A GRAND EXPERIENCE

HALDIMAND COUNTY

2018

DRAFT RATE SUPPORTED WATER & WASTEWATER CAPITAL FORECAST AND OPERATING BUDGET

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Capital Forecast and Operating Budget
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HALDIMAND COUNTY

2018 Draft Rate Supported Capital Forecast and Operating Budget

For Consideration by Committee of the Whole on December 7, 2017

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 2018 Budget Timetable:

Draft Budget	**Review Date(s)**	**Additional/Conditional Dates**
Rate Supported Capital and Operating Budget	December 7, 2017	n/a
Tax Supported Capital Budget	February 8, 2018	February 9, 2018 (if required)
Tax Supported Operating Budget	March 6, 2018	March 7 and 8, 2018 (if required)

The review and approval of the 2018 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 2018 Draft Tax Supported Operating Budget will provide the basis for the 2018 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 9,200 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 November 2017 Economic Forecast, Canada's annualized rate of change in key financial areas is projected as follows:

Annualized Rate of Change	***2014 Actual***	***2015 Actual***	***2016 Actual***	***2017 Forecast***	***2018 Forecast***
Gross Domestic Product	2.6%	0.9%	1.5%	**3.0%**	**2.5%**
Residential Construction	2.7%	3.8%	3.0%	**4.4%**	**0.4%**
Unemployment Rate	6.9%	6.9%	7.0%	**6.4%**	**6.0%**
Inflation	1.9%	1.1%	1.4%	**1.6%**	**1.8%**
Bank of Canada Prime Lending rate	Currently at 3.20% (major banks = 3.20%)				

Recent economists' reports indicate continued Canadian economic growth, modest inflation and additional interest rates increases in 2018. It is anticipated these impacts, particularly further interest rate increases, will financially affect residents and businesses to varying degrees. Accordingly, these potential impacts have influenced the guidelines and recommendations contained within the 2018 Draft Rate Supported Operating Budget. The affordability of the County's investments in water and wastewater infrastructure has been heavily 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, continue to be utilized for preparation of the 2018 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);
- Elimination of reduced Block 2 consumption rate (the phase out ended in 2016);
- 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 of all miscellaneous revenues based on annual increase of underlying costs.

The Rate Supported Budget is scheduled to be reviewed by Council on December 7st, 2017. It is recommended that the required rate increases take effect January 1, 2018, upon approval of the draft budget by Council.

A. 2018 DRAFT RATE SUPPORTED CAPITAL BUDGET AND FORECAST TO 2027

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 2018 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. Several of these recommended improvements are included in the 2018 to 2027 capital budget. 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 53% 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 $118.7 million for the period 2018 to 2027. Relative to the approved forecast in 2017, this represents an **increase** of approximately $48.6 over the ten year forecast (the majority of this increase relates to one project – a new wastewater treatment plant in Caledonia totaling approximately $45 million). Typically gross capital costs decrease significantly in the later part of the forecast (with the exception of 2026/2027 due to the wastewater treatment noted above). 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 2018 Capital Budget and Forecast). As indicated below, there are consistent average gross costs relative to the prior year's approved budget over the 10 year forecasted period particularly for the water system. 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). The wastewater system 2018 draft budget average annual gross expenditures have increased significantly from the 2017 final capital budget. The main driver, as will be discussed during this report, is 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	2017 Budget Average Annual Gross Expenditures	2018 Draft Budget Average Annual Gross Expenditures	10 Year Forecast from 2013 Rate Study (average annual gross expenditures)
Water System	$3.4 Million	$3.5 Million	$4.7 Million
Wastewater System	$3.6 Million	$8.4 Million	$4.3 Million
Total	**$7.0 Million**	**$11.9 Million**	**$9.0 Million**

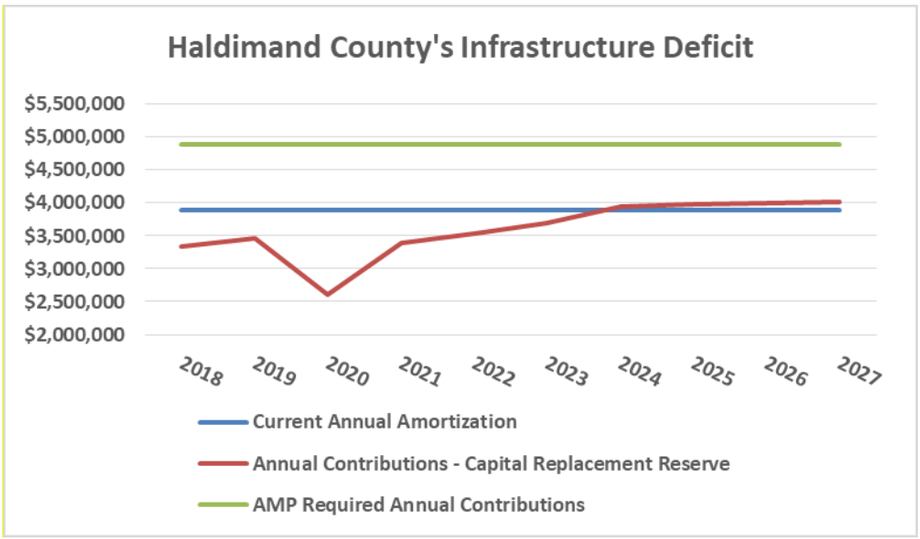
Estimated Haldimand County Water/Wastewater "Infrastructure Deficit"

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 2016 financial statements, the County's net book value of assets for water and wastewater only (excludes tax supported infrastructure) was as follows:

2016 Net Book Value *(water and wastewater assets only)*	Haldimand
Historical Cost	$206,816,933
Net Book value	$133,044,228
Percentage	**64.3%**

The County's NBV as a % of historical cost has remained relatively constant from 2009 to 2016 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 (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.

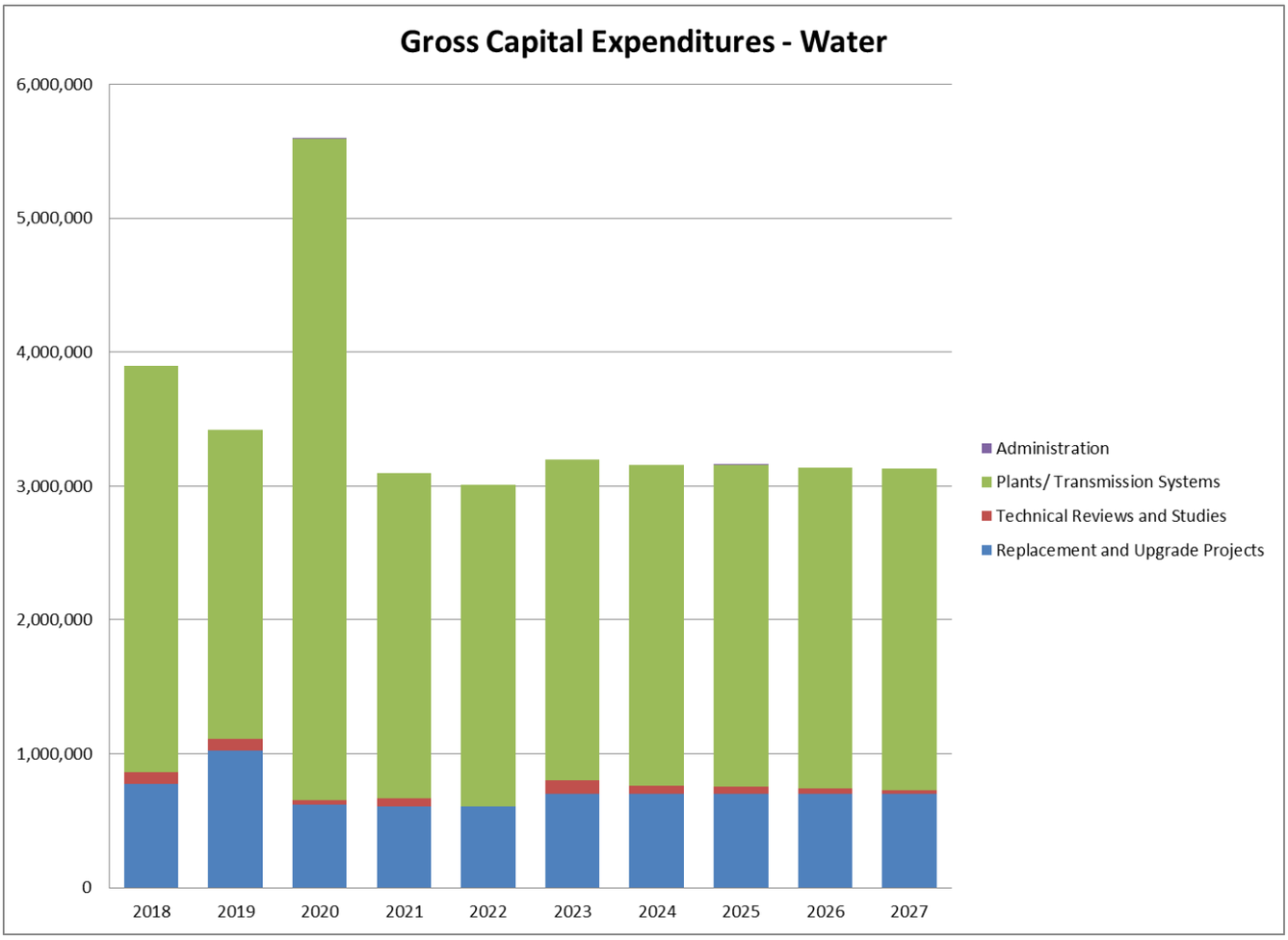


Although the above information is based on several assumptions (i.e. rate of inflation, interest earnings on applicable reserves, estimated useful life, anticipated debenture issuances, etc.), it is a good indication that there are definitely future funding issues to be addressed in order to fully finance 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 2018 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:

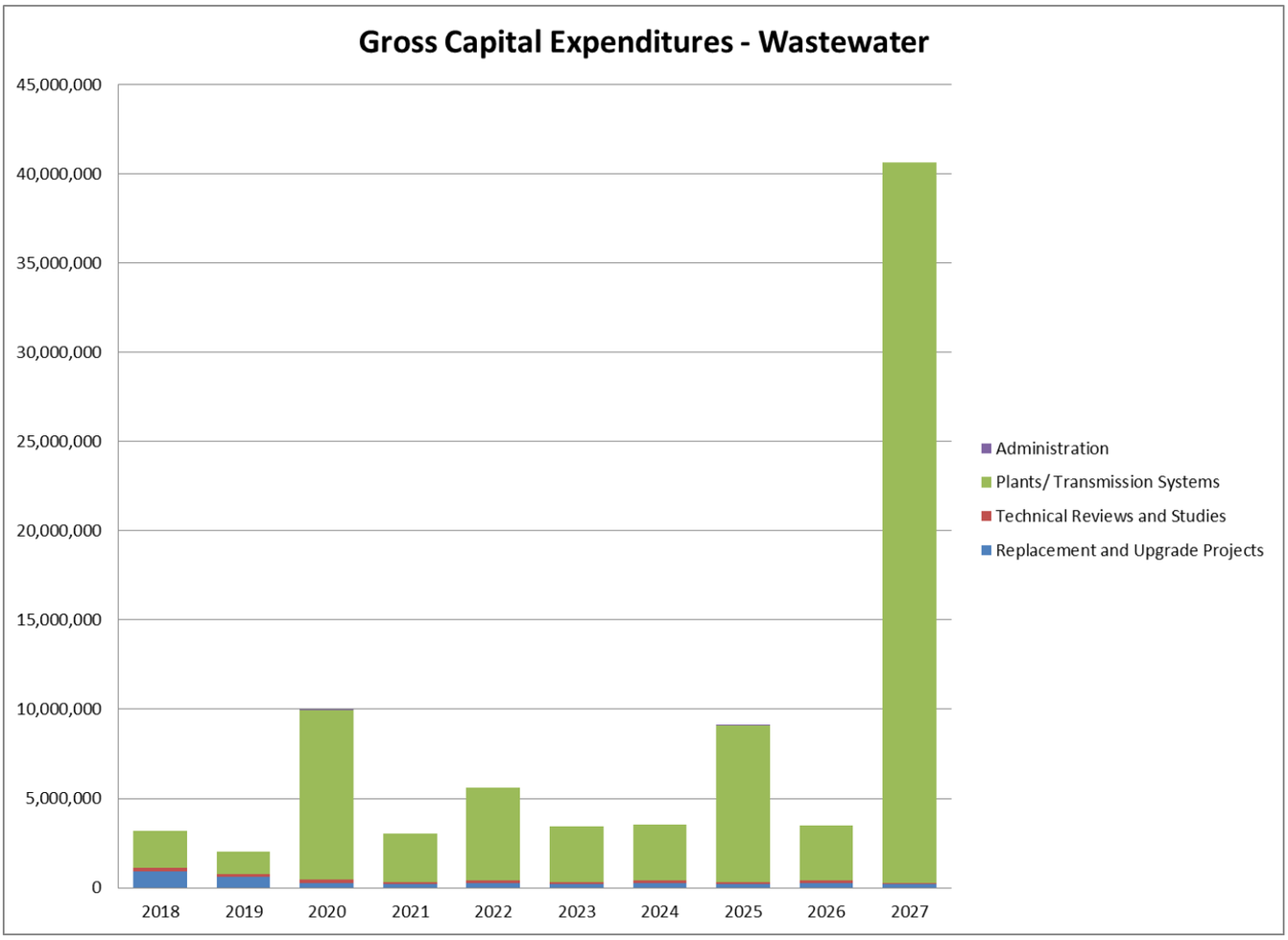
A summary of the planned gross capital costs for Water services is presented in the chart below. Although there are limited overall changes, there are shifts in timing/scope changes for projects that will affect the long range financing plan (primarily due to the changes in the early years of the forecast – 2018 to 2020). 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 $605,000. Annual fluctuations reflect timing of planned replacements with spikes for major replacement/growth related projects (i.e. Dunnville Alder Street for $400,000 and $450,000 in 2018 and 2019 respectively). 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 $55,000 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 $2.7 million – annual fluctuations would reflect growth related projects funded from Development Charges or one-time significant replacements. Also, there is a significant project planned at the Port Maitland Low Lift Facility totaling approximately $1.25 million in 2018. The replacement of the existing water standpipe in Caledonia is planned to start in 2018 with the project spanning a three year period at an estimated total cost of $5.4 million ($4.6 million in 2020), funded primarily by development Charges ($3.3 million). 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 also a 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 $335,000. Annual fluctuations reflect timing of planned replacements with spikes for major growth related projects as can be noted in 2018 and 2019 (due primarily to Alder Street replacements). 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 $138,000 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 $5 million, including the Jarvis Additional Wastewater Treatment Capacity project, totaling $6.4 million over the years 2018 to 2020; 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 $45 million over the years 2022 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 9,200 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 2018 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.

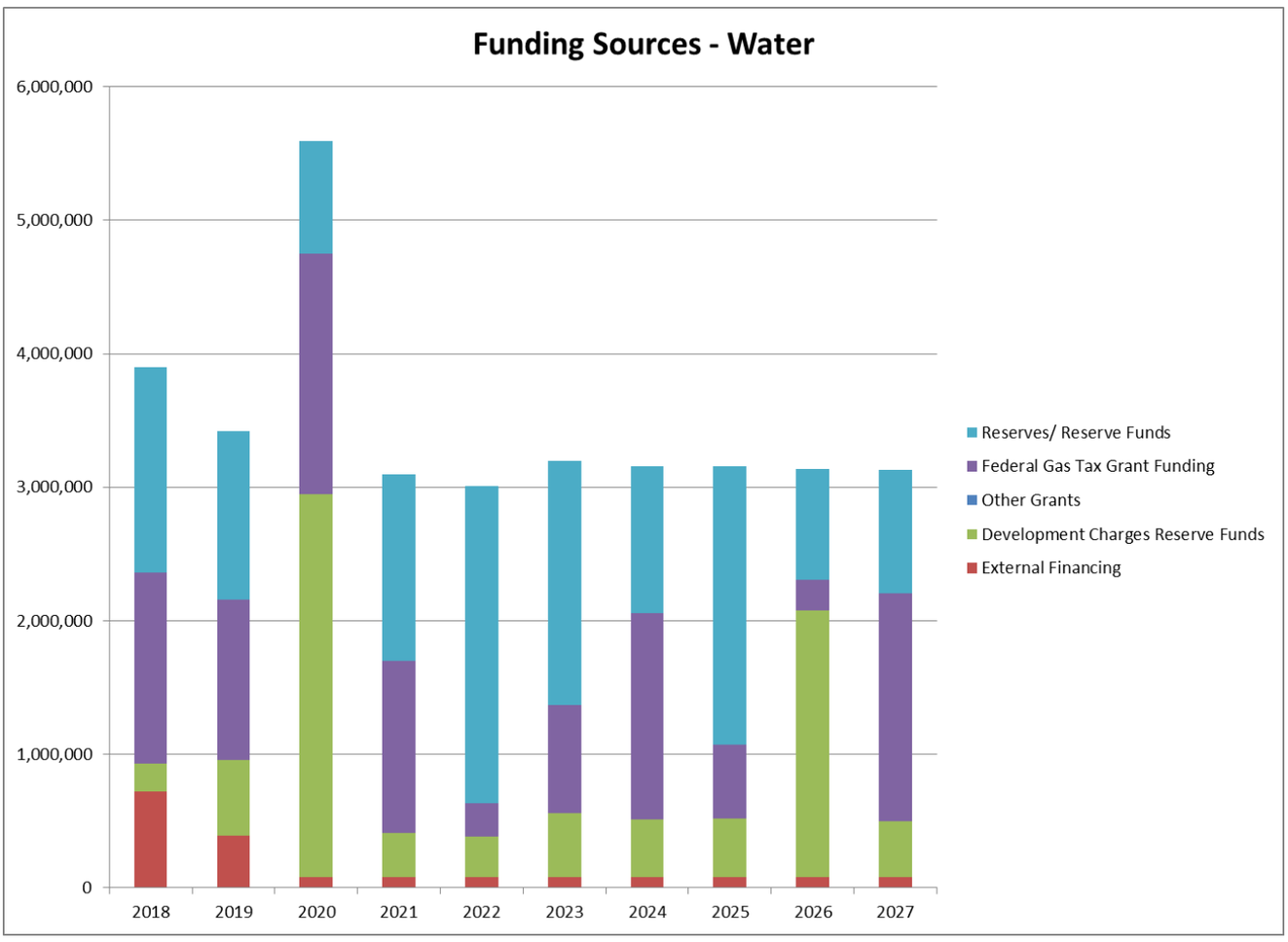
Typically, water and wastewater capital projects are funded in specific ways, depending mainly on whether the expenditure is for replacement or enhancement, as follows:

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.

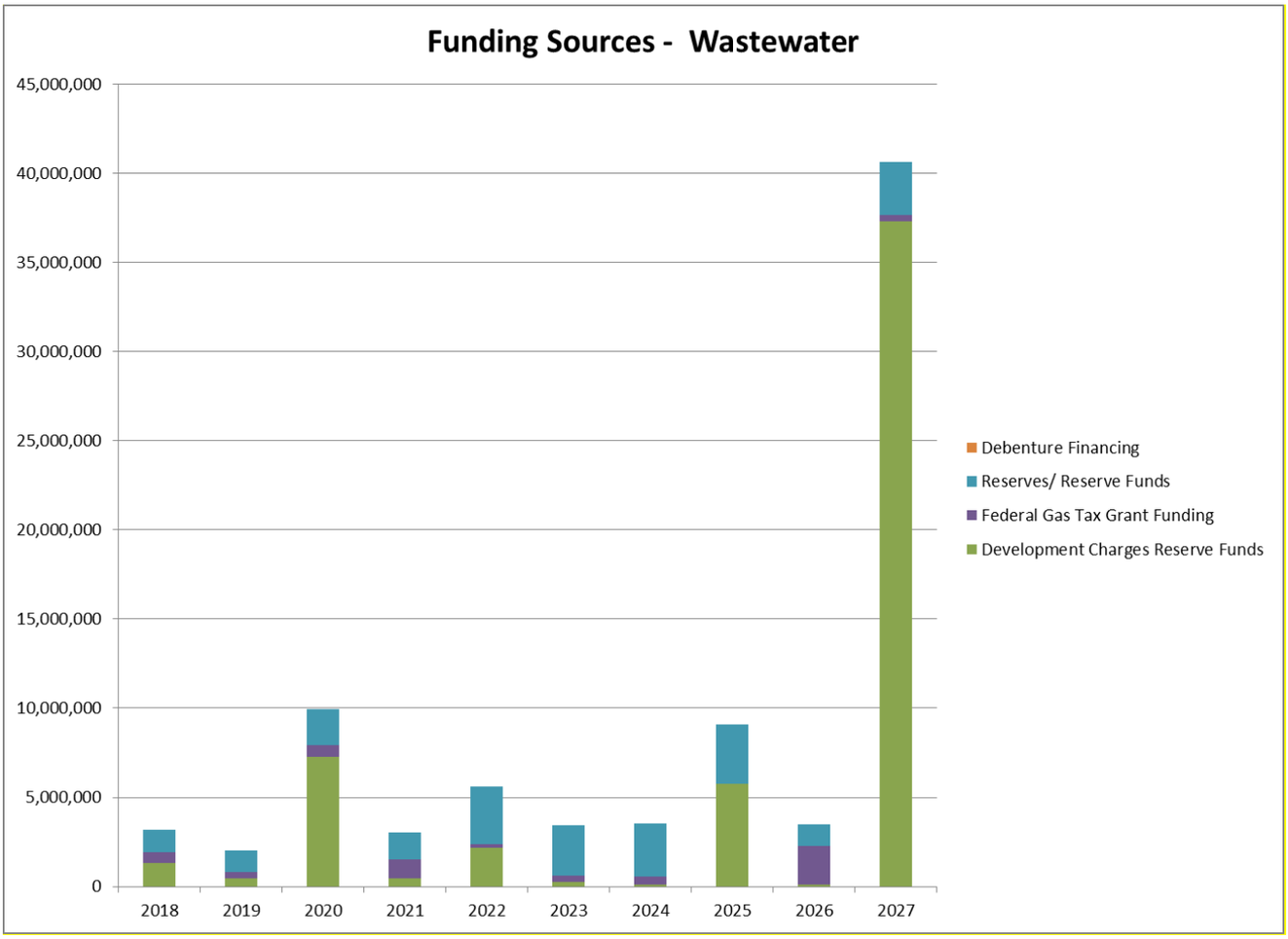
Plant Upgrades/Enhancement Projects: Typically, these projects are financed from external revenue sources. Enhancements to existing services/processes, not growth related, are internally financed. Development charges are collected for specifically identified projects. External sources of funds may be 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 41% of total funding over the forecast period). Federal Gas Tax grant funding represents the next largest portion totaling 31%. While 2017 also contained significant funding from the new Canada/Ontario Clean Water and Wastewater Fund totaling $2,070,050 or 6.1%, there has not been any announcements regarding the permanency of this grant on a go forward basis (therefore no funding was included in 2018). There is limited use of development charges (approximately 23% 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. Total external funding represents 5%.



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 27% 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 has increased substantially over the 2017 Rate Supported Capital Budget and Forecast and represents approximately 66% 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 $45 million (which is fully financed by Development Charges over the period of 2022 to 2027).



Grant Funding

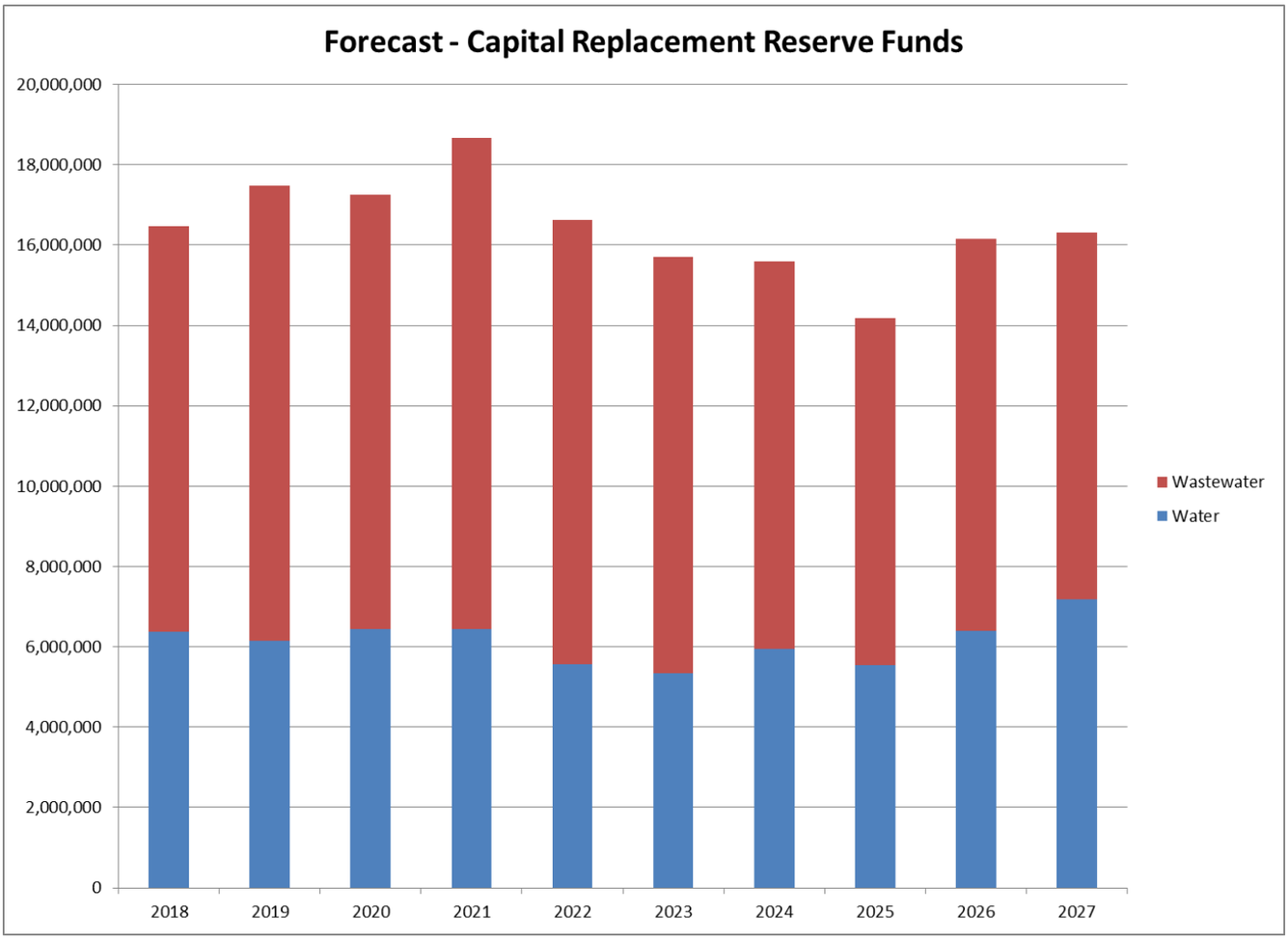
As indicated above, the only predictable grant funding is the County's annual Federal Gas Tax Allocation (our current allocation is approximately $2.86 million per year). As outlined in the capital financing principles, 50% of the annual allocation is applied to water/wastewater capital needs. Of the approximately $16.9 million allocated to water/wastewater capital projects over the forecast period, $10.8 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.

In September 2016, the governments of Canada and Ontario announced the establishment of the Clean Water and Wastewater Fund (CWWF). The CWWF will provide Ontario municipalities with up to $569.6 million in infrastructure funding in 2016/17 to accelerate the rehabilitation and modernization of drinking water, wastewater and stormwater infrastructure. The CWWF funds were intended to foster economic growth and support a cleaner and healthier environment for communities. Municipal allocations are based on the amount of water, wastewater and stormwater assets owned by municipalities and their economic conditions. While it was previously believed that there was the potential for additional funds to be made available in future years under this grant program, there has been no further announcements at this time (there is indication from the Province that there may be future funding available, although no details have been provided).

Based on the CWWF formula, Haldimand County was eligible to receive a maximum federal allocation of $1,380,033 and a maximum provincial allocation of $690,017 for a combined amount of $2,070,050 of new grant funding. If additional CWWF 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 2018 Draft Rate Supported Capital Budget and Forecast to 2027. The following chart outlines the projected balance of the water and wastewater capital replacement reserve funds (impacts on the development charges reserve funds are described in more detail later in this report).



The capital financing principles approved by Council (included in 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 there are new debt requirements to fund water/wastewater related capital infrastructure starting in 2018 (for debt issued in 2017) and 2020 respectively, 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 $118,000 or 1.0% of combined rates revenue per year. The impact in 2018 specific to water is $80,000 or 1.4% and for wastewater is $38,000 or 0.6%.

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

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 2018 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 $8 million of growth related water capital projects to be financed from development charges (Caledonia Elevated Tank – approximately $3,293,000; Dunnville WTP reservoir expansion – approximately $1,841,000, and the majority of the balance, approximately $2.9 million, represents estimated costs related to future replacements/plant upgrades yet to be identified). Wastewater capital projects includes approximately $55.3 million funded from development charges (the majority of which represents the new/upgraded Caledonia WWTP in the amount of approximately $45 million – which was not identified during the 2014 study; the next largest balance, of approximately $6.4 million, representing Additional Wastewater Treatment Capacity in Jarvis). The remaining balance of the Wastewater DC projects are distributed throughout the 2018 10 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 ("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 is planned in 2018 that 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 $12.2 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 begin in 2018). As a result, there are new repayments required for debt issued in 2017 on previously approved projects, totaling approximately $6.2 million that will commence in 2018. Existing debt have maturity dates ranging from 2020 to 2027 – see Appendix B.

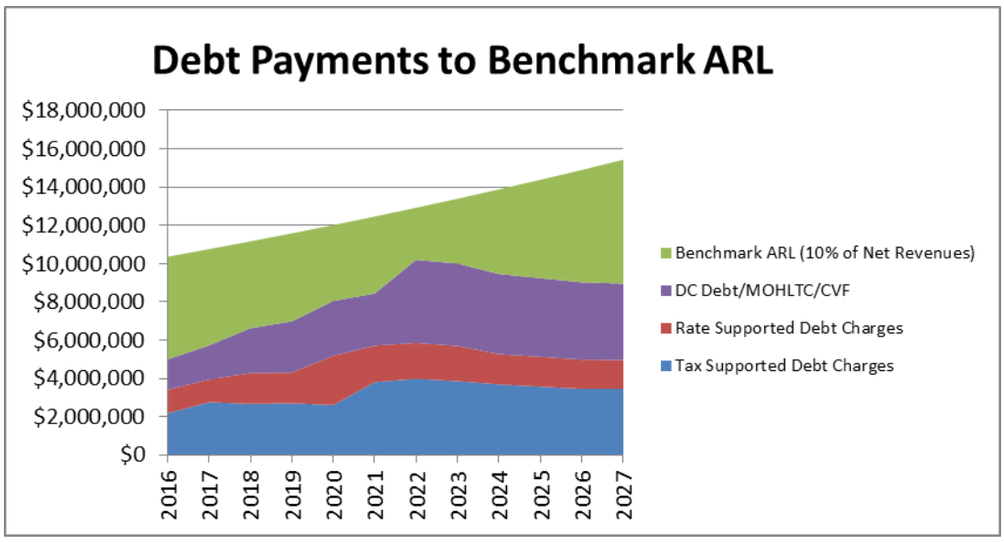
Proposed New Debt: Over the ten year forecast, there is **NO** new proposed debt financed projects for water or wastewater projects. New debt to be issued over the forecast term includes existing projects where construction is to be completed and debt financed in 2018 or beyond. New debt financed projects in wastewater relate to replacements/upgrades at the Dunnville wastewater treatment facility, totaling approximately $7.6 million to be issued in 2018.

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 $57 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 $45 million. New debt to be issued over the forecast term also includes existing projects where construction is to be completed and debt financed in 2018 or beyond. In addition, there are new repayments required for debt issued in 2017 on previously approved projects, totaling approximately $5.2 million, for which payments will commence in 2018.

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 2017-2026 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 $10.2 million (tax supported $4.0 million; rate supported $1.9 million, DC debt $4.3 million) or 7.9% of annual net revenues in 2022. 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).

B. 2018 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 2018 Draft Rate Supported Operating Budget that are, to some degree, beyond Council's control.

In addition to the aforementioned 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 9,200 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.

2017 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 M). 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 2018 operating budget document, the combined water/wastewater forecasted year end 2017 operating **surplus** is approximately $1,310,000.

The following chart outlines the forecasted 2017 surplus/(deficit) for water operations:

2017 Projected Operating Variance Water Operations	
	Surplus/ (Deficit)
Revenues:	
Residential and Commercial/Industrial Consumption - Mainly from large industrial users	$197,531
Nanticoke Industrial Pumping Station - Stelco and Imperial Oil recoveries offset by expenditures below	($256,329)
Bulk Water Sales - Wet spring resulting in lower than anticipated usage	($122,429)
Water Meter Installations and Connection Permits - Due to increased development	$69,107
Miscellaneous Net Items (Individually under $25,000)	$42,342
Sub-total Revenues	***($69,778)***
Expenditures:	
Salaries & Wages - Water portion of gapping related to Project Technologist and Asset Management positions	$111,582
Insurance Charges - Savings in contract renewal	$43,860
Maintenance & Repairs - Services - Due to less excavations from main breaks and service leaks due to a mild winter	$109,813
Hydro - County share only	$83,610
Nanticoke Industrial Pumping Station - Stelco and Imperial Oil share of exependitures - mainly hydro savings	$256,329
Miscellaneous Net Items (Individually under $25,000)	$38,097
Sub-total Expenditures	***$643,291***
Total Water Operating Surplus	**$573,513**

The following chart outlines the forecasted 2017 surplus/(deficit) for wastewater operations:

2017 Projected Operating Variance Wastewater Operations	
Revenue	**Surplus/ (Deficit)**
Residential and Industrial/Commercial Consumption	$94,898
Bulk Processing Leachate - Higher treatment levels at both sites has exceded budget	$333,411
Holding/Septic Tank Revenues	$28,629
Wastewater Portion of Water Meter Installations and Connection Permits - Due to increased development	$60,951
Overstrength Charges - offset by contribution to reserve	$79,068
Miscellaneous net items (individually under $25,000)	$5,003
Subtotal Revenues	***$601,960***
Expenditures	
Salaries & Wages - Wastewater portion of gapping related to Project Technologist and Asset Management positions	$52,892
Insurance Charges - Savings in contract renewal	$36,390
Hydro	$71,890
Taxes & Local Improvements	$35,272
Wastewater Rate Stabilization Reserve - Offset to Overstrength Charges	($79,068)
Miscellaneous net items (individually under $25,000)	$17,193
Subtotal Expenditures	***$134,569***
Total Wastewater Operating Surplus	**$736,529**

There were several items with significant 2017 variances that impact the 2018 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);

- A wet summer season resulting in lower than budgeted bulk water usage (partially offset by a surplus in bulk water usage in New Credit);
- 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);
- Higher than budgeted leachate treatment volumes.

2018 Draft Rate Supported Operating Budget Overview

The 2018 Draft Rate Supported Operating Budget, as outlined in this document, represents an overall net **increase** in total rate revenue requirements of $20,930 or 0.17% compared to the 2017 budgeted total rates revenue of $12.0 million: the water system requires an increase of $7,360 or 0.13% in rates revenue; the wastewater system reflects an increase of $13,570 or 0.22% 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 2018 Draft Rate Supported Budget includes a number of impacts as discussed below, the typical residential user will see a monthly decrease of approximately $2.48 or 2.9% (based on a residential service of 1" or less and average consumption of 15 m^3 per month – as outlined in Appendix Q) as the increased consumption and basic charges realized as a result of the increased development (particularly in Caledonia) is anticipated to offset budgetary pressures.

2018 Budget Drivers – Water Operations

WATER OPERATIONS

	2017 Budget	2018 Budget	increase/(decrease)	
	$	$	$	%
Expenditures				
Salaries, Wages & Benefits	1,783,980	1,850,430	66,450	3.72%
Supplies & Materials	127,700	130,800	3,100	2.43%
Hamilton Water Supply	2,346,200	2,347,930	1,730	0.07%
Services	3,403,740	2,828,880	(574,860)	-16.89%
Veolia Operating Services Charges	2,100,430	2,147,060	46,630	2.22%
Interdepartmental Charges	357,950	383,650	25,700	7.18%
Long Term Debt Charges	337,300	1,443,500	1,106,200	327.96%
Transfers to Reserves/Reserve Funds	1,870,600	1,216,310	(654,290)	-34.98%
Total Expenditures	**12,327,900**	**12,348,560**	**20,660**	**0.17%**
Revenues				
Recoveries from New Credit	210,600	248,300	37,700	17.90%
Fees & Recoveries	6,406,490	6,382,090	(24,400)	-0.38%
Total Revenues	**6,617,090**	**6,630,390**	**13,300**	**0.20%**
Net Revenues Required from User Rates	**5,710,810**	**5,718,170**	**7,360**	**0.13%**

As noted above, the overall 2018 rates revenue requirement from water users has increased by $7,360 or 0.13%.

Driver	***Net Rate Revenues Impact***	***% Impact***
A. Base Budget (net)	($159,740)	(2.80%)
B. New Initiatives	$87,160	1.53%
C. Water Additional Capital Contribution	$79,940	1.40%
Total	**$7,360**	**0.13%**

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 $159,740. This net change is driven primarily by: decreased bulk water revenues (water haulers offset by New Credit and fire protection charges) and increases in meter installs and connection permits mainly due to new development. Expenditure drivers for 2018 include shifts in direct operating staff from wastewater to water, saving in the contract renewal for insurance not captured in the 2017 budget and reductions in the overall maintenance and repair and hydro accounts. 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). In 2018, the contribution to the water rate stabilization reserve is being reduced by $70,000 to bring the annual contribution to zero. A corresponding reduction of $100,000 is included related to the wastewater rate stabilization reserve to bring both the water and wastewater annual contributions to zero as the balances in these reserves are adequate to cease annual contributions completely, assuming financing operating results are on budget. However, staff will continue to monitor the annual operating requirements in these reserves to ensure the balances remain at an acceptable level (see Appendix L).

As outlined in Appendix L, it is anticipated that, in the absence of any changes in future costs or consumption trends, there will be an ability to transfer excess funds of approximately $3.5 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:

2018 Draft Water Operating Budget	
Summary of Impact of Budget Drivers on Rate Revenue Requirements	
Base Budget:	**Increase/ (Decrease)**
Revenues (excludes rate revenues):	
New Credit Water Depot - 3 year average consumption	($37,500)
Bulk Water Sales - 2 year average consumption	$132,000
Connection Permits & Meter Installs - Due to new development	($86,440)
Fire Hydrant Fees - Estimated 2% increase	($42,600)
Dunnville Microstrainer - Decreased recoverable capital planned for Port Maitland offset by reduced contribution to Reserve Fund	$60,330
Nanticoke Industrial Pumping Station - Stelco and Imperial Oil recoveries offset by expenditures below	$420,740
Miscellaneous Fees & Recoveries	$4,210
Sub-total Revenues	***$450,740***
Expenditures:	
Salaries & Wages - Shift in operational work from wastewater to water (net impact of $41,000)	$66,450
Hamilton Water Supply - Wholesale water purchase (based on rates per agreements and 2 year average consumption)	$1,730
Insurance - Savings in contract renewal	($43,780)
Maintenance & Repair - Services	($40,000)
County Hydro Costs	($59,600)
Reduction in Contribution to Rate Stabilization Reserve	($70,000)
Dunnville Microstrainer (offset) - Decreased recoverable capital planned for Port Maitland	($60,330)
Nanticoke Industrial Pumping Station - Stelco and Imperial Oil share of expenditures - mainly hydro savings	($420,740)
Miscellaneous Supplies & Services	$15,790
Sub-total Expenditures	***($610,480)***
Total Base Budget Impact on Rate Revenue Requirements	**($159,740)**

B. New Initiatives

New initiatives are identified in two categories: Council Approved Initiatives and New Initiatives. There is one Council approved Initiative for 2018, as outlined in Appendix J. In addition, there is one New Initiative proposed for Council's consideration for 2018, as outlined in Appendix K (as well as outlined through a separate report to be presented with the Draft Rate Supported Budget). The proposed New Initiatives have an ongoing annual operating budget impact. Overall, the net rate revenue impact of these initiatives in water operations is an increase of $87,160 as outlined bellow:

Description	**Rate Revenue Increase/ (Decrease)**
Council Approved Initiatives	
Water Billing & Collecting Costs - Annualized increased staffing costs from billing provider as a result of increase in user base	$48,900
Sub-total	**$48,900**
New Initiatives	
Transfer of Water Connection Permit Revenue for all work completed from Street Line to House	$38,260
Sub-total	**$38,260**
Total Initiatives Impact on Rate Revenue Requirements	**$87,160**

C. Infrastructure Capital Financing Requirements

Overall, water annual capital financing related impacts on the user rates were held to **1.40%** in 2018. 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 2018 increased by $79,940. 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.

2018 Budget Drivers – Wastewater Operations

WASTEWATER OPERATIONS

	2017 Budget	2018 Budget	increase/(decrease)	
	$	$	$	%
Expenditures				
Salaries, Wages & Benefits	690,660	665,240	(25,420)	-3.68%
Supplies & Materials	20,060	20,110	50	0.25%
Services	1,608,540	1,571,230	(37,310)	-2.32%
Veolia Operating Services Charges	2,406,180	2,477,170	70,990	2.95%
Interdepartmental Charges	268,720	290,310	21,590	8.03%
Long Term Debt Charges	1,245,270	1,150,900	(94,370)	-7.58%
Transfers to Reserves/Reserve Funds	2,378,520	2,490,760	112,240	4.72%
Total Expenditures	**8,617,950**	**8,665,720**	**47,770**	**0.55%**
Revenues				
Municipal Recoveries	74,100	58,320	(15,780)	-21.30%
Fees & Recoveries	1,860,360	1,833,240	(27,120)	-1.46%
Transfers from Reserves/Reserve Funds	403,140	480,240	77,100	19.12%
Total Revenues	**2,337,600**	**2,371,800**	**34,200**	**1.46%**
Net Revenues Required from User Rates	**6,280,350**	**6,293,920**	**13,570**	**0.22%**

As noted above, the overall 2018 rates revenue requirement from wastewater users has increased by $13,570 or 0.22%. Detailed budget drivers are outlined below.

Driver	***Net Rate Revenues Impact***	***% Impact***
A. Base Budget (net)	($109,550)	(1.74%)
B. New Initiatives	$84,930	1.35%
C. Wastewater Additional Cap	$38,190	0.61%
Total	**$13,570**	**0.22%**

A. Base Budget Drivers (net)

As indicated above, total net base expenditures decreased by approximately $109,550. The major revenue related impacts are increased meter installation and connection permits due to new development and reduced leachate revenues. Expenditure related impacts include a shift in operational staff time from wastewater to water, a decrease in contract renewal for insurance not captured in the 2017 budget, Veolia operating impacts, hydro savings at treatment plants and the removal of the annual contribution to the wastewater rate stabilization reserve as mentioned previously. The major detailed net operational impacts are outlined below:

2018 Draft Wastewater Operating Budget	
Summary of Impact of Base Budget Drivers on Rate Revenue Requirements	
Base Budget:	**Increase/ (Decrease)**
Other Revenues (excludes rate revenues):	
Connection Permits and Meter Installations - Due to new development	($90,350)
Leachate - Based on 2 year average volume and anticipated decrease in loading of 1.75%	$109,700
Miscellaneous Fees & Recoveries	($12,480)
Sub-total Revenues	***$6,870***
Expenditures:	
Salaries & Wages - Shift in operational work from wastewater to water (net impact of $41,000)	($25,420)
Veolia Operations - Standard annual increase with additional $23,000 related to McClung Pump station	$70,990
Insurance - Savings in contract renewal	($35,740)
Hydro - 3 year average consumption with estimated rate increase and LAS provided rate increase	($50,030)
Decrease in Contribution to Rate Stabilization Reserve	($100,000)
Miscellaneous Supplies & Services	$23,780
Sub-total Expenditures	***($116,420)***
Total Base Budget Impact on Rate Revenue Requirements	**($109,550)**

B. New Initiatives

New initiatives are identified in two categories: Council Approved Initiatives and New Initiatives. There is one Council approved Initiatives for 2018, as outlined in Appendix J. In addition, there is one New Initiative proposed for 2018 as outlined in Appendix K (as well as outlined through a separate report to be presented with the Draft Rate Supported Budget). The proposed New Initiatives have an ongoing operating budget impact. Overall, the net rate revenue impact of these initiatives in water operations is an increase of $84,930 as outlined bellow:

Description	**Rate Revenue Increase/ (Decrease)**
Council Approved	
Wastewater Billing & Collecting Costs - Annualied increased staffing costs from billing provider as a result of increase in user base	$48,900
Subtotal	**$48,900**
New Initiatives	
Transfer of Water Connection Permit Revenue for all work completed from Street Line to House	*$36,030*
Subtotal	**$36,030**
Total Initiatives Impact on Rate Revenue Requirements	**$84,930**

C. Infrastructure Capital Financing Requirements

Overall, wastewater annual capital financing related impacts on the user rates were **0.61%** in 2018. 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 2018 increased by $38,190. 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 N – Schedules B through D, inclusive. The intent is to pass a comprehensive water and wastewater by-law that includes all water and wastewater fees, with an effective date of January 1, 2018.

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 M 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 2018, with the exception of the bulk water cubic meter consumption charge, which is discussed in further detail below.

Water Miscellaneous Revenues

Miscellaneous revenues represent approximately $6.6 million in annual revenues for the water system, reducing the user rates revenue by a corresponding amount. Of these fees approximately $2.1 million relates to the recovery of costs associated with the provision of non-potable water to industries in Nanticoke - it should be noted that this budget has been developed with no changes to the cost allocations under the Lake Erie industrial agreement. An additional $261,000 relates to industry recoveries from Port Maitland. Bulk water recoveries represent total revenues of approximately $1.0 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 $42,600 or 2.0%. The remaining miscellaneous fees total approximately $567,000 and include: water supply charges to New Credit of $248,000 (which is established by agreement as a percentage of the County's block 1 water rate and includes increased consumption related to usage of the bulk water depot in New Credit); property tax recoveries from industry of approximately $98,000; and miscellaneous charges of approximately $221,000.

During the 2018 budget preparations, staff completed a comprehensive review of the majority of the fees outlined in Appendix N, Schedule C – General Fees. Finance staff reviewed the applicable fees with water and wastewater staff and calculated the cost recovery for these fees by utilizing Schedule E – the County's standard template for determining full cost recovery. The majority of fees calculated did not change significantly from those that were approved in 2017 and those fees that did change do not warrant an adjustment to the related revenue budget. The calculated fees were also compared to fees for similar services in surrounding municipalities/3rd party providers.

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.

One fairly significant change to the user fees for 2018 relates to the New Initiative mentioned previously related to the connection permit revenues derived from inspections completed between the street line and the related property. As outlined in Appendix K, and as outlined in more detail through a separate report to be presented with the Draft Rate Supported Budget, currently these fees are collected as part of the water and wastewater general user fees contained in Schedule C. Upon further analysis, it has been determined that this activity is covered under the Building Code Act, and as such should be covered under the Building Division through the Tax Supported Operating Budget. As a result, a total revenue reduction of $74,290 is included in the Draft Rate Supported Operating Budget, with the corresponding remaining Tax Supported impacts to be included as a Council Approved initiative in the 2018 Tax Supported Operating Budget, if approved.

The following summarizes the proposed changes for bulk processing fees:

(i) Bulk Water Charges

As outlined in Appendix M, 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 has been fluctuating over the past few years. In order to maintain a level of predictability to these rates, staff are proposing that the bulk water cubic meter rate be index based on the underlying cost increases (2% for 2018), 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 2018 monthly fee is $16.85 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	Proposed 2018
Bulk Water Rate (per m3)	$3.02	$2.96	$2.93	$2.96	$2.89	$2.94

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

Bulk Water Rate	**2017 Rates**	**2018 Proposed Rates**	**Change**	
(per cubic metre)			*($)*	*(%)*
Controlled by Haldimand County				
Bulk Water Rate (charged to hauler)	$2.89	$2.94	$0.05	1.7%
Monthly Administration Fee (charged to hauler)	$16.52	$16.85	$0.33	2.0%
Per Load Impact on "Typical End User" (3,000 gallon load)				
Water Commodity (determined by Haldimand County)	$39.41	$40.10	$0.69	1.7%
Estimated hauler delivery charge (determined by hauler)	$85.45	$85.45	$0.00	0.0%
Total "End User" estimated cost	**$124.86**	**$125.54**	**$0.69**	**0.6%**

The following assumptions were used in the above chart: average load is 3,000 gallons (i.e. approximately 13.6 cubic metres); an estimated delivery charge of $85.45 (an increase from the estimated delivery charge of $72.60 used in last year's analysis); 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 2018 estimate reflects a decrease in this revenue source of approximately $110,000 due to relative treatment strength. 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 continue to 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 $151,000. This is a increase of $9,280 in aggregate due to a proposed increase of 2% in the per cubic meter rate and what appears to 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 $849,000 and include: "overstrength" charges established under the Sewer Use By-law of $82,000; sludge storage charges to Norfolk County of approximately $58,000; an increase in meter installation charges and connection permit revenue of $90,000; transfer from Development Charges Reserve Fund – Sewer of approximately $480,000 for the growth share of debenture charges; and miscellaneous charges of approximately $139,000. As mentioned previously, these fees have undergone a comprehensive fee review for 2018. All proposed changes are display in Appendix N, Schedule C. The majority of fees calculated did not change significantly from those that were approved in 2017 and those fees that did change do not warrant an adjustment to the related revenue budget.

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

As outlined in Appendix M 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 $16.85 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 2018 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 $9,280. Holding/septic volumes treated on an annual basis have declined steadily since 2010 (from a high of 24,000 cubic meters to approximately 9,000 cubic metres in 2016). For 2017, it is predicted that volumes will rebound slightly to a total of approximately 12,000 with a two year average volume utilized for the projected 2018 volumes of approximately11,000 cubic metres.

The impact on the holding/septic tank rates for 2018 is as follows:

Holding/Septic/Portable Toilet Tank Treatment Charge	**2017**	**2018 Proposed**	**Change**	
(per cubic metre)			*($)*	*(%)*
Controlled by Haldimand County:				
Proposed Rate (charged to hauler)	$13.79	$14.07	$0.28	2.0%
Monthly Administration Fee (charged to hauler)	$16.52	$16.85	$0.33	2.0%
Per Load Impact on "Typical End User" (2,000 gallon load)				
Treatment Cost (determined by Haldimand)	$125.35	$127.90	$2.55	2.0%
Estimated hauler delivery charge (determined by Hauler)	$91.57	$91.57	$0.00	0.0%
Total "End User" cost	**$216.92**	**$219.47**	**$2.55**	**1.2%**

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 $91.57. 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 M.

For 2018, the water users are required to generate approximately $5.7 million, which represents an increase in water rate revenue requirements of 0.13%. These revenues are collected by a combination of base water fixed fees and volumetric consumption charges per cubic metre consumed. As outlined in Appendix M, 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 $6.3 million in 2018, representing an increased requirement of 0.22%. 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 2018:

Water Customers and Consumption Comparison

	2017				2018			
	Actuals		Budget		Budget			
	Users	%	Consumption	%	Users	%	Consumption	%
Residential	8,533	89.81%	1,335,143	40.67%	8,665	89.82%	1,366,547	41.46%
Commercial/Industrial	680	7.16%	610,566	18.60%	680	7.05%	604,525	18.34%
Large Industrial	4	0.04%	819,174	24.95%	4	0.04%	804,002	24.40%
Subtotal	**9,217**	**97.01%**	**2,764,883**	**84.22%**	**9,349**	**96.91%**	**2,775,075**	**84.20%**
Bulk Water	284	2.99%	398,119	12.13%	298	3.09%	385,927	11.71%
New Credit Wholesale			71,247	2.17%			73,065	2.22%
New Credit Depot			48,783	1.49%			61,626	1.87%
Total	**9,501**	**100.00%**	**3,283,032**	**100.00%**	**9,647**	**100.00%**	**3,295,693**	**100.00%**

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 2018 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 2018 is comparable to 2017. 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 L) will provide some relief to offset any negative consumption impacts as they become known.

Wastewater Customers and Consumption Comparison

	2017				2018			
	Actuals		Budget		Budget			
	Users	%	Consumption	%	Users	%	Consumption	%
Residential	8,369	92.76%	1,309,129	61.54%	8,501	92.87%	1,344,153	61.71%
Commercial/Industrial	644	7.14%	489,259	23.00%	644	7.04%	480,157	22.05%
Large Industrial	3	0.03%	294,108	13.83%	3	0.03%	316,089	14.51%
Subtotal	**9,016**	**99.93%**	**2,092,496**	**98.36%**	**9,148**	**99.93%**	**2,140,398**	**98.27%**
Septic/Holding	6	0.07%	10,250	0.48%	6	0.07%	10,712	0.49%
Leachate		0.00%	24,568	1.15%			26,956	1.24%
Total	**9,022**	**100.00%**	**2,127,314**	**100.00%**	**9,154**	**100.00%**	**2,178,066**	**100.00%**

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 2018.

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 2018 water and wastewater user rates are included in Appendix N in this budget document. The proposed rates would be effective on all billings for consumption **effective January 1, 2018**. 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			2017	2018	$ Change	% Change
Monthly Services						
Residential (15 m3)	**Water**	Basic	$ 21.78	$ 21.10	$ (0.68)	(3.1%)
		Consumption	$ 15.49	$ 15.45	$ (0.04)	(0.2%)
		Total	**$ 37.27**	**$ 36.55**	**$ (0.72)**	**(1.9%)**
	Sewer	Basic	$ 25.45	$ 24.14	$ (1.31)	(5.1%)
		Consumption	$ 22.50	$ 22.05	$ (0.45)	(2.0%)
		Total	**$ 47.95**	**$ 46.20**	**$ (1.76)**	**(3.7%)**
	Total		**$ 85.22**	**$ 82.75**	**$ (2.48)**	**(2.9%)**
Commercial (2" 500 m3)	**Water**	Basic	$ 267.44	$ 259.05	$ (8.39)	(3.1%)
		Consumption	$ 516.37	$ 515.14	$ (1.23)	(0.2%)
		Total	**$ 783.81**	**$ 774.18**	**$ (9.62)**	**(1.2%)**
	Sewer	Basic	$ 312.47	$ 296.48	$ (15.99)	(5.1%)
		Consumption	$ 750.31	$ 735.14	$ (15.17)	(2.0%)
		Total	**$ 1,062.78**	**$ 1,031.62**	**$ (31.15)**	**(2.9%)**
	Total		**$ 1,846.58**	**$ 1,805.81**	**$ (40.78)**	**(2.2%)**
Industrial (4" 4,000 m3)	**Water**	Basic	$ 936.03	$ 906.66	$ (29.37)	(3.1%)
		Consumption	$ 4,130.96	$ 4,121.09	$ (9.86)	(0.2%)
		Total	**$ 5,066.99**	**$ 5,027.76**	**$ (39.23)**	**(0.8%)**
	Sewer	Basic	$ 1,093.65	$ 1,037.69	$ (55.96)	(5.1%)
		Consumption	$ 6,002.44	$ 5,881.12	$ (121.32)	(2.0%)
		Total	**$ 7,096.09**	**$ 6,918.81**	**$ (177.29)**	**(2.5%)**
	Total		**$ 12,163.08**	**$ 11,946.56**	**$ (216.52)**	**(1.8%)**

Bulk Services (per use basis)					
Bulk Water (3,000 gallons)	Potable Water Costs (County)	$39.41	$40.10	$0.69	1.7%
	Estimated Delivery Charges (Private Hauler)	$85.45	$85.45	$0.00	0.0%
	Total	**$124.86**	**$125.54**	**$0.69**	**0.6%**
Septic/Holding (2,000 gallons)	Treatment Costs (County)	$125.35	$127.90	$2.55	2.0%
	Estimated Delivery Charges (Private Hauler)	$91.57	$91.57	$0.00	0.0%
	Total	**$216.92**	**$219.47**	**$2.55**	**1.2%**

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

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 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 24% of total water rates revenues and 14% of wastewater revenues in 2017. In addition, Raw Water revenues account for approximately $2.1 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.
- 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 2018 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.

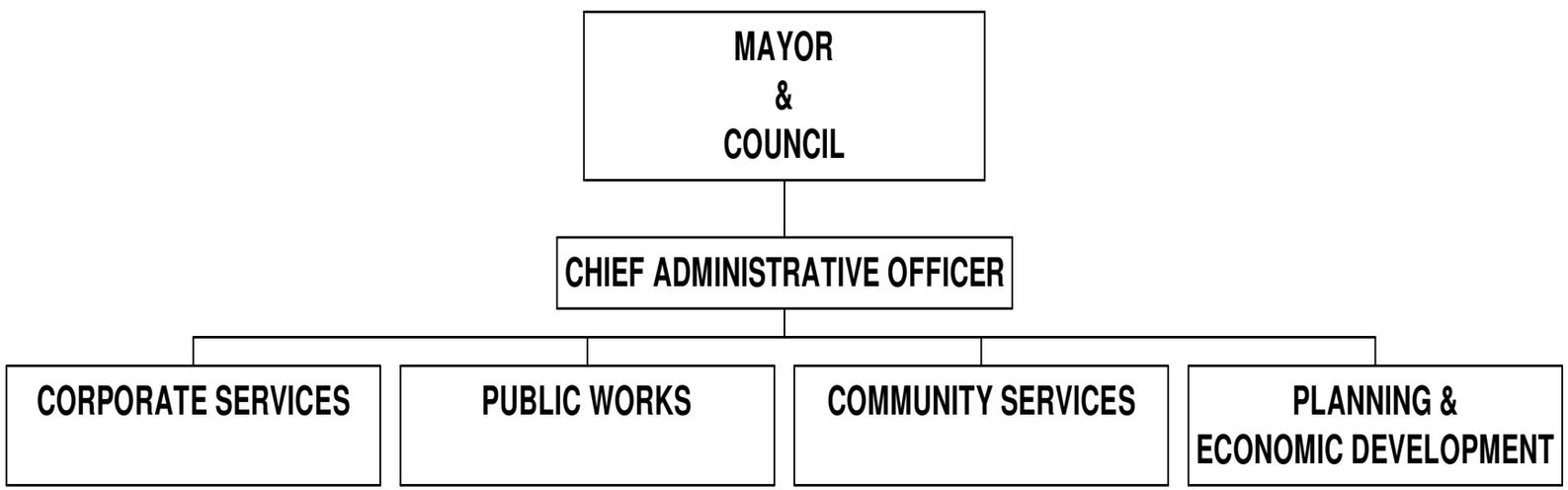
Continual revisions to the operating budget process will help the County better allocate resources to manage its operations and develop a long range financial plan with predictable water and wastewater rates.

It is, therefore, recommended that Council adopt the 2018 Draft Rate Supported Capital Forecast and Operating Budget and associated revisions to user rates and miscellaneous fees and charges.

Prepared by: Mark Merritt, CPA, CA, Treasurer

Respectfully submitted: Karen General, CPA, CGA, General Manager of Corporate Services

GOVERNANCE


MAYOR
&
COUNCIL
CHIEF ADMINISTRATIVE OFFICER
CORPORATE SERVICES
PUBLIC WORKS
COMMUNITY SERVICES
PLANNING &
ECONOMIC DEVELOPMENT

HALDIMAND COUNTY
COUNCIL
2014 - 2018

MAYOR ----------KEN HEWITT

WARD 1 ----------LEROY BARTLETT

WARD 2 ---------- FRED MORISON

WARD 3 ---------- CRAIG GRICE

WARD 4 ----------TONY DALIMONTE

WARD 5 ----------ROB SHIRTON

WARD 6 ---------- BERNIE CORBETT

HALDIMAND COUNTY
SENIOR STAFF

CHIEF ADMINISTRATIVE OFFICER ---------- DON BOYLE

GENERAL MANAGER
CORPORATE SERVICES ---------- KAREN GENERAL

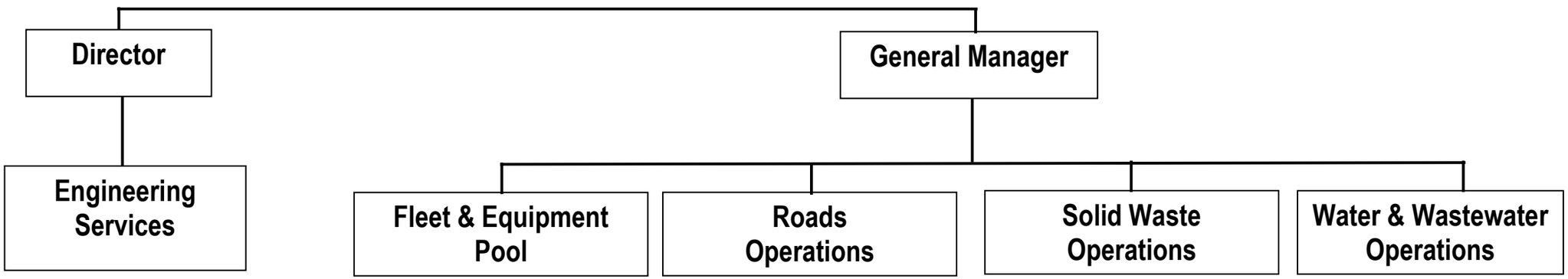
GENERAL MANAGER
COMMUNITY SERVICES ---------- HUGH HANLY

GENERAL MANAGER
PUBLIC WORKS ---------- PAUL MUNGAR

DIRECTOR
ENGINEERING SERVICES ----------TYSON HAEDRICH

GENERAL MANAGER
PLANNING & ECONOMIC DEVELOPMENT----------CRAIG MANLEY

PUBLIC WORKS DEPARTMENT



WATER & WASTEWATER CAPITAL FORECAST


A GRAND EXPERIENCE
HALDIMAND
COUNTY

Haldimand County

2018 to 2027 DRAFT CAPITAL FORECAST

Version: **Draft Budget**

Division: **Summary - Water and Wastewater**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
SUMMARY-Water & Wastewater Administration																
Water & Wastewater Administration			5,500					5,500			**11,000**				(11,000)	
Total SUMMARY-Water & Wastewater Administration			5,500					5,500			**11,000**				(11,000)	
SUMMARY-Water																
Water - Replacement and Upgrade Projects	772,000	1,025,000	621,500	605,000	605,000	700,000	700,000	700,000	700,000	700,000	**7,128,500**	(738,000)		(531,720)	(5,858,780)	
Water - Technical Reviews and Studies	89,000	84,000	29,000	64,000	4,000	99,000	59,000	54,000	39,000	29,000	**550,000**			(152,200)	(397,800)	
Water - Plants/Transmission Systems	3,036,900	2,309,500	4,941,300	2,425,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	**27,112,700**	(10,078,310)	(1,751,970)	(7,363,590)	(7,918,830)	
Total SUMMARY-Water	3,897,900	3,418,500	5,591,800	3,094,000	3,009,000	3,199,000	3,159,000	3,154,000	3,139,000	3,129,000	**34,791,200**	(10,816,310)	(1,751,970)	(8,047,510)	(14,175,410)	
SUMMARY-Wastewater																
Wastewater - Replacement and Upgrade Projects	935,000	588,000	270,000	183,000	280,000	183,000	270,000	193,000	270,000	183,000	**3,355,000**	(1,567,500)		(310,750)	(1,476,750)	
Wastewater - Technical Reviews and Studies	174,000	169,000	174,000	114,000	114,000	144,000	159,000	114,000	139,000	79,000	**1,380,000**			(299,300)	(1,080,700)	
Wastewater - Plants	2,054,500	1,266,900	9,511,800	2,716,700	5,197,700	3,100,000	3,100,000	8,782,600	3,100,000	40,355,900	**79,186,100**	(4,535,220)		(54,721,560)	(19,929,320)	
Total SUMMARY-Wastewater	3,163,500	2,023,900	9,955,800	3,013,700	5,591,700	3,427,000	3,529,000	9,089,600	3,509,000	40,617,900	**83,921,100**	(6,102,720)		(55,331,610)	(22,486,770)	
Total SUMMARY-Water and Wastewater	7,061,400	5,442,400	15,553,100	6,107,700	8,600,700	6,626,000	6,688,000	12,249,100	6,648,000	43,746,900	**118,723,300**	(16,919,030)	(1,751,970)	(63,379,120)	(36,673,180)	
Funding																
Water & Wastewater Administration																
Grants																
External Financing																
Development charges reserve Funds																
Community Vibrancy Reserve Funds																
Reserves/Reserve Funds			(5,500)					(5,500)			**(11,000)**					
Debenture Financing																
Total SUMMARY-Water & Wastewater Administration			**(5,500)**					**(5,500)**			**(11,000)**					
Water																
Grants	(1,430,000)	(1,203,000)	(1,800,000)	(1,287,750)	(250,000)	(814,610)	(1,542,750)	(550,200)	(225,250)	(1,712,750)	**(10,816,310)**					
External Financing	(721,950)	(390,020)	(80,000)	(80,000)	(80,000)	(80,000)	(80,000)	(80,000)	(80,000)	(80,000)	**(1,751,970)**					
Development charges reserve Funds	(208,890)	(566,700)	(2,869,470)	(333,050)	(302,560)	(476,270)	(433,700)	(441,200)	(2,000,470)	(415,200)	**(8,047,510)**					
Community Vibrancy Reserve Funds																
Reserves/Reserve Funds	(1,537,060)	(1,258,780)	(842,330)	(1,393,200)	(2,376,440)	(1,828,120)	(1,102,550)	(2,082,600)	(833,280)	(921,050)	**(14,175,410)**					
Debenture Financing																
Total SUMMARY-Water	**(3,897,900)**	**(3,418,500)**	**(5,591,800)**	**(3,094,000)**	**(3,009,000)**	**(3,199,000)**	**(3,159,000)**	**(3,154,000)**	**(3,139,000)**	**(3,129,000)**	**(34,791,200)**					
Wastewater																
Grants	(587,500)	(319,110)	(646,990)	(1,060,000)	(170,000)	(380,000)	(430,320)		(2,179,400)	(329,400)	**(6,102,720)**					
External Financing																
Development charges reserve Funds	(1,328,750)	(482,320)	(7,295,260)	(480,500)	(2,194,110)	(237,200)	(119,920)	(5,767,700)	(98,550)	(37,327,300)	**(55,331,610)**					
Community Vibrancy Reserve Funds																
Reserves/Reserve Funds	(1,247,250)	(1,222,470)	(2,013,550)	(1,473,200)	(3,227,590)	(2,809,800)	(2,978,760)	(3,321,900)	(1,231,050)	(2,961,200)	**(22,486,770)**					
Debenture Financing																
Total SUMMARY-Wastewater	**(3,163,500)**	**(2,023,900)**	**(9,955,800)**	**(3,013,700)**	**(5,591,700)**	**(3,427,000)**	**(3,529,000)**	**(9,089,600)**	**(3,509,000)**	**(40,617,900)**	**(83,921,100)**					
Total SUMMARY-Water and Wastewater	**(7,061,400)**	**(5,442,400)**	**(15,553,100)**	**(6,107,700)**	**(8,600,700)**	**(6,626,000)**	**(6,688,000)**	**(12,249,100)**	**(6,648,000)**	**(43,746,900)**	**(118,723,300)**					

Version: Draft Budget

Division: SUMMARY-Water & Wastewater Administration

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve 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)	
Total Replacement/State of Good Repair			5,500					5,500			**11,000**				(11,000)	
Total Water & Wastewater Administration			5,500					5,500			**11,000**				(11,000)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: SUMMARY-Water

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
Water - Replacement and Upgrade Projects	772,000	1,025,000	621,500	605,000	605,000	700,000	700,000	700,000	700,000	700,000	**7,128,500**	(738,000)		(531,720)	(5,858,780)	
Water - Technical Reviews and Studies	89,000	84,000	29,000	64,000	4,000	99,000	59,000	54,000	39,000	29,000	**550,000**			(152,200)	(397,800)	
Water - Plants/Transmission Systems	3,036,900	2,309,500	4,941,300	2,425,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	**27,112,700**	(10,078,310)	(1,751,970)	(7,363,590)	(7,918,830)	
Total SUMMARY-Water	3,897,900	3,418,500	5,591,800	3,094,000	3,009,000	3,199,000	3,159,000	3,154,000	3,139,000	3,129,000	**34,791,200**	(10,816,310)	(1,751,970)	(8,047,510)	(14,175,410)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: Water - Replacement and Upgrade Projects

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
Water - Replacement and Upgrade Projects																
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**				(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**				(750,000)	
Future Watermain Replacements						595,000	595,000	595,000	595,000	595,000	**2,975,000**			(446,250)	(2,528,750)	
Distribution Leak Detection Program	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	**200,000**				(200,000)	
Engineering(2018)& Replacement of Cast Iron Watermains	175,000	500,000	500,000	500,000	500,000						**2,175,000**				(2,175,000)	
Total Replacement/State of Good Repair	280,000	605,000	605,000	605,000	605,000	700,000	700,000	700,000	700,000	700,000	**6,200,000**			(446,250)	(5,753,750)	
Total Water Operations Administration	280,000	605,000	605,000	605,000	605,000	700,000	700,000	700,000	700,000	700,000	**6,200,000**			(446,250)	(5,753,750)	
Caledonia Water																
Replacement/State of Good Repair																
Reservoir~SCADA Computer & Network Replmt			16,500								**16,500**			(3,470)	(13,030)	
Argyle Bridge Watermain Relocation [WW] (2017)	82,000										**82,000**				(82,000)	
Total Replacement/State of Good Repair	82,000		16,500								**98,500**			(3,470)	(95,030)	
Total Caledonia Water	82,000		16,500								**98,500**			(3,470)	(95,030)	
Hagersville Water																
Replacement/State of Good Repair																
Hagersville Tuscarora Op's Building Roof Repairs	10,000										**10,000**				(10,000)	
Total Replacement/State of Good Repair	10,000										**10,000**				(10,000)	
Total Hagersville Water	10,000										**10,000**				(10,000)	
Dunnville Water																
Replacement/State of Good Repair																
Alder St - Cedar to West [WW] [S] [R]	400,000	420,000									**820,000**	(738,000)		(82,000)		
Total Replacement/State of Good Repair	400,000	420,000									**820,000**	(738,000)		(82,000)		
Total Dunnville Water	400,000	420,000									**820,000**	(738,000)		(82,000)		
Total Water - Replacement and Upgrade Projects	772,000	1,025,000	621,500	605,000	605,000	700,000	700,000	700,000	700,000	700,000	**7,128,500**	(738,000)		(531,720)	(5,858,780)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: Water - Technical Reviews and Studies

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
Water - Technical Reviews and Studies																
Water Operations Administration																
Replacement/State of Good Repair																
Facility Condition Assessment [WW]	25,000	25,000		25,000		25,000		25,000		25,000	**150,000**				(150,000)	
SCADA Master Plan				35,000					35,000		**70,000**			(14,700)	(55,300)	
Asbestos Annual Inspection and Remediation [WW]	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	**40,000**				(40,000)	
Total Replacement/State of Good Repair	29,000	29,000	4,000	64,000	4,000	29,000	4,000	29,000	39,000	29,000	**260,000**			(14,700)	(245,300)	
New/Enhanced Service																
Backflow Prevention Program	25,000										**25,000**				(25,000)	
Total New/Enhanced Service	25,000										**25,000**				(25,000)	
Total Water Operations Administration	54,000	29,000	4,000	64,000	4,000	29,000	4,000	29,000	39,000	29,000	**285,000**			(14,700)	(270,300)	
Caledonia Water																
Replacement/State of Good Repair																
Cal - MSP - Update [WW][R][SS]						50,000					**50,000**			(37,500)	(12,500)	
Total Replacement/State of Good Repair						50,000					**50,000**			(37,500)	(12,500)	
Total Caledonia Water						50,000					**50,000**			(37,500)	(12,500)	
Hagersville Water																
Replacement/State of Good Repair																
Hag - MSP - Update [WW][R][SS] (2017)		25,000					25,000				**50,000**			(25,000)	(25,000)	
Total Replacement/State of Good Repair		25,000					25,000				**50,000**			(25,000)	(25,000)	
Total Hagersville Water		25,000					25,000				**50,000**			(25,000)	(25,000)	
Jarvis Water																
Replacement/State of Good Repair																
Jar - MSP Update [WW][R][SS]	20,000					20,000					**40,000**			(20,000)	(20,000)	
Total Replacement/State of Good Repair	20,000					20,000					**40,000**			(20,000)	(20,000)	
Total Jarvis Water	20,000					20,000					**40,000**			(20,000)	(20,000)	
Cayuga Water																
Replacement/State of Good Repair																
Cay - MSP Update [WW][R][SS]			25,000					25,000			**50,000**			(25,000)	(25,000)	
Total Replacement/State of Good Repair			25,000					25,000			**50,000**			(25,000)	(25,000)	
Total Cayuga Water			25,000					25,000			**50,000**			(25,000)	(25,000)	
Dunnville Water																
Replacement/State of Good Repair																
Dun - MSP - Update [WW][R][SS] (2017)		30,000					30,000				**60,000**			(30,000)	(30,000)	
Total Replacement/State of Good Repair		30,000					30,000				**60,000**			(30,000)	(30,000)	
Total Dunnville Water		30,000					30,000				**60,000**			(30,000)	(30,000)	
Nanticoke Water																
New/Enhanced Service																
Hydraulic Study	15,000										**15,000**				(15,000)	
Total New/Enhanced Service	15,000										**15,000**				(15,000)	
Total Nanticoke Water	15,000										**15,000**				(15,000)	
Total Water - Technical Reviews and Studies	89,000	84,000	29,000	64,000	4,000	99,000	59,000	54,000	39,000	29,000	**550,000**			(152,200)	(397,800)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: Water - Plants/Transmission Systems

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
Water - Plants/Transmission Systems																
Water Operations Administration																
Replacement/State of Good Repair																
Plant Optimization Program Support	60,000	60,000									**120,000**			(18,000)	(102,000)	
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				2,015,000	1,895,500	2,139,000	2,015,000	2,165,000	324,500	2,075,000	**12,629,000**	(6,133,310)		(1,894,350)	(4,601,340)	
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 Sonic Wall Replacement	7,000										**7,000**				(7,000)	
Total Replacement/State of Good Repair	177,000	170,000	110,000	2,125,000	2,005,500	2,249,000	2,125,000	2,275,000	434,500	2,185,000	**13,856,000**	(6,133,310)		(2,059,350)	(5,663,340)	
Total Water Operations Administration	177,000	170,000	110,000	2,125,000	2,005,500	2,249,000	2,125,000	2,275,000	434,500	2,185,000	**13,856,000**	(6,133,310)		(2,059,350)	(5,663,340)	
Caledonia Water																
Replacement/State of Good Repair																
Online Analyzer Replacements		30,000									**30,000**				(30,000)	
Chemical Dosing Equipment Replacement				25,000							**25,000**				(25,000)	
Elevated Storage Tank Replacement	212,900	523,500	4,636,800								**5,373,200**	(2,080,000)		(3,293,200)		
Chloramination Feasibility Study				35,000							**35,000**			(8,750)	(26,250)	
Total Replacement/State of Good Repair	212,900	553,500	4,636,800	60,000							**5,463,200**	(2,080,000)		(3,301,950)	(81,250)	
Total Caledonia Water	212,900	553,500	4,636,800	60,000							**5,463,200**	(2,080,000)		(3,301,950)	(81,250)	
Hagersville Water																
Replacement/State of Good Repair																
Booster Stn Roof Replacement	33,000										**33,000**				(33,000)	
Standpipe Coating Maintenance					250,000						**250,000**	(250,000)				
Total Replacement/State of Good Repair	33,000				250,000						**283,000**	(250,000)			(33,000)	
Total Hagersville Water	33,000				250,000						**283,000**	(250,000)			(33,000)	
Cayuga Water																
Replacement/State of Good Repair																
Reservoir Roof Replacement		58,000									**58,000**				(58,000)	
Reservoir Pump Rebuild/Replacement	20,000	20,000									**40,000**				(40,000)	
Reservoir-SCADA Computer & Network Replmt			6,500								**6,500**			(1,370)	(5,130)	
Online Analyzer Replacements				25,000							**25,000**				(25,000)	
Chemical Dosing Equipment					10,000						**10,000**				(10,000)	
Total Replacement/State of Good Repair	20,000	78,000	6,500	25,000	10,000						**139,500**			(1,370)	(138,130)	
Total Cayuga Water	20,000	78,000	6,500	25,000	10,000						**139,500**			(1,370)	(138,130)	
Dunnville Water																
Replacement/State of Good Repair																
Granular Activated Carbon change out	90,000			90,000			90,000			90,000	**360,000**				(360,000)	
Pt Maitland Low Lift Facility Capital Repairs	1,250,000										**1,250,000**	(990,000)	(260,000)			

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: Water - Plants/Transmission Systems

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
Pt Maitland Transmission Main Valve Chamber Rpr Pgm	35,000										**35,000**				(35,000)	
WTP SCADA Computer & Network Replmt			3,000			9,000					**12,000**			(2,520)	(9,480)	
Structural Repairs	85,000										**85,000**				(85,000)	
WTP Window Replacements		30,000									**30,000**				(30,000)	
Port Maitland Sample Line & Chlorine Dosing Line Replacement	30,000										**30,000**		(960)		(29,040)	
Dunnville Back Wash Valves 1&2 Replacements	40,000										**40,000**				(40,000)	
Dunnville SCADA Wiring Replacements	10,000										**10,000**				(10,000)	
Total Replacement/State of Good Repair	1,540,000	30,000	3,000	90,000		9,000	90,000			90,000	**1,852,000**	(990,000)	(260,960)	(2,520)	(598,520)	
New/Enhanced Service																
Pre-Treatment Upgrades		200,000									**200,000**	(200,000)				
WTP Reservoir Expansion									1,840,500		**1,840,500**			(1,840,500)		
Dunnville WTP Static/Power Mixer	50,000										**50,000**				(50,000)	
Total New/Enhanced Service	50,000	200,000							1,840,500		**2,090,500**	(200,000)		(1,840,500)	(50,000)	
Total Dunnville Water	1,590,000	230,000	3,000	90,000		9,000	90,000		1,840,500	90,000	**3,942,500**	(1,190,000)	(260,960)	(1,843,020)	(648,520)	
Nanticoke Water																
Replacement/State of Good Repair																
Filter Media Replacement			60,000				60,000				**120,000**				(120,000)	
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									**70,000**				(70,000)	
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	11,000				9,500	17,000					**37,500**			(7,900)	(29,600)	
Safety Railing Replmts	5,000										**5,000**				(5,000)	
Structural Repairs	50,000										**50,000**		(44,880)		(5,120)	
IPS Travelling Screen Refurbishment		48,000									**48,000**		(43,080)		(4,920)	
Low Lift Online Analyzer Replacements	25,000										**25,000**				(25,000)	
IPS Automation Improvements Ph 2	35,000										**35,000**		(35,000)			
Concrete Curb & Sidewalk Repairs	15,000										**15,000**				(15,000)	
IPS Roof Access Hatch Replacements	320,500										**320,500**		(287,650)		(32,850)	
WTP Residuals Lagoon Structural Repairs		70,000									**70,000**				(70,000)	
IPS & ITP Eyewash & Shower Replacements	30,000										**30,000**		(13,460)		(16,540)	
Control Room Windows	47,500										**47,500**				(47,500)	
IPS Wet Well Piping and Valve Replacements (Phase 1)		225,000									**225,000**		(201,940)		(23,060)	
2nd Back Wash Pump		35,000									**35,000**				(35,000)	
Hydro-Cyclone Modifications	20,000										**20,000**				(20,000)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: Water - Plants/Transmission Systems

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
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)	
Total Replacement/State of Good Repair	719,000	1,073,000	185,000	125,000	134,500	142,000	185,000	125,000	125,000	125,000	**2,938,500**	(225,000)	(1,491,010)	(157,900)	(1,064,590)	
New/Enhanced Service																
Pre-Treatment Upgrades		200,000									**200,000**	(200,000)				
High Lift Pumps 2 & 3 motors and VFD's	285,000										**285,000**				(285,000)	
Maturation Tank Lighting		5,000									**5,000**				(5,000)	
Total New/Enhanced Service	285,000	205,000									**490,000**	(200,000)			(290,000)	
Total Nanticoke Water	1,004,000	1,278,000	185,000	125,000	134,500	142,000	185,000	125,000	125,000	125,000	**3,428,500**	(425,000)	(1,491,010)	(157,900)	(1,354,590)	
Total Water - Plants/Transmission Systems	3,036,900	2,309,500	4,941,300	2,425,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	**27,112,700**	(10,078,310)	(1,751,970)	(7,363,590)	(7,918,830)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: SUMMARY-Wastewater

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
Wastewater - Replacement and Upgrade Projects	935,000	588,000	270,000	183,000	280,000	183,000	270,000	193,000	270,000	183,000	**3,355,000**	(1,567,500)		(310,750)	(1,476,750)	
Wastewater - Technical Reviews and Studies	174,000	169,000	174,000	114,000	114,000	144,000	159,000	114,000	139,000	79,000	**1,380,000**			(299,300)	(1,080,700)	
Wastewater - Plants	2,054,500	1,266,900	9,511,800	2,716,700	5,197,700	3,100,000	3,100,000	8,782,600	3,100,000	40,355,900	**79,186,100**	(4,535,220)		(54,721,560)	(19,929,320)	
Total SUMMARY-Wastewater	3,163,500	2,023,900	9,955,800	3,013,700	5,591,700	3,427,000	3,529,000	9,089,600	3,509,000	40,617,900	**83,921,100**	(6,102,720)		(55,331,610)	(22,486,770)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: Wastewater - Replacement and Upgrade Projects

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
Wastewater - Replacement and Upgrade Projects																
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**				(700,000)	
Composite Sampler-Replacement Program		38,000		38,000		38,000		38,000		38,000	**190,000**				(190,000)	
Sewer Manhole Repairs (I&I)		75,000		75,000		75,000		75,000		75,000	**375,000**			(56,250)	(318,750)	
Sanitary Sewer Rehabilitations (I&I)	250,000		200,000		200,000		200,000		200,000		**1,050,000**	(892,500)		(157,500)		
Confined Space Entry Equipment Replacements		10,000			10,000			10,000			**30,000**				(30,000)	
Total Replacement/State of Good Repair	320,000	193,000	270,000	183,000	280,000	183,000	270,000	193,000	270,000	183,000	**2,345,000**	(892,500)		(213,750)	(1,238,750)	
Total Sewer Operations Administration	320,000	193,000	270,000	183,000	280,000	183,000	270,000	193,000	270,000	183,000	**2,345,000**	(892,500)		(213,750)	(1,238,750)	
Caledonia Sewer																
Replacement/State of Good Repair																
Argyle Bridge Sanitary Sewer Relocation [W] (17-$40,000)	46,000										**46,000**				(46,000)	
Stirling St - Sanitary Repl - Argyle to Peebles [R] [SS]	182,000										**182,000**				(182,000)	
Total Replacement/State of Good Repair	228,000										**228,000**				(228,000)	
Total Caledonia Sewer	228,000										**228,000**				(228,000)	
Hagersville Sewer																
Replacement/State of Good Repair																
Wet Well Gas Monitoring Equipment Replacement		10,000									**10,000**				(10,000)	
Total Replacement/State of Good Repair		10,000									**10,000**				(10,000)	
Total Hagersville Sewer		10,000									**10,000**				(10,000)	
Jarvis Sewer																
New/Enhanced Service																
Walpole St - Sewer Pipe Upsize (Peel to Talbot)	12,000	85,000									**97,000**			(97,000)		
Total New/Enhanced Service	12,000	85,000									**97,000**			(97,000)		
Total Jarvis Sewer	12,000	85,000									**97,000**			(97,000)		
Dunnville Sewer																
Replacement/State of Good Repair																
Alder St - Cedar to West [W] [SS] [R]	375,000	300,000									**675,000**	(675,000)				
Total Replacement/State of Good Repair	375,000	300,000									**675,000**	(675,000)				
Total Dunnville Sewer	375,000	300,000									**675,000**	(675,000)				
Total Wastewater - Replacement and Upgrade Projects	935,000	588,000	270,000	183,000	280,000	183,000	270,000	193,000	270,000	183,000	**3,355,000**	(1,567,500)		(310,750)	(1,476,750)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: Wastewater - Technical Reviews and Studies

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
Wastewater - Technical Reviews and Studies																
Sewer Operations Administration																
Replacement/State of Good Repair																
Inflow & Infiltration Program Support	45,000	25,000	35,000	25,000	35,000	25,000	25,000	35,000	25,000	25,000	**300,000**			(45,000)	(255,000)	
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)	
Total Replacement/State of Good Repair	124,000	79,000	114,000	114,000	114,000	79,000	104,000	89,000	139,000	79,000	**1,035,000**			(61,800)	(973,200)	
New/Enhanced Service																
Effluent Water Quality & Impact Assessment	35,000	35,000	35,000								**105,000**			(105,000)		
Total New/Enhanced Service	35,000	35,000	35,000								**105,000**			(105,000)		
Total Sewer Operations Administration	159,000	114,000	149,000	114,000	114,000	79,000	104,000	89,000	139,000	79,000	**1,140,000**			(166,800)	(973,200)	
Caledonia Sewer																
Replacement/State of Good Repair																
Cal - MSP - Update [W][R][SS]						50,000					**50,000**			(37,500)	(12,500)	
Total Replacement/State of Good Repair						50,000					**50,000**			(37,500)	(12,500)	
Total Caledonia Sewer						50,000					**50,000**			(37,500)	(12,500)	
Hagersville Sewer																
Replacement/State of Good Repair																
Hag - MSP - Update [W][R][SS] (2017)		25,000					25,000				**50,000**			(25,000)	(25,000)	
Total Replacement/State of Good Repair		25,000					25,000				**50,000**			(25,000)	(25,000)	
Total Hagersville Sewer		25,000					25,000				**50,000**			(25,000)	(25,000)	
Jarvis Sewer																
Replacement/State of Good Repair																
Jar - MSP Update [W][R][SS]	15,000					15,000					**30,000**			(15,000)	(15,000)	
Total Replacement/State of Good Repair	15,000					15,000					**30,000**			(15,000)	(15,000)	
Total Jarvis Sewer	15,000					15,000					**30,000**			(15,000)	(15,000)	
Cayuga Sewer																
Replacement/State of Good Repair																
Cay - MSP Update [W][R][SS]			25,000					25,000			**50,000**			(25,000)	(25,000)	
Total Replacement/State of Good Repair			25,000					25,000			**50,000**			(25,000)	(25,000)	
Total Cayuga Sewer			25,000					25,000			**50,000**			(25,000)	(25,000)	
Dunnville Sewer																
Replacement/State of Good Repair																
Dun - MSP - Update [W][R][SS] (2017)		30,000					30,000				**60,000**			(30,000)	(30,000)	
Total Replacement/State of Good Repair		30,000					30,000				**60,000**			(30,000)	(30,000)	
Total Dunnville Sewer		30,000					30,000				**60,000**			(30,000)	(30,000)	
Total Wastewater - Technical Reviews and Studies	174,000	169,000	174,000	114,000	114,000	144,000	159,000	114,000	139,000	79,000	**1,380,000**			(299,300)	(1,080,700)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: Wastewater - Plants

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
Wastewater - Plants																
Sewer Operations Administration																
Replacement/State of Good Repair																
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					2,699,000	2,344,000	2,523,000	2,620,000	2,640,000	2,640,000	**15,466,000**	(2,599,120)		(231,990)	(12,634,890)	
Plant Optimization Program Support	30,000	30,000	30,000								**90,000**			(13,500)	(76,500)	
SCADA Technical Support	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	**500,000**			(120,000)	(380,000)	
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		250,000	250,000								**500,000**			(50,000)	(450,000)	
SCADA Sonic Wall Replacement	7,000										**7,000**				(7,000)	
Total Replacement/State of Good Repair	147,000	390,000	390,000	110,000	2,809,000	2,454,000	2,633,000	2,730,000	2,750,000	2,750,000	**17,163,000**	(2,599,120)		(463,490)	(14,100,390)	
Total Sewer Operations Administration	147,000	390,000	390,000	110,000	2,809,000	2,454,000	2,633,000	2,730,000	2,750,000	2,750,000	**17,163,000**	(2,599,120)		(463,490)	(14,100,390)	
Caledonia Sewer																
Replacement/State of Good Repair																
Effluent Water System			75,000								**75,000**				(75,000)	
Blower Replmts			300,000								**300,000**				(300,000)	
Remotes-Control Equipment Replacement(SCADA)						45,000					**45,000**				(45,000)	
WWTP - SCADA Computer & Network Replmt	20,000					20,000					**40,000**			(9,600)	(30,400)	
Caledonia WWTP Diesel Tank Replacement	25,000										**25,000**				(25,000)	
Nairne Pump Station Diesel Tank Replacement	25,000										**25,000**				(25,000)	
Nairne & Orkney Pump Stations Concrete Repairs (Front Entran	4,500										**4,500**				(4,500)	
Paisley Pump Station Diesel Tank Replacement	22,000										**22,000**				(22,000)	
Nairne Pump Station Wet Well Gas Monitoring Equipment Repla		10,000									**10,000**				(10,000)	
Total Replacement/State of Good Repair	96,500	10,000	375,000			65,000					**546,500**			(9,600)	(536,900)	
New/Enhanced Service																
Sludge Storage Tank Retrofit			175,000								**175,000**			(87,500)	(87,500)	
WWTP Wet Well Expansion	22,200	161,800	1,263,600								**1,447,600**			(1,447,600)		
Caledonia Wastewater Treatment Plant					2,097,700			5,682,600		37,255,900	**45,036,200**			(45,036,200)		
Total New/Enhanced Service	22,200	161,800	1,438,600		2,097,700			5,682,600		37,255,900	**46,658,800**			(46,571,300)	(87,500)	
Total Caledonia Sewer	118,700	171,800	1,813,600		2,097,700	65,000		5,682,600		37,255,900	**47,205,300**			(46,580,900)	(624,400)	
Hagersville Sewer																
Replacement/State of Good Repair																
Remotes-Control Equipment Replacement(SCADA)		135,000				90,000					**225,000**			(54,000)	(171,000)	
WWTP SCADA Computer & Network Replmt	90,000					16,000					**106,000**			(25,440)	(80,560)	
Mckeen Pump Station Pump Replacements	25,000										**25,000**				(25,000)	
Parkview Pump Station Check Valve Replacement	12,000										**12,000**				(12,000)	
Parkview Pump Station Diesel Tank Replacement	22,000										**22,000**				(22,000)	
Tuscarora Pump Station Check Valve Replacement	10,000										**10,000**				(10,000)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: Wastewater - Plants

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
Tuscarora Pump Station Diesel Tank Replacement	22,000										**22,000**				(22,000)	
Tuscarora Op's Building Roof Repairs	10,000										**10,000**				(10,000)	
Hagersville WWTP Driveway Reconstruction		45,000									**45,000**				(45,000)	
WWTP Concrete Repairs (Front Steps, Landing & Leachate Tan	10,000										**10,000**				(10,000)	
Total Replacement/State of Good Repair	201,000	180,000				106,000					**487,000**			(79,440)	(407,560)	
New/Enhanced Service																
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)		
Total New/Enhanced Service				1,466,700							**1,466,700**	(1,060,000)		(406,700)		
Total Hagersville Sewer	201,000	180,000		1,466,700		106,000					**1,953,700**	(1,060,000)		(486,140)	(407,560)	
Jarvis Sewer																
Replacement/State of Good Repair																
Jarvis Lagoon Clean Out							450,000				**450,000**				(450,000)	
Jarvis Lagoon's Pump Station Diesel Tank Replacement	22,000										**22,000**				(22,000)	
Jarvis Lagoon's Pump Station Concrete Repairs (Front Entrance	3,500										**3,500**				(3,500)	
Total Replacement/State of Good Repair	25,500						450,000				**475,500**				(475,500)	
New/Enhanced Service																
Jarvis Additional Wastewater Treatment Capacity	1,107,300		5,249,100								**6,356,400**			(6,356,400)		
Total New/Enhanced Service	1,107,300		5,249,100								**6,356,400**			(6,356,400)		
Total Jarvis Sewer	1,132,800		5,249,100				450,000				**6,831,900**			(6,356,400)	(475,500)	
Cayuga Sewer																
Replacement/State of Good Repair																
Ouse St PS Replacements		169,300	1,272,200								**1,441,500**			(493,500)	(948,000)	
Remotes-Control Equipment Replacement(SCADA)		20,000	110,000								**130,000**			(31,200)	(98,800)	
WWTP SCADA Computer & Network Replmt					16,000						**16,000**			(3,870)	(12,130)	
Cayuga WWTP Bypass Backflow Prevention	12,000										**12,000**				(12,000)	
Cayuga WWTP Waste Activated Sludge Flow Meter Replacemer	12,000										**12,000**				(12,000)	
Total Replacement/State of Good Repair	24,000	189,300	1,382,200		16,000						**1,611,500**			(528,570)	(1,082,930)	
New/Enhanced Service																
Ouse St Forcemain Twinning		30,800	306,900								**337,700**	(221,100)		(116,600)		
Twinning of Headworks Screen			275,000								**275,000**	(275,000)				
Total New/Enhanced Service		30,800	581,900								**612,700**	(496,100)		(116,600)		
Total Cayuga Sewer	24,000	220,100	1,964,100		16,000						**2,224,200**	(496,100)		(645,170)	(1,082,930)	
Dunnville Sewer																
Replacement/State of Good Repair																
WWTP SCADA Replacements	220,000										**220,000**			(52,800)	(167,200)	
Remotes-Control Equipment Replacement(SCADA)				140,000							**140,000**			(33,600)	(106,400)	
Blower Replacement				600,000							**600,000**				(600,000)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

Version: Draft Budget

Division: Wastewater - Plants

Haldimand County

2018 to 2027 CAPITAL FORECAST

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	**Total Expenditures**	Grants Subsidies	External Financing	Development Charges Rsve Funds	Reserves/ Reserve Funds	Debenture Financing
Secondary Clarifier Repairs		125,000									**125,000**				(125,000)	
WWTP SCADA Computer & Network Replmt		17,000					17,000				**34,000**			(8,060)	(25,940)	
Digester Clean Out & Inspection		18,000									**18,000**				(18,000)	
Aeration Diffuser System Replacement				400,000							**400,000**				(400,000)	
Low Lift Pump Replacements	65,000	65,000	65,000								**195,000**				(195,000)	
Aeration Tanks Clean Out & Inspection	18,000										**18,000**				(18,000)	
Broad St. Pump Station Replacements	35,000										**35,000**				(35,000)	
Dunnville WWTP Dissolved Oxygen Monitoring System Replacer		25,000									**25,000**				(25,000)	
Digester Mixing System Replacement			30,000								**30,000**				(30,000)	
Total Replacement/State of Good Repair	338,000	250,000	95,000	1,140,000			17,000				**1,840,000**			(94,460)	(1,745,540)	
New/Enhanced Service																
Digester Cover & Insulation						475,000					**475,000**	(380,000)		(95,000)		
Hauled Waste Pump VFD's	25,000										**25,000**				(25,000)	
Dunnville WWTP New Leachate Flow Meter	15,000										**15,000**				(15,000)	
Total New/Enhanced Service	40,000					475,000					**515,000**	(380,000)		(95,000)	(40,000)	
Total Dunnville Sewer	378,000	250,000	95,000	1,140,000		475,000	17,000				**2,355,000**	(380,000)		(189,460)	(1,785,540)	
Townsend Sewer																
Replacement/State of Good Repair																
Townsend Lagoon Clean Out								370,000		350,000	**720,000**				(720,000)	
Townsend Lagoon Pump Station Diesel Tank Replacement	25,000										**25,000**				(25,000)	
Townsend Lagoons Raw Sewage Influent Chamber & Valving R		55,000									**55,000**				(55,000)	
Total Replacement/State of Good Repair	25,000	55,000						370,000		350,000	**800,000**				(800,000)	
Total Townsend Sewer	25,000	55,000						370,000		350,000	**800,000**				(800,000)	
Oswego Park Sewer																
Replacement/State of Good Repair																
Oswego Lagoon Clean Out					275,000						**275,000**				(275,000)	
Total Replacement/State of Good Repair					275,000						**275,000**				(275,000)	
Total Oswego Park Sewer					275,000						**275,000**				(275,000)	
Nanticoke Sewer																
Replacement/State of Good Repair																
LEIP Lagoon Clean Out									350,000		**350,000**				(350,000)	
LEIP Pump Station Pump Replacements	28,000										**28,000**				(28,000)	
Total Replacement/State of Good Repair	28,000								350,000		**378,000**				(378,000)	
Total Nanticoke Sewer	28,000								350,000		**378,000**				(378,000)	
Total Wastewater - Plants	2,054,500	1,266,900	9,511,800	2,716,700	5,197,700	3,100,000	3,100,000	8,782,600	3,100,000	40,355,900	**79,186,100**	(4,535,220)		(54,721,560)	(19,929,320)	

Note: (W) Water; (WW) Wastewater; (SS) Storm Sewer; (R) Roads

WATER & WASTEWATER OPERATING

Haldimand County 2018 Draft Rate Supported Operating Budget

Water and Wastewater Summary

Function:
To contract 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 is committed to providing safe, 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 seven water distribution 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 seven wastewater collection systems
- Operation and maintenance of the County's seven 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 of short term and long term capital requirements for the water and wastewater and urban storm sewer requirements in conjunction with the Engineering Division

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 the water and wastewater treatment facilities and enhanced operations for the newly constructed Nanticoke Water Treatment Facility to ensure capable production of safe reliable water in sufficient quantity to meet system requirements.

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

Haldimand County 2018 Rate Supported Operating Budget

Water and Wastewater Summary

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
Salaries, Wages & Benefits	2,310,166	2,474,640	2,515,670			2,515,670	41,030	1.66
Supplies & Materials	156,706	147,760	150,910			150,910	3,150	2.13
Hamilton Water Supply	2,347,089	2,346,200	2,347,930			2,347,930	1,730	0.07
Services	4,276,975	5,012,280	4,302,310	97,800		4,400,110	(612,170)	(12.21)
Veolia Operating Services Charges	4,506,610	4,506,610	4,624,230			4,624,230	117,620	2.61
Interdepartmental Charges	659,710	626,670	673,960			673,960	47,290	7.55
Long Term Debt Charges	1,582,543	1,582,570	2,594,400			2,594,400	1,011,830	63.94
Transfers to Reserves/Reserve Funds	4,328,188	4,249,120	3,707,070			3,707,070	(542,050)	(12.76)
TOTAL EXPENDITURES	**20,167,987**	**20,945,850**	**20,916,480**	**97,800**		**21,014,280**	**68,430**	**0.33**
REVENUES:								
Revenue Required from User Rates	(12,283,589)	(11,991,160)	(11,840,000)	(97,800)	(74,290)	(12,012,090)	(20,930)	0.17
Municipal Recoveries	(57,853)	(74,100)	(58,320)			(58,320)	15,780	(21.30)
Recoveries from New Credit	(252,142)	(210,900)	(248,800)			(248,800)	(37,900)	17.97
Fees & Recoveries	(8,481,313)	(8,266,550)	(7,786,820)		74,290	(7,712,530)	554,020	(6.70)
Transfers from Reserves/Reserve Funds	(403,135)	(403,140)	(982,540)			(982,540)	(579,400)	143.72
TOTAL REVENUES	**(21,478,032)**	**(20,945,850)**	**(20,916,480)**	**(97,800)**		**(21,014,280)**	**(68,430)**	**0.33**
NET REVENUE Required from User Rates	**(1,310,045)**							
STAFFING (stated in FTE)								
Full Time		**26.55**	**26.58**			**26.58**		
Part Time &/or Temporary F/T		**0.26**	**0.26**			**0.26**		

Haldimand County 2018 Rate Supported Operating Budget

Water Summary

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
Salaries, Wages & Benefits	1,672,398	1,783,980	1,850,430			1,850,430	66,450	3.72
Supplies & Materials	132,490	127,700	130,800			130,800	3,100	2.43
Hamilton Water Supply	2,347,089	2,346,200	2,347,930			2,347,930	1,730	0.07
Services	2,848,722	3,403,740	2,779,980	48,900		2,828,880	(574,860)	(16.89)
Veolia Operating Services Charges	2,100,430	2,100,430	2,147,060			2,147,060	46,630	2.22
Interdepartmental Charges	375,594	357,950	383,650			383,650	25,700	7.18
Long Term Debt Charges	337,283	337,300	1,443,500			1,443,500	1,106,200	327.96
Transfers to Reserves/Reserve Funds	1,870,600	1,870,600	1,216,310			1,216,310	(654,290)	(34.98)
TOTAL EXPENDITURES	**11,684,606**	**12,327,900**	**12,299,660**	**48,900**		**12,348,560**	**20,660**	**0.17**
REVENUES:								
Revenue Required from User Rates	(5,908,341)	(5,710,810)	(5,631,010)	(48,900)	(38,260)	(5,718,170)	(7,360)	0.13
Recoveries from New Credit	(251,283)	(210,600)	(248,300)			(248,300)	(37,700)	17.90
Fees & Recoveries	(6,098,498)	(6,406,490)	(5,918,050)		38,260	(5,879,790)	526,700	(8.22)
Transfers from Reserves/Reserve Funds			(502,300)			(502,300)	(502,300)	
TOTAL REVENUES	**(12,258,122)**	**(12,327,900)**	**(12,299,660)**	**(48,900)**		**(12,348,560)**	**(20,660)**	**0.17**
NET REVENUE Required from User Rates	**(573,516)**							
STAFFING (stated in FTE)								
Full Time		**19.36**	**19.50**			**19.50**		
Part Time &/or Temporary F/T		**0.17**	**0.17**			**0.17**		

Haldimand County 2018 Rate Supported Operating Budget

Water Administration

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
Salaries, Wages & Benefits	713,980	787,000	810,150			810,150	23,150	2.94
Supplies & Materials	3,780	3,780	3,600			3,600	(180)	(4.76)
Services	201,170	263,170	217,160			217,160	(46,010)	(17.48)
Interdepartmental Charges	107,909	107,100	110,170			110,170	3,070	2.87
TOTAL EXPENDITURES	**1,026,839**	**1,161,050**	**1,141,080**			**1,141,080**	**(19,970)**	**(1.72)**
REVENUES:								
TOTAL REVENUES								
NET REVENUE Required from User Rates	**1,026,839**	**1,161,050**	**1,141,080**			**1,141,080**	**(19,970)**	**(1.72)**
STAFFING (stated in FTE)								
Full Time		**7.47**	**7.47**			**7.47**		
Part Time &/or Temporary F/T		**0.17**	**0.17**			**0.17**		

Haldimand County 2018 Rate Supported Operating Budget

Water Financial Administration

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
Services	201,666	214,670	202,250	48,900		251,150	36,480	16.99
Interdepartmental Charges	151,705	140,270	155,130			155,130	14,860	10.59
Long Term Debt Charges	337,283	337,300	1,443,500			1,443,500	1,106,200	327.96
Transfers to Reserves/Reserve Funds	1,549,310	1,549,310	955,350			955,350	(593,960)	(38.34)
TOTAL EXPENDITURES	**2,239,964**	**2,241,550**	**2,756,230**	**48,900**		**2,805,130**	**563,580**	**25.14**
REVENUES:								
Fees & Recoveries	(25,914)	(9,350)	(23,060)			(23,060)	(13,710)	146.63
TOTAL REVENUES	**(25,914)**	**(9,350)**	**(23,060)**			**(23,060)**	**(13,710)**	**146.63**
NET REVENUE Required from User Rates	**2,214,050**	**2,232,200**	**2,733,170**	**48,900**		**2,782,070**	**549,870**	**24.63**
STAFFING (stated in FTE)								

Haldimand County 2018 Rate Supported Operating Budget

Direct Water Operations

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
Salaries, Wages & Benefits	958,418	996,980	1,040,280			1,040,280	43,300	4.34
Supplies & Materials	128,710	123,920	127,200			127,200	3,280	2.65
Hamilton Water Supply	2,347,089	2,346,200	2,347,930			2,347,930	1,730	0.07
Services	947,905	1,171,590	1,051,230			1,051,230	(120,360)	(10.27)
Veolia Operating Services Charges	1,378,190	1,378,190	1,400,590			1,400,590	22,400	1.63
Interdepartmental Charges	115,980	110,580	118,350			118,350	7,770	7.03
Transfers to Reserves/Reserve Funds	321,290	321,290	260,960			260,960	(60,330)	(18.78)
TOTAL EXPENDITURES	**6,197,582**	**6,448,750**	**6,346,540**			**6,346,540**	**(102,210)**	**(1.58)**
REVENUES:								
TOTAL REVENUES								
NET REVENUE Required from User Rates	**6,197,582**	**6,448,750**	**6,346,540**			**6,346,540**	**(102,210)**	**(1.58)**
STAFFING (stated in FTE)								
Full Time		**11.89**	**12.03**			**12.03**		

Haldimand County 2018 Rate Supported Operating Budget

Nanticoke Industrial Pumping Station

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
Services	1,497,981	1,754,310	1,309,340			1,309,340	(444,970)	(25.36)
Veolia Operating Services Charges	722,240	722,240	746,470			746,470	24,230	3.35
TOTAL EXPENDITURES	**2,220,221**	**2,476,550**	**2,055,810**			**2,055,810**	**(420,740)**	**(16.99)**
REVENUES:								
Fees & Recoveries	(2,261,156)	(2,526,550)	(2,093,170)			(2,093,170)	433,380	(17.15)
TOTAL REVENUES	**(2,261,156)**	**(2,526,550)**	**(2,093,170)**			**(2,093,170)**	**433,380**	**(17.15)**
NET REVENUE Required from User Rates	**(40,935)**	**(50,000)**	**(37,360)**			**(37,360)**	**12,640**	**(25.28)**
STAFFING (stated in FTE)								

Haldimand County 2018 Rate Supported Operating Budget

Water User Fees

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
TOTAL EXPENDITURES								
REVENUES:								
Recoveries from New Credit	(251,283)	(210,600)	(248,300)			(248,300)	(37,700)	17.90
Fees & Recoveries	(3,811,428)	(3,870,590)	(3,801,820)		38,260	(3,763,560)	107,030	(2.77)
Transfers from Reserves/Reserve Funds			(502,300)			(502,300)	(502,300)	
TOTAL REVENUES	**(4,062,711)**	**(4,081,190)**	**(4,552,420)**		**38,260**	**(4,514,160)**	**(432,970)**	**10.61**
NET REVENUE Required from User Rates	**(4,062,711)**	**(4,081,190)**	**(4,552,420)**		**38,260**	**(4,514,160)**	**(432,970)**	**10.61**
STAFFING (stated in FTE)								

Haldimand County 2018 Rate Supported Operating Budget

Water User Rates Revenue

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
REVENUES:								
Revenue Required from User Rates								
Base Charge - Residential	(2,226,660)	(2,164,750)	(2,106,250)	(48,900)	(38,260)	(2,193,410)	(28,660)	1.32
Consumption - Residential	(1,432,524)	(1,378,900)	(1,407,900)			(1,407,900)	(29,000)	2.10
Base Charge - Commercial	(634,590)	(690,560)	(665,660)			(665,660)	24,900	(3.61)
Consumption - Commercial	(1,614,567)	(1,476,600)	(1,451,200)			(1,451,200)	25,400	(1.72)
TOTAL REVENUES	**(5,908,341)**	**(5,710,810)**	**(5,631,010)**	**(48,900)**	**(38,260)**	**(5,718,170)**	**(7,360)**	**0.13**
NET REVENUE Required from User Rates	**(5,908,341)**	**(5,710,810)**	**(5,631,010)**	**(48,900)**	**(38,260)**	**(5,718,170)**	**(7,360)**	**0.13**
STAFFING (stated in FTE)								

Haldimand County 2018 Rate Supported Operating Budget

WasteWater Summary

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
Salaries, Wages & Benefits	637,768	690,660	665,240			665,240	(25,420)	(3.68)
Supplies & Materials	24,216	20,060	20,110			20,110	50	0.25
Services	1,428,253	1,608,540	1,522,330	48,900		1,571,230	(37,310)	(2.32)
Veolia Operating Services Charges	2,406,180	2,406,180	2,477,170			2,477,170	70,990	2.95
Interdepartmental Charges	284,116	268,720	290,310			290,310	21,590	8.03
Long Term Debt Charges	1,245,260	1,245,270	1,150,900			1,150,900	(94,370)	(7.58)
Transfers to Reserves/Reserve Funds	2,457,588	2,378,520	2,490,760			2,490,760	112,240	4.72
TOTAL EXPENDITURES	**8,483,381**	**8,617,950**	**8,616,820**	**48,900**		**8,665,720**	**47,770**	**0.55**
REVENUES:								
Revenue Required from User Rates	(6,375,248)	(6,280,350)	(6,208,990)	(48,900)	(36,030)	(6,293,920)	(13,570)	0.22
Municipal Recoveries	(57,853)	(74,100)	(58,320)			(58,320)	15,780	(21.30)
Recoveries from New Credit	(859)	(300)	(500)			(500)	(200)	66.67
Fees & Recoveries	(2,382,815)	(1,860,060)	(1,868,770)		36,030	(1,832,740)	27,320	(1.47)
Transfers from Reserves/Reserve Funds	(403,135)	(403,140)	(480,240)			(480,240)	(77,100)	19.12
TOTAL REVENUES	**(9,219,910)**	**(8,617,950)**	**(8,616,820)**	**(48,900)**		**(8,665,720)**	**(47,770)**	**0.55**
NET REVENUE Required from User Rates	**(736,529)**							
STAFFING (stated in FTE)								
Full Time		**7.19**	**7.08**			**7.08**		
Part Time &/or Temporary F/T		**0.09**	**0.09**			**0.09**		

Haldimand County 2018 Rate Supported Operating Budget

Wastewater Administration

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
Salaries, Wages & Benefits	398,160	475,590	449,240			449,240	(26,350)	(5.54)
Supplies & Materials	2,363	2,740	2,610			2,610	(130)	(4.74)
Services	135,233	178,710	142,920			142,920	(35,790)	(20.03)
Interdepartmental Charges	58,021	57,620	59,230			59,230	1,610	2.79
TOTAL EXPENDITURES	**593,777**	**714,660**	**654,000**			**654,000**	**(60,660)**	**(8.49)**
REVENUES:								
TOTAL REVENUES								
NET REVENUE Required from User Rates	**593,777**	**714,660**	**654,000**			**654,000**	**(60,660)**	**(8.49)**
STAFFING (stated in FTE)								
Full Time		**4.58**	**4.58**			**4.58**		
Part Time &/or Temporary F/T		**0.09**	**0.09**			**0.09**		

Haldimand County 2018 Rate Supported Operating Budget

Wastewater Financial Administration

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
Services	201,700	214,060	199,750	48,900		248,650	34,590	16.16
Interdepartmental Charges	151,775	140,330	155,200			155,200	14,870	10.60
Long Term Debt Charges	1,245,260	1,245,270	1,150,900			1,150,900	(94,370)	(7.58)
Transfers to Reserves/Reserve Funds	2,457,588	2,378,520	2,490,760			2,490,760	112,240	4.72
TOTAL EXPENDITURES	**4,056,323**	**3,978,180**	**3,996,610**	**48,900**		**4,045,510**	**67,330**	**1.69**
REVENUES:								
Fees & Recoveries	(25,914)	(9,350)	(23,070)			(23,070)	(13,720)	146.74
TOTAL REVENUES	**(25,914)**	**(9,350)**	**(23,070)**			**(23,070)**	**(13,720)**	**146.74**
NET REVENUE Required from User Rates	**4,030,409**	**3,968,830**	**3,973,540**	**48,900**		**4,022,440**	**53,610**	**1.35**
STAFFING (stated in FTE)								

Haldimand County 2018 Rate Supported Operating Budget

Direct Wastewater Operations

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
Salaries, Wages & Benefits	239,608	215,070	216,000			216,000	930	0.43
Supplies & Materials	21,853	17,320	17,500			17,500	180	1.04
Services	1,091,320	1,215,770	1,179,660			1,179,660	(36,110)	(2.97)
Veolia Operating Services Charges	2,406,180	2,406,180	2,477,170			2,477,170	70,990	2.95
Interdepartmental Charges	74,320	70,770	75,880			75,880	5,110	7.22
TOTAL EXPENDITURES	**3,833,281**	**3,925,110**	**3,966,210**			**3,966,210**	**41,100**	**1.05**
REVENUES:								
TOTAL REVENUES								
NET REVENUE Required from User Rates	**3,833,281**	**3,925,110**	**3,966,210**			**3,966,210**	**41,100**	**1.05**
STAFFING (stated in FTE)								
Full Time		**2.61**	**2.50**			**2.50**		

Haldimand County 2018 Rate Supported Operating Budget

Wastewater User Fees

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
EXPENDITURES:								
TOTAL EXPENDITURES								
REVENUES:								
Municipal Recoveries	(57,853)	(74,100)	(58,320)			(58,320)	15,780	(21.30)
Recoveries from New Credit	(859)	(300)	(500)			(500)	(200)	66.67
Fees & Recoveries	(2,356,901)	(1,850,710)	(1,845,700)		36,030	(1,809,670)	41,040	(2.22)
Transfers from Reserves/Reserve Funds	(403,135)	(403,140)	(480,240)			(480,240)	(77,100)	19.12
TOTAL REVENUES	**(2,818,748)**	**(2,328,250)**	**(2,384,760)**		**36,030**	**(2,348,730)**	**(20,480)**	**0.88**
NET REVENUE Required from User Rates	**(2,818,748)**	**(2,328,250)**	**(2,384,760)**		**36,030**	**(2,348,730)**	**(20,480)**	**0.88**
STAFFING (stated in FTE)								

Haldimand County 2018 Rate Supported Operating Budget

Wastewater User Rates Revenue

	2017 Current Forecast	2017 Revised Budget	2018 Base Budget	2018 Cncl. Appr. Initiatives	2018 New Initiatives	2018 Total Budget	2018 Budget $ Incr / (Decr)	2018 Budget % Incr / (Decr)
REVENUES:								
Revenue Required from User Rates								
Base Charge - Residential	(2,545,895)	(2,493,200)	(2,408,590)	(48,900)	(36,030)	(2,493,520)	(320)	0.01
Consumption - Residential	(2,064,673)	(1,967,950)	(1,976,370)			(1,976,370)	(8,420)	0.43
Base Charge - Commercial	(611,224)	(643,670)	(653,330)			(653,330)	(9,660)	1.50
Consumption - Commercial	(1,153,456)	(1,175,530)	(1,170,700)			(1,170,700)	4,830	(0.41)
TOTAL REVENUES	**(6,375,248)**	**(6,280,350)**	**(6,208,990)**	**(48,900)**	**(36,030)**	**(6,293,920)**	**(13,570)**	**0.22**
NET REVENUE Required from User Rates	**(6,375,248)**	**(6,280,350)**	**(6,208,990)**	**(48,900)**	**(36,030)**	**(6,293,920)**	**(13,570)**	**0.22**
STAFFING (stated in FTE)								

WATER & WASTEWATER APPENDICES


A GRAND EXPERIENCE
HALDIMAND
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HALDIMAND COUNTY

2018 DRAFT CAPITAL BUDGET AND FORECAST

CAPITAL FINANCING PRINCIPLES

Principles ***Source***	***Sub-category***	***Principle***
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: Gross Project Costs < $1 million: Not eligible for debt Gross Project Costs between $1 Million and $10 Million : Debt financed for a period of 10 years. Gross Project Costs > $10 million and asset life >20 years: Debt financed for a period of 20 years. 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: - 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. - if the DCRF results in a negative balance, a review of significant DC funded projects will occur to review for potential DC debt issuance

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


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HALDIMAND COUNTY
2018 RATE SUPPORTED BUDGET
Net Capital Financing from Water and Wastewater Rates

	2017			2018			2019			2020			2021			2022			2023			2024			2025			2026			2027		
	WATER	SEWER	COMBINED	WATER	SEWER	COMBINED	WATER	SEWER	COMBINED	WATER	SEWER	COMBINED	WATER	SEWER	COMBINED	WATER	SEWER	COMBINED	WATER	SEWER	COMBINED	WATER	SEWER	COMBINED	WATER	SEWER	COMBINED	WATER	SEWER	COMBINED	WATER	SEWER	COMBINED
DEBT CHARGES (Existing Debt)																																	
- Gross debt repayments	337,290	842,120	1,179,410	941,200	670,620	1,611,820	938,640	664,888	1,603,528	935,950	659,700	1,595,650	777,310	170,540	947,850	774,380	165,300	939,680	771,910	160,050	931,960	691,000	0	691,000	690,420	0	690,420	691,140	0	691,140	690,560		690,560
- Development related debt repayments	0	403,140	403,140	502,280	480,240	982,520	502,350	474,132	976,482	502,290	467,590	969,880	502,100	298,380	800,480	501,910	291,740	793,650	502,040	285,160	787,200	502,100	83,660	585,760	501,670	83,590	585,260	502,200	83,680	585,880	501,780	83,610	585,390
- Less funding from:																																	
- Develop. Charges Reserve Fund	0	(403,140)	(403,140)	(502,280)	(480,240)	(982,520)	(502,350)	(474,132)	(976,482)	(502,290)	(467,590)	(969,880)	(502,100)	(298,380)	(800,480)	(501,910)	(291,740)	(793,650)	(502,040)	(285,160)	(787,200)	(502,100)	(83,660)	(585,760)	(501,670)	(83,590)	(585,260)	(502,200)	(83,680)	(585,880)	(501,780)	(83,610)	(585,390)
Net Existing Debt Charges	337,290	842,120	1,179,410	941,200	670,620	1,611,820	938,640	664,888	1,603,528	935,950	659,700	1,595,650	777,310	170,540	947,850	774,380	165,300	939,680	771,910	160,050	931,960	691,000	0	691,000	690,420	0	690,420	691,140	0	691,140	690,560	0	690,560
DEBT CHARGES (Proposed Debt for Active Projects)	0	0	0	0	0	0	0	0	0	0	978,580	978,580	0	955,350	955,350	0	933,590	933,590	0	909,860	909,860	0	886,790	886,790	0	864,500	864,500	0	841,800	841,800	0	819,160	819,160
DEBT CHARGES (Proposed Debt for Development Related Activ	0	0	0	0	0	0	0	218,120	218,120	0	260,410	260,410	0	253,740	253,740	0	247,660	247,660	0	241,550	241,550	0	235,440	235,440	0	229,260	229,260	0	223,170	223,170	0	216,910	216,910
OFFSETTING FUNDING for Development Related Active Project	0	0	0	0	0	0	0	(218,120)	(218,120)	0	(260,410)	(260,410)	0	(253,740)	(253,740)	0	(247,660)	(247,660)	0	(241,550)	(241,550)	0	(235,440)	(235,440)	0	(229,260)	(229,260)	0	(223,170)	(223,170)	0	(216,910)	(216,910)
DEBT CHARGES (Proposed New Debt)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEBT CHARGES (Proposed New Debt for Development Related	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	403,790	1,027,480	1,431,270	393,910	1,042,040	1,435,950	384,340	1,276,420	1,660,760	375,200	1,245,020	1,620,220	365,840	1,214,110	1,579,950	356,500	1,183,510	1,540,010
OFFSETTING FUNDING for Development Related New Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(403,790)	(1,027,480)	(1,431,270)	(393,910)	(1,042,040)	(1,435,950)	(384,340)	(1,276,420)	(1,660,760)	(375,200)	(1,245,020)	(1,620,220)	(365,840)	(1,214,110)	(1,579,950)	(356,500)	(1,183,510)	(1,540,010)
DEBT CHARGES SUB-TOTAL	0	0	0	0	0	0	0	0	0	0	978,580	978,580	0	955,350	955,350	0	933,590	933,590	0	909,860	909,860	0	886,790	886,790	0	864,500	864,500	0	841,800	841,800	0	819,160	819,160
TOTAL DEBT CHARGES	**337,290**	**842,120**	**1,179,410**	**941,200**	**670,620**	**1,611,820**	**938,640**	**664,888**	**1,603,528**	**935,950**	**1,638,280**	**2,574,230**	**777,310**	**1,125,890**	**1,903,200**	**774,380**	**1,098,890**	**1,873,270**	**771,910**	**1,069,910**	**1,841,820**	**691,000**	**886,790**	**1,577,790**	**690,420**	**864,500**	**1,554,920**	**691,140**	**841,800**	**1,532,940**	**690,560**	**819,160**	**1,509,720**
CAPITAL REPLACEMENT RESERVE FUND																																	
- Budgeted annual contribution	1,479,310	2,171,480	3,650,790	955,350	2,381,140	3,336,490	1,043,570	2,420,000	3,463,570	1,137,630	1,471,730	2,609,360	1,393,350	2,002,960	3,396,310	1,499,080	2,042,520	3,541,600	1,610,050	2,077,780	3,687,830	1,690,960	2,260,900	3,951,860	1,691,540	2,283,190	3,974,730	1,690,820	2,305,890	3,996,710	1,691,400	2,328,530	4,019,930
TOTAL CAPITAL-RELATED FINANCING:	1,816,600	3,013,600	4,830,200	1,896,550	3,051,760	4,948,310	1,982,210	3,084,888	5,067,098	2,073,580	3,110,010	5,183,590	2,170,660	3,128,850	5,299,510	2,273,460	3,141,410	5,414,870	2,381,960	3,147,690	5,529,650	2,381,960	3,147,690	5,529,650	2,381,960	3,147,690	5,529,650	2,381,960	3,147,690	5,529,650	2,381,960	3,147,690	5,529,650
IMPACT ON USER RATES:																																	
% INCREASE - YEAR TO YEAR	4.17%	1.41%	2.43%	4.40%	1.27%	2.45%	4.52%	1.09%	2.40%	4.61%	0.81%	2.30%	4.68%	0.61%	2.24%	4.74%	0.40%	2.18%	4.77%	0.20%	2.12%	0.00%	0.00%	0.00%	0.00%	0.00%	75.67%	0.00%	0.00%	75.67%	0.00%	0.00%	75.67%
$ INCREASE - YEAR TO YEAR	72,780	41,990	114,770	79,940	38,190	118,110	85,660	33,128	118,788	91,370	25,122	116,492	97,080	18,840	115,920	102,800	12,560	115,360	108,500	6,280	114,780	0	0	0	0	0	0	0	0	0	0	0	0
Net Revenue from User Rates	**5,710,810**	**6,280,350**	**11,991,160**	**5,710,810**	**6,280,350**	**11,991,160**	**5,710,810**	**6,280,350**	**11,991,160**	**5,710,810**	**6,280,350**	**11,991,160**	**5,710,810**	**6,280,350**	**11,991,160**	**5,710,810**	**6,280,350**	**11,991,160**	**5,710,810**	**6,280,350**	**11,991,160**	**5,710,810**	**6,280,350**	**11,991,160**	**5,710,810**	**6,280,350**	**11,991,160**	**5,710,810**	**6,280,350**	**11,991,160**	**5,710,810**	**6,280,350**	**11,991,160**
Estimated Impact of Proposed Capital Related Expenditures on User Rates	**1.3%**	**0.7%**	**1.0%**	**1.4%**	**0.6%**	**1.0%**	**1.5%**	**0.5%**	**1.0%**	**1.6%**	**0.4%**	**1.0%**	**1.7%**	**0.3%**	**1.0%**	**1.8%**	**0.2%**	**1.0%**	**1.9%**	**0.1%**	**1.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**

NOTE: Existing Debt made up of debenture payments required for: WATER - Nanticoke Water Treatment Plant (2018-2027), Caledonia-Orkney Street (2011-2020), Caledonia - Caithness, Argyle to McClung (2014-2023), Dunnville-Cast Iron Watermains (2011-2020), Jarivs Watermain Replacement (2018-2027). WASTEWATER - Cayuga WPCP (2011-2020); and Hagersville WPCP (2011-2020) upgrades, Jarvis Lagoon upgrades (2018-2027); and refinancing of balloon debt for Caledonia Water Pollution Control Upgrade (2013-2022).

Proposed New Debt includes debenture payments required for the following existing capital projects: WASTEWATER Dunnville WWTP Replacements (2020-2029).
New Debt requirements for Wastewater Development Related Projects within the 2018 - 2027 Capital Forecast include: Dunnville WWTP Replacements (2020-2029), Hagersville Grit Removal System (2023-2032), Caledonia Aeration Head Diffusers (2019-2028), Cayuga Ouse St. Forcemain Twinning (2019-2028), Caledonia WWTP Wet Well Expansion (2022-2031), Jarvis Additional Wastewater Treatment Capacity (2022-2031), Cayuga Ouse St Pumping Station (2022-2031), Caledonia Nairn St. Forcemain (2019-2028), Townsend Lagoon Upgrade (2019-2028), and New Caledonia Wastewater Treatment Plant Phase 1 (2024-2033).
New Debt requirements for Water Development Related Projects within the 2018 - 2027 Capital Forecast include: Caledonia Elevated Tank (2022-2031) and Dunnville WTP Reservoir Expansion (2028-2037).


A GRAND EXPERIENCE
HALDIMAND
COUNTY

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, 2017)*	*2018 Annual Payments*	*offsetting funding*	*Net County Responsibility*	*Outstanding Principal (as at December 31, 2018)*	*Maturity*
Lowbanks - Firehall and Community Centre	1392/13	IO	PAD	October 1, 2013	$898,500	3.36%	$89,850	$539,100	$107,207		$107,207	$449,250	2023
Cayuga Fire Station	1711/16	IO	PAD	October 3, 2016	$1,502,800	2.07%	$150,280	$1,352,520	$177,497	(121,584)	$55,914	$1,202,240	2026
Hagersville Fire Station	1711/16	IO	PAD	October 3, 2016	$1,747,700	2.07%	$174,770	$1,572,930	$206,423	(27,567)	$178,856	$1,398,160	2026
South Haldimand Fire Station	1711/16	IO	PAD	October 3, 2016	$1,236,300	2.07%	$123,630	$1,112,670	$146,021	(47,741)	$98,280	$989,040	2026
Cayuga EMS Station	1711/16	IO	PAD	October 3, 2016	$512,900	2.07%	$51,290	$461,610	$60,579	(9,036)	$51,544	$410,320	2026
Hagersville EMS Station	1711/16	IO	PAD	October 3, 2016	$710,400	2.07%	$71,040	$639,360	$83,906	(11,256)	$72,650	$568,320	2026
Grandview	824/07	IO	PAD	July 16, 2007	$17,000,000	5.27%	$850,000	$8,500,000	$1,286,843	(483,552)	$803,291	$7,650,000	2027
Grandview - New Debt	1393/13	IO	PAD	October 1, 2013	$1,686,000	3.82%	$112,453	$1,236,987	$158,629		$158,629	$1,124,534	2028
HCCC - Balloon & New Debt	1392/13	IO	PAD	October 1, 2013	$3,658,000	3.36%	$365,800	$2,194,800	$436,464	(178,950)	$257,514	$1,829,000	2023
Cayuga Arena	1394/13	IO	PAD	October 1, 2013	$6,620,400	4.11%	$331,020	$5,296,320	$545,288	(289,364)	$255,924	$4,965,300	2033
Dunnville Arena	1394/13	IO	PAD	October 1, 2013	$7,656,900	4.11%	$382,845	$6,125,520	$630,659	(189,857)	$440,802	$5,742,675	2033
Dunnville Library	1829/17	CDS	PAD	July 5, 2017	$864,700	1.20%	$86,470	$864,700	$96,310	(96,310)	-	$783,994	2027
Caledonia Lions Hall	1711/16	IO	PAD	October 3, 2016	$1,653,000	2.07%	$165,300	$1,487,700	$195,238		$195,238	$1,322,400	2026
Total Tax Supported								**$31,384,217**	**$4,131,064**	**($1,455,216)**	**$2,675,848**	**$28,435,232**	

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, 2017)*	*2018 Annual Payments*	*offsetting funding*	*Net County Responsibility*	*Outstanding Principal (as at December 31, 2018)*	*Maturity*
Water projects													
Cast Iron Watermain - Orkney Street, Caledonia	CMHC Loans	CMHC	PAD	October 1, 2010	$228,000	2.87%	$22,800	$75,292	$26,552		$26,552	$50,901	2020
Caithness Street - Argyle to McClung, Caledonia	1392/13	IO	PAD	October 1, 2013	$789,900	3.36%	$78,990	$473,940	$94,249		$94,249	$394,950	2023
Jarvis Watermain Replacement	1829/17	CDS	PAD	July 5, 2017	$2,250,000	1.20%	$224,460	$2,250,000	$250,605	(62,651)	$187,954	$2,039,998	2027
Cast Iron Watermain - Dunnville	CMHC Loans	CMHC	PAD	October 1, 2010	$1,109,900	2.87%	$110,900	$366,223	$129,148		$129,148	$247,586	2020
Nanticoke Electrical Servicing Upgrades	1829/17	CDS	PAD	July 5, 2017	$100,000	1.20%	$10,000	$100,000	$11,138	(11,138)	-	$90,667	2027
Nanticoke Filter Building Expansion	1829/17	CDS	PAD	July 5, 2017	$1,704,400	1.20%	$170,440	$1,704,400	$189,836	(47,459)	$142,377	$1,545,321	2027
Nanticoke High Rate Sedimentation Capacity Expansion	1829/17	CDS	PAD	July 5, 2017	$1,337,400	1.20%	$133,740	$1,337,400	$148,959	(37,234)	$111,725	$1,212,575	2027
Nanticoke Water System Filter Replacement	1829/17	CDS	PAD	July 5, 2017	$2,340,900	1.20%	$234,090	$2,340,900	$260,730	(260,730)	-	$2,122,413	2027
Nanticoke Water Treatment Process	1829/17	CDS	PAD	July 5, 2017	$2,983,200	1.20%	$298,320	$2,983,200	$332,268	(83,067)	$249,201	$2,704,765	2027
Wastewater Projects													
Caithness Street - Argyle to McClung	1392/13	IO	PAD	October 1, 2013	$502,800	3.36%	$50,280	$301,680	$59,993		$59,993	$251,400	2023
Caledonia Water Polution Control Upgrade Balloon	1392/13	IO	PAD	October 1, 2013	$3,024,000	3.36%	$302,400	$1,814,400	$360,817	(234,531)	$126,286	$1,512,000	2023
Caledonia WWTP Upgrades	1829/17	CDS	PAD	July 5, 2017	$628,700	1.20%	$62,870	$628,700	$70,025	(70,025)	-	$570,021	2027
Upgrade WTP - Hagersville	CMHC Loans	CMHC	PAD	October 1, 2010	$3,146,000	2.87%	$314,600	$1,038,898	$366,365	(162,000)	$204,365	$702,350	2020
Jarvis Lagoon Upgrades	1829/17	CDS	PAD	July 5, 2017	$122,700	1.20%	$12,270	$122,700	$13,666	(13,666)	-	$111,248	2027
Upgrade WTP - Cayuga	CMHC Loans	CMHC	PAD	October 1, 2010	$2,404,300	2.87%	$240,430	$793,968	$279,991		$279,991	$536,764	2020
Total Rate Supported Water and Wastewater								**$16,331,701**	**$2,594,340**	**($982,501)**	**$1,611,839**	**$14,092,958**	
Total Debt:								**$47,715,918**	**$6,725,404**	**($2,437,717)**	**$4,287,687**	**$42,528,191**	

HALDIMAND COUNTY

FORECAST OF CAPITAL REPLACEMENT RESERVE FUND - WATER
FOR THE YEARS 2018 TO 2027

	2017 WATER $	2018 WATER $	2019 WATER $	2020 WATER $	2021 WATER $	2022 WATER $	2023 WATER $	2024 WATER $	2025 WATER $	2026 WATER $	2027 WATER $
Opening Balance January 1st	**6,015,008**	**3,441,378**	**6,365,668**	**6,150,458**	**6,443,008**	**6,443,158**	**5,565,798**	**5,347,728**	**5,936,138**	**5,542,328**	**6,399,868**
Source of Funds:											
Budgeted Annual Contribution	1,479,310	955,350	1,043,570	1,137,630	1,393,350	1,499,080	1,610,050	1,690,960	1,691,540	1,690,820	1,691,400
Contribution from Rate Stabilization Reserve		3,506,000									
Interest Earned	174,665										
Total Source of Funds	1,653,975	4,461,350	1,043,570	1,137,630	1,393,350	1,499,080	1,610,050	1,690,960	1,691,540	1,690,820	1,691,400
Use of Funds:											
Commitment for Active Projects	4,227,605										
New Initiative/Enhanced Service		375,000	5,000								
Replacement/State of Good Repair		1,162,060	1,253,780	845,080	1,393,200	2,376,440	1,828,120	1,102,550	2,085,350	833,280	921,050
Total Use of Funds	4,227,605	1,537,060	1,258,780	845,080	1,393,200	2,376,440	1,828,120	1,102,550	2,085,350	833,280	921,050
Closing Balance December 31st	**3,441,378**	**6,365,668**	**6,150,458**	**6,443,008**	**6,443,158**	**5,565,798**	**5,347,728**	**5,936,138**	**5,542,328**	**6,399,868**	**7,170,218**

FORECAST OF CAPITAL REPLACEMENT RESERVE FUND - SEWER
FOR THE YEARS 2017 TO 2026

	2017 SEWER $	2018 SEWER $	2019 SEWER $	2020 SEWER $	2021 SEWER $	2022 SEWER $	2023 SEWER $	2024 SEWER $	2025 SEWER $	2026 SEWER $	2027 SEWER $
Opening Balance January 1st	**10,078,245**	**8,941,663**	**10,102,693**	**11,327,363**	**10,809,933**	**12,216,833**	**11,058,903**	**10,354,023**	**9,663,303**	**8,648,984**	**9,750,964**
Source of Funds:											
Budgeted Annual Contribution	2,171,480	2,381,140	2,420,000	1,471,730	2,002,960	2,042,520	2,077,780	2,260,900	2,283,190	2,305,890	2,328,530
Contribution from Rate Stabilization Reserve					850,000						
Contribution: Leachate Leachate Norfolk Capital component											
Leachate Haldimand Capital componen	27,140	27,140	27,140	27,140	27,140	27,140	27,140	27,140	27,140	27,140	27,140
Interest Earned											
Total Source of Funds	2,198,620	2,408,280	2,447,140	1,498,870	2,880,100	2,069,660	2,104,920	2,288,040	2,310,330	2,333,030	2,355,670
Use of Funds:											
Commitment for Active Projects	3,335,202										
New Initiative/Enhanced Service		40,000	0	87,500							
Replacement/State of Good Repair		1,207,250	1,222,470	1,928,800	1,473,200	3,227,590	2,809,800	2,978,760	3,324,650	1,231,050	2,961,200
Total Use of Funds	3,335,202	1,247,250	1,222,470	2,016,300	1,473,200	3,227,590	2,809,800	2,978,760	3,324,650	1,231,050	2,961,200
Closing Balance December 31st	**8,941,663**	**10,102,693**	**11,327,363**	**10,809,933**	**12,216,833**	**11,058,903**	**10,354,023**	**9,663,303**	**8,648,984**	**9,750,964**	**9,145,434**

HALDIMAND COUNTY

FORECAST OF FEDERAL GAS TAX REVENUE RESERVE FUND
FOR THE YEARS 2018 TO 2027

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	$	$	$	$	$	$	$	$	$	$	$
Opening Balance January 1st	**3,864,987**	**2,043,124**	**1,744,910**	**2,014,267**	**1,325,574**	**98,281**	**169,828**	**808,005**	**589,222**	**1,392,529**	**364,426**
Source of Funds:											
Budgeted Contribution	2,728,747	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687
Interest Earned											
Total Source of Funds	2,728,747	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687	2,858,687
Use of Funds:											
Commitment for Active Projects (Tax)	1,326,860										
Commitment for Active Projects (Water/Wastewater)	3,223,750										
Contribution to State of Good Repair Projects (Tax Supported)					650,000	1,380,000			280,000	280,000	
Contribution to New Initiatives/Enhanced Service Projects (Tax Supported)		1,139,400	1,067,220	1,100,390	1,088,230	987,140	1,025,900	1,104,400	1,225,180	1,202,140	1,083,790
Contribution to New Initiatives/Enhanced Service Projects (Water)			400,000								
Contribtuion to New Initiatives/Enhanced Service Projects (Wastewater)			19,110	476,990	1,060,000		380,000				
Contribution to State of Good Repair Projects (Water)		1,430,000	803,000	1,800,000	1,287,750	250,000	814,610	1,542,750	550,200	225,250	1,712,750
Contribution to State of Good Repair Projects (Wastewater)		587,500	300,000	170,000		170,000		430,320		2,179,400	329,400
Total Use of Funds	4,550,610	3,156,900	2,589,330	3,547,380	4,085,980	2,787,140	2,220,510	3,077,470	2,055,380	3,886,790	3,125,940
Closing Balance December 31st	**2,043,124**	**1,744,910**	**2,014,267**	**1,325,574**	**98,281**	**169,828**	**808,005**	**589,222**	**1,392,529**	**364,426**	**97,173**

HALDIMAND COUNTY

DEVELOPMENT CHARGES RESERVE FUND - WATER
FOR THE YEARS 2018 TO 2027

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	$	$	$	$	$	$	$	$	$	$	$
Opening Balance January 1st	**506,390**	**546,485**	**569,275**	**431,372**	**400,753**	**217,133**	**(334,893)**	**(1,061,416)**	**(1,725,748)**	**(2,387,152)**	**(2,845,891)**
Source of Funds:											
Actual Receipts to September 30th	406,231										
Receipts expected per DC study (prorated if part year)	98,880	403,430	499,270	509,250	519,440	531,550	542,180	553,030	564,090	575,370	586,880
Additional Development Growth Estimate - Above DC Study (note 1)		206,960	119,170	121,550	123,980	124,660	127,150	129,690	132,290	134,930	137,630
Interest Earned	8,952	13,720	12,707	10,342	8,109	24	(13,483)	(26,912)	(39,714)	(50,530)	(60,847)
Total Source of Funds	514,063	624,110	631,147	641,142	651,529	656,234	655,847	655,808	656,666	659,770	663,663
Use of Funds:											
DC debt repayment (note 2)		502,280	502,350	502,290	502,100	501,910	502,040	502,100	501,670	502,200	501,780
Forecasted DC debt repayment (note 3)						403,790	393,910	384,340	375,200	365,840	356,500
Proposed Projects-Capital Forecast (Tax)		10,150					10,150				
Proposed Projects-Capital Forecast (WWW) (note 4)	473,969	88,890	266,700	169,470	333,050	302,560	476,270	433,700	441,200	250,470	415,200
Total Use of Funds	473,969	601,320	769,050	671,760	835,150	1,208,260	1,382,370	1,320,140	1,318,070	1,118,510	1,273,480
Closing Balance December 31st (note 5)	**546,485**	**569,275**	**431,372**	**400,753**	**217,133**	**(334,893)**	**(1,061,416)**	**(1,725,748)**	**(2,387,152)**	**(2,845,891)**	**(3,455,709)**

Note 1: Additional development growth greater than estimated for the 2014 DC Study included in above analysis. A DC Study update will be completed in 2018 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 2018 - 2027; Caledonia Elevated Tank (2022-2031) and Dunnville WTP Reservoir Expansion (2028-2037). Proposed project expenditures are based on the 2018 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

Note 4: Study review.

Note 5: Balance of reserve fund at end of current forecast period (2027) 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 2018 TO 2027

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	$	$	$	$	$	$	$	$	$	$	$
Opening Balance January 1st	**(2,047,750)**	**(2,290,779)**	**(2,446,380)**	**(2,757,531)**	**(3,417,668)**	**(3,490,512)**	**(4,588,583)**	**(5,748,758)**	**(6,814,649)**	**(8,501,833)**	**(9,493,099)**
Source of Funds:											
Actual Receipts to September 30th	446,524										
Receipts expected per DC study (prorated if part year)	110,625	451,350	561,280	572,500	583,950	597,620	609,570	621,760	634,200	646,880	659,820
Additional Development Growth Estimate - Above DC Study (note 1)		237,930	137,000	139,740	142,530	143,310	146,170	149,100	152,080	155,120	158,220
Interest Earned	(46,204)	(45,741)	(50,248)	(59,627)	(66,704)	(78,011)	(99,816)	(121,310)	(147,894)	(173,756)	(214,300)
Total Source of Funds	510,945	643,539	648,032	652,613	659,776	662,919	655,924	649,550	638,386	628,244	603,740
Use of Funds:											
DC debt repayment (note 2)		480,240	692,252	728,000	552,120	539,400	526,710	319,100	312,850	306,850	300,520
Forecasted DC debt repayment (note 3)			0	0	0	1,027,480	1,042,040	1,276,420	1,245,020	1,214,110	1,183,510
Proposed Projects-Capital Forecast (Tax)		10,150					10,150				
Proposed Projects-Capital Forecast (WWW) (note 4)	753,974	308,750	266,930	584,750	180,500	194,110	237,200	119,920	767,700	98,550	2,327,300
Total Use of Funds	753,974	799,140	959,182	1,312,750	732,620	1,760,990	1,816,100	1,715,440	2,325,570	1,619,510	3,811,330
Closing Balance December 31st (note 5)	**(2,290,779)**	**(2,446,380)**	**(2,757,531)**	**(3,417,668)**	**(3,490,512)**	**(4,588,583)**	**(5,748,758)**	**(6,814,649)**	**(8,501,833)**	**(9,493,099)**	**(12,700,689)**

Note 1: Additional development growth greater than estimated for the 2014 DC Study included in above analysis. A DC Study update will be completed in 2018 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 2018 - 2027; 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 2018 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 (2027) 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

2018 to 2027 RATE SUPPORTED CAPITAL FORECAST
CO-ORDINATED PROJECTS

		TAX CAPITAL (preliminary information)						WATER AND WASTEWATER CAPITAL				
Project	Timing	Roads 2017 Open Projects	Roads 10 Year Forecast	Storm 2017 Open Projects	Storm 10 Year Forecast	Other 2017 Open Projects	Other 10 Year Forecast	Water 2017 Open Projects	Water 10 Year Forecast	Wastewater 2017 Open Projects	Wastewater 10 Year Forecast	Project Total
Jarvis												
Master Servicing Plan	2018, 2023	-	30,000	-	30,000	-	-	-	40,000	-	30,000	**130,000**
Cayuga												
Master Servicing Plan	2020, 2025	-	60,000	-	30,000	-	-	-	50,000	-	50,000	**190,000**
Caledonia												
Master Servicing Plan	2017, 2023	150,000	50,000	33,600	30,000	-	-	50,000	50,000	50,000	50,000	**463,600**
Stirling St - Arygle St to Peebles	2017-2018	40,000	655,000	21,000	207,000	-	-	-	-	-	182,000	**1,105,000**
Argyle Bridge Watermain and Sanitary Sewer Relocation	2018	-	-	-	-	-	-	-	82,000	-	46,000	**128,000**
Hagersville												
Master Servicing Plan	2019, 2024	30,000	60,000	15,000	30,000	-	-	25,000	50,000	25,000	50,000	**285,000**
Operations Building Roof Repairs	2018	-	-	-	-	-	-	-	10,000	-	10,000	**20,000**
Dunnville												
Alder St Reconstruction - Cedar to West	2017-2019	170,000	1,950,000	155,000	2,600,000	-	-	50,000	820,000	50,000	675,000	**6,470,000**
Master Servicing Plan	2019, 2024	30,000	60,000	30,000	60,000	-	-	30,000	60,000	30,000	60,000	**360,000**
County Wide												
CCTV Inspection Program	2018-2027	-	-	45,000	250,000	-	-	-	-	100,000	500,000	**895,000**
Facility Condition Assessments	2018-2027	-	-	-	-	-	-	54,200	150,000	96,100	125,000	**425,300**
SCADA Master Plan	2021	-	-	-	-	-	-	35,000	70,000	35,000	70,000	**210,000**
SCADA Maintenance	2018-2027	-	-	-	-	-	-	58,350	300,000	20,000	200,000	**578,350**
SCADA Technical Support	2018-2027	-	-	-	-	-	-	72,750	400,000	50,000	500,000	**1,022,750**
Asbestos Annual Inspection and Remediation	2018-2027	-	-	-	-	369,930	364,500	11,030	40,000	13,520	40,000	**838,980**
SCADA Sonic Wall Replacement	2018	-	-	-	-	-	44,500	-	7,000	-	7,000	**58,500**
TOTAL		**420,000**	**2,865,000**	**299,600**	**3,237,000**	**375,930**	**489,500**	**468,330**	**2,129,000**	**474,620**	**2,595,000**	**13,353,980**

Note - does not include prior year closed projects or prior year open projects with no impact in 2018-2027 or co-ordinated projects that do not have a water/wastewater component.

HALDIMAND COUNTY

2018 to 2027 RATE SUPPORTED CAPITAL FORECAST
New Projects Added or Projects Deleted

PROJECTS GREATER THAN $100,000

Project	Division	Description	New/Enhanced SOGR	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
PROJECTS ADDED - EXLUDING ADDITION OF 2027 YEAR														
WATER														
471.0021 Engineering(2018)& Replacement of Cast Iron Watermains	Water - Replacement and Upgrade Projects	New project/program to replace deficient cast iron watermains throughout several communities in Haldimand County. Locations and sections have been prioritized by water and wastewater staff. 2018 expenses are solely for engineering costs.	SOGR	175,000	500,000	500,000	500,000	500,000	-	-	-	-	-	**2,175,000**
476.0069 Pt Maitland Low Lift Facility Capital Repairs	Water - Plants/Transmission Systems	New project that follows the capital needs study conducted in 2011. The work scheduled for 2018 will complete the capital replacement plan and restore the Port Maitland Low Lift Facility.	SOGR	1,250,000	-	-	-	-	-	-	-	-	-	**1,250,000**
479.0111 High Lift Pumps 2 & 3 motors and VFD's	Water - Plants/Transmission Systems	New project to add Variable Frequency Drives (VFD's) to the #2 and #3 high lift pumps at the Nanticoke WTP and to replace the pump motors for compatibility. Adding variable drive capability (ramping pump speed up/down compared to on/off) will facilitate smoother operation of the Nanticoke Water System and avoid operational issues while maintaining the Townsend Elevated Tank.	New/Enhanced	285,000	-	-	-	-	-	-	-	-	-	**285,000**
479.0114 IPS Wet Well Piping and Valve Replacements (Phase 1)	Water - Plants/Transmission Systems	New project to replace the existing valves and piping that are in poor condition. The first phase consists of valve replacements that will allow for isolation and draw down of the east wet well so that a detailed condition assessment of the remaining piping and valves can occur.	SOGR	-	225,000	-	-	-	-	-	-	-	-	**225,000**
TOTAL WATER - PROJECTS ADDED				**$ 1,710,000**	**$ 725,000**	**$ 500,000**	**$ 500,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,935,000**
WASTEWATER														
452.0087 Stirling St - Sanitary Repl - Argyle to Peebles [R] [SS]	Wastewater - Replacement and Upgrade Projects	New project to replace the Sanitary Sewer on Stirling Street as a result of its poor condition.	SOGR	182,000	-	-	-	-	-	-	-	-	-	**182,000**
452.0093 Caledonia Wastewater Treatment Plant	Wastewater - Plants	New project added to construct an additional wastewater treatment plant to service Caledonia as a result of new development. Costs include EA (2022), Property Acquisition, Design, Contract Admin (2025) and Construction (2027). 100% DC Funded.	New/Enhanced	-	-	-	-	2,097,700	-	-	5,682,600	-	37,255,900	**45,036,200**
TOTAL WASTEWATER - PROJECTS ADDED				**$ 182,000**	**$ -**	**$ -**	**$ -**	**$ 2,097,700**	**$ -**	**$ -**	**$ 5,682,600**	**$ -**	**$ 37,255,900**	**$ 45,218,200**
PROJECTS REMOVED - EXLUDING 2017 OPEN/ACTIVE PROJECTS														
WATER														
472.0004 CaithnessW Recons-Firehall-Ross [R][WW][SS]	Water - Replacement and Upgrade Projects	Project will now be carried under the Cast Iron Watermain Replacement project (C.471.0021).	SOGR	-	-	-	411,000	-	-	-	-	-	-	**411,000**
479.0108 OPG Forebay Isolation Baffle	Water - Plants/Transmission Systems	Project removed as the scope of work was included in OPS's tender for demolition of site works. OPG has agreed to cover the costs as part of their decommissiong plan.	New/Enhanced	275,000	-	-	-	-	-	-	-	-	-	**275,000**
TOTAL WATER - PROJECTS REMOVED				**$ 275,000**	**$ -**	**$ -**	**$ 411,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 686,000**
WASTEWATER														
451.0011 Future Wastewater Main Projects	Wastewater - Replacement and Upgrade Projects	Due to the current state of wastewater mains in Haldimand County, this placeholder project for future replacements has been removed.	SOGR	-	-	-	-	325,000	412,000	325,000	412,000	325,000	-	**1,799,000**
452.0006 Caithness W Recons-Firehall-Ross [R][W][SS]	Wastewater - Replacement and Upgrade Projects	Due to the continued delays by the MTO to replace the Argyle St Bridge, staff have completed all of the essential work on Caithness St. Therefore this project is unnecessary.	SOGR	-	-	-	182,000	-	-	-	-	-	-	**182,000**
TOTAL WASTEWATER - PROJECTS REMOVED				**$ -**	**$ -**	**$ -**	**$ 182,000**	**$ 325,000**	**$ 412,000**	**$ 325,000**	**$ 412,000**	**$ 325,000**	**$ -**	**$ 1,981,000**

HALDIMAND COUNTY

APPENDIX H

2018 to 2027 RATE SUPPORTED CAPITAL FORECAST
Projects Moved - Shifts in Timing

PROJECTS GREATER THAN $100,000

PROJECT	DIVISION	DESCRIPTION	State of Good Repair/ Enhanced Service	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
WATER														
472.0006 Cal - MSP - Update [WW][R][SS]	Water - Technical Reviews and Studies	Timing shift from 2020/2025 to 2023/2028 to balance workload of all Master Servicing Plans.	SOGR			→			50,000		→			**50,000**
472.0027 Elevated Storage Tank Replacement	Water - Plants/Transmission Systems	Shifting construction to 2020 to accommodate new workplan of project (EA/Property Acquisition 2018, Design 2019, Construction 2020)	SOGR	212,900	523,500	4,636,800								**5,373,200**
476.0111 Pre-Treatment Upgrades	Water - Plants/Transmission Systems	Shifted from 2018 to 2019 to allow for additional study of raw water treatment requirements.	New/Enhanced	→	200,000									**200,000**
WASTEWATER														
452.0007 Cal - MSP - Update [W][R][SS]	Wastewater - Technical Reviews and Studies	Timing shift from 2020/2025 to 2023/2028 to balance workload of all Master Servicing Plans.	SOGR			→			50,000		→			**50,000**
454.0011 Jarvis Additional Wastewater Treatment Capacity	Wastewater - Plants	Shifting construction to 2020 to accommodate new workplan of project (EA/Design 2018, Construction 2020)	New/Enhanced	1,107,300	→	5,249,100								**6,356,400**
455.0020 PS SCADA Replacements	Wastewater - Plants	Shifted construction costs of $110,000 to 2020 in coordination with the Ouse St Pump Station replacements. $20,000 will remain in 2019 for engineering and design.	SOGR		→	20,000	110,000							**130,000**
457.0001 Townsend Lagoon Clean Out	Wastewater - Plants	Shifted from 2022/2026 to 2025/2027 based on current understanding of need and project prioritization completed in 2017.	SOGR					→	370,000		→	350,000		**720,000**
459.0001 LEIP Lagoon Clean Out	Wastewater - Plants	Shifted from 2025 to 2026 based on current understanding of need and project prioritization completed in 2017.	SOGR								→	350,000		**350,000**

HALDIMAND COUNTY
2018 to 2027 RATE SUPPORTED CAPITAL FORECAST
Scope/Price Increase/(Decrease)

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

PROJECT	DIVISION	DESCRIPTION	State of Good Repair/New	2017 to 2026	2018 to 2027	Increase/ (Decrease)
WATER						
471.0010 Plant Optimization Program Support	Water - Plants/Transmission Systems	$60,000 open/active in 2017. $60,000 added for 2018/2019 to continue with the practice of optimization that places a focus on public health protection and economics.	SOGR	60,000	120,000	**60,000**
471.0018 Distribution Leak Detection Program	Water - Replacement and Upgrade Projects	Budget decreased from $30,000/year to $20,000/year based on historical actuals.	SOGR	300,000	200,000	**(100,000)**
472.0027 Elevated Storage Tank Replacement	Water - Plants/Transmission Systems	EA/Design increased by $85,000 due to revised estimates for scope of work. $173,200 in costs added for temporary financing and legal fees associated with DC Debt.	SOGR	5,115,000	5,373,200	**258,200**
476.0093 Alder St - Cedar to West [WW] [S] [R]	Water - Replacement and Upgrade Projects	Based on revised estimates from engineering work completed in 2017.	SOGR	900,000	820,000	**(80,000)**
476.0112 WTP Reservoir Expansion	Water - Plants/Transmission Systems	Increased by $90,500 for temporary financing and legal fees associated with DC Debt.	New/ Enhanced	1,750,000	1,840,500	**90,500**
TOTAL WATER						**$ 228,700**
WASTEWATER						
451.0004 Facility Condition Assessment [W]	Wastewater - Technical Reviews and Studies	$25,000 removed in 2019 due to savings realized and carried forward from previous years.	SOGR	150,000	125,000	**(25,000)**
451.0010 Collection System - Annual Repair	Wastewater - Replacement and Upgrade Projects	Decreased from $75,000/year to $70,000/year based on historical actuals	SOGR	750,000	700,000	**(50,000)**
451.0032 Effluent Water Quality & Impact Assessment	Wastewater - Technical Reviews and Studies	$23,000 open/active in 2017. $35,000 added for 2018-2020 to continue to develop a database to trend receiver water quality and assess impact from County owned Wastewater Treatment Plants on the receiver.	New/ Enhanced	23,000	105,000	**82,000**
451.0039 Pump Station Repairs/Replacement	Wastewater - Plants	$250,000 removed in 2018 as detailed projects are identified seperately within this budget.	New/ Enhanced	750,000	500,000	**(250,000)**
452.0085 WWTP Wet Well Expansion	Wastewater - Plants	Increased by $77,600 for temporary financing and legal fees associated with DC Debt.	New/ Enhanced	1,370,000	1,447,600	**77,600**
454.0011 Jarvis Additional Wastewater Treatment Capacity	Wastewater - Plants	Costs for project increased by $3,475,000 based on revised estimated costs for scope of work required. $356,400 in costs added for temporary financing and legal fees associated with DC Debt.	New/ Enhanced	2,525,000	6,356,400	**3,831,400**
455.0018 Ouse St PS Replacements	Wastewater - Plants	Project costs increased by $515,000 based on revised estimated costs for scope of work required. $26,500 in costs added for temporary financing and legal fees associated with DC Debt	SOGR	900,000	1,441,500	**541,500**
456.0036 Secondary Clarifier Repairs	Wastewater - Plants	Removed $125,000 in 2018 based on review of project scope and overall priority.	SOGR	250,000	125,000	**(125,000)**
456.0039 Alder St - Cedar to West [W] [SS] [R]	Wastewater - Replacement and Upgrade Projects	Based on revised estimates from engineering work completed in 2017.	SOGR	745,000	675,000	**(70,000)**
456.0056 Low Lift Pump Replacements	Wastewater - Plants	Increased by $19,000/year for 2018-2020 to reflect the necessary electrical upgrades and replacements to accommodate the new pumps.	SOGR	138,000	195,000	**57,000**
TOTAL WASTEWATER						**$ 4,069,500**


A GRAND EXPERIENCE
HALDIMAND
COUNTY

2018 Draft Rate Supported Water and Wastewater Council Approved New Initiatives

	Council Approved Ongoing	Council Approved One Time	2018 Total Council Approved Initiatives
Water			
Water share of Billing and Collecting Contract - increase in annualized contract costs as a result of increase in number of customers as per contract approved by Council through CS-GM-02-2016 Water and Wastewater Billing & Collection Service Agreement with Util-Assist.	48,900		48,900
Total Water New Initiatives	**$48,900**	**$0**	**$48,900**
Wastewater			
Wastewater share of Billing and Collecting Contract - increase in annualized contract costs as a result of increase in number of customers as per contract approved by Council through CS-GM-02-2016 Water and Wastewater Billing & Collection Service Agreement with Util-Assist.	48,900		48,900
Total Wastewater New Initiatives	**$48,900**	**$0**	**$48,900**

2018 Draft Rate Supported Water and Wastewater New Initiatives

	New Initiative Ongoing	New Initiative One Time	2018 Total New Initiatives
Water			
Removal of water fees related to inspections completed from Street Line to Property (to be completed through Building Division as service is covered under Building Code Act) as included in PED-GM-07-2017	38,260		38,260
Total Water New Initiatives	**$38,260**	**$0**	**$38,260**
Wastewater			
Removal of wastewater fees related to inspections completed from Street Line to Property (to be completed through Building Division as service is covered under Building Code Act) as included in PED-GM-07-2017	36,030		36,030
Total Wastewater New Initiatives	**$36,030**	**$0**	**$36,030**

NEW INITIATIVES

DEPARTMENT: Public Works
DIVISION: Water and Wastewater User Fees
Type of New Initiative: Change in Service Delivery

PROGRAM DESCRIPTION:

Transfer of Fees related to inspections completed from street line to house to Building Division (covered under the Building Code Act)

JUSTIFICATION: Contractual/Legislative Obligation | **If Other - please specify:** | **Choose Ongoing or One-Time** | **On-going**

BUSINESS CASE:

If the Type of New Initiative is an "Enhancement to Existing Service; a "Change in Service Delivery"; or a "New Service/program", include additional Business Case information.

Currently all water and wastewater connections are conducted through the Water and Wastewater division. The related expenditures are paid for and revenues received through the rate supported users. A review of this service has led to the determination that any connection service provided between the street line and the related property is in fact covered under the Building Code Act. As a result, staff have reviewed the related revenue accounts and remove any related connection permit revenues that relate to services conducted between the property and the street line. Further details, including those impacting the 2018 Building Division budget are presented through report PED-GM-07-2017, which is accompanying the 2018 Water and Wastewater Budget.

	2017	ESTIMATED COSTS			
EXPENDITURES:	**Budget**	**2018 Base**	**2018 New Initiative**	**2018 Total**	**Additional details of Expenditures, Revenues**
Salaries & Benefits: Start Date:					**Salaries & Benefits:**
					Supplies:
					Services:
REVENUES:					**Revenues:**
W.471.1110.2300.2352 Connection Permits - Water Portion	(11,730)	(45,320)	38,260	(7,060)	
W.451.1110.2300.2352 Connection Permits - Wastewater Portion	(8,250)	(45,750)	36,030	(9,720)	
NET LEVY IMPACT	**$ (19,980)**	**$ (91,070)**	**$ 74,290**	**$ (16,780)**	

HALDIMAND COUNTY RATE SUPPORTED BUDGET

FORECAST OF RATE STABILIZATION RESERVE - WATER
FOR THE YEARS 2014 TO 2022

	2014 ACTUALS $	2015 ACTUALS $	2016 ACTUALS $	2017 FORECAST $	2018 BUDGET $	2019 FORECAST $	2020 FORECAST $	2021 FORECAST $	2022 FORECAST $
Opening Balance January 1st	**1,455,466**	**2,213,008**	**2,966,310**	**4,117,621**	**4,868,894**	**1,427,175**	**1,467,136**	**1,508,216**	**1,550,446**
Source of Funds:									
Budgeted Annual Contribution	470,000	470,000	170,000	70,000					
Surplus/(Deficit) from Operations	250,743	233,877	861,649	573,513					
Interest Earned	36,799	49,424	119,662	107,760	64,281	39,961	41,080	42,230	43,412
Total Source of Funds	757,542	753,301	1,151,311	751,273	64,281	39,961	41,080	42,230	43,412
Use of Funds:									
Commitment for Active Projects									
Potential Contribution to CRRF - Water					3,506,000				
Total Use of Funds	0	0	0	0	3,506,000	0	0	0	0
Closing Balance December 31st	**2,213,008**	**2,966,310**	**4,117,621**	**4,868,894**	**1,427,175**	**1,467,136**	**1,508,216**	**1,550,446**	**1,593,858**
Balance in Reserve as a Percentage of Rates Revenue	37.28%	51.71%	68.44%	85.26%	24.99%	25.69%	26.41%	27.15%	27.91%
Rates Revenue	5,936,206	5,736,032	6,016,653	5,710,810	5,710,810	5,710,810	5,710,810	5,710,810	5,710,810
Budgeted Annual Contribution as a % of Rates Revenue	7.92%	8.19%	2.83%	1.23%	0.00%	0.00%	0.00%	0.00%	0.00%

FORECAST OF RATE STABILIZATION RESERVE - WASTE WATER
FOR THE YEARS 2014 TO 2022

	2014 ACTUALS $	2015 ACTUALS $	2016 ACTUALS $	2017 FORECAST $	2018 BUDGET $	2019 FORECAST $	2020 FORECAST $	2021 FORECAST $	2022 FORECAST $
Opening Balance January 1st	**1,142,240**	**1,316,933**	**1,023,840**	**973,419**	**2,001,760**	**2,140,289**	**2,200,217**	**2,261,823**	**1,457,686**
Source of Funds:									
Budgeted Annual Contribution				100,000					
Leachate/Overstrength contributions	155,237	164,298	105,053	158,968	82,480				
Surplus/(Deficit) from Operations	(7,427)	(484,810)	(193,471)	736,529					
Interest Earned	26,883	27,419	37,997	32,844	56,049	59,928	61,606	45,864	40,815
Total Source of Funds	174,693	(293,093)	(50,421)	1,028,341	138,529	59,928	61,606	45,864	40,815
Use of Funds:									
Commitment for Active Projects									
Potential Contribution to CRRF - Wastewater								850,000	
Total Use of Funds	0	0	0	0	0	0	0	850,000	0
Closing Balance December 31st	**1,316,933**	**1,023,840**	**973,419**	**2,001,760**	**2,140,289**	**2,200,217**	**2,261,823**	**1,457,686**	**1,498,502**
Balance in Reserve as a Percentage of Rates Revenue	24.86%	19.32%	16.39%	32.29%	34.52%	37.04%	36.48%	23.51%	24.17%
Rates Revenue	5,297,809	5,300,479	5,939,630	6,199,680	6,199,680	5,939,630	6,199,680	6,199,680	6,199,680
Budgeted Annual Contribution as a % of Rates Revenue	2.93%	3.10%	1.77%	4.18%	1.33%	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 additonal 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.*

	Approved 2015 Budget	*Approved 2016 Budget*	*Approved 2017 Budget*	*Draft 2018 Budget*
Effective Date of Rate Change	March 1, 2015	February 1, 2016	January 1, 2017	January 1, 2018
WATER				
Consumption Assumptions				
Residential Users				
Annual Water Consumption	Two Year Rolling Average	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
Anticipated Growth	Based on expected residential growth, as revised Development Charges study currently in progress	Minimal Growth Projections	Slight Increase in Growth Projections	Increase in Growth Projections mainly due to development in Caledonia
"Regular" Commercial/Industrial Customers				
Annual Water Consumption	Normalized Two Year Rolling Average	Normalized Two Year Rolling Average	Normalized Two 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
Large Commercial/Industrial Users				
Annual Water Consumption	Two Year Rolling Average	Normalized Three Year Rolling Average	*Large Commercial* : Three Year Average Consumption; *Large Industrial* : Normalized Two Year Average Consumption	*Large Commercial* : Three Year Rolling Average Consumption; *Large Industrial* : Normalized Two Year Average Consumption
New Credit (Wholesale Rate)				
Annual Water Consumption	Two Year Rolling Average	Three Year Rolling Average	Three Year Rolling Average	Three Year Rolling Average
Water Depot	Two Year Rolling Average	Two Year Rolling Average	Three Year Rolling Average	Three Year Rolling Average
Water Rates				
Basic Charges	50%/50% fixed/variable share 0.98% increase in rates	50%/50% fixed/variable share 2.76% decrease in rates	50%/50% fixed/variable share 2.52% decrease in rates	50%/50% fixed/variable share 3.14% decrease in rates
Block 1 Rate Increases	4.51% Increase	1.20% Decrease	1.01% Increase	0.23% 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)	Ten Year Phase-out (starting in 2006); based on a set percentage in relation to Block 1 (ending in 2016)	N/A	N/A
Rate Increase	9.05% increase	2.92% increase	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.*

	Approved 2015 Budget	*Approved 2016 Budget*	*Approved 2017 Budget*	*Draft 2018 Budget*
Effective Date of Rate Change	March 1, 2015	February 1, 2016	January 1, 2017	January 1, 2018
WASTEWATER				
Consumption Assumptions				
Residential Users				
Wastewater Consumption	Two Year Rolling Average	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
"Regular" Commercial/Industrial Customers				
Wastewater Consumption	Normalized Two Year Rolling Average	Normalized Two Year Rolling Average	Normalized Two Year Rolling Average	Four Year Rolling Average
Large Commercial/Industrial				
Wastewater Consumption	Two Year Rolling Average	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
Wastewater Rates				
Basic Charges	50%/50% fixed/variable share 7.37% increase in rates	50%/50% fixed/variable share 5.31% increase in rates	50%/50% fixed/variable share 4.77% increase in rates	50%/50% fixed/variable share 2.02% decrease in rates
Block 1 Rate Increases	5.81% increase	13.94% increase	7.21% increase	5.12% decrease increase
Block 2 Rate Assumptions	Ten Year Phase-out (starting in 2006); based on a set percentage in relation to Block 1 (ending in 2016)	Ten Year Phase-out (starting in 2006); based on a set percentage in relation to Block 1 (ending in 2016)	N/A	N/A
Rate Increase	10.41% increase	18.69% increase	N/A	N/A
Wastewater Discharge Program	20% Flow Differential Minimum 10,000 cubic metres	20% Flow Differential Minimum 10,000 cubic metres	20% Flow Differential Minimum 10,000 cubic metres	20% Flow Differential 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.*

	Approved 2015 Budget	*Approved 2016 Budget*	*Approved 2017 Budget*	*Draft 2018 Budget*
Effective Date of Rate Change	March 1, 2015	February 1, 2016	January 1, 2017	January 1, 2018
Other Rates				
Bulk Water Rates				
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	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
Annual Water Consumption	Two Year Rolling Average	Two Year Rolling Average	Three Year Rolling Average	Adjusted Two Year Rolling Average
Increases	1.17% decrease, consumption rate	1.11% increase, consumption rate	3.07% decrease, consumption rate	1.73% increase
Bulk Water Administration Fee	3.01% increase	2.99% increase	2.00% increase	2.00% increase
Bulk Water Activation Fee	3.20% increase	3.00% increase	2.00% increase	2.00% increase
Bulk Water Re-Activation Fee	Based on Full Cost Recovery - New Fee in 2015	3.00% increase	2.00% increase	2.00% increase
Fire Protection				
Assumption	Based on industry standard allocation for flows allocated to fire protection (including specific capital/operating related hydrant costs)	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% $2,027,410	2.91% $2,088,230	2.00% $2,129,990	2.00% $2,172,590
Miscellaneous Fees				
Leachate	Full Cost Recovery (based on loading and capital/operating cost allocation methodology, as well as 50%/50% fixed/variable recovery) 4.29% increase in consumption rate	Full Cost Recovery (based on loading and capital/operating cost allocation methodology, as well as 50%/50% fixed/variable recovery) 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) 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) 15.28% decrease in consumption rate
Holding Tank	Blended Septic/Holding Rate based on relative loading and flows received	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	26.37% increase	2.97% increase	2.00% increase	2.00% increase
Septic Hauler Administration Fee	Monthly fee to recover direct administration costs 3.00% increase	Monthly fee to recover direct administration costs 3.00% increase	Monthly fee to recover direct administration costs 2.00% increase	Monthly fee to recover direct administration costs 2.00% increase
Sludge Storage	Full Cost Recovery 3.10% increase	Full Cost Recovery 2.91% increase	Full Cost Recovery 2.00% increase	Full Cost Recovery 2.00% increase
Overstrength Charge (R-Value)	Full Cost Recovery 3.20% increase	Full Cost Recovery 3.00% increase	Full Cost Recovery 2.00% increase	Full Cost Recovery 2.00% increase
All Other Miscellaneous Fees	Based on increase in direct operating costs 3.20% increase	Based on increase in direct operating costs 3.00% increase	Based on increase in direct operating costs 2.00% increase	Based on increase in direct operating costs 2.00% increase


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

NOTE: Any changes as a result of the comprehensive user fee review 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 a conditions.

Water and Wastewater Metered Charges		Description	2017 Charge	2018 Charge	% Increase
Water					
Consumption Charges	$/m3		$1.0327	$1.0303	-0.24%
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	$21.78	$21.10	-3.14%
R2/C2	25	1	$21.78	$21.10	-3.14%
R3/C3	37	1.5	$123.05	$119.19	-3.14%
R4/C4	50	2	$267.44	$259.05	-3.14%
C5	75	3	$470.63	$455.86	-3.14%
C6	100	4	$936.03	$906.66	-3.14%
C7	150	6	$1,741.16	$1,686.55	-3.14%
C8	200	8	$2,974.03	$2,880.74	-3.14%
Flat Rate		*Consumption charge: 20 m3/month*	*$20.65*	*$20.61*	-0.24%
		R1/C1 Basic Charge	*$21.78*	*$21.10*	-3.14%
		Total Flat Rate	**$42.43**	**$41.70**	**-1.73%**
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.			
Wastewater					
Consumption Charges		$/m3	$1.5006	$1.4703	-2.02%
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	$25.45	$24.14	-5.12%
R2/C2	25	1	$25.45	$24.14	-5.12%
R3/C3	37	1.5	$143.77	$136.41	-5.12%
R4/C4	50	2	$312.47	$296.48	-5.12%
C5	75	3	$549.88	$521.74	-5.12%
C6	100	4	$1,093.65	$1,037.69	-5.12%
C7	150	60	$2,034.37	$1,930.27	-5.12%
C8	200	8	$3,474.83	$3,297.04	-5.12%
Flat Rate		*Consumption charge: 20 m3/month*	*$30.01*	*$29.41*	-2.02%
		R1/C1 Basic Charge	*$25.45*	*$24.14*	-5.12%
		Total Flat Rate	**$55.46**	**$53.55**	**-3.44%**
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.			
Water and Wastewater Arrears					
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	2017 Charge	2018 Charge	% Increase
Water				
Bulk Water Consumption Rate	$/m3	$2.89	$2.94	1.73%
Bulk Water Administration Fee	for months with billable consumption	$16.52	$16.85	2.01%
Bulk Water	Account Activation Fee (note: accounts will be deactivated if there is no consumption in the prior twelve month calendar year)	$27.10	$27.64	2.00%
Bulk Water	Re-Activation Fee	$27.10	$27.64	2.00%
New Credit Wholesale Rate	$/m3	$0.91	$0.91	0.00%
Wastewater				
Bulk Wastewater Disposal	Leachate - Local Volumetric Charge ($/m3)	$31.71	$26.87	-15.28%
Bulk Wastewater Disposal	Leachate - Base Charge	$779,100	$724,200	-7.05%
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)	$13.79	$14.07	2.03%
Bulk Wastewater Disposal Administration Fee	Septic/Holding Tank/Portable Toilet Hauler Administration Fee (per month) for months with billable disposable volumes	$16.52	$16.85	2.02%

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	2017 Charge	2018 Charge	% Increase
Connection Permits and Fees				
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	n/a
Water Connection	Re-Inspection Fee		$91	n/a
Water Connection	Street Line to House: Inspection Only	$91	$91	0.00%
Water Connection	Main to Street Line: Includes Inspection and Main Tap (contractor to supply all materials) ~~Material. 19 mm (3/4") service~~	$714	$348	-51.26%
~~Water Connection~~	~~Main to Street Line: Includes Inspection and Material. 25 mm (1" service)~~	~~$829~~		
Water Connection	Main to House: Includes Inspection and Main Tap (contractor to supply all materials) ~~Material to Street Line. 19 mm (3/4") service~~	$804	$439	-45.40%
~~Water Connection~~	~~Main to House: Includes Inspection and Material to Street Line. 25 mm (1" service)~~	~~$918~~		
Water Connection	Water Meter: Service requiring and meter size	100% Cost Recovery	Meter Cost + $91	n/a
	5/8" or 3/4" Meter		$280	n/a
	1' Meter		$330	n/a
	1.5" Meter		$640	n/a
	2" Meter		$830	n/a
Water Main Taps 40mm to 50mm (3/4" to 2" Diameter)	Inspection Only (contractor to supply all materials)	$91	$91	0.00%
~~Water Main Taps 40mm to 50mm (3/4" to 2" Diameter)~~	~~Includes Main Tap and Inspection to Street Line (contractor to supply all materials)~~	~~$245~~		
~~Water Main Taps 40mm to 50mm (3/4" to 2" Diameter)~~	~~Includes Main Tap and Inspection to House (contractor to supply all materials)~~	~~$332~~		
Water Main Service Connection 100mm (4") Diameter and Larger	Inspection includes: operating valves to isolate main, installation inspection and verification of pressure test (contractor to tap main and supply all materials)	$476	$91 per hour	n/a
Bacteriological Testing for New 100mm (4") Diameter & Larger	Water Mains or Services - includes sampling and transport to accredited laboratory	$163	$188	15.34%
Water Disconnection Inpsection	Inspection Only (contractor to supply all materials)	$91	$91	0.00%
Sanitary Sewer Service Connection	Re-Inspection Fee		$91	n/a
Sanitary Sewer Service Connection 100mm (4") Diameter	Street Line to House: Inspection Only	$91	$166	82.42%
Sanitary Sewer Service Connection 100mm (4") Diameter	Main to Street Line - Includes Inspection and Main Tap (contractor to supply all materials)	$245	$348	42.04%
Sanitary Sewer Service Connection 100mm (4") Diameter	Main to House - Includes Inspection and Main Tap (contractor to supply all materials)	$332	$439	32.23%
Other Sanitary Sewer Service Connection Diameters	Main to Street Line: 150mm (6") Diameter: Inspection Only	$200	$166	-17.00%
~~Other Sanitary Sewer Service Connection Diameters~~	~~Main to Street Line: 200 mm (8") Diameter (includes inspection and main tap)~~	~~$200~~		
~~Other Sanitary Sewer Service Connection Diameters~~	~~Main to Street Line: 250mm & 300mm (10" & 12") Diameter (includes inspection and main tap)~~	~~$200~~		
~~Other Sanitary Sewer Service Connection Diameters~~	~~Main to House: Contractor supplies all materials~~	~~$285~~		
Sanitary Sewer Disconnection Inpsection	Inspection Only (contractor to supply all materials)	$91	$91	0.00%
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
Connection Fees	Monthly Fee for new construction prior to the meter installation. Based on Flat Rate of 20 m3 volume for Water and Wastewater. Monthly fee will be charged until a water meter is installed.	Flat Rate Water and Wastewater	Flat Rate Water and Wastewater	n/a
Testing of Water Meters				

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	2017 Charge	2018 Charge	% Increase
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
Water Turn On/Off				
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."				
During Normal Working Hours	Water Turn On	$55	$91	65.45%
During Normal Working Hours	Water Turn Off	$55	$91	65.45%
During Normal Working Hours	Water Turn On/Off Same Day for Fix and Repair	$73	$102	39.73%
During Normal Working Hours	Water Turn On and Meter Reconnection	$73	$102	39.73%
During Normal Working Hours	Water Turn Off and Meter Disconnection	$73	$102	39.73%
During Normal Working Hours	Water Meter Removal or Install	$18	$19	5.56%
Outside of Normal Working Hours	Water Turn On	$123	$200	62.60%
Outside of Normal Working Hours	Water Turn Off	$123	$200	62.60%
~~Outside of Normal Working Hours~~	~~Water Turn On/Off Same Day for Fix and Repair~~	~~$163~~		
Outside of Normal Working Hours	Water Turn On and Meter Reconnection	$163	$240	47.24%
Outside of Normal Working Hours	Water Turn Off and Meter Disconnection	$163	$240	47.24%
Outside of Normal Working Hours	Water Meter Removal or Install	$39	$41	5.56%
Winter Control Service Calls				
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)	$123	$136	10.57%
Thawing Frozen Water Service Lines	Outside of Normal Working Hours (per hour) (min. 2 hrs)	$200	$239	19.50%
Replacement of Water Meter due to Frost Plate damage	During Normal Working Hours	100% Cost Recovery	Meter Cost plus $91	n/a
Replacement of Water Meter due to Frost Plate damage	Outside of Normal Working Hours	100% Cost Recovery	Meter Cost plus $239	n/a
	5/8" or 3/4" Meter		$250	n/a
	1' Meter		$300	n/a
	1.5" Meter		$610	n/a
	2" Meter		$800	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	2017 Charge	2018 Charge	% Increase
Sanitary Sewer Rodding/Teley Video				
If County staff determine that a sewer line blockage is the property owner's responsibility, the charges below will be billed. Services provided outside of normal working hours will be charged a minimum 2 hours.				
Sanitary Sewer Rodding~~/Teley Video~~	During Normal Working Hours - each full or additional hours (min. 1 hr)	$123	$266	116.26%
Sanitary Sewer Rodding~~/Teley Video~~	Outside of Normal Working Hours - each full or additional hours (min. 2 hrs)	$200	$468	134.00%
Sewer Video	Sewers will be videoed during normal working hours only. Rate is per hour with a minimum of a one (1) hour charge	$123	$225	82.93%
Dye Testing	During normal working hours (min. 1 hr)	$106	$133	25.47%
Dye Testing	Outside of normal working hours (min. 2 hrs)	$172	$234	36.05%
Vactor Charge	During normal working hours (min. 1 hr)	$277	$277	0.00%
Vactor Charge	Outside of normal working hours (min. 2 hrs)	$430	$508	18.14%
~~Note: All charges above require a minimum of one (1) hour charge~~				
Wastewater Charges				
Sewer Sludge Storage Costs	Sludge Storage - Townsend Lagoon per Cubic Meter (m3)	$4.455	$4.544	2.00%
Sanitary Discharge Agreement	Over-strength discharge fee formula "R" value ("R" means the rate for sewage treatment in$/m3 of sewage flow as set out from time to time by the County)	$0.98	$1.00	2.00%
Sanitary Discharge Agreement	New discharger information report administrative fee	$237	$242	2.11%
Sanitary Discharge Agreement	Existing discharger information report administration fee	$237	$242	2.11%
Sanitary Discharge Agreement	Sanitary discharge agreement annual administration fee	$1,423	$1,451	1.97%
Sanitary Discharge Agreement	Sanitary discharge agreement amendment request application processing fee	$237	$242	2.11%
Sanitary Discharge Agreement	Application for a hauled sewage discharge permit processing fee	$237	$242	2.11%
Sanitary Discharge Agreement	Annual hauled sewage discharge permit processing fee	$237	$242	2.11%
Sanitary Discharge Agreement	Haldimand County assistance with all other additional requests	100% Cost Recovery	100% Cost Recovery	n/a
Wastewater Discharge Program	Application fee	$237	$242	2.11%
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
Other Services				
Inspection of external services		100% Cost Recovery	100% Cost Recovery	n/a
Installation of Communication Antennae System on County Facilities	Other Agencies or Departments of the County	No Charge	No Charge	n/a
Installation of Communication Antennae System on County Facilities	Local Emergency Services, Provincial and Federal Agencies or Ministries per year, per mounting	$2,594	$2,646	2.00%
Installation of Communication Antennae System on County Facilities	Private Enterprises	Per Contract	Per Contract	n/a
Administration Fees and Late Payment Interest Charges				
Note: the following charges may be administered by a 3rd party on behalf of the County				
Arrears Certificate		$15.30	$15.50	1.31%
Non-sufficient Funds Charge (NSF)		$33.00	$33.50	1.52%
Credit Reference/Credit Check		$15.30	$15.50	1.31%
Account Setup Charge		$30.60	$31.00	1.31%
Late Payment Interest Charges:				
	Per Month	1.25%		n/a
	Per Year	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	$30.00	$30.50	1.67%

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	2017 Charge	2018 Charge	% Increase
Refusal of Entry for Inspection, Installation, Repair or Replacement of Meters/Equipment				
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	$30.00	$30.50	1.67%
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.	$500.00	$510.00	2.00%
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

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.

COSTS:	DESCRIPTION OF COSTS/SERVICES:		HOURS/UNITS:	ESTIMATED COSTS:
DIRECT COSTS:				
WAGES & BENEFITS:				
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
VEHICLE COSTS:	Vehicles Used:	# of Vehicles Used:	Operating Hours:	
		0		$0.00
				$0.00
				$0.00
ADMINSITRATIVE COSTS:				
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
OTHER COSTS:	Description:	Cost Per Unit:	Units:	
		$0.00	0	$0.00
		$0.00	0	$0.00
		$0.00	0	$0.00
TOTAL DIRECT COSTS:				$0.00
INDIRECT COSTS:				
Department Overhead Allocation	Allocation to Department of Allocation (%)			$0.00
County General Admin Overhead	Council, CAO, Finance, Clerk's & General Overhead (%)			$0.00
TOTAL INDIRECT COSTS:				$0.00
TOTAL COSTS:				$0.00
Less: Ancillary Revenues:	Grants & Offsetting Revenues	Percentage:		$0.00
		$ Amount:	$0.00	$0.00
CALCULATED USER FEE				$0.00
ADJUSTED USER FEE APPROVED BY COUNCIL				

Applicable Taxes		1
Final User Fee Includin		$0.00

Comments:

Consumer & Consumption Statistics

Residential & Commercial/Industrial Water Consumers (#)

	2011	2012	2013	2014	2015	2016	2017	2018 estimate
Residential	8,011	8,147	8,217	8,186	8,231	8,284	8,533	8,665
Commercial	660	706	705	658	670	682	684	684
Total	8,671	8,853	8,922	8,844	8,901	8,966	9,217	9,349
Growth	-0.01%	2.10%	0.78%	-0.87%	0.64%	0.73%	2.80%	4.27%

Includes all water customers, including standby regardless of consumption useage.
Validation of customer data has been completed since 2014. Previous years are based on estimates.

Residential Water Consumption (m^3)

	2011	2012	2013	2014	2015	2016	2017	Adjusted 4 Year Ave.	Ave m^3/mo
Total	1,418,977	1,422,245	1,368,552	1,322,031	1,348,254	1,311,078	1,389,506	1,366,547	13.1

Commercial/Industrial Water Consumption (m^3)

	2011	2012	2013	2014	2015	2016	2017	Adjusted 4 Year Ave.
Total	1,633,827	1,500,682	1,550,611	1,694,822	1,531,123	1,546,833	1,573,390	1,408,527

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
Effective Date	1-Jan-17	Proposed for 2018	1-Jan-17	1-Jan-17	1-Jan-17	1-Jan-17	1-Jan-17	1-Jan-17	1-Jan-17	1-Jan-17	1-Jan-17
Demographics											
Population	44,876	44,876	63,175	93,650	102,075	37,754	35,638	73,214	121,668	519,949	22,487
Water Customers	8,966	9,349	14,382	32,896	39,636	14,140	7,200	12,364	41,233	142,000	5,569
Geographic Area (Km^2)	1,252	1,252	1,608	72	2,458	49	843	3,083	87	1,117	163
Customers / (Km^2)	**7.2**	**7.5**	**8.9**	**453.9**	**16.1**	**288.6**	**8.5**	**4.0**	**472.9**	**127.1**	**34.2**
Metered Rates:											
Residential (15 m^3)											
Water ($)	37.27	36.55	41.94	39.07	39.50	28.57	63.31	68.19	32.85	23.65	35.11
Sewer ($)	47.95	46.20	48.97	27.75	39.35	22.55	41.61	47.56	36.60	25.60	37.82
Combined ($)	**85.22**	**82.75**	**90.91**	**66.82**	**78.85**	**51.12**	**104.92**	**115.75**	**69.45**	**49.25**	**72.93**
Commercial (2" 500 m^3)											
Water ($)	783.81	774.18	836.52	1,006.32	436.18	619.37	952.73	1,432.52	894.70	794.20	1,071.02
Sewer ($)	1,062.78	1,031.62	975.40	925.00	389.66	583.35	864.88	802.86	992.70	851.60	1,161.33
Combined ($)	**1,846.58**	**1,805.81**	**1,811.92**	**1,931.32**	**825.84**	**1,202.72**	**1,817.61**	**2,235.38**	**1,887.40**	**1,645.80**	**2,232.35**
Industrial (4" 4,000 m^3)											
Water ($)	5,066.99	5,027.76	5,833.72	7,984.56	2,830.18	4,368.11	5,265.26	11,225.64	6,897.80	5,967.50	8,473.28
Sewer ($)	7,096.09	6,918.81	6,799.06	7,400.00	2,550.66	4,537.03	5,950.37	6,192.66	7,536.60	6,415.00	9,195.95
Combined ($)	**12,163.08**	**11,946.56**	**12,632.78**	**15,384.56**	**5,380.84**	**8,905.14**	**11,215.63**	**17,418.30**	**14,434.40**	**12,382.50**	**17,669.23**
Miscellaneous Fees:											
Bulk Water Rate $/$m^3$	**2.89**	**2.94**	**3.350**	**3.980**	**2.400**	**1.500**	**2.400**	**2.717**	**3.260**	**2.150**	**2.102**
Holding Tank Waste $/$m^3$			**10.000**	**21.000**	**8.800**	**n/a**	**n/a**	**6.260**	**n/a**	**8.500**	
Blended Septic/Holding $/m3	**13.79**	**14.07**									**8.811**
Septic Rate $/$m^3$			**35.830**	**21.000**	**15.400**	**n/a**	**n/a**	**12.090**	**n/a**	**n/a**	

AVERAGE CUSTOMER IMPACTS						
User			**2017**	**2018**	**$ Change**	**% Change**
Monthly Services						
Residential (15 m3)	**Water**	Basic	$ 21.78	$ 21.10	$ (0.68)	(3.1%)
		Consumption	$ 15.49	$ 15.45	$ (0.04)	(0.2%)
		Total	**$ 37.27**	**$ 36.55**	**$ (0.72)**	**(1.9%)**
	Sewer	Basic	$ 25.45	$ 24.14	$ (1.31)	(5.1%)
		Consumption	$ 22.50	$ 22.05	$ (0.45)	(2.0%)
		Total	**$ 47.95**	**$ 46.20**	**$ (1.76)**	**(3.7%)**
	Total		**$ 85.22**	**$ 82.75**	**$ (2.48)**	**(2.9%)**
Commercial (2" 500 m3)	**Water**	Basic	$ 267.44	$ 259.05	$ (8.39)	(3.1%)
		Consumption	$ 516.37	$ 515.14	$ (1.23)	(0.2%)
		Total	**$ 783.81**	**$ 774.18**	**$ (9.62)**	**(1.2%)**
	Sewer	Basic	$ 312.47	$ 296.48	$ (15.99)	(5.1%)
		Consumption	$ 750.31	$ 735.14	$ (15.17)	(2.0%)
		Total	**$ 1,062.78**	**$ 1,031.62**	**$ (31.15)**	**(2.9%)**
	Total		**$ 1,846.58**	**$ 1,805.81**	**$ (40.78)**	**(2.2%)**
Industrial (4" 4,000 m3)	**Water**	Basic	$ 936.03	$ 906.66	$ (29.37)	(3.1%)
		Consumption	$ 4,130.96	$ 4,121.09	$ (9.86)	(0.2%)
		Total	**$ 5,066.99**	**$ 5,027.76**	**$ (39.23)**	**(0.8%)**
	Sewer	Basic	$ 1,093.65	$ 1,037.69	$ (55.96)	(5.1%)
		Consumption	$ 6,002.44	$ 5,881.12	$ (121.32)	(2.0%)
		Total	**$ 7,096.09**	**$ 6,918.81**	**$ (177.29)**	**(2.5%)**
	Total		**$ 12,163.08**	**$ 11,946.56**	**$ (216.52)**	**(1.8%)**

Bulk Services (per use basis)					
Bulk Water (3,000 gallons)	Potable Water Costs (County)	$39.41	$40.10	$0.69	1.7%
	Estimated Delivery Charges (Private Hauler)	$85.45	$85.45	$0.00	0.0%
	Total	**$124.86**	**$125.54**	**$0.69**	**0.6%**
Septic/Holding (2,000 gallons)	Treatment Costs (County)	$125.35	$127.90	$2.55	2.0%
	Estimated Delivery Charges (Private Hauler)	$91.57	$91.57	$0.00	0.0%
	Total	**$216.92**	**$219.47**	**$2.55**	**1.2%**