/Price Increase/Decrease**

**PROJECTS GREATER THAN \$100,000 FOR SCOPE INCREASE/DECREASE GREATER THAN \$25,000**

| <u>PROJECT</u>   | <u>DIVISION</u>                               | <u>DESCRIPTION</u>  | State of Good<br>Repair/New | 2018 to<br>2027 | 2019 to<br>2028 | Increase/<br>(Decrease) |
|--|---|---|-----------------------------|-----------------|-----------------|-------------------------|
| <b>WATER</b>   |   |   |                             |                 |                 |                         |
| 471.0021 Replacement of Cast Iron Watermains (various locations)     | Water - Replacement and Upgrade Projects      | Budget increased from \$500,000 for four consecutive years to \$650,000 for four consecutive years based on engineering work completed in 2018.                     | SOGR                        | 2,175,000       | 3,250,000       | <b>1,075,000</b>        |
| 472.0027 Caledonia - Elevated Storage Tank Replacement               | Water - Plants/Transmission Systems           | Engineering increased by \$385,000 and construction decreased by \$500,000 due to revised scope of work. Amended temporary financing costs associated with DC Debt. | SOGR                        | 5,373,200       | 5,160,300       | <b>(212,900)</b>        |
| <b>TOTAL WATER</b>   |   |   |                             |                 |                 | <b>\$ 862,100</b>       |
| <b>WASTEWATER</b>  |   |   |                             |                 |                 |                         |
| 451.0021 SCADA Technical Support                                     | Wastewater - Plants                           | Decreased from \$50,000/year to \$40,000/year based on historical actuals.  | SOGR                        | 500,000         | 400,000         | <b>(100,000)</b>        |
| 451.0039 Pump Station Repairs/Replacement (various locations)        | Wastewater - Plants                           | \$250,000 removed from 2019 and 2020 as detailed projects are identified separately within this budget. Increased by \$100,000/year and added to 2021 and 2022.     | SOGR                        | 500,000         | 700,000         | <b>200,000</b>          |
| 452.0053 Caledonia - Blower Replacements                             | Wastewater - Plants                           | cost estimate increased by \$50,000   | SOGR                        | 300,000         | 350,000         | <b>50,000</b>           |
| 452.0064 Caledonia - Remotes-Control Equipment Replacement (SCADA)   | Wastewater - Plants                           | additional pumping stations added to replacement schedule   | SOGR                        | 45,000          | 133,000         | <b>88,000</b>           |
| 452.0093 Caledonia Wastewater Treatment Plant                        | Wastewater - Plants                           | Additional estimated costs related to Wastewater Treatment Plant Options Study and land purchase.   | New/Enhanced                | 45,036,200      | 46,656,200      | <b>1,620,000</b>        |
| 453.0032 Hagersville - Remotes-Control Equipment Replacement (SCADA) | Wastewater - Plants                           | revised project costs identified in alignment with County SCADA master plan   | SOGR                        | 225,000         | 112,000         | <b>(113,000)</b>        |
| 456.0039 Dunnville - Alder St - Cedar to West [W] [SS] [R]           | Wastewater - Replacement and Upgrade Projects | \$375,000 open/active in 2018. Increased by \$60,000 in 2019 to reflect current estimates.  | SOGR                        | 675,000         | 360,000         | <b>(315,000)</b>        |
| <b>TOTAL WASTEWATER</b>  |   |   |                             |                 |                 | <b>\$ 1,430,000</b>     |





2019 Draft Rate Supported Water and Wastewater Council Approved New Initiatives

**Water**

Water share of costs related to Revised Organizational Structure and review of staff time allocations, Salaries, Benefits, Administration Charges as per report CAO-03-2018

**Total Water New Initiatives**

**Wastewater**

Wastewater share of costs related to Revised Organizational Structure and review of staff time allocations, Salaries, Benefits, Administration Charges as per report CAO-03-2018

**Total Wastewater New Initiatives**

|  | Council<br>Approved<br>Ongoing | Council<br>Approved<br>One Time | 2018 Total<br>Council<br>Approved<br>Initiatives |
|--|--------------------------------|---------------------------------|--|
|  | 12,970                         |                                 | 12,970   |
|  | <b>\$12,970</b>                | <b>\$0</b>                      | <b>\$12,970</b>                                  |
|  | 208,030                        |                                 | 208,030  |
|  | <b>\$208,030</b>               | <b>\$0</b>                      | <b>\$208,030</b>                                 |

**HALDIMAND COUNTY RATE SUPPORTED BUDGET**

| FORECAST OF RATE STABILIZATION RESERVE - WATER<br>FOR THE YEARS 2015 TO 2023 |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|  | 2015             | 2016             | 2017             | 2018             | 2019             | 2020             | 2021             | 2022             | 2023             |
|  | ACTUALS          | ACTUALS          | ACTUALS          | FORECAST         | BUDGET           | FORECAST         | FORECAST         | FORECAST         | FORECAST         |
|  | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               |
| <b>Opening Balance January 1st</b>   | <b>2,213,008</b> | <b>2,966,310</b> | <b>4,117,621</b> | <b>5,003,433</b> | <b>1,403,027</b> | <b>1,442,312</b> | <b>1,482,697</b> | <b>1,524,212</b> | <b>1,566,890</b> |
| Source of Funds:   |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Budgeted Annual Contribution   | 470,000          | 170,000          | 70,000           |                  |                  |                  |                  |                  |                  |
| Surplus/(Deficit) from Operations  | 233,877          | 861,649          | 754,337          | 954,028          |                  |                  |                  |                  |                  |
| Interest Earned  | 49,424           | 119,662          | 61,475           | 45,566           | 39,285           | 40,385           | 41,516           | 42,678           | 39,763           |
| <b>Total Source of Funds</b>   | <b>753,301</b>   | <b>1,151,311</b> | <b>885,812</b>   | <b>999,594</b>   | <b>39,285</b>    | <b>40,385</b>    | <b>41,516</b>    | <b>42,678</b>    | <b>39,763</b>    |
| Use of Funds:  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Commitment for Active Projects   |                  |                  |                  | 4,600,000        |                  |                  |                  |                  | 200,000          |
| Potential Contribution to CRRF - Water                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| <b>Total Use of Funds</b>  | <b>0</b>         | <b>0</b>         | <b>0</b>         | <b>4,600,000</b> | <b>0</b>         | <b>0</b>         | <b>0</b>         | <b>0</b>         | <b>200,000</b>   |
| <b>Closing Balance December 31st</b>   | <b>2,966,310</b> | <b>4,117,621</b> | <b>5,003,433</b> | <b>1,403,027</b> | <b>1,442,312</b> | <b>1,482,697</b> | <b>1,524,212</b> | <b>1,566,890</b> | <b>1,406,653</b> |
| Balance in Reserve as a Percentage of Rates Revenue                          | 51.71%           | 68.44%           | 87.61%           | 24.54%           | 25.56%           | 26.28%           | 27.01%           | 27.77%           | 24.93%           |
| Rates Revenue  | 5,736,032        | 6,016,653        | 5,710,810        | 5,718,170        | 5,642,470        | 5,642,470        | 5,642,470        | 5,642,470        | 5,642,470        |
| Budgeted Annual Contribution as a % of Rates Revenue                         | 8.19%            | 2.83%            | 1.23%            | 0.00%            | 0.00%            | 0.00%            | 0.00%            | 0.00%            | 0.00%            |

| FORECAST OF RATE STABILIZATION RESERVE - WASTE WATER<br>FOR THE YEARS 2015 TO 2023 |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|  | 2015             | 2016             | 2017             | 2018             | 2019             | 2020             | 2021             | 2022             | 2023             |
|  | ACTUALS          | ACTUALS          | ACTUALS          | FORECAST         | BUDGET           | FORECAST         | FORECAST         | FORECAST         | FORECAST         |
|  | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               | \$               |
| <b>Opening Balance January 1st</b>   | <b>1,316,933</b> | <b>1,023,840</b> | <b>973,419</b>   | <b>2,114,578</b> | <b>2,889,934</b> | <b>3,109,352</b> | <b>3,196,414</b> | <b>1,499,951</b> | <b>1,541,950</b> |
| Source of Funds:   |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Budgeted Annual Contribution   |                  |                  | 100,000          |                  |                  |                  |                  |                  |                  |
| Leachate/Overstrength contributions  | 164,298          | 105,053          | 158,127          | 181,138          | 138,500          |                  |                  |                  |                  |
| Surplus/(Deficit) from Operations  | (484,810)        | (193,471)        | 866,991          | 535,010          |                  |                  |                  |                  |                  |
| Interest Earned  | 27,419           | 37,997           | 16,041           | 59,208           | 80,918           | 87,062           | 53,537           | 41,999           | 43,175           |
| <b>Total Source of Funds</b>   | <b>(293,093)</b> | <b>(50,421)</b>  | <b>1,141,159</b> | <b>775,356</b>   | <b>219,418</b>   | <b>87,062</b>    | <b>53,537</b>    | <b>41,999</b>    | <b>43,175</b>    |
| Use of Funds:  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Commitment for Active Projects   |                  |                  |                  |                  |                  |                  | 1,750,000        |                  |                  |
| Potential Contribution to CRRF - Wastewater  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| <b>Total Use of Funds</b>  | <b>0</b>         | <b>0</b>         | <b>0</b>         | <b>0</b>         | <b>0</b>         | <b>0</b>         | <b>1,750,000</b> | <b>0</b>         | <b>0</b>         |
| <b>Closing Balance December 31st</b>   | <b>1,023,840</b> | <b>973,419</b>   | <b>2,114,578</b> | <b>2,889,934</b> | <b>3,109,352</b> | <b>3,196,414</b> | <b>1,499,951</b> | <b>1,541,950</b> | <b>1,585,124</b> |
| Balance in Reserve as a Percentage of Rates Revenue                                | 19.32%           | 16.39%           | 34.11%           | 45.92%           | 46.75%           | 51.56%           | 24.19%           | 24.87%           | 25.57%           |
| Rates Revenue  | 5,300,479        | 5,939,630        | 6,199,680        | 6,293,920        | 6,650,480        | 6,199,680        | 6,199,680        | 6,199,680        | 6,199,680        |
| Budgeted Annual Contribution as a % of Rates Revenue                               | 3.10%            | 1.77%            | 4.16%            | 2.88%            | 2.08%            | 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 are planned to cease 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% 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.

**HALDIMAND COUNTY**

**WATER AND WASTEWATER RATE ASSUMPTIONS**

*\*Note: thorough analysis is completed annually with respect to the assumptions used within each fee category. Due to the uncontrollable factors in water and wastewater (i.e. weather, shifts in consumption patterns, etc), the same assumption may not be utilized from year to year in order to ensure large fluctuations in rates is avoided.*

|  | <u>Approved<br/>2016<br/>Budget</u>  | <u>Approved<br/>2017<br/>Budget</u>  | <u>Approved<br/>2018<br/>Budget</u>  | <u>Draft<br/>2019<br/>Budget</u>   |
|--|--|--|--|--|
| <b>Effective Date of Rate Change</b>             | February 1, 2016   | January 1, 2017  | January 1, 2018  | February 1, 2019   |
| <b>WATER</b>                                     |  |  |  |  |
| <b>Consumption Assumptions</b>                   |  |  |  |  |
| <i>Residential Users</i>                         |  |  |  |  |
| Annual Water Consumption                         | Two Year Rolling Average   | Three Year Average Consumption with Three year Average Decline; Offset by Anticipated Growth                                   | Four Year Rolling Average Consumption with Consumption Growth from Anticipated New Development   | Three Year Rolling Average Consumption with Consumption Growth from Anticipated New Development  |
| Anticipated Growth                               | Minimal Growth Projections   | Slight Increase in Growth Projections  | Increase in Growth Projections mainly due to development in Caledonia  | Increase in Growth Projections mainly due to development in Caledonia  |
| <i>"Regular" Commercial/Industrial Customers</i> |  |  |  |  |
| Annual Water Consumption                         | Normalized Two Year Rolling Average  | Normalized Two Year Rolling Average  | Three Year Rolling Average   | Three Year Rolling Average   |
| Anticipated Growth                               | Minimal growth expect in commercial users  | Minimal growth expect in commercial users  | Minimal growth expect in commercial users  | Minimal growth expect in commercial users  |
| <i>Large Commercial/Industrial Users</i>         |  |  |  |  |
| Annual Water Consumption                         | Normalized Three Year Rolling Average  | <i>Large Commercial</i> : Three Year Average Consumption;<br><i>Large Industrial</i> : Normalized Two Year Average Consumption | <i>Large Commercial</i> : Three Year Rolling Average Consumption;<br><i>Large Industrial</i> : Normalized Two Year Average Consumption | <i>Large Commercial</i> : Three Year Rolling Average Consumption;<br><i>Large Industrial</i> : Normalized Two Year Average Consumption |
| <i>New Credit (Wholesale Rate)</i>               |  |  |  |  |
| Annual Water Consumption                         | Three Year Rolling Average   | Three Year Rolling Average   | Three Year Rolling Average   | Three Year Rolling Average   |
| Water Depot                                      | Two Year Rolling Average   | Three Year Rolling Average   | Three Year Rolling Average   | Three Year Rolling Average   |
| <b>Water Rates</b>                               |  |  |  |  |
| Basic Charges                                    | 50%/50% fixed/variable share<br>2.76% decrease in rates  | 50%/50% fixed/variable share<br>2.52% decrease in rates  | 50%/50% fixed/variable share<br>3.14% decrease in rates  | 50%/50% fixed/variable share<br>6.13% decrease in rates  |
| Block 1    Rate Increases                        | 1.20% Decrease   | 1.01% Increase   | 0.23% Decrease   | 3.90% Decrease   |
| Block 2    Rate Assumptions                      | Ten Year Phase-out (starting in 2006); based on a set percentage in relation to Block 1 (ending in 2016) | N/A  | N/A  | N/A  |
| Rate Increase                                    | 2.92% increase   | N/A  | N/A  | N/A  |

**HALDIMAND COUNTY**

**WATER AND WASTEWATER RATE ASSUMPTIONS**

\*Note: thorough analysis is completed annually with respect to the assumptions used within each fee category. Due to the uncontrollable factors in water and wastewater (i.e. weather, shifts in consumption patterns, etc), the same assumption may not be utilized from year to year in order to ensure large fluctuations in rates is avoided.

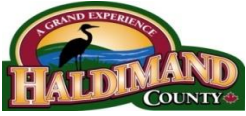
|   | <u>Approved<br/>2016<br/>Budget</u>  | <u>Approved<br/>2017<br/>Budget</u>   | <u>Approved<br/>2018<br/>Budget</u>   | <u>Draft<br/>2019<br/>Budget</u>  |
|---|--|---|---|---|
| <b>Effective Date of Rate Change</b>      | February 1, 2016   | January 1, 2017   | January 1, 2018   | February 1, 2019  |
| <b>WASTEWATER</b>                         |  |   |   |   |
| <b>Consumption Assumptions</b>            |  |   |   |   |
| <i>Residential Users</i>                  |  |   |   |   |
| Wastewater Consumption                    | Two Year Rolling Average   | Three Year Average Consumption with Three Year Average Decline; Offset by Anticipated Growth                | Four Year Rolling Average Consumption with Consumption Growth from Anticipated New Development                  | Three Year Rolling Average Consumption with Consumption Growth from Anticipated New Development                 |
| "Regular" Commercial/Industrial Customers |  |   |   |   |
| Wastewater Consumption                    | Normalized Two Year Rolling Average  | Normalized Two Year Rolling Average   | Four Year Rolling Average   | Three Year Rolling Average  |
| <i>Large Commercial/Industrial</i>        |  |   |   |   |
| Wastewater Consumption                    | Normalized Three Year Rolling Average  | Large Commercial: Three Year Average Consumption; Large Industrial: Normalized Two Year Average Consumption | Large Commercial: Four Year Rolling Average Consumption; Large Industrial: Two Year Rolling Average Consumption | Large Commercial: Four Year Rolling Average Consumption; Large Industrial: Two Year Rolling Average Consumption |
| <b>Wastewater Rates</b>                   |  |   |   |   |
| Basic Charges                             | 50%/50% fixed/variable share   | 50%/50% fixed/variable share  | 50%/50% fixed/variable share  | 50%/50% fixed/variable share  |
| Block 1                                   | 5.31% increase in rates  | 4.77% increase in rates   | 2.02% decrease in rates   | 0.48% decrease in rates   |
| Block 2                                   | 13.94% increase  | 7.21% increase  | 5.12% decrease increase   | 4.69% increase  |
| Rate Assumptions                          | Ten Year Phase-out (starting in 2006); based on a set percentage in relation to Block 1 (ending in 2016) | N/A   | N/A   | N/A   |
| Rate Increase                             | 18.69% increase  | N/A   | N/A   | N/A   |
| Wastewater Discharge Program              | 20% Flow Differential<br>Minimum 10,000 cubic metres   | 20% Flow Differential<br>Minimum 10,000 cubic metres  | 20% Flow Differential<br>Minimum 10,000 cubic metres  | 20% Flow Differential<br>Minimum 10,000 cubic metres  |

HALDIMAND COUNTY

**WATER AND WASTEWATER RATE ASSUMPTIONS**

\*Note: thorough analysis is completed annually with respect to the assumptions used within each fee category. Due to the uncontrollable factors in water and wastewater (i.e. weather, shifts in consumption patterns, etc), the same assumption may not be utilized from year to year in order to ensure large fluctuations in rates is avoided.

|                                      | <u>Approved<br/>2016<br/>Budget</u>  | <u>Approved<br/>2017<br/>Budget</u>  | <u>Approved<br/>2018<br/>Budget</u>   | <u>Draft<br/>2019<br/>Budget</u>   |
|--------------------------------------|--|--|---|--|
| <b>Effective Date of Rate Change</b> | February 1, 2016   | January 1, 2017  | January 1, 2018   | February 1, 2019   |
| <b>Other Rates</b>                   |  |  |   |  |
| <i>Bulk Water Rates</i>              |  |  |   |  |
| Assumption                           | Full Cost Recovery (based on bulk water depot direct cost allocation and water treatment & supply cost (per m3)); administration fee and bulk water activation fee                     | Full Cost Recovery (based on bulk water depot direct cost allocation and water treatment & supply cost (per m3)); administration fee and bulk water activation fee                     | Full Cost Recovery (based on bulk water depot direct cost allocation and water treatment & supply cost (per m3)); administration fee and bulk water activation fee; commencing in 2018 all bulk water fees (consumption and administration fees) to be indexed based on underlying year over year increases in underlying costs | Consumption and administration fees indexed based on underlying year over year increases in underlying costs (indexed effective 2018)  |
|                                      |  |  |   | 2.00% Increase   |
| Annual Water Consumption             | Two Year Rolling Average   | Three Year Rolling Average   | Adjusted Two Year Rolling Average   | Adjusted Two Year Rolling Average  |
| Increases                            | 1.11% increase, consumption rate   | 3.07% decrease, consumption rate   | 1.73% increase  | 2.00% increase   |
| Bulk Water Administration Fee        | 2.99% increase   | 2.00% increase   | 2.00% increase  | 2.00% increase   |
| Bulk Water Activation Fee            | 3.00% increase   | 2.00% increase   | 2.00% increase  | 2.00% increase   |
| Bulk Water Re-Activation Fee         | 3.00% increase   | 2.00% increase   | 2.00% increase  | 2.00% increase   |
| <i>Fire Protection</i>               |  |  |   |  |
| Assumption                           | Based on industry standard allocation for flows allocated to fire protection (including specific capital/operating related hydrant costs); indexed since implementation of rate study. | Based on industry standard allocation for flows allocated to fire protection (including specific capital/operating related hydrant costs); indexed since implementation of rate study. | Based on industry standard allocation for flows allocated to fire protection (including specific capital/operating related hydrant costs); indexed since implementation of rate study.  | Based on industry standard allocation for flows allocated to fire protection (including specific capital/operating related hydrant costs); indexed since implementation of rate study. |
| Increase                             | 2.91%  | 2.00%  | 2.00%   | 2.00%  |
|                                      | \$2,088,230  | \$2,129,990  | \$2,172,590   | \$2,216,040  |
| <i>Miscellaneous Fees</i>            |  |  |   |  |
| Leachate                             | Full Cost Recovery (based on loading and capital/operating cost allocation methodology, as well as 50%/50% fixed/variable recovery)<br>19.42% increase in consumption rate             | Full Cost Recovery (based on loading and capital/operating cost allocation methodology, as well as 50%/50% fixed/variable recovery)<br>1.58% increase in consumption rate              | Full Cost Recovery (based on loading and capital/operating cost allocation methodology, as well as 50%/50% fixed/variable recovery)<br>15.28% decrease in consumption rate  | Full Cost Recovery (based on loading and capital/operating cost allocation methodology, as well as 50%/50% fixed/variable recovery)<br>14.74% decrease in consumption rate             |
| Holding Tank                         | Blended Septic/Holding Rate based on relative loading and flows received (indexed effective 2016)  | Blended Septic/Holding Rate based on relative loading and flows received (indexed effective 2016)  | Blended Septic/Holding Rate based on relative loading and flows received (indexed effective 2016)   | Blended Septic/Holding Rate based on relative loading and flows received (indexed effective 2016)  |
| Septic Tank                          | 2.97% increase   | 2.00% increase   | 2.00% increase  | 2.00% increase   |
| Septic Hauler Administration Fee     | Monthly fee to recover direct administration costs<br>3.00% increase   | Monthly fee to recover direct administration costs<br>2.00% increase   | Monthly fee to recover direct administration costs<br>2.00% increase  | Monthly fee to recover direct administration costs<br>2.00% increase   |
| Sludge Storage                       | Full Cost Recovery<br>2.91% increase   | Full Cost Recovery<br>2.00% increase   | Full Cost Recovery<br>2.00% increase  | Full Cost Recovery<br>2.00% increase   |
| Overstrength Charge (R-Value)        | Full Cost Recovery<br>3.00% increase   | Full Cost Recovery<br>2.00% increase   | Full Cost Recovery<br>2.00% increase  | Full Cost Recovery<br>2.00% increase   |
| All Other Miscellaneous Fees         | Based on increase in direct operating costs<br>3.00% increase  | Based on increase in direct operating costs<br>2.00% increase  | Based on increase in direct operating costs<br>2.00% increase   | Based on increase in direct operating costs<br>2.00% increase  |



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

| <u>Schedule</u> | <u>Division</u>   |
|-----------------|---|
| A               | Water and Wastewater Metered Charges                      |
| B               | Water and Wastewater Bulk Service Charges                 |
| C               | Water and Wastewater General Fees                         |
| D               | Water and Wastewater Access Refusal and Tampering Charges |
| E               | Fees and Charges Cost Calculation Template                |

**Note:** Any housekeeping changes have been highlighted in blue on Schedule C





### Schedule A - Metered Charges

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

| Water and Wastewater Metered Charges |  | Description | 2018 Charge    | 2019 Charge    | % Increase    |
|--------------------------------------|--|-------------|----------------|----------------|---------------|
| <b>Water</b>                         |  |             |                |                |               |
| Consumption Charges                  |  | \$/m3       | \$1.0303       | \$0.9901       | -3.90%        |
| Basic Charges:                       | \$/month based on domestic service size requirements   |             | see below      | see below      | n/a           |
|                                      | Service Size:  |             |                |                |               |
|                                      | mm   | inches      |                |                |               |
| R1/C1                                | 16 & 19  | 5/8 & 3/4   | \$21.10        | \$19.80        | -6.13%        |
| R2/C2                                | 25   | 1           | \$21.10        | \$19.80        | -6.13%        |
| R3/C3                                | 37   | 1.5         | \$119.19       | \$111.88       | -6.13%        |
| R4/C4                                | 50   | 2           | \$259.05       | \$243.17       | -6.13%        |
| C5                                   | 75   | 3           | \$455.86       | \$427.93       | -6.13%        |
| C6                                   | 100  | 4           | \$906.66       | \$851.11       | -6.13%        |
| C7                                   | 150  | 6           | \$1,686.55     | \$1,583.20     | -6.13%        |
| C8                                   | 200  | 8           | \$2,880.74     | \$2,704.21     | -6.13%        |
| Flat Rate                            | Consumption charge: 20 m3/month  |             | \$20.61        | \$19.80        | -3.90%        |
|                                      | R1/C1 Basic Charge   |             | \$21.10        | \$19.80        | -6.13%        |
|                                      | <b>Total Flat Rate</b>   |             | <b>\$41.70</b> | <b>\$39.60</b> | <b>-5.03%</b> |
| Standby Charge                       | When a property temporarily discontinues the supply of water or when a property is being developed or re-developed, a standby charge is billed based on the basic rate for the applicable service size until connection is in place. The standby charge represents the Basic Water charge. |             |                |                |               |
| <b>Wastewater</b>                    |  |             |                |                |               |
| Consumption Charges                  |  | \$/m3       | \$1.4703       | \$1.5393       | 4.70%         |
| Basic Charges:                       | \$/month based on domestic service size requirements   |             | see below      | see below      | n/a           |
|                                      | Service Size:  |             |                |                |               |
|                                      | mm   | inches      |                |                |               |
| R1/C1                                | 16 & 19  | 5/8 & 3/4   | \$24.14        | \$24.03        | -0.48%        |
| R2/C2                                | 25   | 1           | \$24.14        | \$24.03        | -0.48%        |
| R3/C3                                | 37   | 1.5         | \$136.41       | \$135.76       | -0.48%        |
| R4/C4                                | 50   | 2           | \$296.48       | \$295.06       | -0.48%        |
| C5                                   | 75   | 3           | \$521.74       | \$519.23       | -0.48%        |
| C6                                   | 100  | 4           | \$1,037.69     | \$1,032.70     | -0.48%        |
| C7                                   | 150  | 6           | \$1,930.27     | \$1,921.00     | -0.48%        |



### Schedule A - Metered Charges

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

| Water and Wastewater Metered Charges |  | Description | 2018 Charge    | 2019 Charge    | % Increase   |
|--------------------------------------|--|-------------|----------------|----------------|--------------|
| C8                                   | 200  | 8           | \$3,297.04     | \$3,281.20     | -0.48%       |
| Flat Rate                            | <i>Consumption charge: 20 m3/month</i>   |             | \$29.41        | \$30.79        | 4.70%        |
|                                      | <i>R1/C1 Basic Charge</i>  |             | \$24.14        | \$24.03        | -0.48%       |
|                                      | <b>Total Flat Rate</b>   |             | <b>\$53.55</b> | <b>\$54.81</b> | <b>2.36%</b> |
| Standby Charge                       | When a property temporarily discontinues the use of the wastewater system or when a property is being developed or re-developed and discontinues the use of the wastewater system, a standby charge is billed based on the basic rate for the applicable service size until connection is in place. The standby charge represents the Basic Wastewater charge. |             |                |                |              |
| <b>Water and Wastewater Arrears</b>  |  |             |                |                |              |
| Transfer to Taxes                    | Non-payment will result in the outstanding amounts due being transferred to the current property owners tax account within 60 days.  |             |                |                |              |
| Transfer to Taxes - Tenants          | 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

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

| Water and Wastewater Bulk Service Charges            | Description  | 2018 Charge                  | 2019 Charge                  | % Increase |
|--|--|------------------------------|------------------------------|------------|
| <b>Water</b>   |  |                              |                              |            |
| Bulk Water Consumption Rate                          | \$/m3  | \$2.94                       | \$3.00                       | 2.00%      |
| Bulk Water Administration Fee                        | for months with billable consumption   | \$16.85                      | \$17.19                      | 2.00%      |
| Bulk Water   | Account Activation Fee (note: accounts will be deactivated if there is no consumption in the prior twelve month calendar year) | \$27.91                      | \$28.47                      | 2.00%      |
| Bulk Water   | Re-Activation Fee  | \$27.91                      | \$28.47                      | 2.00%      |
| New Credit Wholesale Rate                            | \$/m3 (12% reduction of metered water charge based on agreement)   | \$0.91                       | \$0.87                       | -3.90%     |
| <b>Wastewater</b>                                    |  |                              |                              |            |
| Bulk Wastewater Disposal                             | Leachate - Local Volumetric Charge (\$/m3)   | \$26.87                      | \$22.90                      | -14.74%    |
| 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)   | \$14.07                      | \$14.35                      | 2.00%      |
| Bulk Wastewater Disposal Administration Fee          | Septic/Holding Tank/Portable Toilet Hauler Administration Fee (per month) for months with billable disposable volumes          | \$16.85                      | \$17.19                      | 2.00%      |



## 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   | 2018 Charge                    | 2019 Charge                    | % Increase |
|--|---|--------------------------------|--------------------------------|------------|
| <b>Connection Permits and Fees</b>   |   |                                |                                |            |
| Charges payable to the Corporation of Haldimand County for permits, inspections, material and labour. Charges vary depending on type and size of connection. |   |                                |                                |            |
| Missed Appointment Fee   |   | \$91                           | \$93.00                        | 2.20%      |
| Water Connection   | Re-Inspection Fee   | \$91                           | \$93.00                        | 2.20%      |
| Water Connection   | Street Line to House: Inspection Only   | \$91                           | \$93.00                        | 2.20%      |
| Water Connection   | Main to Street Line: Includes Inspection and Main Tap (contractor to supply all materials)  | \$348                          | \$355.00                       | 2.01%      |
| Water Connection   | Main to House: Includes Inspection and Main Tap (contractor to supply all materials - 3/4" to 2")   | \$439                          | \$448.00                       | 2.05%      |
| Water Connection Meter   | Water Meter for new construction: Service requiring and-meter size  | Meter Cost + \$91              | Meter Cost + \$94              | n/a        |
|  | 5/8" or 3/4" Meter  | \$280                          | \$286                          | 2.14%      |
|  | 1' Meter  | \$330                          | \$337                          | 2.12%      |
|  | 1.5" Meter  | \$640                          | \$653                          | 2.03%      |
|  | 2" Meter  | \$830                          | \$847                          | 2.05%      |
| Water Main Taps 40mm to 50mm (3/4" to 2" Diameter)   | Inspection Only (contractor to supply all materials)  | \$91                           | \$93                           | 2.20%      |
| 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 and verification of pressure test (contractor to tap main and supply all materials) | \$91 per hour                  | \$93 per hour                  | 2.20%      |
| Bacteriological Testing for New 100mm (4") Diameter & Larger   | Water Mains or Services - includes sampling and transport to accredited laboratory per sampling site  | \$188                          | \$192                          | 2.13%      |
| Water Disconnection Inspection   | Inspection Only (contractor to supply all materials)  | \$91                           | \$93                           | 2.20%      |
| Sanitary Sewer Service Connection-   | Re-Inspection Fee   | \$91                           | \$93                           | 2.20%      |
| Sanitary Sewer Service Connection 100mm (4") Diameter  | Street Line to House: Inspection Only   | \$166                          | \$169                          | 1.81%      |
| Sanitary Sewer Service Connection 100mm (4") Diameter  | Main to Street Line - Includes Inspection and Main Tap (contractor to supply all materials)   | \$348                          | \$355                          | 2.01%      |
| Sanitary Sewer Service Connection 100mm (4") Diameter  | Main to House - Includes Inspection and Main Tap (contractor to supply all materials)   | \$439                          | \$448                          | 2.05%      |
| Other Sanitary Sewer Service Connection Diameters  | Main to Street Line: 150mm (6") or Greater Diameter: Inspection Only  | \$166                          | \$169                          | 1.81%      |
| Sanitary Sewer Disconnection Inspection  | Inspection Only (contractor to supply all materials)  | \$91                           | \$93                           | 2.20%      |
| 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 | per Development Charges By-law | n/a        |



## 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   | 2018 Charge                    | 2019 Charge                    | % Increase |
|-----------------------------------|---|--------------------------------|--------------------------------|------------|
| 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        |
| <b>Testing of Water Meters</b>    |   |                                |                                |            |
| Testing Requests                  | Customers may request that their water meter be tested. If the meter is found to be accurate, the customer must pay carrying charges and cost of testing, in addition to payment in full of the bill(s) in question. The following is an excerpt from Haldimand County's Water Use By-Law describing how the charge for testing of meters works.  |                                |                                |            |
|                                   | "No person shall test any meter except the Water Purveyor. The Water Purveyor shall remove and test any meter by an owner or agent of the owner. If the meter is found to be inaccurate, Haldimand shall adjust the water bill accordingly. A new or rebuilt displacement meter from 17mm (5/8) to 50mm (2") in size will be deemed to be inaccurate if it records outside of the accuracy limits of 98.5 to 101.5 percent on high and intermediate flows and 95.0 to 101.0 percent on low flows. New and rebuilt compound meters, turbine meters, multi-jet meters and propeller meters from 50mm (2") to 250mm (10") in size will be deemed to be inaccurate if they record 2 percent higher or lower than the manufacturers' recommended accuracy limits. Repaired meters of all sizes will be deemed to be inaccurate if they record outside of the accuracy limit of 90 percent minimum. A rebuilt meter is defined as one that has had the measuring element replaced with a factory-made new unit. A repaired meter is defined as one that has had the old measuring element cleaned and refurbished." |                                |                                |            |
| External Testing                  | Testing done at customer's request - includes meter removal, shipment and cost of test  | 100% cost recovery             | 100% cost recovery             | n/a        |
| <b>Water Turn On/Off</b>          |   |                                |                                |            |
|                                   | A customer may request their water be turned on or off due to an internal plumbing problem or for seasonal protection of the plumbing. Haldimand County Finance may initiate a turn off due to non-payment of a bill. The following is an excerpt of Haldimand County's Water Use By-Law.   |                                |                                |            |
|                                   | "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."  |                                |                                |            |



## 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   | 2018 Charge           | 2019 Charge           | % Increase |
|--|---|-----------------------|-----------------------|------------|
| During Normal Working Hours  | Water Turn On   | \$91                  | \$93                  | 2.20%      |
| During Normal Working Hours  | Water Turn Off  | \$91                  | \$93                  | 2.20%      |
| During Normal Working Hours  | Water Turn On/Off Same Day for Fix and Repair           | \$102                 | \$104                 | 1.96%      |
| During Normal Working Hours  | Water Turn On and Meter Reconnection                    | \$102                 | \$104                 | 1.96%      |
| During Normal Working Hours  | Water Turn Off and Meter Disconnection                  | \$102                 | \$104                 | 1.96%      |
| During Normal Working Hours  | Water Meter Removal or Install                          | \$19                  | \$19                  | 0.00%      |
| Outside of Normal Working Hours  | Water Turn On   | \$200                 | \$204                 | 2.00%      |
| Outside of Normal Working Hours  | Water Turn Off  | \$200                 | \$204                 | 2.00%      |
| Outside of Normal Working Hours  | Water Turn On and Meter Reconnection                    | \$240                 | \$245                 | 2.08%      |
| Outside of Normal Working Hours  | Water Turn Off and Meter Disconnection                  | \$240                 | \$245                 | 2.08%      |
| Outside of Normal Working Hours  | Water Meter Removal or Install                          | \$41                  | \$41                  | -0.40%     |
| <b>Winter Control Service Calls</b>  |   |                       |                       |            |
| Customers may call the County to perform certain services caused by cold weather conditions. |   |                       |                       |            |
| Thawing Frozen Water Service Lines   | During Normal Working Hours (per hour) (min. 1 hr)      | \$136                 | \$139                 | 2%         |
| Thawing Frozen Water Service Lines   | Outside of Normal Working Hours (per hour) (min. 2 hrs) | \$239                 | \$244                 | 2%         |
| Replacement of Water Meter due to Frost Plate damage   | During Normal Working Hours                             | Meter Cost plus \$91  | Meter Cost plus \$93  | n/a        |
| Replacement of Water Meter due to Frost Plate damage   | Outside of Normal Working Hours                         | Meter Cost plus \$239 | Meter Cost plus \$244 | n/a        |
|  | 5/8" or 3/4" Meter                                      | \$250                 | \$286                 | 14.40%     |
|  | 1" Meter  | \$300                 | \$337                 | 12.33%     |
|  | 1.5" Meter  | \$610                 | \$653                 | 7.05%      |
|  | 2" Meter  | \$800                 | \$847                 | 5.88%      |



## 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   | 2018 Charge        | 2019 Charge        | % Increase |
|--|---|--------------------|--------------------|------------|
| <b>Sanitary Sewer Rodding/Teley Video</b>  |   |                    |                    |            |
| If County staff determine that a sewer line blockage is the property owner's responsibility, the charges below will be billed.<br>Services provided outside of normal working hours will be charged a minimum 2 hours. |   |                    |                    |            |
| Sanitary Sewer Rodding   | During Normal Working Hours - each full or additional hours (min. 1 hr)   | \$266              | \$271              | 1.88%      |
| Sanitary Sewer Rodding   | Outside of Normal Working Hours - each full or additional hours (min. 2 hrs)  | \$468              | \$477              | 1.92%      |
| Sewer Video  | Sewers will be videoed during normal working hours only. Rate is per hour with a minimum of a one (1) hour charge   | \$225              | \$230              | 2.22%      |
| Dye Testing  | During normal working hours (min. 1 hr)   | \$133              | \$136              | 2.26%      |
| Dye Testing  | Outside of normal working hours (min. 2 hrs)  | \$234              | \$239              | 2.14%      |
| Vactor Charge  | During normal working hours (min. 1 hr)   | \$277              | \$283              | 2.17%      |
| Vactor Charge  | Outside of normal working hours (min. 2 hrs)  | \$508              | \$518              | 1.97%      |
| <b>Wastewater Charges</b>  |   |                    |                    |            |
| Sewer Sludge Storage Costs   | Sludge Storage - Townsend Lagoon per Cubic Meter (m3)   | \$4,589            | \$4,681            | 2.00%      |
| 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) | \$1.01             | \$1.03             | 2.00%      |
| Sanitary Discharge Agreement   | New discharger information report administrative fee  | \$244              | \$249              | 2.05%      |
| Sanitary Discharge Agreement   | Existing discharger information report administration fee   | \$244              | \$249              | 2.05%      |
| Sanitary Discharge Agreement   | Sanitary discharge agreement annual administration fee  | \$1,466            | \$1,495            | 1.98%      |
| Sanitary Discharge Agreement   | Sanitary discharge agreement amendment request application processing fee   | \$244              | \$249              | 2.05%      |
| Sanitary Discharge Agreement   | Application for a hauled sewage discharge permit processing fee   | \$244              | \$249              | 2.05%      |
| Sanitary Discharge Agreement   | Annual hauled sewage discharge permit processing fee  | \$244              | \$249              | 2.05%      |
| Sanitary Discharge Agreement   | Haldimand County assistance with all other additional requests  | 100% Cost Recovery | 100% Cost Recovery | n/a        |
| Wastewater Discharge Program   | Application fee   | \$244              | \$249              | 2.05%      |
| Wastewater Discharge Program   | Engineering Compliance Report   | 100% Cost Recovery | 100% Cost Recovery | n/a        |
| Wastewater Discharge Program   | Meter Testing, Meter Calibration, Meter Installation, Other administrative costs  | 100% Cost Recovery | 100% Cost Recovery | n/a        |
| <b>Other Services</b>  |   |                    |                    |            |
| 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  | \$2,698            | \$2,752            | 2.00%      |
| Installation of Communication Antennae System on County Facilities   | Private Enterprises   | Per Contract       | Per Contract       | n/a        |
| <b>Administration Fees and Late Payment Interest Charges</b>   |   |                    |                    |            |
| Note: the following charges may be administered by a 3rd party on behalf of the County   |   |                    |                    |            |
| Arrears Certificate  |   | \$16.00            | \$16.50            | 3.13%      |
| Non-sufficient Funds Charge (NSF)  |   | \$34.00            | \$35.00            | 2.94%      |
| Credit Reference/Credit Check  |   | \$16.00            | \$16.50            | 3.13%      |



## 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   | 2018 Charge | 2019 Charge | % Increase |
|---|---|-------------|-------------|------------|
| Account Setup Charge                            |   | \$32.00     | \$33.00     | 3.13%      |
| 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 | adding water and wastewater charges that remain unpaid after the due date, to the property tax owners account | \$31.00     | \$32.00     | 3.23%      |





## Schedule D - Refusal & Tampering

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

| Water and Wastewater Access Refusal and Tampering Charges  | Description  | 2018 Charge   | 2019 Charge   | % Increase |
|--|--|---|---|------------|
| <b>Refusal of Entry for Inspection, Installation, Repair or Replacement of Meters/Equipment, Water Service Leaks</b>   |  |   |   |            |
| 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  | \$30.50   | \$31.00   | 1.64%      |
| 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.                       | \$510.00  | \$520.00  | 1.96%      |
| When it is determined that a meter fails to register accurately the quantity of water consumed, during the period of such failure the quantity shall be estimated by the County. |  |   |   |            |

**SCHEDULE E**

**FEES AND CHARGES COST CALCULATION TEMPLATE**

APPENDIX M

**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 **G59**. 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.

| <b>COSTS:</b>                                | <b>DESCRIPTION OF COSTS/SERVICES:</b>                 | <b>HOURS/UNITS:</b> | <b>ESTIMATED COSTS:</b> |
|--|---|---------------------|-------------------------|
| <b>DIRECT COSTS:</b>                         |   |                     |                         |
| <b>WAGES &amp; BENEFITS:</b>                 |   |                     |                         |
| Staffing Costs:                              | Hours x Hourly Rate                                   | 0.00                | \$0.00                  |
| Staffing Benefit Costs:                      | County Average Benefit Percentage                     | 48%                 | \$0.00                  |
| Supervisor Costs:                            | Hours x Hourly Rate                                   | 0.00                | \$0.00                  |
| Supervisor Benefit Costs:                    | County Average Benefit Percentage                     | 48%                 | \$0.00                  |
| <b>VEHICLE COSTS:</b>                        |   |                     |                         |
|  | Vehicles Used:  | # of Vehicles Used: | Operating Hours:        |
|  |   | 0                   |                         |
|  |   |                     | \$0.00                  |
|  |   |                     | \$0.00                  |
|  |   |                     | \$0.00                  |
| <b>ADMINISTRATIVE COSTS:</b>                 |   |                     |                         |
| Inspection Costs:                            | Number of Staff x Hours x Hourly Rate                 | 0.00                | \$0.00                  |
| Benefits:                                    | County Average Benefit Percentage                     | 48%                 | \$0.00                  |
| Photocopying                                 | Cost of Photocopying & Paper                          |                     | \$0.00                  |
| Mailing                                      | Cost for Regular Mail                                 |                     | \$0.00                  |
| Filing                                       | Copying & Filing Internal Copies                      |                     | \$0.00                  |
| <b>OTHER COSTS:</b>                          |   |                     |                         |
|  | Description:  | Cost Per Unit:      | Units:                  |
|  |   | \$0.00              | 0                       |
|  |   | \$0.00              | 0                       |
|  |   | \$0.00              | 0                       |
| <b>TOTAL DIRECT COSTS:</b>                   |   |                     | \$0.00                  |
| <b>INDIRECT COSTS:</b>                       |   |                     |                         |
| Department Overhead Allocation               | Allocation to Department of Allocation (%)            |                     | \$0.00                  |
| County General Admin Overhead                | Council, CAO, Finance, Clerk's & General Overhead (%) |                     | \$0.00                  |
| <b>TOTAL INDIRECT COSTS:</b>                 |   |                     | \$0.00                  |
| <b>TOTAL COSTS:</b>                          |   |                     | \$0.00                  |
| <b>Less: Ancillary Revenues:</b>             | Grants & Offsetting Revenues                          | Percentage:         | \$0.00                  |
|  |   | \$ Amount:          | \$0.00                  |
| <b>CALCULATED USER FEE</b>                   |   |                     | \$0.00                  |
| <b>ADJUSTED USER FEE APPROVED BY COUNCIL</b> |   |                     | \$0.00                  |

**Applicable Taxes**

**Final User Fee Including**

**Comments:**



## Consumer & Consumption Statistics

### Residential & Commercial/Industrial Water Consumers (#)

|               | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         | 2019<br>estimate |
|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------|
| Residential   | 8,147        | 8,217        | 8,186        | 8,231        | 8,284        | 8,533        | 8,665        | 9,244            |
| Commercial    | 706          | 705          | 658          | 670          | 682          | 684          | 684          | 683              |
| <b>Total</b>  | <b>8,853</b> | <b>8,922</b> | <b>8,844</b> | <b>8,901</b> | <b>8,966</b> | <b>9,217</b> | <b>9,349</b> | <b>9,927</b>     |
| <b>Growth</b> | 2.10%        | 0.78%        | -0.87%       | 0.64%        | 0.73%        | 2.80%        | 1.43%        | 10.72%           |

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.

### Residential Water Consumption (m<sup>3</sup>)

|              | 2012      | 2013      | 2014      | 2015      | 2016      | 2017      | 2018      | Adjusted 3 Year<br>Ave. | Ave m <sup>3</sup> /mo |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------------|------------------------|
| <b>Total</b> | 1,422,245 | 1,368,552 | 1,322,031 | 1,348,254 | 1,311,078 | 1,433,273 | 1,400,815 | 1,402,322               | 12.6                   |

### Commercial/Industrial Water Consumption (m<sup>3</sup>)

|              | 2012      | 2013      | 2014      | 2015      | 2016      | 2017      | 2018      | Adjusted 3 Year<br>Ave. |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------------|
| <b>Total</b> | 1,500,682 | 1,550,611 | 1,694,822 | 1,531,123 | 1,546,833 | 1,650,211 | 1,669,751 | 1,447,109               |

### Water & Wastewater Comparison of Average Monthly Billing for Selected Municipalities

|  | Haldimand County | Haldimand County Proposed | Norfolk County   | City of Brantford | Chatham-Kent    | City of Woodstock | County of Brant  | City of Kawartha Lakes | City of Guelph   | City of Hamilton | Town of Lincoln  |
|--|------------------|---------------------------|------------------|-------------------|-----------------|-------------------|------------------|------------------------|------------------|------------------|------------------|
| <b>Effective Date</b>                          | 1-Jan-18         | Proposed for 2019         | 1-Jan-18         | 1-Jan-18          | 1-Jan-18        | 1-Jan-19          | 1-Jan-18         | 1-Jan-18               | 1-Jan-18         | 1-Jan-19         | 1-Jan-18         |
| <b>Demographics</b>                            |                  |                           |                  |                   |                 |                   |                  |                        |                  |                  |                  |
| Population                                     | 45,608           | 45,608                    | 64,044           | 97,496            | 101,647         | 40,902            | 36,707           | 75,423                 | 131,794          | 536,917          | 23,787           |
| Water Customers                                | 9,349            | 9,927                     | 14,382           | 32,896            | 39,636          | 14,140            | 7,200            | 12,364                 | 41,233           | 142,000          | 5,569            |
| Geographic Area (Km <sup>2</sup> )             | 1,252            | 1,252                     | 1,608            | 72                | 2,458           | 49                | 843              | 3,084                  | 87               | 1,117            | 163              |
| Customers / (Km <sup>2</sup> )                 | <b>7.5</b>       | <b>7.9</b>                | <b>8.9</b>       | <b>454.1</b>      | <b>16.1</b>     | <b>288.7</b>      | <b>8.5</b>       | <b>4.0</b>             | <b>472.7</b>     | <b>127.1</b>     | <b>34.2</b>      |
| <b>Metered Rates:</b>                          |                  |                           |                  |                   |                 |                   |                  |                        |                  |                  |                  |
| <b>Residential (15 m<sup>3</sup>)</b>          |                  |                           |                  |                   |                 |                   |                  |                        |                  |                  |                  |
| Water (\$)                                     | 36.55            | 34.65                     | 42.18            | 40.27             | 42.25           | 29.67             | 67.42            | 69.86                  | 33.60            | 26.35            | 35.74            |
| Sewer (\$)                                     | 46.19            | 47.12                     | 49.99            | 28.50             | 41.75           | 25.15             | 41.42            | 49.54                  | 37.20            | 28.20            | 39.19            |
| <b>Combined (\$)</b>                           | <b>82.75</b>     | <b>81.77</b>              | <b>92.16</b>     | <b>68.77</b>      | <b>84.00</b>    | <b>54.82</b>      | <b>108.84</b>    | <b>119.40</b>          | <b>70.80</b>     | <b>54.55</b>     | <b>74.93</b>     |
| <b>Commercial (2" 500 m<sup>3</sup>)</b>       |                  |                           |                  |                   |                 |                   |                  |                        |                  |                  |                  |
| Water (\$)                                     | 774.20           | 738.23                    | 846.42           | 1,046.32          | 461.85          | 645.84            | 1,033.32         | 1,437.03               | 919.70           | 861.40           | 1,071.02         |
| Sewer (\$)                                     | 1,031.63         | 1,064.72                  | 1,000.72         | 950.00            | 409.17          | 615.60            | 867.14           | 808.45                 | 1,012.70         | 931.20           | 1,190.54         |
| <b>Combined (\$)</b>                           | <b>1,805.83</b>  | <b>1,802.95</b>           | <b>1,847.14</b>  | <b>1,996.32</b>   | <b>871.02</b>   | <b>1,261.44</b>   | <b>1,900.46</b>  | <b>2,245.48</b>        | <b>1,932.40</b>  | <b>1,792.60</b>  | <b>2,261.56</b>  |
| <b>Industrial (4" 4,000 m<sup>3</sup>)</b>     |                  |                           |                  |                   |                 |                   |                  |                        |                  |                  |                  |
| Water (\$)                                     | 5,027.86         | 4,811.52                  | 5,916.37         | 8,304.56          | 2,998.35        | 4,546.01          | 5,813.32         | 11,247.41              | 7,097.80         | 6,470.00         | 8,473.28         |
| Sewer (\$)                                     | 6,918.89         | 7,190.01                  | 6,988.29         | 7,600.00          | 2,677.17        | 4,774.33          | 5,984.54         | 6,623.83               | 7,696.60         | 7,005.00         | 9,382.46         |
| <b>Combined (\$)</b>                           | <b>11,946.75</b> | <b>12,001.53</b>          | <b>12,904.66</b> | <b>15,904.56</b>  | <b>5,675.52</b> | <b>9,320.34</b>   | <b>11,797.86</b> | <b>17,871.24</b>       | <b>14,794.40</b> | <b>13,475.00</b> | <b>17,855.74</b> |
| <b>Miscellaneous Fees:</b>                     |                  |                           |                  |                   |                 |                   |                  |                        |                  |                  |                  |
| <b>Bulk Water Rate \$/m<sup>3</sup></b>        | <b>2.94</b>      | <b>3.00</b>               | <b>3.950</b>     | <b>4.140</b>      | <b>2.500</b>    | <b>1.500</b>      | <b>2.570</b>     | <b>3.260</b>           | <b>3.310</b>     | <b>2.350</b>     | <b>2.102</b>     |
| <b>Holding Tank Waste \$/m<sup>3</sup></b>     |                  |                           | <b>12.000</b>    | <b>22.480</b>     | <b>11.000</b>   | n/a               | n/a              | <b>6.260</b>           | n/a              | <b>8.500</b>     |                  |
| <b>Blended Septic/Holding \$/m<sup>3</sup></b> | <b>14.07</b>     | <b>14.35</b>              |                  |                   |                 |                   |                  |                        |                  |                  | <b>9.019</b>     |
| <b>Septic Rate \$/m<sup>3</sup></b>            |                  |                           | <b>33.730</b>    | <b>22.480</b>     | <b>19.800</b>   | n/a               | n/a              | <b>12.090</b>          | n/a              | n/a              |                  |

| AVERAGE CUSTOMER IMPACTS             |   |              |                    |                     |                     |                  |
|--------------------------------------|---|--------------|--------------------|---------------------|---------------------|------------------|
| User                                 |   |              | 2018               | 2019                | \$ Change           | % Change         |
| <b>Monthly Services</b>              |   |              |                    |                     |                     |                  |
| Residential<br>(15 m3)               | Water                                       | Basic        | \$ 21.10           | \$ 19.80            | \$ (1.29)           | (6.1%)           |
|                                      |   | Consumption  | \$ 15.45           | \$ 14.85            | \$ (0.60)           | (3.9%)           |
|                                      |   | <b>Total</b> | <b>\$ 36.55</b>    | <b>\$ 34.65</b>     | <b>\$ (1.90)</b>    | <b>(5.2%)</b>    |
|                                      | Wastewater                                  | Basic        | \$ 24.14           | \$ 24.03            | \$ (0.12)           | (0.5%)           |
|                                      |   | Consumption  | \$ 22.05           | \$ 23.09            | \$ 1.04             | 4.7%             |
|                                      |   | <b>Total</b> | <b>\$ 46.20</b>    | <b>\$ 47.12</b>     | <b>\$ 0.92</b>      | <b>2.0%</b>      |
|                                      | <b>Total</b>                                |              |                    | <b>\$ 82.75</b>     | <b>\$ 81.77</b>     | <b>\$ (0.98)</b> |
| Commercial<br>(2" 500 m3)            | Water                                       | Basic        | \$ 259.05          | \$ 243.17           | \$ (15.87)          | (6.1%)           |
|                                      |   | Consumption  | \$ 515.14          | \$ 495.05           | \$ (20.08)          | (3.9%)           |
|                                      |   | <b>Total</b> | <b>\$ 774.18</b>   | <b>\$ 738.23</b>    | <b>\$ (35.96)</b>   | <b>(4.6%)</b>    |
|                                      | Wastewater                                  | Basic        | \$ 296.48          | \$ 295.06           | \$ (1.42)           | (0.5%)           |
|                                      |   | Consumption  | \$ 735.14          | \$ 769.66           | \$ 34.52            | 4.7%             |
|                                      |   | <b>Total</b> | <b>\$ 1,031.62</b> | <b>\$ 1,064.72</b>  | <b>\$ 33.10</b>     | <b>3.2%</b>      |
|                                      | <b>Total</b>                                |              |                    | <b>\$ 1,805.81</b>  | <b>\$ 1,802.95</b>  | <b>\$ (2.86)</b> |
| Industrial<br>(4" 4,000 m3)          | Water                                       | Basic        | \$ 906.66          | \$ 851.11           | \$ (55.56)          | (6.1%)           |
|                                      |   | Consumption  | \$ 4,121.09        | \$ 3,960.42         | \$ (160.68)         | (3.9%)           |
|                                      |   | <b>Total</b> | <b>\$ 5,027.76</b> | <b>\$ 4,811.52</b>  | <b>\$ (216.23)</b>  | <b>(4.3%)</b>    |
|                                      | Wastewater                                  | Basic        | \$ 1,037.69        | \$ 1,032.70         | \$ (4.99)           | (0.5%)           |
|                                      |   | Consumption  | \$ 5,881.12        | \$ 6,157.30         | \$ 276.19           | 4.7%             |
|                                      |   | <b>Total</b> | <b>\$ 6,918.81</b> | <b>\$ 7,190.01</b>  | <b>\$ 271.20</b>    | <b>3.9%</b>      |
|                                      | <b>Total</b>                                |              |                    | <b>\$ 11,946.56</b> | <b>\$ 12,001.53</b> | <b>\$ 54.97</b>  |
| <b>Bulk Services (per use basis)</b> |   |              |                    |                     |                     |                  |
| Bulk Water<br>(3,000 gallons)        | Potable Water Costs (County)                |              | \$40.10            | \$40.90             | \$ 0.80             | 2.0%             |
|                                      | Estimated Delivery Charges (Private Hauler) |              | \$85.45            | \$85.45             | \$-                 | 0.0%             |
|                                      | <b>Total</b>                                |              | <b>\$125.54</b>    | <b>\$126.35</b>     | <b>\$0.80</b>       | <b>0.6%</b>      |
| Septic/Holding<br>(2,000 gallons)    | Treatment Costs (County)                    |              | \$127.90           | \$130.45            | \$ 2.56             | 2.0%             |
|                                      | Estimated Delivery Charges (Private Hauler) |              | \$91.57            | \$91.57             | \$-                 | 0.0%             |
|                                      | <b>Total</b>                                |              | <b>\$219.47</b>    | <b>\$222.02</b>     | <b>\$2.56</b>       | <b>1.2%</b>      |