Water and Wastewater Rate Study

Township of Guelph/Eramosa

Watson & Associates Economists Ltd.
905-272-3600
info@watsonecon.ca

May 12, 2025

Table of Contents

Table of Contents (Cont'd)

Page

List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
A.M.O.	Association of Municipalities of Ontario
A.W.W.A.	American Water Works Association
cu.m.	Cubic metre
C.W.W.F.	Clean Water and Wastewater Fund
D.C.A.	Development Charges Act, 1997
F.I.R.	Financial Information Return
I.J.P.A.	Infrastructure for Jobs and Prosperity Act, 2015
I.O.	Infrastructure Ontario
LPAT	Local Planning Appeal Tribunal
M.O.E.	Ministry of Environment
O.C.I.F.	Ontario Community Infrastructure Fund
O.L.T.	Ontario Land Tribunal
O.M.B.	Ontario Municipal Board
O.Reg.	Ontario Regulation
O.S.I.F.A.	Ontario Strategic Infrastructure Financing Authority
P.S.A.B.	Public Sector Accounting Board
P.T.I.F.	Public Transit Infrastructure Fund
S.C.A.D.A.	Supervisory Control and Data Acquisition
S.W.S.S.A.	Sustainable Water and Sewage Systems Act, 2002

Executive Summary

Executive Summary

The Township of Guelph/Eramosa retained Watson & Associates Economists Ltd. (Watson) to undertake a Water and Wastewater Rate Study and Water Financial Plan. This study aims to update the 2020 water and wastewater rate analysis for current capital and operating forecasts, costing for lifecycle cost requirements, current volumes and customer profiles. The results of this analysis provide updated water and wastewater base charges and volume rates for customers within the Township of Guelph/Eramosa. The rate analysis contained herein continues to provide fiscally responsible practices that align with current provincial legislation at a level of rate increases that are reasonable.

The analysis presented herein provides the following:

- The 2026 to 2035 capital spending program for the Rockwood and Hamilton Drive water systems totals approximately $4.28 million (inflated dollars);
- The 2026 to 2035 capital spending program for wastewater (Rockwood only) is $3.59 million (inflated);
- There are no capital expenditures forecasted from 2026 to 2035 for water and wastewater for the Gazer-Mooney system;
- A significant portion (13%) of the water capital spending program is related to the Supervisory Control and Data Acquisition (SCADA) System upgrades occuring from 2026 to 2029;
- For wastewater, a significant portion (28%) of the capital spending program is related to the new expanded wetwell at the Valley Road Sewage Pumping Station occuring in 2031;
- Annual operating expenditures related to wages and salaries are increasing by 2% per annum over the forecast, while expenditures related to utilities, fuels, chemicals and other materials are increasing at 5% per annum;
- The present rate structure for water and wastewater in Rockwood and Hamilton Drive (base monthly charges and a constant volume rate) were reviewed and a new modified rate structure option is proposed. The proposed rate structure option continues to follow the same general structure (base monthly charges and a constant volume rate) but with new customer categories based on meter sizes (i.e. 5/8” or 3/4”, 1”, 1 ½”, and 2”);

- Existing water customers total 2,125 in Rockwood and 227 in the Hamilton Drive area; it is anticipated the Township will see an increase of approximately 133 new customers in Rockwood and 5 new customers in the Hamilton Drive area over the next 10-year period;
- Existing wastewater customers total 2,125. The same level of increase as water customers in Rockwood (approximately 133) is assumed over the forecast period;
- There are currently 71 water and wastewater customers in the Gazer-Mooney area with no anticipated growth; and
- The present rate structure (annual flat rate) is continued for the Gazer-Mooney area in order to recover lifecycle related costs.

Moving to the proposed rate structure of the tiered base charge based on meter size will allow the Township to save up for the higher replacement costs of the larger meter sizes (i.e., 1", 1 ½", and 2"). This approach also aligns with rate setting principles established by the Americian Water Works Assocation (A.W.W.A.). The tiered based charge rate structure will be phased-in over a 4-year period from 2027 to 2030. By the end of 2030, customers with a 1" meter will pay 1.25 times the residential base charge, customers with a 1 ½" meter will pay 2.5 times the residential base charge, and customers with a 2" meter will pay 4 times the residential base charge.

Based on the above information, the estimated rate increases are aimed at addressing the following:

- In order to meet the needs of the water forecast, the base charge is anticipated to increase annually by 3% over the forecast period, starting in 2027. The volume rates in Rockwood and Hamilton Drive are anticipated to increase annually by 3% in 2026, and 2% every year thereafter. This is equivalent to an annual increase of $0.07 to $0.09 (average of $0.08 per year) per cubic metre for Rockwood. For Hamilton Drive, this is equivalent to an increase of $0.11 per cubic metre in 2026, and an annual increase of $0.02 per cubic metre every year thereafter.
- The monthly base rate for wastewater is anticipated to increase annually by 1.9% over the forecast period, starting in 2027. It is recommended that the wastewater volume rates increase annually by 2% for the forecast period. This is equivalent to an annual increase of $0.08 to $0.09 per cubic metre.

- The volume rates for water in Rockwood and Hamilton Drive have been calcuated such that the rates converge by the end of the forecast in 2035.
- The combined impact of the water and wastewater rates above equates to an increase of $29.21 on the 2026 total water and wastewater bill for customers in Rockwood (based on an annual average usage of 170 cu.m). This equates to an increase of $2.43 per month.
- The water bill in the Hamilton Drive area is anticipated to increase by $18.31 in 2026 (based on an annual average usage of 170 cu.m). This equates to an increase of $1.53 per month.
- For Gazer-Mooney, it is recommended that the flat rates for water and wastewater services increase by 2% per year. The 2026 total bill for Gazer-Mooney is calculated to be $371.39.

The following summaries provide the water and wastewater rates and average annual bills based on the analysis provided herein over the forecast period to 2035. For Rockwood, assuming an annual volume of 170 cu.m (based on the average annual usage in this system), the water and wastewater rates are provided in Table ES-1. For Hamilton Drive, assuming an annual volume of 170 cu.m, the water rates are provided in Table ES-2. Table ES-3 provides the annual flat rate for water and wastewater services in the Gazer-Mooney system. Tables ES-1 through ES-3 also provide the average annual bill and the annual increases anticipated based on the calculated rates.

Table ES-1
Township of Guelph/Eramosa
Water and Wastewater Rate Summary – Rockwood
Average Customer Water and Wastewater Bill based on 170 cu.m of usage

Annual Bill for Residential Users (5/8" or 3/4" Meter Size)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Water											
Monthly Base Charge	$13.81	$13.81	$14.22	$14.65	$15.09	$15.54	$16.01	$16.49	$16.98	$17.49	$18.02
Volume Rate	$3.06	$3.15	$3.22	$3.30	$3.37	$3.44	$3.52	$3.60	$3.68	$3.77	$3.85
Annual Base Charge Bill	**$165.72**	**$165.72**	**$170.69**	**$175.81**	**$181.09**	**$186.52**	**$192.11**	**$197.88**	**$203.81**	**$209.93**	**$216.23**
Annual Volume Bill	**$520.20**	**$535.81**	**$547.85**	**$560.17**	**$572.77**	**$585.64**	**$598.81**	**$612.28**	**$626.04**	**$640.12**	**$654.51**
Total Water Bill	**$685.92**	**$701.53**	**$718.54**	**$735.98**	**$753.85**	**$772.16**	**$790.93**	**$810.15**	**$829.86**	**$850.05**	**$870.74**
Wastewater											
Monthly Base Charge	$11.95	$11.95	$12.18	$12.41	$12.64	$12.88	$13.13	$13.38	$13.63	$13.89	$14.16
Volume Rate	$3.75	$3.83	$3.91	$3.99	$4.07	$4.15	$4.23	$4.31	$4.40	$4.49	$4.58
Annual Base Charge Bill	**$143.40**	**$143.40**	**$146.12**	**$148.90**	**$151.73**	**$154.61**	**$157.55**	**$160.54**	**$163.59**	**$166.70**	**$169.87**
Annual Volume Bill	**$637.50**	**$651.10**	**$664.70**	**$678.30**	**$691.90**	**$705.50**	**$719.10**	**$732.70**	**$748.00**	**$763.30**	**$778.60**
Total Wastewater Bill	**$780.90**	**$794.50**	**$810.82**	**$827.20**	**$843.63**	**$860.11**	**$876.65**	**$893.24**	**$911.59**	**$930.00**	**$948.47**
Total Combined Bill	**$1,466.82**	**$1,496.03**	**$1,529.37**	**$1,563.18**	**$1,597.48**	**$1,632.28**	**$1,667.58**	**$1,703.40**	**$1,741.45**	**$1,780.05**	**$1,819.21**
% Increase - Total Annual Bill		**2.0%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.1%**	**2.2%**	**2.2%**	**2.2%**
$ Increase - Total Annual Bill		**$29.21**	**$33.34**	**$33.82**	**$34.30**	**$34.79**	**$35.30**	**$35.82**	**$38.05**	**$38.60**	**$39.16**

Table ES-2
Township of Guelph/Eramosa
Water Rate Summary – Hamilton Drive
Average Customer Water Bill based on 170 cu.m of usage

Annual Bill for Residential Users (5/8" or 3/4" Meter Size)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Water											
Monthly Base Charge	$13.81	$13.81	$14.22	$14.65	$15.09	$15.54	$16.01	$16.49	$16.98	$17.49	$18.02
Volume Rate	$3.59	$3.70	$3.71	$3.73	$3.75	$3.76	$3.78	$3.80	$3.82	$3.83	$3.85
Annual Base Charge Bill	**$165.72**	**$165.72**	**$170.69**	**$175.81**	**$181.09**	**$186.52**	**$192.11**	**$197.88**	**$203.81**	**$209.93**	**$216.23**
Annual Volume Bill	**$610.30**	**$628.61**	**$631.43**	**$634.27**	**$637.12**	**$639.99**	**$642.87**	**$645.75**	**$648.66**	**$651.57**	**$654.50**
Total Annual Bill	**$776.02**	**$794.33**	**$802.13**	**$810.09**	**$818.21**	**$826.51**	**$834.98**	**$843.63**	**$852.47**	**$861.50**	**$870.73**
% Increase - Total Annual Bill		**2.4%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.1%**	**1.1%**
$ Increase - Total Annual Bill		**$18.31**	**$7.80**	**$7.96**	**$8.13**	**$8.30**	**$8.47**	**$8.65**	**$8.84**	**$9.03**	**$9.23**

Table ES-3
Township of Guelph/Eramosa
Water & Wastewater Rate Summary – Gazer-Mooney

Annual Bill	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Water & Wastewater											
Annual Flat Rate	$364.11	$371.39	$378.82	$386.40	$394.13	$402.01	$410.05	$418.25	$426.62	$435.15	$443.85
Total Annual Bill	**$364.11**	**$371.39**	**$378.82**	**$386.40**	**$394.13**	**$402.01**	**$410.05**	**$418.25**	**$426.62**	**$435.15**	**$443.85**
% Increase - Total Annual Bill		**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**
$ Increase - Total Annual Bill		**$7.28**	**$7.43**	**$7.58**	**$7.73**	**$7.88**	**$8.04**	**$8.20**	**$8.37**	**$8.53**	**$8.70**

Report

Chapter 1
Introduction

1. Introduction

1.1 Background

The Township of Guelph/Eramosa provides water via two distribution systems: Hamilton Drive Water Supply System and Rockwood Water Supply System.

The Hamilton Drive Water Supply System obtains its entire water supply from two groundwater wells (Huntington and Cross Creek) each with its own pumphouse and grade-level reservoir. The pumphouse supplies an elevated storage reservoir located on Wellington Road 38. The raw water from each well is chlorinated to protect against microbial contaminants prior to discharge into the respective grade-level reservoir. The raw water is disinfected with a sodium hypochlorite solution (chlorine) for primary and secondary disinfection requirements. The water level in the reservoir starts and stops the well pumps.

The treated water is pumped with high-lift pumps at each station through the distribution system which consists of approximately 7.2 kilometers of watermain. The high lift pumps operate based on the water level in the standpipe. Once the low water level in the standpipe is reached, the pump stations are called upon to operate in sequence and supply the distribution system and any excess water fills the standpipe to the high-water level. This system is a demand/storage system; once the standpipe is full, the high lift pumps shut down until the water level drops in the tower and the pumps are required again.

The Rockwood Water Supply System consists of four municipal groundwater wells, a booster pumping station/standpipe and distribution system (approximately 28.3 km or watermains). Two of the wells are located at the Station Street pumphouse and the other at the Bernardi Pumphouse. A Supervisory Control and Data Acquisition/Programmable Logic Controller (S.C.A.D.A./P.L.C.) system monitors the operation and demands of the well pumps based on the water level in the standpipe. The raw water at the Station Street Pumphouse is primarily disinfected with a UV disinfection unit with secondary disinfection via a sodium hypochlorite solution. The Bernardi Pumphouse primary disinfection is provided through sodium hypochlorite.

The Rockwood system currently services 2,125 metered water customers and 2,125 wastewater customers. Development within this area has been proceeding at a steady

pace with further growth anticipated over the next few years. The Hamilton Drive system has 227 users. One other area, known as the Gazer-Mooney area, is also serviced by municipal water, however this area is supplied directly, under agreement with the City of Guelph. There are 71 users within the Gazer-Mooney system. The Township is responsible for the lifecycle costs for the infrastructure in place (within the Township boundaries) for the Gazer-Mooney system and hence imposes a flat rate to recover these costs associated with Township infrastructure.

Municipal wastewater collection is provided to Rockwood residents by the Township while the treatment is provided, under agreement with the City of Guelph. The Rockwood system consists of six pumping stations, the Skyway monitoring station, 28.08 km of sanitary sewers and 2.70 km of forcemains. The Gazer-Mooney area is also serviced by municipal wastewater treatment; this is also through an agreement with the City of Guelph. Similar as for water, the Township retains responsibility for the localized infrastructure, so charges are imposed by the Township for the long-term replacement of this infrastructure.

The water systems in the Township utilize a rate structure with a monthly base charge, as well as a volume charge on a per cubic metre basis. For wastewater customers in the Rockwood area, the charges follow the same structure with a monthly base charge, as well as a volume charge on a per cubic metre basis (based on water usage). The rates for both water and wastewater are in place to recover capital and operating costs related to the respective systems. Table 1-1 provides the existing rates currently in effect for the Rockwood and Hamilton Drive Areas.

Table 1-1
Township of Guelph/Eramosa – Rockwood & Hamilton Drive
Water and Wastewater Rates – 2025

Township of Guelph Eramosa	
2025 - Water Billing Rates	
Base Charge (monthly)	
Rockwood	13.81
Hamilton Drive	13.81
Volume Charge (per cu.m)	
Rockwood	3.06
Hamilton Drive	3.59

Township of Guelph Eramosa	
2025 - Wastewater Billing Rates	
Base Charge (monthly)	
Rockwood	11.95
Hamilton Drive	n/a
Volume Charge (per cu.m)	
Rockwood	3.75

The flat rate for water and wastewater charges in the Gazer-Mooney area currently in effect is presented in Table 1-2.

Table 1-2
Township of Guelph/Eramosa – Gazer-Mooney
Water and Wastewater Rates – 2025

2025 - Combined Water & Wastewater	
Annual Flat Rate	
Gazer-Mooney	364.11

Since the Walkerton crisis, the Province has continued to make legislative changes for municipal water and wastewater systems. Noted below are the historical changes along with pending legislation anticipated to be implemented in the future. Watson & Associates Economists Ltd. (Watson) was retained by the Township of Guelph/Eramosa to assist in addressing these changes in a proactive manner as they relate to the water and wastewater systems. The assessment provided herein addresses changes recommended to the water and wastewater rates based on the most current information and forecasts the implications over the next 10-year period.

1.2 Study Process

The objectives of the study and the steps involved in carrying out this assignment are summarized below:

- Identify all current and future water and wastewater system capital needs to assess the immediate and longer-term implications;
- Identify potential methods of cost recovery from the capital needs listing. These recovery methods may include other statutory authorities (e.g. *Development Charges Act, 1997* (D.C.A.), *Municipal Act*, etc.) as an offset to recovery through the water and wastewater rates;
- Identify existing operating costs by component and estimate future operating costs over the next ten years. This assessment identifies fixed and variable costs in order to project those costs sensitive to changes to the existing infrastructure inventory, as well as costs which may increase commensurate with growth; and
- Provide staff and Committee/Council the findings to assist in gaining approval of the rates for 2026 and future years.

1.3 Regulatory Changes in Ontario

Resulting from the water crisis in Walkerton, significant regulatory changes have been made in Ontario. These changes arise as a result of the Walkerton Commission and the 93 recommendations made by the Walkerton Inquiry Part II report. Areas of recommendation include:

- watershed management and source protection;
- quality management;
- preventative maintenance;
- research and development;
- new performance standards;
- sustainable asset management; and
- lifecycle costing.

The legislation which would have most impacted municipal water and wastewater rates was the *Sustainable Water and Sewage Systems Act* (S.W.S.S.A.) which would have required municipalities to implement **full cost pricing**. The legislation was enacted in 2002, however, it had not been implemented pending the approval of its regulations. The Act was repealed as of January 1, 2013. It is expected that the provisions of the *Water Opportunities Act* will implement the fundamental requirements of S.W.S.S.A. Furthermore, on December 27, 2017, O. Reg. 588/17 was released under the *Infrastructure for Jobs and Prosperity Act, 2015* (I.J.P.A.), which outlines the requirements for asset management for municipalities. The results of the asset management review under this Act will need to be considered in light of the recent investments undertaken by the Township and the capital spending plan provided herein. The following sections describe these various resulting changes.

1.4 Sustainable Water and Sewage Systems Act

As noted earlier, the S.W.S.S.A. was passed on December 13, 2002. The intent of the Act was to introduce the requirement for municipalities to undertake an assessment of the "full cost" of providing their water and wastewater services. It is noted, however, that this Act has been repealed. To provide broader context and understanding to other legislation discussed herein, a description of the Act is provided below.

Full costs for water service was defined in subsection 3(7) of the Act and included "…source protection costs, operating costs, financing costs, renewal and replacement costs and improvement costs associated with extracting, treating or distributing water to the public and such other costs which may be specified by regulation." Similar provisions were made for wastewater services in subsection 4(7) with respect to "…collecting, treating or discharging wastewater."

The Act would have required the preparation of two reports for submission to the Ministry of the Environment (or such other member of the Executive Council as may be assigned the administration of this Act under the *Executive Council Act*). The first report was on the "full cost of services" and the second was the "cost recovery plan." Once these reports were reviewed and approved by the Ministry, the municipality would have been required to implement the plans within a specified time period.

In regard to the **full cost of services** report, the municipality (deemed a regulated entity under the Act) would prepare and approve a report concerning the provision of water and sewage services. This report was to include an inventory of the infrastructure, a management plan providing for the long-term integrity of the systems, and would address the full cost of providing the services (other matters may be specified by the regulations) along with the revenue obtained to provide them. A professional engineer would certify the inventory and management plan portion of the report. The municipality's auditor would be required to provide a written opinion on the report. The report was to be approved by the municipality and then be forwarded to the Ministry along with the engineer's certification and the auditor's opinion. The regulations would stipulate the timing for this report.

The second report was referred to as a **cost recovery plan** and would address how the municipality intended to pay for the full costs of providing the service. The regulations were to specify limitations on what sources of revenue the municipality may use. The regulations may have also provided limits as to the level of increases any customer or class of customer may experience over any period of time. Provision was made for the municipality to implement increases above these limits; however, ministerial approval would be required first. Similar to the first report, the municipal auditor would provide a written opinion on the report prior to Council's adoption, and this opinion must accompany the report when submitted to the Province.

The Act provided the Minister the power to approve or not approve the plans. If the Minister was not satisfied with the report or if a municipality did not submit a plan, the Minister may have a plan prepared. The cost to the Crown for preparing the plan would be recovered from the municipality. As well, the Minister may direct two or more regulated municipalities to prepare a joint plan. This joint plan may be directed at the onset or be directed by the Minister after receiving the individual plans from the municipalities.

The Minister also had the power to order a municipality to generate revenue from a specific revenue source or in a specified manner. The Minister may have also ordered a regulated entity to do or refrain from doing such things as the Minister considered advisable to ensure that the entity pays the full cost of providing the services to the public.

Once the plans were approved and in place, the municipality would be required to submit progress reports. The timing of these reports and the information to be contained therein would be established by the regulations. A municipal auditor's opinion must be provided with the progress report. Municipalities would also revise the plans if they deem the estimate does not reflect the full cost of providing the services, as a result of a change in circumstances, regulatory or other changes that affect their plan, etc. The municipality would then revise its prior plan, provide an auditor's opinion, and submit the plan to the Minister.

1.5 Financial Plans Regulation

On August 16, 2007, the M.O.E. passed O.Reg 453/07 which requires the preparation of financial plans for water (and wastewater) systems. The M.O.E. has also provided a Financial Plan Guidance Document to assist in preparing the plans. A brief summary of the key elements of the regulation is provided below:

- The financial plan will represent one of the key elements for the municipality to obtain its Drinking Water Licence;
- The financial plans shall be for a period of at least six years, but longer planning horizons are encouraged;
- As the regulation is under the *Safe Drinking Water Act, 2002*, the preparation of the plan is mandatory for water and encouraged for wastewater;

- The plan is considered a living document (i.e. will be updated as annual budgets are prepared) but will need to be undertaken, at a minimum, every five years;
- The plans generally require the forecasting of capital, operating and reserve fund positions, providing detailed inventories, forecasting future users and volume usage and corresponding calculation of rates. In addition, P.S.A.B. information on the system must be provided for each year of the forecast (i.e. total non-financial assets, tangible capital asset acquisitions, tangible capital asset construction, betterments, write-downs, disposals, total liabilities and net debt);
- The financial plans must be made available to the public (at no charge) upon request and be available on the municipality's website. The availability of this information must also be advertised; and
- The financial plans are to be approved by Resolution of the Council or governing body indicating that the drinking water system is financially viable.

In general, the financial principles of the draft regulations follow the intent of S.W.S.S.A. to move municipalities towards financial sustainability. Many of the prescriptive requirements, however, have been removed (e.g. preparation of two separate documents for provincial approval, auditor opinions, engineer certifications, etc.).

A Guideline ("Towards Financially Sustainable Drinking Shores – Water and Wastewater Systems") had been developed to assist municipalities in understanding the Province's direction and provided a detailed discussion on possible approaches to sustainability. The Province's Principles of Financially Sustainable Water and Wastewater Services are provided below:

Principle #1: Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system(s) to which they relate.

Principle #2: An integrated approach to planning among water, wastewater, and stormwater systems is desirable given the inherent relationship among these services.

Principle #3: Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services.

Principle #4: Lifecycle planning with mid-course corrections is preferable to planning over the short term, or not planning at all.

Principle #5: An asset management plan is a key input to the development of a financial plan.

Principle #6: A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs.

Principle #7: Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.

Principle #8: Financial plans are "living" documents that require continuous improvement. Comparing the accuracy of financial projections with actual results can lead to improved planning in the future.

Principle #9: Financial plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff, and municipal Council.

1.6 Water Opportunities Act, 2010

As noted earlier, since the passage of the *Safe Drinking Water Act, 2002*, continuing changes and refinements to the legislation have been introduced. Some of these Bills have found their way into law, while others have not been approved. Bill 72, the *Water Opportunities Act, 2010*, was introduced into legislation on May 18, 2010 and received Royal Assent on November 29, 2010.

The Act provides for the following elements:

- The fostering of innovative water, wastewater and stormwater technologies, services and practices in the private and public sectors;
- Preparation of water conservation plans to achieve water conservation targets established by the regulations; and
- Preparation of sustainability plans for municipal water services, municipal wastewater services and municipal stormwater services.

With regard to the sustainability plans:

- The Act extends from the water financial plans and requires a more detailed review of the water financial plan and requires a full plan for wastewater and stormwater services; and
- Regulations will provide performance targets for each service – these targets may vary based on the jurisdiction of the regulated entity or the class of entity.

The financial plan shall include:

- An asset management plan for the physical infrastructure;
- A financial plan;
- For water, a water conservation plan;
- An assessment of risks that may interfere with the future delivery of the municipal service, including, if required by the regulations, the risks posed by climate change and a plan to deal with those risks; and
- Strategies for maintaining and improving the municipal service, including strategies to ensure the municipal service can satisfy future demand, consider technologies, services and practices that promote the efficient use of water and reduce negative impacts on Ontario's water resources, and increase co-operation with other municipal service providers.

Performance indicators will be established by service, with the following considerations:

- May relate to the financing, operation or maintenance of a municipal service or to any other matter in respect of what information may be required to be included in a plan;
- May be different for different municipal service providers or for municipal services in different areas of the Province.

Regulations will prescribe:

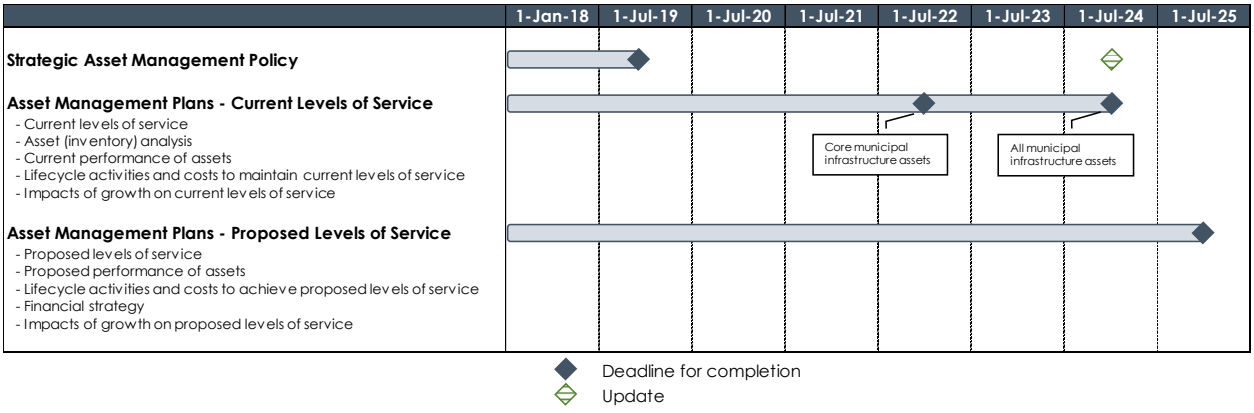
- Timing;
- Contents of the plans;
- Which identified portions of the plan will require certification;
- Public consultation process; and
- Limitations, updates, refinements, etc.

As noted earlier, it is expected that this Act will implement the principles of the S.W.S.S.A. once all regulations are put in place.

1.7 Infrastructure for Jobs and Prosperity Act, 2015 (I.J.P.A.)

On June 4, 2015, the Province of Ontario passed the I.J.P.A. which, over time, will require municipalities to undertake and implement asset management plans for all infrastructure they own. On December 27, 2017, the Province released Ontario Regulation 588/17 under the I.J.P.A. which has three phases that municipalities must meet:

Figure 1-1
Legislative Timelines set out by the Jobs and Prosperity Act
Legislation related to Asset Management Plans



Note: on March 15, 2021, the Province filed Regulation 193/21 to extend all of the timelines of Regulation 588/17 by one year (reflected in the table above).

Every municipality in Ontario was required to prepare a strategic asset management policy by July 1, 2019. Municipalities will be required to review their strategic asset management policies at least every five years and make updates as necessary. The subsequent phases are as follows:

- Phase 1 – Asset Management Plan (by July 1, 2022):
    - For core assets, municipalities must have the following:
        - Inventory of assets;
        - Current levels of service measured by standard metrics; and
        - Costs to maintain levels of service.

- Phase 2 – Asset Management Plan (by July 1, 2024):
    - Same steps as Phase 1 but for all assets.
- Phase 3 – Asset Management Plan (by July 1, 2025):
    - Builds on Phase 1 and 2 by adding:
        - Proposed levels of service; and
        - Lifecycle management and financial strategy.

In relation to water and wastewater (which is considered a core asset), municipalities will need to have an asset management plan that addresses the related infrastructure by July 1, 2022 (Phase 1). O.Reg. 588/17 specifies that the municipality's asset management plan must include the following for each asset category:

- The current levels of service being provided, determined in accordance with the following qualitative descriptions and technical metrics and based on data from at most the two calendar years prior to the year in which all information required under this section is included in the asset management plan;
- The current performance of each asset category, including:
    - a summary of the assets in the category;
    - the replacement cost of the assets in the category;
    - the average age of the assets in the category, determined by assessing the average age of the components of the assets;
    - the information available on the condition of the assets in the category;
    - a description of the municipality's approach to assessing the condition of the assets in the category, based on recognized and generally accepted good engineering practices where appropriate; and
- The lifecycle activities that would need to be undertaken to maintain the current levels of service.

1.8 Forecast Growth and Servicing Requirements

The Township of Guelph/Eramosa services 2,352 water customers (2,125 customers within the Rockwood area and 227 in the Hamilton Drive area) as well as 2,125 Rockwood customers with wastewater services. Information on the existing number of customers and existing billable water volumes was obtained from the Township.

For forecasting future water volumes in Rockwood and Hamilton Drive, an average volume per customer amount of 170 cu.m has been assumed for new water customers. This conservative assumption was based on a review of historical water consumption per customer. For forecasting future billable wastewater volumes in Rockwood, an average per residential customer of 170 cu.m has been used as wastewater charges are based on metered water volumes.

For future water customers to be added to the systems, consideration has been given to development potential for both the Hamilton Drive and Rockwood areas. A review of the existing and potential subdivision plans has provided the basis for the customer forecast. For wastewater, the same information has been used for new residents in Rockwood. There are currently 71 customers provided with water and wastewater services in the Gazer-Mooney area, however, there is no growth anticipated over the 10-year forecast period.

Table 1-3 provides for the forecast of water users and volumes in the Rockwood area, Table 1-4 provides the forecast of water users and volumes in Hamilton Drive area and Table 1-5 provides for the forecast of wastewater users and volumes in Rockwood.

Table 1-3
Township of Guelph/Eramosa
2025 to 2035 Water System Forecast – Rockwood

Rockwood Water Users Forecast

Year	Total Users	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2025	0	-	-	-	-	-	-	-	-	-	-	-
2026	0		-	-	-	-	-	-	-	-	-	-
2027	6			3	6	6	6	6	6	6	6	6
2028	20				10	20	20	20	20	20	20	20
2029	40					20	40	40	40	40	40	40
2030	30						15	30	30	30	30	30
2031	26							13	26	26	26	26
2032	11								6	11	11	11
2033	0									-	-	-
2034	0										-	-
2035	0											-
Total	**133**	**-**	**-**	**3**	**16**	**46**	**81**	**109**	**128**	**133**	**133**	**133**
m^3/user	170	170	170	170	170	170	170	170	170	170	170	170
Annual Flow		**-**	**-**	**510**	**2,720**	**7,820**	**13,770**	**18,530**	**21,760**	**22,610**	**22,610**	**22,610**

Water Customer Forecast	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125
New - Growth	-	-	3	16	46	81	109	128	133	133	133
Total	**2,125**	**2,125**	**2,128**	**2,141**	**2,171**	**2,206**	**2,234**	**2,253**	**2,258**	**2,258**	**2,258**

Water Volume Forecast (m^3)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	372,779	372,779	372,779	372,779	372,779	372,779	372,779	372,779	372,779	372,779	372,779
New	-	-	510	2,720	7,820	13,770	18,530	21,760	22,610	22,610	22,610
Total	**372,779**	**372,779**	**373,289**	**375,499**	**380,599**	**386,549**	**391,309**	**394,539**	**395,389**	**395,389**	**395,389**

Table 1-4
Township of Guelph/Eramosa
2025 to 2035 Water System Forecast – Hamilton Drive

Hamilton Drive Water Users Forecast

Year	Total Users	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2025		-	-	-	-	-	-	-	-	-	-	-
2026			-	-	-	-	-	-	-	-	-	-
2027	5			3	5	5	5	5	5	5	5	5
2028					-	-	-	-	-	-	-	-
2029						-	-	-	-	-	-	-
2030							-	-	-	-	-	-
2031								-	-	-	-	-
2032									-	-	-	-
2033										-	-	-
2034											-	-
2035												-
Total	**5**	**-**	**-**	**3**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
m^3/user	170	170	170	170	170	170	170	170	170	170	170	170
Annual Flow		**-**	**-**	**510**	**850**	**850**	**850**	**850**	**850**	**850**	**850**	**850**

Water Customer Forecast	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	227	227	227	227	227	227	227	227	227	227	227
New - Growth	-	-	3	5	5	5	5	5	5	5	5
Total	**227**	**227**	**230**	**232**	**232**	**232**	**232**	**232**	**232**	**232**	**232**

Water Volume Forecast (m^3)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	49,289	49,289	49,289	49,289	49,289	49,289	49,289	49,289	49,289	49,289	49,289
New	-	-	510	850	850	850	850	850	850	850	850
Total	**49,289**	**49,289**	**49,799**	**50,139**	**50,139**	**50,139**	**50,139**	**50,139**	**50,139**	**50,139**	**50,139**

Table 1-5
Township of Guelph/Eramosa
2025 to 2035 Wastewater System Forecast – Rockwood

Wastewater Users Forecast

Year	Total Users	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2025	0	-	-	-	-	-	-	-	-	-	-	-
2026	0		-	-	-	-	-	-	-	-	-	-
2027	6			3	6	6	6	6	6	6	6	6
2028	20				10	20	20	20	20	20	20	20
2029	40					20	40	40	40	40	40	40
2030	30						15	30	30	30	30	30
2031	26							13	26	26	26	26
2032	11								6	11	11	11
2033	0									-	-	-
2034	0										-	-
2035	0											-
Total	**133**	**-**	**-**	**3**	**16**	**46**	**81**	**109**	**128**	**133**	**133**	**133**
m^3/user	170	170	170	170	170	170	170	170	170	170	170	170
Annual Flow		**-**	**-**	**510**	**2,720**	**7,820**	**13,770**	**18,530**	**21,760**	**22,610**	**22,610**	**22,610**

Wastewater Customer Forecast	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125
New - Growth	-	-	3	16	46	81	109	128	133	133	133
Total	**2,125**	**2,125**	**2,128**	**2,141**	**2,171**	**2,206**	**2,234**	**2,253**	**2,258**	**2,258**	**2,258**

Wastewater Flows Forecast (m^3)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	372,779	372,779	372,779	372,779	372,779	372,779	372,779	372,779	372,779	372,779	372,779
New	-	-	510	2,720	7,820	13,770	18,530	21,760	22,610	22,610	22,610
Total	**372,779**	**372,779**	**373,289**	**375,499**	**380,599**	**386,549**	**391,309**	**394,539**	**395,389**	**395,389**	**395,389**

Chapter 2
Capital Infrastructure Needs

2. Capital Infrastructure Needs

2.1 Capital Forecast

Capital forecasts have been provided for each of the water and wastewater systems and are presented on Tables 2-1 through 2-2 (note: the costs are provided in uninflated dollars). The basis for these forecasts is the Township's water and wastewater Capital Budget and capital infrastructure replacement needs based on recommendations from the Township's 2022 Asset Management Plan. There are no capital projects identified for the forecast period in Gazer-Mooney.

A summary of the capital works related to the water and wastewater services is provided on the following tables. Table 2-1 presents the water capital forecast summary for Rockwood and Hamilton Drive, and Table 2-2 presents the wastewater capital forecast summary for Rockwood.

Table 2-1
Township of Guelph/Eramosa
2026 to 2035 Water Capital Forecast Summary (Uninflated $) – Rockwood & Hamilton Drive

Description	Total 2026 to 2035	Years Undertaken
Rockwood		
Capital Expenditures:		
Academy to George Ware Lane W/M connection	140,000	2032
Dowler to Main St. W/M connection	100,000	2030
Lifecycle:		
Hydrant Maintenance & Painting	72,000	2026
Water Meter Replacement Program	75,000	2026-2028
Catherine to Main St N W/M replacement	110,000	2026
Jackson, part Mackenzie & Dennis	360,000	2027
Mackenzie Brady Queen from Jackson to Christie	365,000	2028
Christie Mackenzie Brady and Gzowski	470,000	2029
SCADA upgrades	520,000	2026-2029
Standpipe Cleaning & Anode replacement	75,000	2027
UV disinfection system	140,000	2027
Add VFD Drive	50,000	2027
Pumps	20,000	2026
VFD Drive	15,000	2026
FL-123 Replacement 2017 F-250	50,000	2027
FL-127 Replacement 2018 Transit Van	35,000	2028
FL-130 Replacement 2020 F-150	40,000	2030
FL-134 Replacement 2022 Ford Ranger	30,000	2032
FL-137 Replacement 2023 Chev Silverado	50,000	2033
Vac-trailer Valve turner	60,000	2030
Studies:		
Water Rate Study	22,000	2030
Hamilton Drive		
Capital Expenditures:		
Bedford to Woodfield W/M looping	195,000	2032
Lifecycle:		
Vac-trailer Valve turner	60,000	2030
Replace asphalt shingle roof with Steel	15,000	2027
Replace High lift pumps with VFD	15,000	2027
Replace asphalt shingle roof with Steel	15,000	2027
Township-Wide		
Future Watermain Projects	800,000	2034-2035
Total Capital Expenditures	**3,899,000**	

Table 2-2
Township of Guelph/Eramosa
2026 to 2035 Wastewater Capital Forecast Summary (Uninflated $)

Description	Total 2026 to 2035	Years Undertaken
Capital Expenditures:		
New Expanded Wetwell	900,000	2031
Lifecycle:		
Water Meter Replacement Program	75,000	2026-2028
Jackson, part Mackenzie & Dennis	100,000	2027
Mackenzie Brady Queen from Jackson to Christie	100,000	2028
Christie Mackenzie Brady and Gzowski	100,000	2029
Fountain & Lou's	60,000	2027
SCADA	280,000	2026-2027
Replace piping	80,000	2030
Remove Manholes	600,000	2027-2032
FL-123 Replacement 2017 F-250	50,000	2027
FL-127 Replacement 2018 Transit Van	35,000	2028
FL-130 Replacement 2020 F-150	40,000	2030
FL-134 Replacement 2022 Ford Ranger	30,000	2032
FL-137 Replacement 2023 Chev Silverado	50,000	2033
Vac-trailer Valve turner	60,000	2030
Studies:		
Water Rate Study	18,000	2030
Growth Related:		
Sanitary Inflow Investigation (Smoke testing)	45,000	2027
Miscellaneous:		
Future Wastewater Projects	600,000	2034-2035
Total Capital Expenditures	**3,223,000**	

Chapter 3
Lifecycle Costing

3. Lifecycle Costing

3.1 Overview of Lifecycle Costing

3.1.1 Definition

For many years, lifecycle costing has been used in the field of maintenance engineering and to evaluate the advantages of using alternative materials in construction or production design. The method has gained wider acceptance and use in the areas of industrial decision-making and the management of physical assets.

By definition, lifecycle costs are all the costs which are incurred during the lifecycle of a physical asset, from the time its acquisition is first considered to the time it is taken out of service for disposal or redeployment. The stages which the asset goes through in its lifecycle are specification, design, manufacture (or build), install, commission, operate, maintain and disposal. Figure 3-1 depicts these stages in a schematic form.

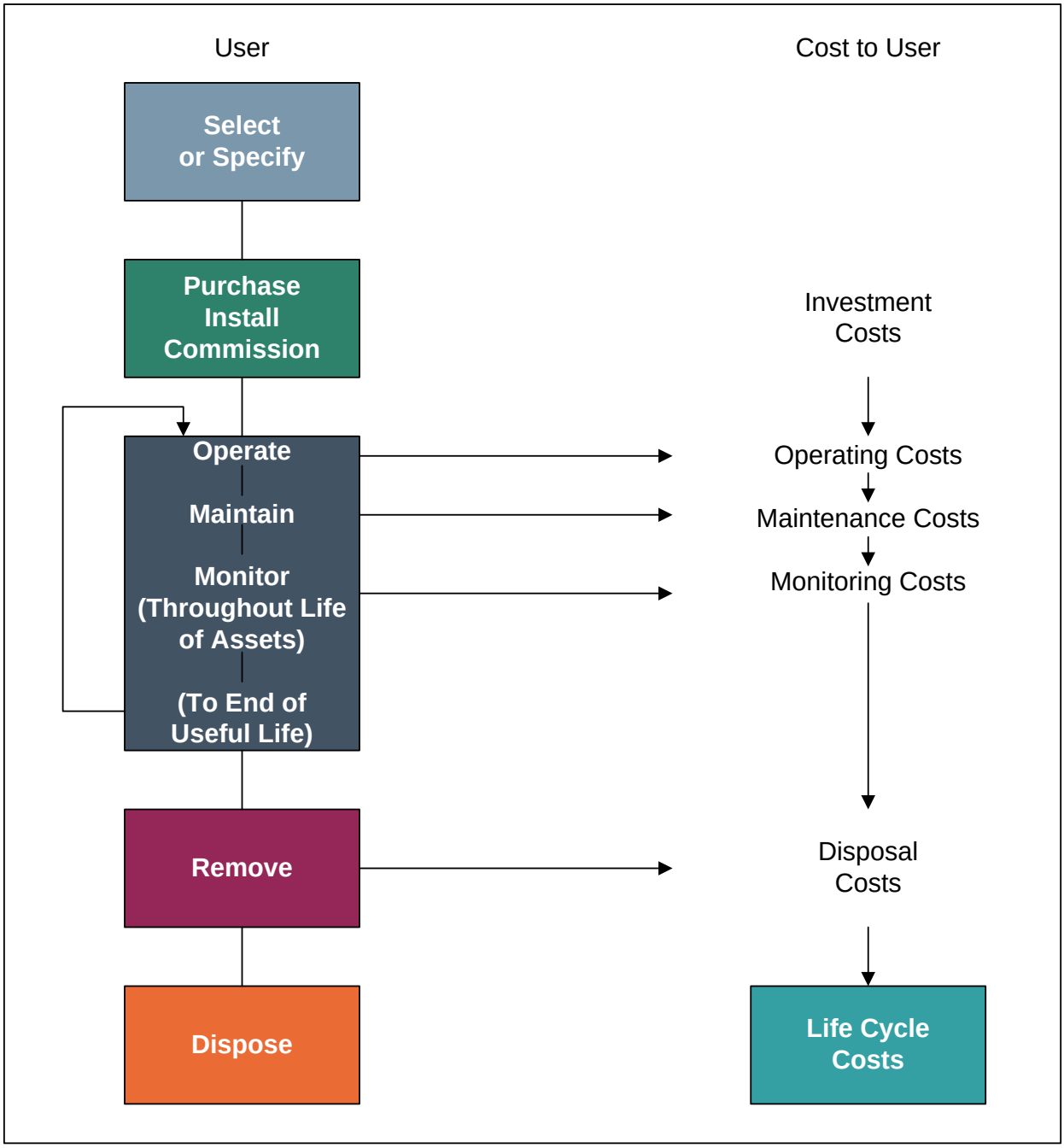
3.1.2 Financing Costs

This section will focus on financing mechanisms in place to fund the costs incurred throughout the asset's life.

In a municipal context, services are provided to benefit tax/rate payers. Acquisition of assets is normally timed in relation to direct needs within the community. At times, economies of scale or technical efficiencies will lead to oversizing an asset to accommodate future growth within the Township. Over the past few decades, new financing techniques such as development charges have been employed based on the underlying principle of having tax/rate payers who benefit directly from the service paying for that service. Operating costs which reflect the cost of the service for that year are charged directly to all existing tax/rate payers who have received the benefit. Operating costs are normally charged through the tax base or user rates.

Capital expenditures are recouped through several methods, with operating budget contributions, development charges, reserves, developer contributions and debentures, being the most common.

Figure 3-1
Lifecycle Costing



New construction related to growth could produce development charges and developer contributions (e.g. works internal to a subdivision which are the responsibility of the developer to construct) to fund a significant portion of projects, where new assets are

being acquired to allow growth within the Township to continue. As well, debentures could be used to fund such works, with the debt charge carrying costs recouped from taxpayers in the future.

Capital construction to replace existing infrastructure, however, is largely not growth-related and will therefore not yield development charges or developer contributions to assist in financing these works. Hence, a municipality will be dependent upon debentures, reserves and contributions from the operating budget to fund these works.

Figure 3-2 depicts the costs of an asset from its initial conception through to replacement and then continues to follow the associated costs through to the next replacement.

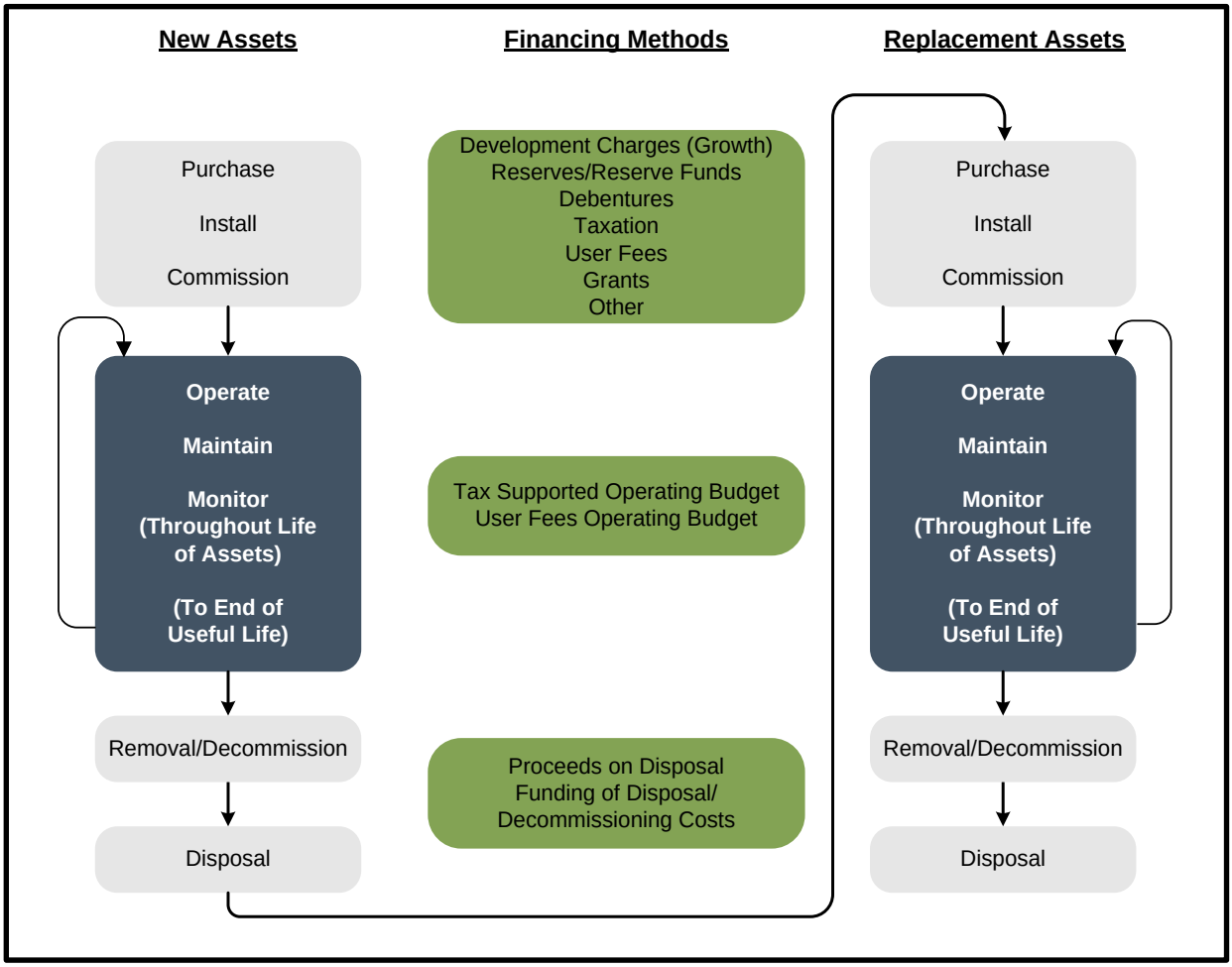
As referred to earlier, growth-related financing methods such as development charges and developer contributions could be utilized to finance the growth-related component of the new asset. These revenues are collected (indirectly) from the new homeowner who benefits directly from the installation of this asset. Other financing methods may be used as well to finance the non-growth-related component of this project, such as reserves which have been collected from past tax/rate payers, operating budget contributions which are collected from existing tax/rate payers and debenturing which will be carried by future tax/rate payers. Ongoing costs for monitoring, operating and maintaining the asset will be charged annually to the existing tax/rate payer.

When the asset requires replacement, the sources of financing will be limited to reserves, debentures and contributions from the operating budget. At this point, the question is raised: "If the cost of replacement is to be assessed against the tax/rate payer who benefits from the replacement of the asset, should the past tax/rate payer pay for this cost or should future rate payers assume this cost?" If the position is taken that the past user has used up the asset, hence he should pay for the cost of replacement, then a charge should be assessed annually through the life of the asset, to have funds available to replace it when the time comes. If the position is taken that the future tax/rate payer should assume this cost, then debenturing and, possibly, a contribution from the operating budget should be used to fund this work.

Charging for the cost of using up an asset is the fundamental concept behind depreciation methods utilized by the private sector. This concept allows for expending the asset as it is used up in the production process. The tracking of these costs forms

part of the product's selling price and, hence, end-users are charged for the asset's depreciation. The same concept can be applied in a municipal setting to charge existing users for the asset's use and set those funds aside in a reserve to finance the cost of replacing the asset in the future.

Figure 3-2
Financing Lifecycle Costs



3.1.3 Costing Methods

There are two fundamental methods of calculating the cost of the usage of an asset and for the provision of the revenue required when the time comes to retire and replace it. The first method is the Depreciation Method. This method recognizes the reduction in the value of the asset through wear and tear and aging. There are two commonly used

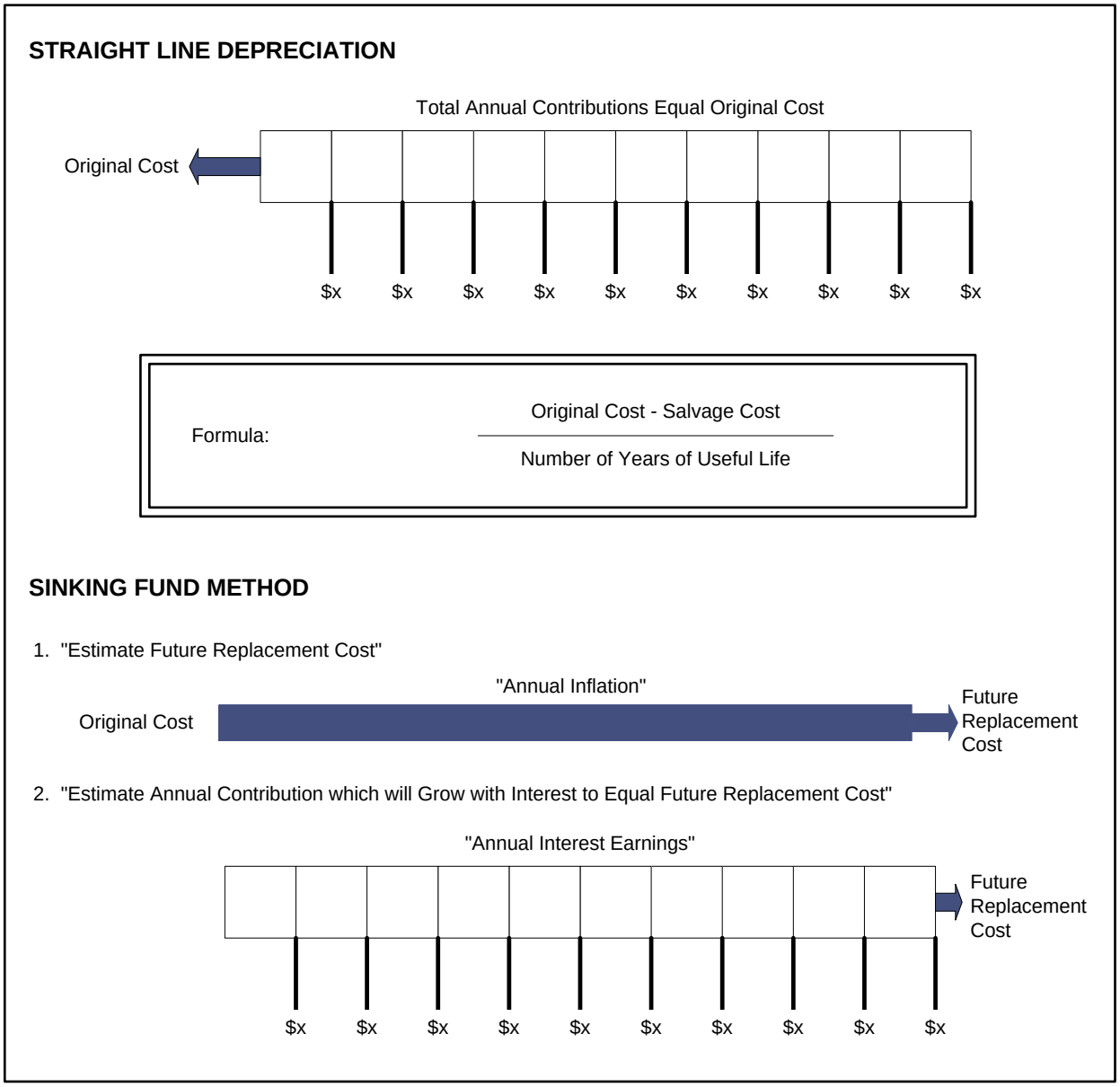
forms of depreciation: the straight-line method and the reducing balance method (shown graphically in Figure 3-3).

The straight-line method is calculated by taking the original cost of the asset, subtracting its estimated salvage value (estimated value of the asset at the time it is disposed of) and dividing this by the estimated number of years of useful life. The reducing balance method is calculated by utilizing a fixed percentage rate and this rate is applied annually to the undepreciated balance of the asset value.

The second method of lifecycle costing is the sinking fund method. This method first estimates the future value of the asset at the time of replacement. This is done by inflating the original cost of the asset at an assumed annual inflation rate. A calculation is then performed to determine annual contributions (equal or otherwise) which, when invested, will grow with interest to equal the future replacement cost.

The preferred method used herein for forecasting purposes is the sinking fund method of lifecycle costing.

Figure 3-3



3.2 Impact on Budgets

The age of portions of the Hamilton Drive area water system dates back to the late 1960's. In the Rockwood area, the age of the original water and wastewater systems dates back to the early 1970's. Gazer-Mooney water and sewer mains date back to 1980. The Township's Asset Management Plan outlines the total replacement cost of the Township's water asset inventory to be approximately $51.10 million. The average

annual level of investment recommended for linear water asset lifecycle rehabilitation and replacement needs in the Township's Asset Management Plan is approximately $1.03 million.

The Township's Asset Management Plan outlines the total replacement cost of the Township's wastewater asset inventory to be approximately $52.14 million. The average annual level of investment recommended for linear wastewater asset lifecycle rehabilitation and replacement needs in the Township's Asset Management Plan is $997,164.

To integrate the asset management needs into the rate calculations, increases to reserves transfers have been assumed throughout the forecast. The transfers to the water reserves reach approximately $1.00 million by 2031. The transfers to the wastewater reserves are not anticipated to reach the recommended level until post 2035.

Chapter 4
Capital Cost Financing Options

4. Capital Cost Financing Options

4.1 Summary of Capital Cost Financing Alternatives

Historically, the powers that municipalities had to raise alternative revenues to taxation to fund capital services have been restrictive. Over the past decade, legislative reforms have been introduced. Some of these have expanded municipal powers (e.g. Bill 26 introduced in 1996 to provide for expanded powers for imposing fees and charges), while others appear to restrict them (e.g. Bill 98 in 1997 and Bill 23 in 2022 providing amendments to the D.C.A.).

The Province passed a new *Municipal Act* which came into force on January 1, 2003. Part XII of the Act and O.Reg. 584/06 govern a municipality's ability to impose fees and charges. In contrast to the previous *Municipal Act*, this Act provides municipalities with broadly defined powers and does not differentiate between fees for operating and capital purposes. It is anticipated that the powers to recover capital costs under the previous *Municipal Act* will continue within the new Statutes and Regulations, as indicated by s.9(2) and s.452 of the new *Municipal Act*.

Under s.484 of *Municipal Act, 2001*, the *Local Improvement Act* was repealed with the in-force date of the *Municipal Act* (January 1, 2003). The municipal powers granted under the *Local Improvement Act* now fall under the jurisdiction of the *Municipal Act*. To this end, on December 20, 2002, O.Reg. 390/02 was filed, which allowed for the *Local Improvement Act* to be deemed to remain in force until April 1, 2003. O.Reg. 119/03 was enacted on April 19, 2003, which restored many of the previous *Local Improvement Act* provisions; however, the authority is now provided under the *Municipal Act*.

The methods of capital cost recovery available to municipalities are provided as follows:

Recovery Methods	Section Reference
• *Development Charges Act, 1997*	4.2
• *Municipal Act*	4.3
○ Fees and Charges	
○ Sewer and Water Area Charges	
○ Connection Fees	
○ Local Improvements	

Recovery Methods	Section Reference
• Historical Grant Funding Availability	4.4
• Existing Reserves/Reserve Funds	4.5
• Debenture Financing	4.6
• Infrastructure Ontario	4.7

4.2 Development Charges Act, 1997

Development charges are a revenue tool used by municipalities to recover the capital costs associated with new development and redevelopment. These costs are in addition to what a developer/builder normally constructs as part of their subdivision (i.e. Local Services). Empowered by the *Development Charges Act, 1997*, municipalities may pass by-laws to impose charges to recover the capital costs associated with development and redevelopment.

The Township currently imposes Development Charges via by-laws 24/2023, 25/2023, 26/2023, 27/2023, and 28/2023. For projects that are growth-related, this rate study has identified Development Charges as the funding source. The *Development Charges Act* includes a number of mandatory exemptions from the charges and as such, some level of funding from the water rates will be required for financing the growth-related capital projects.

Since the inception of the revised *Development Charges Act*, in 1997, the province has expanded the number of mandatory exemptions and discounts required for new development. Should the mandatory exemptions and discounts continue to change with new legislation, the Township may need to reexamine timing of capital projects to ensure adequate funding is available.

4.3 Municipal Act

Part XII of the *Municipal Act* provides municipalities with broad powers to impose fees and charges via passage of a by-law. These powers, as presented in s.391(1), include imposing fees or charges:

- "for services or activities provided or done by or on behalf of it;

- for costs payable by it for services or activities provided or done by or on behalf of any other municipality or local board; and
- for the use of its property including property under its control."

Restrictions are provided to ensure that the form of the charge is not akin to a poll tax. Any charges not paid under this authority may be added to the tax roll and collected in a like manner. The fees and charges imposed under this part are not appealable to the Ontario Land Tribunal (OLT) (formerly Local Planning Appeal Tribunal (LPAT), formerly O.M.B.).

Section 221 of the previous *Municipal Act* permitted municipalities to impose charges, by by-law, on owners or occupants of land who would or might derive benefit from the construction of sewage (storm and sanitary) or water works being authorized (in a specific benefit area). For a by-law imposed under this section of the previous Act:

- A variety of different means could be used to establish the rate and recovery of the costs and could be imposed by a number of methods at the discretion of Council (i.e. lot size, frontage, number of benefiting properties, etc.);
- Rates could be imposed with respect to costs of major capital works, even though an immediate benefit was not enjoyed;
- Non-abutting owners could be charged;
- Recovery was authorized against existing works, where a new water or sewer main was added to such works, "notwithstanding that the capital costs of existing works has in whole or in part been paid;"
- Charges on individual parcels could be deferred;
- Exemptions could be established;
- Repayment was secured; and
- OLT approval was not required.

While under the new *Municipal Act* no provisions are provided specific to the previous s.221, the intent to allow capital cost recovery through fees and charges is embraced within s.391. The new *Municipal Act* also maintains the ability of municipalities to impose capital charges for water and sewer services on landowners not receiving an immediate benefit from the works. Under s.391(2) of the Act, "a fee or charge imposed under subsection (1) for capital costs related to sewage or water services or activities may be imposed on persons not receiving an immediate benefit from the services or activities but who will receive a benefit at some later point in time." Also, capital

charges imposed under s.391 are not appealable to the OLT on the grounds that the charges are “unfair or unjust.”

Section 222 of the previous *Municipal Act* permitted municipalities to pass a by-law requiring buildings to connect to the municipality's sewer and water systems, charging the owner for the cost of constructing services from the mains to the property line. Under the new *Municipal Act*, this power still exists under Part II, General Municipal Powers (s.9 (3) b of the *Municipal Act*). Enforcement and penalties for this use of power are contained in s.427 (1) of the *Municipal Act*.

Under the previous *Local Improvement Act*:

- A variety of different types of works could be undertaken, such as watermain, storm and sanitary sewer projects, supply of electrical light or power, bridge construction, sidewalks, road widening and paving;
- Council could pass a by-law for undertaking such work on petition of a majority of benefiting taxpayers, on a 2/3 vote of Council and on sanitary grounds, based on the recommendation of the Minister of Health. The by-law was required to go to the OLT, which might hold hearings and alter the by-law, particularly if there were objections;
- The entire cost of a work was assessed only upon the lots abutting directly on the work, according to the extent of their respective frontages, using an equal special rate per metre of frontage; and
- As noted, this Act was repealed as of April 1, 2003; however, O.Reg. 119/03 was enacted on April 19, 2003 which restores many of the previous *Local Improvement Act* provisions; however, the authority is now provided under the *Municipal Act*.

4.4 Historical and Current Grant Funding Availability

Phase 1 (April 1, 2016 to March 31, 2018)

Funding was provided by the Government of Canada to expressly help municipalities with repair and rehabilitation projects. Funding was mainly provided through the Clean Water and Wastewater Fund (C.W.W.F.) and Public Transit Infrastructure Fund (P.T.I.F.) in Federal Phase 1 projects. The C.W.W.F. was announced in Ontario on September 15, 2016. The Fund was $1.1 billion for water, wastewater, and storm water

systems in Ontario. The federal government provided $569 million and Ontario and municipal governments provided $275 million each.

Over 1,300 water, wastewater, and storm water projects have been approved in Ontario through the C.W.W.F. In Ontario, P.T.I.F. accounted for nearly $1.5 billion of the national total of $3.4 billion. The program was allocated by ridership numbers from the Canadian Urban Transit Association. The Association of Municipalities of Ontario (A.M.O.) understands that $1 billion of Ontario's share has been approved.

Phase 2: Next Steps

The federal government announced Phase 2 of its infrastructure funding plan with a total of $180 billion spent over 11 years. In addition to the balance of funding for previous green, social, and public transit infrastructure funds ($20 billion each, including Phase 1), the government added $10.1 billion for trade and transportation infrastructure and $2 billion for rural and northern communities.

In Phase 2, Ontario was eligible for $11.8 billion including $8.3 billion for transit, $2.8 billion for green infrastructure, $407 million for community, culture and recreation and $250 million for rural and northern communities.

Canada Community-Building Fund

The Canada Community-Building Fund is a permanent source of funding provided up front, twice-a-year, to Provinces and Territories, who in turn flow this funding to their municipalities to support local infrastructure priorities. Municipalities can pool, bank and borrow against this funding, providing significant financial flexibility. Every year, the Canada Community-Building Fund provides over $2 billion and supports approximately 2,500 projects in communities across Canada. Each municipality selects how best to direct the funds with the flexibility provided to make strategic investments across 18 different project categories, which include other water and wastewater servicing.

Ontario Government

The Province has taken steps to increase municipal infrastructure funding. The Ontario Community Infrastructure Fund (O.C.I.F.) was increased in 2016 with formula-based support growing to $200 million, and application funding growing to $100 million annually by 2018/2019. As well, $15 million annually will go to the new Connecting

Links program to help pay for the construction and repair costs of municipal roads that connect communities to provincial highways. This is on top of the Building Ontario Up investment of $130 billion in public infrastructure over 10 years starting in 2015.

Recently the Province announced funding through a new Ontario Infrastructure Bank. This new, arms-length, board-governed agency will assist investors and institutions to further participate in large-scale infrastructure projects. Ontario is providing $825 million over three years towards the Housing-Enabling Water Systems Fund, which will help municipalities repair, rehabilitate and expand drinking water, wastewater and stormwater infrastructure needed to build more homes.

4.5 Existing Reserves/Reserve Funds

The Township has established reserves and reserve funds for water and wastewater costs. The following table summarizes the water and wastewater reserves utilized in this analysis and their respective estimated balances at December 31, 2024:

Table 4-1
Water and Wastewater Reserves and Reserve Funds
As of December 31, 2024

Reserve	Dec. 31 2024
Water	
Township-Wide Capital Reserve	**773,101**
Operating Reserve	**199,181**
Rockwood Development Charges Reserve Fund	**(542,988)**
Township-Wide Lifecycle Reserve Fund	**1,020,801**
Wastewater	
Rockwood Capital Reserve	**1,730,650**
Operating Reserve	**77,430**
Rockwood Development Charges Reserve Fund	**649,995**
Rockwood Lifecycle Reserve Fund	**1,769,771**
Gazer-Mooney	
Lifecycle Reserve Fund	**523,956**

4.6 Debenture Financing

Although it is not a direct method of minimizing the overall cost to the ratepayer, debentures are used by municipalities to assist in cash flowing large capital expenditures.

The Ministry of Municipal Affairs regulates the level of debt incurred by Ontario municipalities, through its powers established under the *Municipal Act*. Ontario Regulation 403/02 provides the current rules respecting municipal debt and financial obligations. Through the rules established under these regulations, a municipality's debt capacity is capped at a level where no more than 25% of the municipality's own purpose revenue may be allotted for servicing the debt (i.e. debt charges). The Township of Guelph/Eramosa's calculation on Debt Capacity is shown on Schedule 81 of the Township's most recent Financial Information Return (F.I.R.). This calculates to the Township's estimated annual repayment limit of approximately $3.25 million. Based upon 10-year financing at an assumed rate of 4%, the available debt for the Township is approximately $26.33 million.

There is an existing debenture related to Alma Street Pretreatment Plant that is to be funded from development charges. The outstanding debt payment culminates in a balloon payment totalling $1.88 million in 2026. The analysis presented in this report assumed the Township will make a principal payment in the amount of the Wastewater Development Charges Reserve Fund Balance as of December 31, 2024 (i.e., $649,995) and refinance the remaining debenture for another 10-year period. However, should the Township decide to pay off the debenture in full in 2026, there would be no anticipated impact on the forecasted rates.

4.7 Infrastructure Ontario

Infrastructure Ontario (I.O.) is an arms-length crown corporation, which supports the Ontario government's goals of modernizing and maximizing the value of public infrastructure. Its lending program was established as a tool to offer low-cost and longer-term financing to assist municipalities in modernizing and renewing their infrastructure. I.O. combines the infrastructure renewal needs of municipalities into an infrastructure investment "pool." I.O. will raise investment capital to finance loans to the public sector by selling Infrastructure Renewal Bonds to individual and institutional investors.

I.O. provides access to infrastructure capital that would not otherwise be available to smaller borrowers. Larger borrowers receive longer loan terms than they could get in the financial markets. They can also save on costs such as legal fees and underwriting commissions. Under the I.O. approach, all borrowers receive the same low interest

rate. I.O. will enter into a financial agreement with each municipality, subject to technical and credit reviews, for a loan up to the maximum amount of the loan request.

To be eligible to receive these loans, municipalities must submit a formal application along with pertinent financial information. Allotments are prioritized and distributed based upon the Province's assessment of need.

4.7.1 Housing-Enabling Water Infrastructure Lending Stream

On November 28, 2024, the Province and I.O. announced the Housing-Enabling Water Infrastructure (H.E.W.I.) lending stream. This lending stream will provide up to $1.0 billion in loans to municipalities for projects to construct, expand, and rehabilitate drinking water, wastewater, and stormwater infrastructure to enable new housing development. Eligible projects under this stream include:

- Potable Water Assets: Treatment plants, reservoirs, local pipes, distribution system watermains, municipal service lines, and pump stations.
- Wastewater Assets: Lagoon systems, pump stations, lift stations, linear assets, treatment plants, storage tanks, and collection systems.
- Stormwater Assets: Management facilities and linear assets such as conveyance piping, ditches, and culverts.

Key features of this lending stream include lower interest rates, the option to defer interest payments during the construction phase of a project, and extended amortization periods (up to 40 years). Additionally, municipalities have the flexibility to issue multiple debentures in sequence over the 40-year period (i.e., split terms during debentures) and to pay down the principal between sequential debentures. This program started accepting applications on December 2, 2024, and is being administered on a "first-come-first-served" basis until the maximum program amount is reached.

4.8 Recommended Capital Financing Approach

Of the various funding alternatives provided in this section, the following are recommended for further consideration by the Township of Guelph/Eramosa for the capital expenditures (inflated) provided in Chapter 2:

Table 4-2
Township of Guelph/Eramosa
Capital Forecasting Financing Sources
Inflated $

Description	Water	Wastewater
Capital Financing		
Provincial/Federal Grants	-	-
Development Charges Reserve Fund	24,000	67,000.00
Non-Growth Related Debenture Requirements	966,000	725,000.00
Growth Related Debenture Requirements	-	-
Operating Contributions	-	-
Water Lifecycle Reserve Fund	2,799,000	-
Water Reserve	495,000	-
Wastewater Lifecycle Reserve Fund	-	1,784,000
Wastewater Reserve	-	1,014,000
Total Capital Financing	**4,284,000**	**3,590,000**

Tables 4-3 and 4-4 provide for the full capital expenditure and funding programs by year for the water systems in Rockwood and Hamilton Drive and the wastewater system in Rockwood.

Table 4-3
Township of Guelph/Eramosa
Capital Budget Forecast – Water (inflated $)
Rockwood and Hamilton Drive

Description	Budget	Total	Forecast									
	2025		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Rockwood												
Capital Expenditures:		-										
Railway watermain crossing	765,000	-	-	-	-	-	-	-	-	-	-	-
Academy to George Ware Lane W/M connection	-	161,000	-	-	-	-	-	-	161,000	-	-	-
Dowler to Main St. W/M connection	-	110,000	-	-	-	-	110,000	-	-	-	-	-
Lifecycle:												
RF Radio Upgrade	52,000	-	-	-	-	-	-	-	-	-	-	-
Inkerman to Pasmore W/m replacement	315,000	-	-	-	-	-	-	-	-	-	-	-
Hydrant Maintenance & Painting	72,000	73,000	73,000	-	-	-	-	-	-	-	-	-
Clean Airlift Production Wells	100,000	-	-	-	-	-	-	-	-	-	-	-
Exterior Door Replacements	12,200	-	-	-	-	-	-	-	-	-	-	-
Water Meter Replacement Program	25,000	79,000	26,000	26,000	27,000	-	-	-	-	-	-	-
Catherine to Main St N W/M replacement	-	112,000	112,000	-	-	-	-	-	-	-	-	-
Jackson, part Mackenzie & Dennis	-	375,000	-	375,000	-	-	-	-	-	-	-	-
Mackenzie Brady Queen from Jackson to Christie	-	387,000	-	-	387,000	-	-	-	-	-	-	-
Christie Mackenzie Brady and Gzowski	-	509,000	-	-	-	509,000	-	-	-	-	-	-
SCADA upgrades	-	547,000	133,000	135,000	138,000	141,000	-	-	-	-	-	-
Standpipe Cleaning & Anode replacement	-	78,000	-	78,000	-	-	-	-	-	-	-	-
UV disinfection system	-	146,000	-	146,000	-	-	-	-	-	-	-	-
Add VFD Drive	-	52,000	-	52,000	-	-	-	-	-	-	-	-
Pumps	-	20,000	20,000	-	-	-	-	-	-	-	-	-
VFD Drive	-	15,000	15,000	-	-	-	-	-	-	-	-	-
FL-123 Replacement 2017 F-250	-	52,000	-	52,000	-	-	-	-	-	-	-	-
FL-127 Replacement 2018 Transit Van	-	37,000	-	-	37,000	-	-	-	-	-	-	-
FL-130 Replacement 2020 F-150	-	44,000	-	-	-	-	44,000	-	-	-	-	-
FL-134 Replacement 2022 Ford Ranger	-	34,000	-	-	-	-	-	-	34,000	-	-	-
FL-137 Replacement 2023 Chev Silverado	-	59,000	-	-	-	-	-	-	-	59,000	-	-
Vac-trailer Valve turner	-	66,000	-	-	-	-	66,000	-	-	-	-	-
Studies:												
Water Rate Study	19,000	24,000	-	-	-	-	24,000	-	-	-	-	-

Table 4-3
Township of Guelph/Eramosa
Capital Budget Forecast – Water (inflated $) (Cont'd)
Rockwood and Hamilton Drive

Description	Budget	Total	Forecast									
	2025		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Hamilton Drive												
Capital Expenditures:												
Huntington Pumphouse Back-up Power	86,000	-	-	-	-	-	-	-	-	-	-	-
Bedford to Woodfield W/M looping	-	224,000	-	-	-	-	-	-	224,000	-	-	-
Lifecycle:												
Standpipe Cleaning & Anode replacement	65,000	-	-	-	-	-	-	-	-	-	-	-
Vac-trailer Valve turner	-	66,000	-	-	-	-	66,000	-	-	-	-	-
Replace asphalt shingle roof with Steel	-	16,000	-	16,000	-	-	-	-	-	-	-	-
Replace High lift pumps with VFD	-	16,000	-	16,000	-	-	-	-	-	-	-	-
Replace asphalt shingle roof with Steel	-	16,000	-	16,000	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
Township-Wide												
Future Watermain Projects	-	966,000	-	-	-	-	-	-	-	-	478,000	488,000
Total Capital Expenditures	**1,511,200**	**4,284,000**	**379,000**	**912,000**	**589,000**	**650,000**	**310,000**	**-**	**419,000**	**59,000**	**478,000**	**488,000**
Capital Financing												
Provincial/Federal Grants		-										
Development Charges Reserve Fund	649,000	24,000	-	-	-	-	24,000	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	966,000	-	-	-	-	-	-	-	-	478,000	488,000
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Water Lifecycle Reserve Fund	641,200	2,799,000	379,000	912,000	589,000	650,000	176,000	-	34,000	59,000	-	-
Water Reserve	221,000	495,000	-	-	-	-	110,000	-	385,000	-	-	-
Total Capital Financing	**1,511,200**	**4,284,000**	**379,000**	**912,000**	**589,000**	**650,000**	**310,000**	**-**	**419,000**	**59,000**	**478,000**	**488,000**

Table 4-4
Township of Guelph/Eramosa
Capital Budget Forecast – Wastewater (inflated $)
Rockwood

Description	Budget 2025	Total	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Expenditures:												
New Expanded Wetwell	-	1,014,000	-	-	-	-	-	1,014,000	-	-	-	-
Lifecycle:												
RF Radio Upgrade	78,000	-	-	-	-	-	-	-	-	-	-	-
Exterior Door Replacements	3,800	-	-	-	-	-	-	-	-	-	-	-
Water Meter Replacement Program	25,000	79,000	26,000	26,000	27,000	-	-	-	-	-	-	-
Forcemain to Guelph	500,000	-	-	-	-	-	-	-	-	-	-	-
New Sewage Pumps	55,000	-	-	-	-	-	-	-	-	-	-	-
Jackson, part Mackenzie & Dennis	-	104,000	-	104,000	-	-	-	-	-	-	-	-
Mackenzie Brady Queen from Jackson to Christie	-	106,000	-	-	106,000	-	-	-	-	-	-	-
Christie Mackenzie Brady and Gzowski	-	108,000	-	-	-	108,000	-	-	-	-	-	-
Fountain & Lou's	-	62,000	-	62,000	-	-	-	-	-	-	-	-
SCADA	-	289,000	143,000	146,000	-	-	-	-	-	-	-	-
Replace piping	-	88,000	-	-	-	-	88,000	-	-	-	-	-
Remove Manholes	-	656,000	-	104,000	106,000	108,000	110,000	113,000	115,000	-	-	-
FL-123 Replacement 2017 F-250	-	52,000	-	52,000	-	-	-	-	-	-	-	-
FL-127 Replacement 2018 Transit Van	-	37,000	-	-	37,000	-	-	-	-	-	-	-
FL-130 Replacement 2020 F-150	-	44,000	-	-	-	-	44,000	-	-	-	-	-
FL-134 Replacement 2022 Ford Ranger	-	34,000	-	-	-	-	-	-	34,000	-	-	-
FL-137 Replacement 2023 Chev Silverado	-	59,000	-	-	-	-	-	-	-	59,000	-	-
Vac-trailer Valve turner	-	66,000	-	-	-	-	66,000	-	-	-	-	-
Studies:		-	-	-	-	-	-	-	-	-	-	-
Water Rate Study	16,600	20,000	-	-	-	-	20,000	-	-	-	-	-
Growth Related:		-	-	-	-	-	-	-	-	-	-	-
Sanitary Inflow Investigation (Smoke testing)	-	47,000	-	47,000	-	-	-	-	-	-	-	-
Miscellaneous:												
Future Wastewater Projects		725,000	-	-	-	-	-	-	-	-	359,000	366,000
Total Capital Expenditures	**678,400**	**3,590,000**	**169,000**	**541,000**	**276,000**	**216,000**	**328,000**	**1,127,000**	**149,000**	**59,000**	**359,000**	**366,000**

Table 4-4
Township of Guelph/Eramosa
Capital Budget Forecast – Wastewater (inflated $) (Cont'd)
Rockwood

Description	Budget	Total	Forecast									
	2025		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Financing												
Provincial/Federal Grants		-										
Development Charges Reserve Fund	16,600	67,000	-	47,000	-	-	20,000	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	725,000	-	-	-	-	-	-	-	-	359,000	366,000
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater Lifecycle Reserve Fund	661,800	1,784,000	169,000	494,000	276,000	216,000	308,000	113,000	149,000	59,000	-	-
Wastewater Reserve	-	1,014,000	-	-	-	-	-	1,014,000	-	-	-	-
Total Capital Financing	**678,400**	**3,590,000**	**169,000**	**541,000**	**276,000**	**216,000**	**328,000**	**1,127,000**	**149,000**	**59,000**	**359,000**	**366,000**

Chapter 5
Overview of Expenditures and Revenues

5. Overview of Expenditures and Revenues

5.1 Water Operating Expenditures

In this report, the forecast water budget figures (2026 to 2035) are based on the 2025 operating budgets. The operating expenditures have been provided by staff. Generally, they have been adjusted over the forecast period by an annual inflationary factor of 2.0%, however, in certain instances, staff have provided variations in the costs based on a direct review of each item. Note that annual contributions have been provided to the lifecycle reserves in order to minimize the need for additional debt to finance the lifecycle replacement program.

5.2 Water Operating Revenues

The Township has base charges and miscellaneous revenue sources to help contribute towards operating expenditures. These miscellaneous revenues, including payment penalties, sale of water meters, and meter maintenance charges have been assumed to increase at a rate of 2.0% annually. Table 5-1 provides for the operating budget for the water system.

Table 5-1
Township of Guelph/Eramosa
Operating Budget Forecast – Water (inflated $)

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Expenditures										
Operating Costs										
Advertising	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500
Communications	13,000	13,100	13,200	13,400	13,600	13,800	14,000	14,200	14,400	14,600
Conservation Initiatives	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
Fees - Audit	5,400	5,560	5,730	5,900	6,080	6,260	6,450	6,640	6,840	7,050
Fees - Engineering	46,000	46,920	47,860	48,820	49,800	50,800	51,820	52,860	53,920	55,000
Fees - Legal	510	520	531	541	552	563	574	586	598	609
Fleet	16,480	16,970	17,480	18,000	18,540	19,100	19,670	20,260	20,870	21,500
Grounds Maintenance	2,000	2,040	2,080	2,120	2,160	2,200	2,240	2,280	2,330	2,380
Heating	1,575	1,654	1,736	1,823	1,914	2,010	2,111	2,216	2,327	2,443
Hydro	78,750	82,688	86,822	91,163	95,721	100,507	105,533	110,809	116,350	122,167
Insurance	70,510	74,040	77,740	81,630	85,710	90,000	94,500	99,230	104,190	109,400
Licenses	1,500	1,530	1,560	1,590	1,620	2,650	1,700	1,730	1,760	1,800
Locates	510	520	531	541	552	563	574	586	598	609
Memberships and Dues	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	1,828
Meter Repairs	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
Contracted Services	64,000	65,280	66,590	67,920	69,280	70,670	72,080	73,520	74,990	76,490
Postage & Shipping	12,500	12,750	13,010	13,270	13,540	13,810	14,090	14,370	14,660	14,950
Property Taxes	15,754	16,227	16,714	17,215	17,731	18,263	18,811	19,375	19,956	20,555
Repairs & Maint - Buildings	10,000	10,200	10,400	10,610	10,820	11,040	11,260	11,490	11,720	11,950
Repairs & Maint - Equipment	36,000	36,720	37,450	38,200	38,960	39,740	40,530	41,340	42,170	43,010
Repairs & Maint - Water Mains	33,558	34,229	34,914	35,612	36,324	37,051	37,792	38,548	39,319	40,105
Safety	3,060	3,121	3,184	3,247	3,312	3,378	3,446	3,515	3,585	3,657
Salaries and Wages	514,102	546,007	556,927	568,065	579,427	591,015	602,835	614,892	627,190	639,734
Salaries Benefits	174,795	185,642	189,355	193,142	197,005	200,945	204,964	209,063	213,245	217,509
Seminars & Training	13,000	13,260	13,530	13,800	14,080	14,360	14,650	14,940	15,240	15,540
Service Agreements	12,200	12,440	12,690	12,940	13,200	13,460	13,730	14,000	14,280	14,570
Supplies and Services	68,145	71,552	75,130	78,886	82,831	86,972	91,321	95,887	100,681	105,715
Telephone	2,500	2,500	2,500	2,700	2,700	2,700	2,900	2,900	2,900	2,900
Uniforms	3,200	3,260	3,330	3,400	3,470	3,540	3,610	3,680	3,750	3,830
Water Meter Stock	25,500	26,010	26,530	27,061	27,602	28,154	28,717	29,291	29,877	30,475
Overhead Costs	41,000	41,820	42,660	43,510	44,380	45,270	46,180	47,100	48,040	49,000
Sub Total Operating	**1,270,718**	**1,331,901**	**1,365,697**	**1,400,796**	**1,436,776**	**1,474,864**	**1,512,309**	**1,551,709**	**1,592,367**	**1,634,316**

Table 5-1 (Cont'd)
Township of Guelph/Eramosa
Operating Budget Forecast – Water (inflated $)

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital-Related										
Existing Debt (Principal) - Growth Related										
Existing Debt (Interest) - Growth Related										
New Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	43,128	43,128	43,128	43,128	43,128	43,128	43,128	4,005	-	-
Existing Debt (Interest) - Non-Growth Related										
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	13,419
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	27,246
Transfer to Capital										
Transfer to Lifecycle Reserve	831,647	839,614	875,858	923,690	976,474	1,022,540	1,055,009	1,112,271	1,137,129	1,121,226
Transfer to Capital Reserve										
Sub Total Capital Related	**874,775**	**882,742**	**918,986**	**966,818**	**1,019,602**	**1,065,668**	**1,098,137**	**1,116,276**	**1,137,129**	**1,161,891**
Total Expenditures	**2,145,493**	**2,214,643**	**2,284,683**	**2,367,614**	**2,456,378**	**2,540,531**	**2,610,446**	**2,667,986**	**2,729,496**	**2,796,207**
Revenues										
Base Charge	389,773	404,317	420,526	440,059	460,982	480,191	498,357	514,326	529,756	545,649
Penalty and Interest	14,280	14,566	14,857	15,154	15,457	15,766	16,082	16,403	16,731	17,066
Miscellaneous Revenue	15,300	15,606	15,918	16,236	16,561	16,892	17,230	17,575	17,926	18,285
Water Meters	2,000	10,000	10,000	10,000	10,000	10,000	5,000	-	-	-
Meter Maintenance Charges	365,081	382,426	397,495	413,041	429,336	446,126	459,596	471,227	485,442	499,925
Contributions from Development Charges Reserve Fund	-	-	-	-	-	-	-	-	-	-
Contributions from Lifecycle Reserve	-	-	-	-	-	-	-	-	-	-
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**786,434**	**826,914**	**858,796**	**894,490**	**932,337**	**968,976**	**996,265**	**1,019,532**	**1,049,856**	**1,080,925**
Water Billing Recovery - Total	**1,359,059**	**1,387,729**	**1,425,887**	**1,473,124**	**1,524,041**	**1,571,555**	**1,614,181**	**1,648,454**	**1,679,641**	**1,715,283**

5.3 Wastewater Operating Expenditures

The wastewater operating expenditures have been provided by staff. Generally, they have been adjusted over the forecast period by an annual inflationary factor of 2.0%, however, in certain instances, staff have provided variations in the costs based on a direct review of each item. Also included are contributions to the lifecycle reserve fund.

5.4 Wastewater Operating Revenues

The operating revenue for the wastewater program comes mainly from base charges from customers. A small amount of revenue is also generated from miscellaneous revenue sources, and sources and penalty and interest fees. Table 5-2 outlines the operating budget for the Rockwood wastewater system.

Table 5-2
Township of Guelph/Eramosa
Operating Budget Forecast – Wastewater (inflated $)

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Expenditures										
Operating Costs										
Communications	4,500	4,590	4,680	4,770	4,870	4,970	5,070	5,170	5,270	5,380
Conservation Initiatives	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
Fees - Engineering	14,000	14,280	14,570	14,860	15,160	15,460	15,770	16,090	16,410	16,740
Fees - Legal	510	520	531	541	552	563	574	586	598	609
Fleet	7,140	7,280	7,430	7,580	7,730	7,880	8,040	8,200	8,360	8,530
Grounds Maintenance	2,000	2,040	2,080	2,120	2,160	2,200	2,240	2,280	2,330	2,380
Heating	525	551	579	608	638	670	704	739	776	814
Hydro	48,300	50,715	53,251	55,913	58,709	61,644	64,727	67,963	71,361	74,929
Insurance	44,530	46,760	49,100	51,560	54,140	56,850	59,690	62,670	65,800	69,090
Licenses	510	520	531	541	552	563	574	586	598	609
Memberships and Dues	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195
Contracted Services	4,000	4,080	4,160	4,240	4,320	4,410	4,500	4,590	4,680	4,770
Property Taxes	20,050	20,650	21,270	21,910	22,570	23,250	23,950	24,670	25,410	26,170
Repairs & Maint - Building	6,000	6,120	6,240	6,360	6,490	6,620	6,750	6,890	7,030	7,170
Repairs & Maint - Equipment	33,000	33,660	34,330	35,020	35,720	36,430	37,160	37,900	38,660	39,430
Repairs & Maint - Water/WW Mains	35,000	35,700	36,410	37,140	37,880	38,640	39,410	40,200	41,000	41,820
Safety	2,000	2,040	2,080	2,120	2,160	2,200	2,240	2,280	2,330	2,380
Salaries and Wages	257,051	273,003	278,463	284,033	289,713	295,508	301,418	307,446	313,595	319,867
Salaries Benefits	87,397	92,821	94,678	96,571	98,503	100,473	102,482	104,532	106,622	108,755
Seminars and Training	5,000	5,100	5,200	5,300	5,410	5,520	5,630	5,740	5,850	5,970
Service Agreements	2,000	2,040	2,080	2,120	2,160	2,200	2,240	2,280	2,330	2,380
Supplies and Services	58,000	59,160	60,340	61,550	62,780	64,040	65,320	66,630	67,960	69,320
Uniforms	800	820	840	860	880	900	920	940	960	980
W/W Treatment City of Guelph	700,000	714,000	728,280	742,850	757,710	772,860	788,320	804,090	820,170	836,570
Overhead Costs	30,000	30,600	31,210	31,830	32,470	33,120	33,780	34,460	35,150	35,850
Transfers to Reserves (operating)										
Sub Total Operating	**1,364,333**	**1,409,111**	**1,440,433**	**1,472,541**	**1,505,463**	**1,539,201**	**1,573,783**	**1,609,251**	**1,645,616**	**1,682,928**

Figure 5-2 (Cont'd)
Township of Guelph/Eramosa
Operating Budget Forecast – Wastewater (inflated $)

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital-Related										
Existing Debt (Principal) - Growth Related	748,779	102,735	106,844	111,118	115,563	120,185	124,993	129,992	135,192	140,600
Existing Debt (Interest) - Growth Related	47,440	43,489	39,379	35,106	30,661	26,038	21,231	16,231	11,032	5,624
New Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	-	-	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Non-Growth Related		-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	10,078
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	20,463
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Lifecycle Reserve	374,765	369,728	386,317	417,051	452,147	480,602	501,230	512,953	519,448	494,593
Transfer to Capital Reserve										
Sub Total Capital Related	**1,170,984**	**515,951**	**532,540**	**563,274**	**598,371**	**626,826**	**647,454**	**659,176**	**665,672**	**671,358**
Total Expenditures	**2,535,318**	**1,925,063**	**1,972,974**	**2,035,815**	**2,103,834**	**2,166,027**	**2,221,237**	**2,268,428**	**2,311,288**	**2,354,286**
Revenues										
Base Charge	304,725	312,517	321,611	333,518	346,256	357,246	367,084	374,877	381,999	389,257
Penalty and Interest	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	6,095
Miscellaneous Revenue	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	1,828
Contributions from Development Charges Reserve Fund	796,219	146,224	146,224	146,224	146,224	146,224	146,224	146,224	146,224	146,224
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**1,107,574**	**465,503**	**474,733**	**486,777**	**499,656**	**510,790**	**520,774**	**528,716**	**535,991**	**543,404**
Wastewater Billing Recovery - Total	**1,427,744**	**1,459,560**	**1,498,241**	**1,549,038**	**1,604,178**	**1,655,237**	**1,700,463**	**1,739,712**	**1,775,297**	**1,810,882**

5.5 Gazer-Mooney Water & Wastewater Operating Budget

There are no operating expenditures or revenues identified in the area of Gazer-Mooney for the forecast period. As part of the operating budget, contributions to the lifecycle reserve have been included.

Table 5-3
Township of Guelph/Eramosa
Operating Budget Forecast – Gazer-Mooney Water & Wastewater (inflated $)

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Expenditures										
Operating Costs										
Sub Total Operating	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Capital-Related										
Existing Debt (Principal) - Non-Growth Related										
Existing Debt (Interest) - Non-Growth Related										
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Sub Total Capital Related	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Expenditures	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Revenues										
Other Revenue		-	-	-	-	-	-	-	-	-
Total Operating Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Water Billing Recovery - Operating	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Lifecycle Reserve Contribution ($)	26,369	26,896	27,434	27,983	28,543	29,114	29,696	30,290	30,896	31,513
Water Billing Recovery - Total	**26,369**	**26,896**	**27,434**	**27,983**	**28,543**	**29,114**	**29,696**	**30,290**	**30,896**	**31,513**

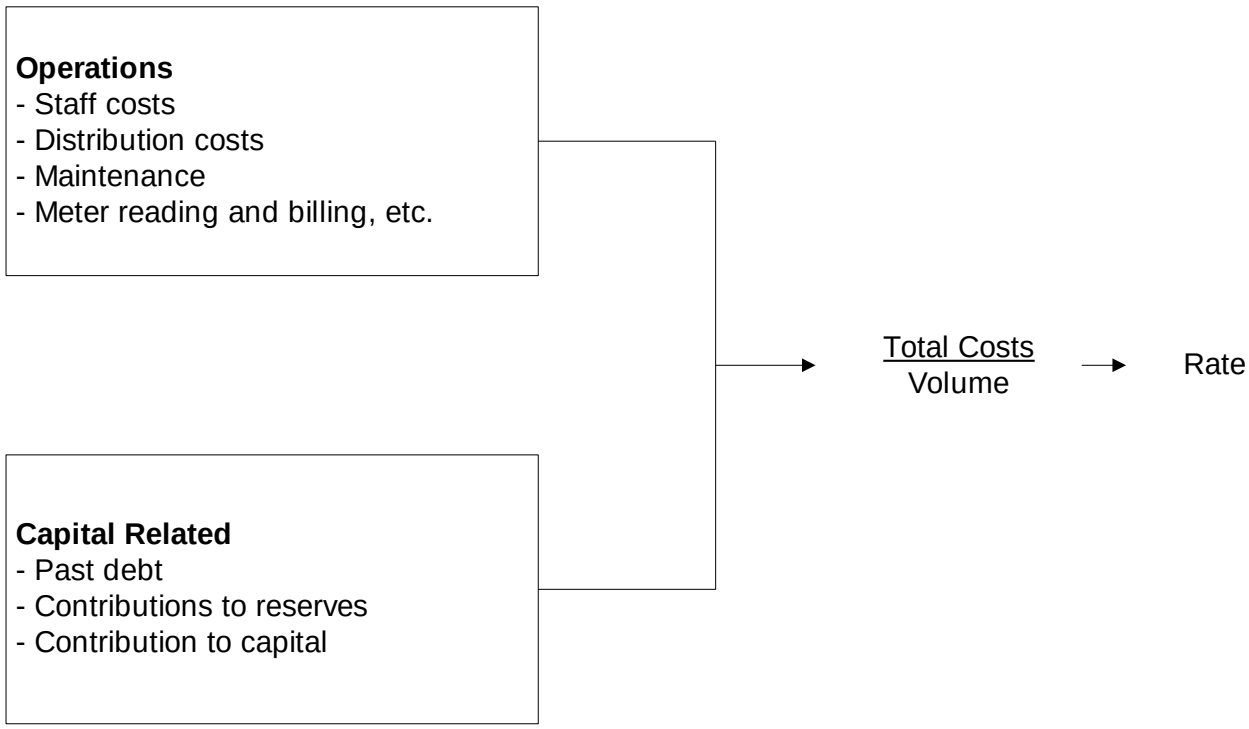
Chapter 6
Pricing Structures

6. Pricing Structures

6.1 Introduction

Rates, in their simplest form, can be defined as total costs to maintain the utility function divided by the total expected volume to be generated for the period. Total costs are usually a combination of operating costs (e.g. staff costs, distribution costs, maintenance, administration, etc.) and capital-related costs (e.g. past debt to finance capital projects, transfers to reserves to finance future expenditures, etc.). The schematic below provides a simplified illustration of the rate calculation for water.

"Annual Costs"



These operating and capital expenditures will vary over time. Examples of factors that will affect the expenditures over time are provided below.

Operations

- Inflation;

- Increased maintenance as system ages; and
- Changes to provincial legislation.

Capital Related

- New capital will be built as areas expand;
- Replacement capital needed as system ages; and
- Financing of capital costs are a function of policy regarding reserves and direct financing from rates (pay as you go), debt and user pay methods (development charges, *Municipal Act*).

6.2 Alternative Pricing Structures

Throughout Ontario, and as well, Canada, the use of pricing mechanisms varies between municipalities. The use of a particular form of pricing depends upon numerous factors, including Council preference, administrative structure, surplus/deficit system capacities, economic/demographic conditions, to name a few.

Municipalities within Ontario have two basic forms of collecting revenues for water purposes, those being through incorporation of the costs within the tax rate charged on property assessment and/or through the establishment of a specific water rate billed to the customer. Within the rate methods, there are five basic rate structures employed along with other variations:

- Flat Rate (non-metered customers);
- Constant Rate;
- Declining Block Rate;
- Increasing (or Inverted) Block Rate;
- Hump Back Block Rate; and
- Base Charges.

The definitions and general application of the various methods are as follows:

Property Assessment: This method incorporates the total costs of providing water into the general requisition or the assessment base of the municipality. This form of collection is a "wealth tax," as payment increases directly with the value of property owned and bears no necessary relationship to actual consumption. This form is easy to

administer as the costs to be recovered are incorporated in the calculation for all general services, normally collected through property taxes.

Flat Rate: This rate is a constant charge applicable to all customers served. The charge is calculated by dividing the total number of user households and other entities (e.g. businesses) into the costs to be recovered. This method does not recognize differences in actual consumption but provides for a uniform spreading of costs across all users. Some municipalities define users into different classes of similar consumption patterns, that is, a commercial user, residential user and industrial user, and charge a flat rate by class. Each user is then billed on a periodic basis. No meters are required to facilitate this method, but an accurate estimate of the number of users is required. This method ensures set revenue for the collection period but is not sensitive to consumption, hence may cause a shortfall or surplus of revenues collected.

Constant Rate: This rate is a volume-based rate, in which the consumer pays the same price per unit consumed, regardless of the volume. The price per unit is calculated by dividing the total cost of the service by the total volume used by total consumers. The bill to the consumer climbs uniformly as the consumption increases. This form of rate requires the use of meters to record the volume consumed by each user. This method closely aligns the revenue recovery with consumption. Revenue collected varies directly with the consumption volume.

Declining Block Rates: This rate structure charges a successively lower price for set volumes, as consumption increases through a series of "blocks." That is to say that within set volume ranges, or blocks, the charge per unit is set at one rate. Within the next volume range, the charge per unit decreases to a lower rate, and so on. Typically, the first, or first and second blocks cover residential and light commercial uses. Subsequent blocks normally are used for heavier commercial and industrial uses. This rate structure requires the use of meters to record the volume consumed by each type of user. This method requires the collection and analysis of consumption patterns by user classification to establish rates at a level which does not over or under collect revenue from rate payers.

Increasing or Inverted Block Rates: The increasing block rate works essentially the same way as the declining block rate, except that the price of water in successive blocks increases rather than declines. Under this method the consumer's bill rises faster with higher volumes used. This rate structure also requires the use of meters to

record the volume consumed by each user. This method requires, as with the declining block structure, the collection and analysis of consumption patterns by user classification to establish rates at a level which does not over or under collect from rate payers.

The Hump Back Rate: The hump back rate is a combination of an increasing block rate and the declining block rate. Under this method the consumer's bill rises with higher volumes used up to a certain level and then begins to fall for volumes in excess of levels set for the increasing block rate.

6.3 Assessment of Alternative Pricing Structures

The adoption by a municipality or utility of any one particular pricing structure is normally a function of a variety of administrative, social, demographic and financial factors. The number of factors, and the weighting each particular factor receives, can vary between municipalities. The following is a review of some of the more prevalent factors.

Cost Recovery

Cost recovery is a prime factor in establishing a particular pricing structure. Costs can be loosely defined into different categories: operations, maintenance, capital, financing and administration. These costs often vary between municipalities and even within a municipality, based on consumption patterns, infrastructure age, economic growth, etc.

The pricing alternatives defined earlier can all achieve the cost recovery goal, but some do so more precisely than others. Fixed pricing structures, such as Property Assessment and Flat Rate, are established on the value of property or on the number of units present in the municipality, but do not adjust in accordance with consumption. Thus, if actual consumption for the year is greater than projected, the municipality incurs a higher cost of production, but the revenue base remains static (since it was determined at the beginning of the year), thus potentially providing a funding shortfall. Conversely, if the consumption level declines below projections, fixed pricing structures will produce more revenue than actual costs incurred.

The other pricing methods (declining block, constant rate, increasing block) are consumption-based and generally will generate revenues in proportion to actual consumption.

Administration

Administration is defined herein as the staffing, equipment and supplies required to support the undertaking of a particular pricing strategy. This factor not only addresses the physical tangible requirements to support the collection of the revenues, but also the intangible requirements, such as policy development.

The easiest pricing structure to support is the Property Assessment structure. As municipalities undertake the process of calculating property tax bills and the collection process for their general services, the incorporation of the water costs into this calculation would have virtually no impact on the administrative process and structure.

The Flat Rate pricing structure is relatively easy to administer as well. It is normally calculated to collect a set amount, either on a monthly, quarterly, semi-annual or annual basis, and is billed directly to the customer. The impact on administration centres mostly on the accounts receivable or billing area of the municipality, but normally requires minor additional staff or operating costs to undertake.

The three remaining methods, those being Increasing Block Rate, Constant Rate and Declining Block Rate, have a more dramatic effect on administration. These methods are dependent upon actual consumption and hence involve a major structure in place to administer. First, meters must be installed in all existing units in the municipality, and units to be subsequently built must be required to include these meters. Second, meter readings must be undertaken periodically. Hence staff must be available for this purpose or a service contract must be negotiated. Third, the billings process must be expanded to accommodate this process. Billing must be done per a defined period, requiring staff to produce the bills. Lastly, either through increased staffing or by service contract, an annual maintenance program must be set up to ensure meters are working effectively in recording consumed volumes.

The benefit derived from the installation of meters is that information on consumption patterns becomes available. This information provides benefit to administration in calculating rates which will ensure revenue recovery. Additionally, when planning what services are to be constructed in future years, the municipality or utility has documented

consumption patterns distinctive to its own situation, which can be used to project sizing of growth-related works.

Equity

Equity is always a consideration in the establishment of pricing structures but its definition can vary depending on a municipality's circumstances and based on the subjective interpretation of those involved. For example: is the price charged to a particular class of rate payer consistent with those of a similar class in surrounding municipalities; through the pricing structure does one class of rate payer pay more than another class; should one pay based on ability to pay, or on the basis that a unit of water costs the same to supply no matter who consumes it; etc.? There are many interpretations. Equity therefore must be viewed broadly in light of many factors as part of achieving what is best for the municipality as a whole.

Conservation

In today's society, conservation of natural resources is increasingly being more highly valued. Controversy continuously focuses on the preservation of non-renewable resources and on the proper management of renewable resources. Conservation is also a concept which applies to a municipality facing physical limitations in the amount of water which can be supplied to an area. As well, financial constraints can encourage conservation in a municipality where the cost of providing each additional unit is increasing.

Pricing structures such as property assessment and flat rate do not, in themselves, encourage conservation. In fact, depending on the price which is charged, they may even encourage resource "squandering," either because consumers, without the price discipline, consume water at will, or the customer wants to get his money's worth and hence adopts more liberal consumption patterns. The fundamental reason for this is that the price paid for the service bears no direct relationship to the volume consumed and hence is viewed as a "tax," instead of being viewed as the price of a purchased commodity.

The Declining Block Rate provides a decreasing incentive towards conservation. By creating awareness of volumes consumed, the consumer can reduce his total costs by restricting consumption; however, the incentive lessens as more water is consumed, because the marginal cost per unit declines as the consumer enters the next block

pricing range. Similarly, those whose consumption level is at the top end of a block have less incentive to reduce consumption.

The Constant Rate structure presents the customer with a linear relationship between consumption and the cost thereof. As the consumer pays a fixed cost per unit, his bill will vary directly with the amount consumed. This method presents tangible incentive for consumers to conserve water. As metering provides direct feedback as to usage patterns and the consumer has direct control over the total amount paid for the commodity, the consumer is encouraged to use only those volumes that are reasonably required.

The Inverted Block method presents the most effective pricing method for encouraging conservation. Through this method, the price per unit consumed increases as total volumes consumed grow. The consumer becomes aware of consumption through metering with the charges increasing dramatically with usage. Hence, there normally is awareness that exercising control over usage can produce significant savings. This method not only encourages conservation methods, but may also penalize legitimate high-volume users if not properly structured.

Figure 6-1 provides a schematic representation of the various rate structures (note property tax as a basis for revenue recovery has not been presented for comparison, as the proportion of taxes paid varies in direct proportion to the market value of the property). The graphs on the left-hand side of the figure present the cost per unit for each additional amount of water consumed. The right-hand side of the figure presents the impact on the customer's bill as the volume of water increases. Following the schematic is a table summarizing each rate structure.

Figure 6-1

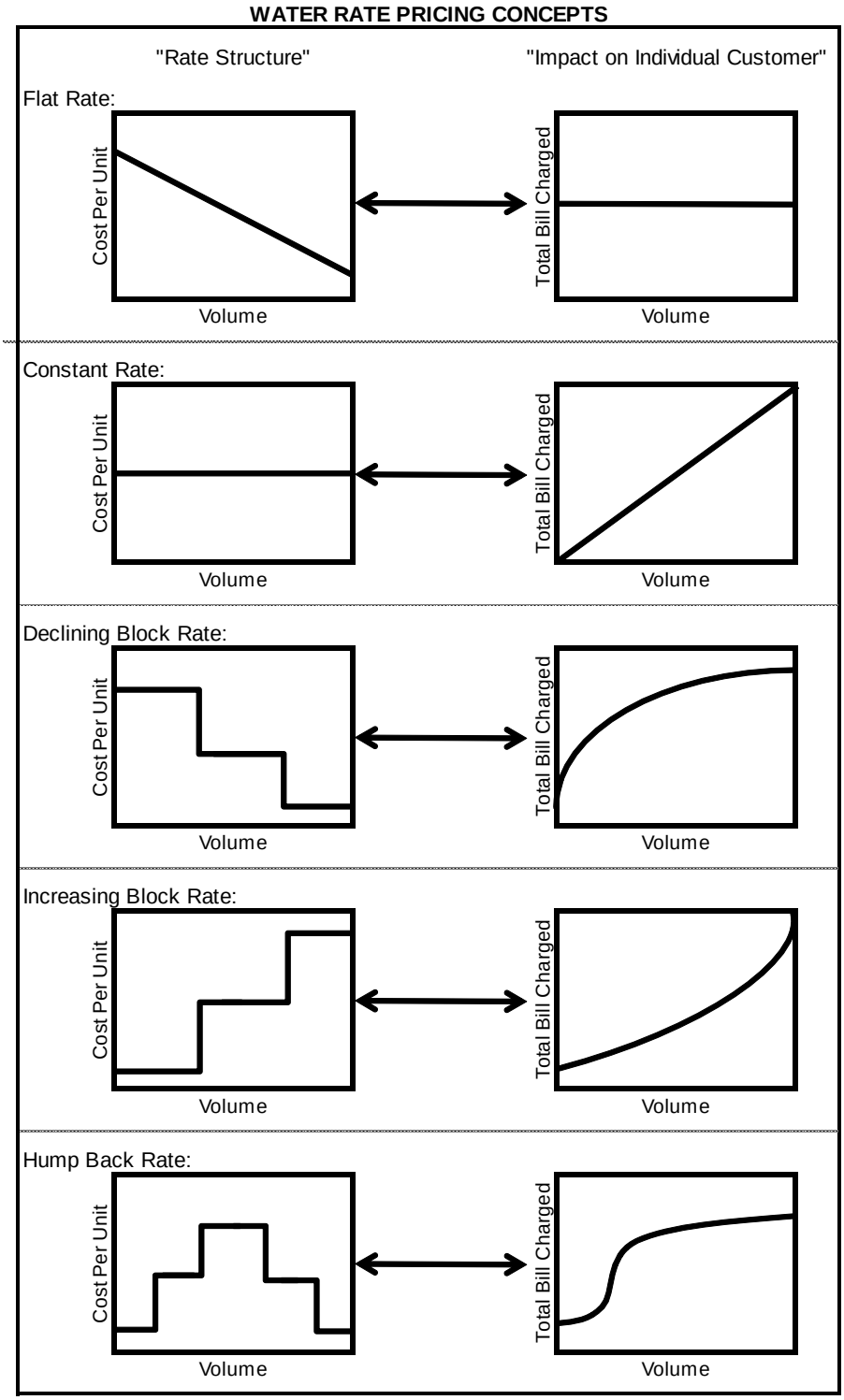

WATER RATE PRICING CONCEPTS
"Rate Structure"
"Impact on Individual Customer"
Flat Rate:
Cost Per Unit
Volume
Total Bill Charged
Volume
Constant Rate:
Cost Per Unit
Volume
Total Bill Charged
Volume
Declining Block Rate:
Cost Per Unit
Volume
Total Bill Charged
Volume
Increasing Block Rate:
Cost Per Unit
Volume
Total Bill Charged
Volume
Hump Back Rate:
Cost Per Unit
Volume
Total Bill Charged
Volume

Figure 6-2
Summary of Various Rate Structures and their Impact on Customer Bills as Volume Usage Increases

Rate Structure	Cost Per Unit As Volume Increases	Impact On Customer Bill As Volume Increases
Flat Rate	Cost per unit decreases as more volume consumed	Bill remains the same no matter how much volume is consumed
Constant Rate	Cost per unit remains the same	Bill increases in direct proportion to consumption
Declining Block	Cost per unit decreases as threshold targets are achieved	Bill increases at a slower rate as volumes increase
Increasing Block	Cost per unit increases as threshold targets are achieved	Bill increases at a faster rate as volumes increase
Hump Back Rate	Combination of an increasing block at the lower consumption volumes and then converts to a declining block for the high consumption	Bill increases at a faster rate at the lower consumption amounts and then slows as volumes increase

6.4 Rate Structures in Ontario

In a past survey of over 170 municipalities (approximately half of the municipalities who provide water and/or sewer), all forms of rate structures are in use by Ontario municipalities. The most common rate structure is the constant rate (for metered municipalities). Most municipalities (approximately 92%) who have volume rate structures also impose a base monthly charge.

Historically, the development of a base charge often reflected either the recovery of meter reading/billing/collection costs, plus administration or those costs plus certain fixed costs (such as capital contributions or reserve contributions). More recently, many municipalities have started to establish base charges based on ensuring a secure portion of the revenue stream which does not vary with volume consumption. Selection

of the quantum of the base charge is a matter of policy selected by individual municipalities.

6.5 Review of Meter Equivalent Ratios

The Township is currently considering transitioning from the current base rate structure to a tiered meter rate structure.

The Township has the following categories of water meters:

- 5/8 and 3/4 inch meters;
- 1 inch meters (Rockwood only);
- 1 ½ inch meters (Rockwood only); and
- 2 inch meters (Rockwood only).

Structuring the monthly base charges based on meter size aligns with the capacity demands the different meter sizes place on the Township's water system. According to the American Water Works Association (A.W.W.A.)[1], one of the advantages of administering charges based on meter size is the ease of administration and customer understanding. As the meter size/capacity demands on the system increase, the relative base charge increases. To achieve this relationship, the Township's larger meter sizes would be stated in relation to the standard meter size category of 5/8 and 3/4 inch meters. The meter equivalent ratios published by the A.W.W.A. suggest the following relationships for the categories of meter sizes in the Township:

Meter Size	Meter Size Equivalent Ratio
5/8" and 3/4" Meters	1.00
1" Meters	2.50
1 1/2" Meters	5.00
2" Meters	8.00

However, many Ontario municipalities opt to use ratios that are lower or even higher than the A.W.W.A recommended ratios based on various factors such as the nature of the customers or consumption patterns. The Township has opted to consider the use of

[1] American Water Works Association, *Principles of Water Rates, Fees, and Charges – Seventh Edition* (Denver: American Water Works Association, 2017), 338.

lower meter equivalent ratios relative to the A.W.W.A. standards as this will allow the Township to be more aligned with adjacent municipalities (e.g., Halton Region, Peel Region, Township of Centre Wellington, etc). As such, the meter equivalent ratios that will be utilized by the Township will be as follows:

Meter Size	Meter Size Equivalent Ratio
5/8" and 3/4" Meters	1.00
1" Meters	1.25
1 1/2" Meters	2.50
2" Meters	4.00

To implement the tiered rate structure, the Township will phase-in the tiered base rates over a four-year period, starting in 2027.

The graphs below from Figure 6-3 to 6-5 presents the meter equivalent ratios (relative to a 5/8" meter) utilized in municipalities throughout Ontario for the 1" meter, 1 ½" meter, and 2" meter.

Figure 6-3
Meter Equivalent Ratio (relative to a 5/8" meter) for a 1" Meter
Survey as of 2024

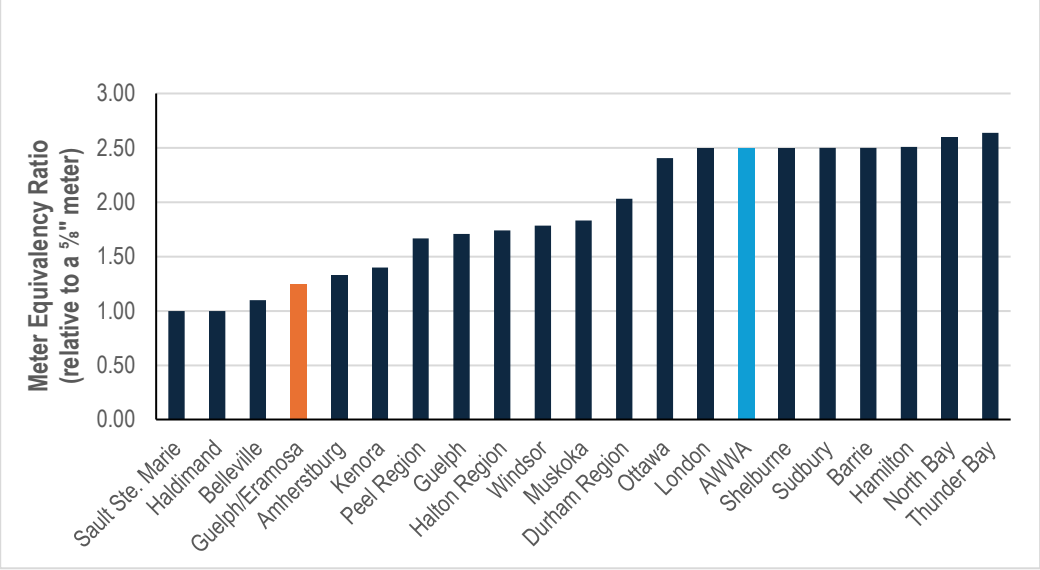


Figure 6-4
Meter Equivalent Ratio (relative to a 5/8” meter) for a 1 1/2” Meter
Survey as of 2024

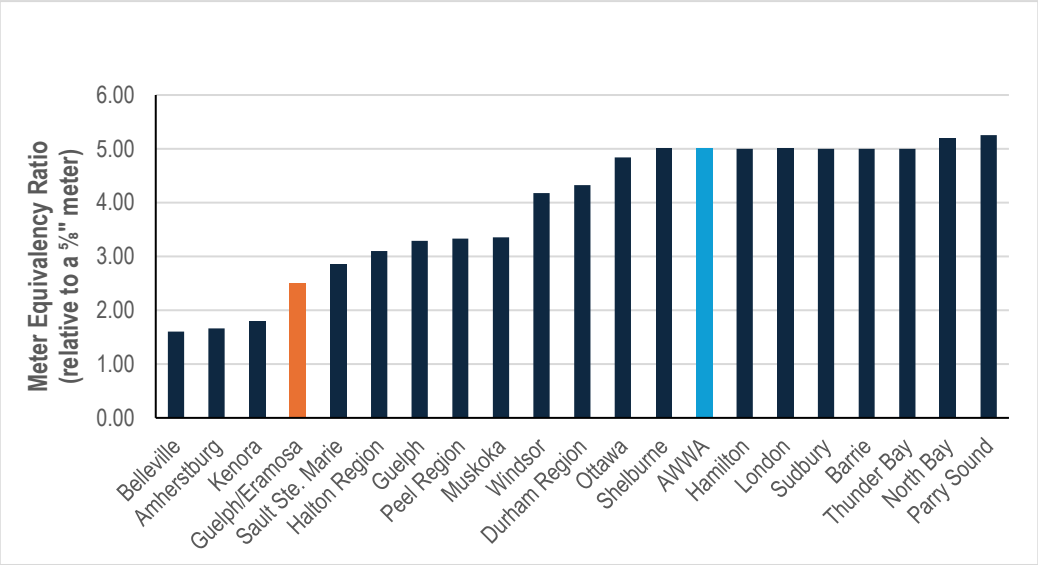
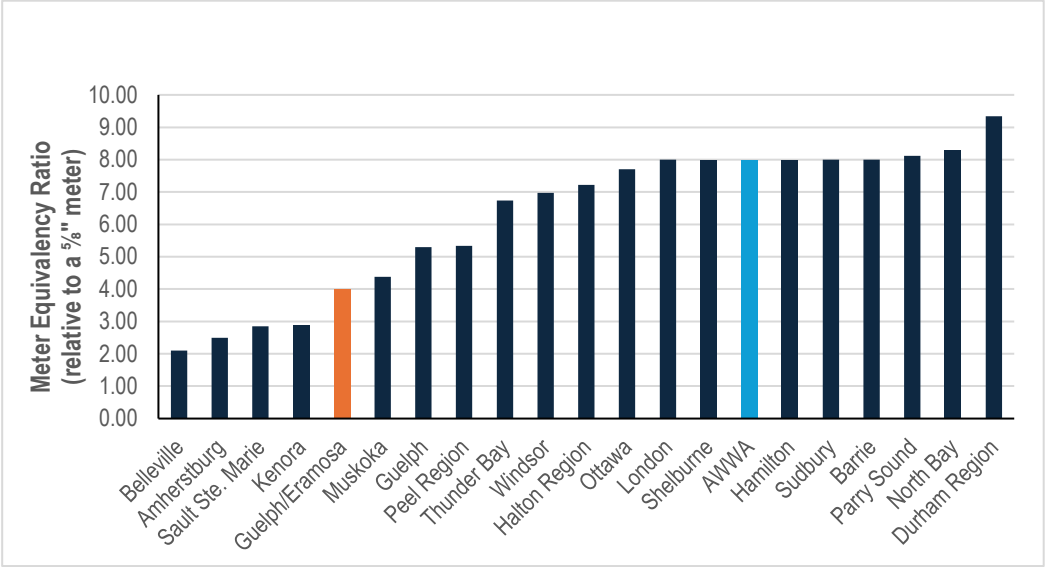


Figure 6-5
Meter Equivalent Ratio (relative to a 5/8” meter) for a 2” Meter
Survey as of 2024



6.6 Recommended Rate Structures

Based on the foregoing, it is recommended that the Township continue the same general rate structure in the future (volume rate and base monthly charge) for Rockwood and Hamilton Drive. However, it is recommended that the monthly base charges be categorized based on the size of the water meters. This is proposed to be phased-in over the period 2027 to 2030. The flat rate for the Gazer-Mooney area is also recommended to be continued.

As noted earlier, the needs for water are balanced throughout the forecast period whereas the needs for wastewater are arising in the middle of the forecast period due to the new expanded wetwell at the Valley Road sewage pumping station in 2031.

In order to meet the future lifecycle needs for water, it is recommended that the water base charges increase annually by $4.97 - $6.30 over the forecast period, which is equivalent to an annual increase of 3%. The forecast base charges are presented in Table 6-2.

As for wastewater, it is recommended that wastewater base charges increase annually by $2.72 - $3.17 over the forecast period. This is equivalent to an annual increase of 1.9%. The forecast base charges are presented in Table 6-3.

For water and wastewater customers within the Gazer-Mooney area, the annual flat rate is forecasted to increase between $7.28 and $8.70 (equivalent to an annual increase of 2%) over the forecast period to ensure the lifecycle reserve has an adequate balance to fund the replacement of infrastructure within the forecast period.

The above increases are recommended to ensure that the Township can fund the capital and operating costs without the need for debentures. The forecast base charges and corresponding revenue are provided in Tables 6-1, 6-2 and 6-3.

Table 6-1
Township of Guelph/Eramosa
Base Charge Forecast – Water

Water	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	2,352	2,352	2,352	2,352	2,352	2,352	2,352	2,352	2,352	2,352	2,352
New	-	-	6	21	51	86	114	133	138	138	138
Total Customers	**2,352**	**2,352**	**2,358**	**2,373**	**2,403**	**2,438**	**2,466**	**2,485**	**2,490**	**2,490**	**2,490**
Total Annual Revenue	**$389,773**	**$389,773**	**$404,317**	**$420,526**	**$440,059**	**$460,982**	**$480,191**	**$498,357**	**$514,326**	**$529,756**	**$545,649**

Rockwood 5/8" or 3/4" Meter Size	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105
New	0	0	3	16	46	81	109	128	133	133	133
Subtotal Customers	**2,105**	**2,105**	**2,108**	**2,121**	**2,151**	**2,186**	**2,214**	**2,233**	**2,238**	**2,238**	**2,238**
Monthly Base Charge	$13.81	$13.81	$14.22	$14.65	$15.09	$15.54	$16.01	$16.49	$16.98	$17.49	$18.02
Annual Base Charge	$165.72	$165.72	$170.69	$175.81	$181.09	$186.52	$192.11	$197.88	$203.81	$209.93	$216.23
Total Annual Revenue	**$348,841**	**$348,841**	**$359,818**	**$372,898**	**$389,518**	**$407,731**	**$425,342**	**$441,862**	**$456,137**	**$469,821**	**$483,916**

Rockwood 1" Meter Size	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	8	8	8	8	8	8	8	8	8	8	8
New	0	0	0	0	0	0	0	0	0	0	0
Subtotal Customers	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**
Monthly Base Charge	$13.81	$13.81	$15.65	$16.85	$18.11	$19.43	$20.01	$20.61	$21.23	$21.87	$22.52
Annual Base Charge	$165.72	$165.72	$187.76	$202.18	$217.30	$233.15	$240.14	$247.35	$254.77	$262.41	$270.28
Total Annual Revenue	**$1,326**	**$1,326**	**$1,502**	**$1,617**	**$1,738**	**$1,865**	**$1,921**	**$1,979**	**$2,038**	**$2,099**	**$2,162**

Rockwood 1 1/2" Meter Size	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	3	3	3	3	3	3	3	3	3	3	3
New	0	0	0	0	0	0	0	0	0	0	0
Subtotal Customers	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
Monthly Base Charge	$13.81	$13.81	$18.49	$26.37	$34.71	$38.86	$40.02	$41.22	$42.46	$43.74	$45.05
Annual Base Charge	$165.72	$165.72	$221.90	$316.46	$416.50	$466.30	$480.29	$494.70	$509.54	$524.82	$540.57
Total Annual Revenue	**$497**	**$497**	**$666**	**$949**	**$1,249**	**$1,399**	**$1,441**	**$1,484**	**$1,529**	**$1,574**	**$1,622**

Rockwood 2" Meter Size	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	9	9	9	9	9	9	9	9	9	9	9
New	0	0	0	0	0	0	0	0	0	0	0
Subtotal Customers	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**
Monthly Base Charge	$13.81	$13.81	$28.45	$39.56	$51.31	$62.17	$64.04	$65.96	$67.94	$69.98	$72.08
Annual Base Charge	$165.72	$165.72	$341.38	$474.69	$615.69	$746.08	$768.46	$791.51	$815.26	$839.72	$864.91
Total Annual Revenue	**$1,491**	**$1,491**	**$3,072**	**$4,272**	**$5,541**	**$6,715**	**$6,916**	**$7,124**	**$7,337**	**$7,557**	**$7,784**

Hamilton Drive Meter Size	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	227	227	227	227	227	227	227	227	227	227	227
New	0	0	3	5	5	5	5	5	5	5	5
Subtotal Customers	**227**	**227**	**230**	**232**	**232**	**232**	**232**	**232**	**232**	**232**	**232**
Monthly Base Charge	$13.81	$13.81	$14.22	$14.65	$15.09	$15.54	$16.01	$16.49	$16.98	$17.49	$18.02
Annual Base Charge	$165.72	$165.72	$170.69	$175.81	$181.09	$186.52	$192.11	$197.88	$203.81	$209.93	$216.23
Total Annual Revenue	**$37,618**	**$37,618**	**$39,259**	**$40,788**	**$42,012**	**$43,272**	**$44,571**	**$45,908**	**$47,285**	**$48,704**	**$50,165**

Table 6-2
Township of Guelph/Eramosa
Base Charge Forecast – Wastewater

Wastewater	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125
New	-	-	3	16	46	81	109	128	133	133	133
Subtotal Customers	**2,125**	**2,125**	**2,128**	**2,141**	**2,171**	**2,206**	**2,234**	**2,253**	**2,258**	**2,258**	**2,258**
Total Annual Revenue	**$304,725**	**$304,725**	**$312,517**	**$321,611**	**$333,518**	**$346,256**	**$357,246**	**$367,084**	**$374,877**	**$381,999**	**$389,257**

Rockwood 5/8" or 3/4" Meter Size	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105	2,105
New	0	0	3	16	46	81	109	128	133	133	133
Subtotal Customers	**2,105**	**2,105**	**2,108**	**2,121**	**2,151**	**2,186**	**2,214**	**2,233**	**2,238**	**2,238**	**2,238**
Monthly Base Charge	$11.95	$11.95	$12.18	$12.41	$12.64	$12.88	$13.13	$13.38	$13.63	$13.89	$14.16
Annual Base Charge	$143.40	$143.40	$146.12	$148.90	$151.73	$154.61	$157.55	$160.54	$163.59	$166.70	$169.87
Total Annual Revenue	**$301,857**	**$301,857**	**$308,031**	**$315,819**	**$326,371**	**$337,984**	**$348,817**	**$358,495**	**$366,124**	**$373,081**	**$380,169**

Rockwood 1" Meter Size	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	8	8	8	8	8	8	8	8	8	8	8
New	0	0	0	0	0	0	0	0	0	0	0
Subtotal Customers	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**
Monthly Base Charge	$11.95	$11.95	$13.39	$14.27	$15.17	$16.11	$16.41	$16.72	$17.04	$17.36	$17.69
Annual Base Charge	$143.40	$143.40	$160.74	$171.24	$182.08	$193.27	$196.94	$200.68	$204.49	$208.38	$212.34
Total Annual Revenue	**$1,147**	**$1,147**	**$1,286**	**$1,370**	**$1,457**	**$1,546**	**$1,576**	**$1,605**	**$1,636**	**$1,667**	**$1,699**

Rockwood 1 1/2" Meter Size	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	3	3	3	3	3	3	3	3	3	3	3
New	0	0	0	0	0	0	0	0	0	0	0
Subtotal Customers	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
Monthly Base Charge	$11.95	$11.95	$15.83	$22.34	$29.08	$32.21	$32.82	$33.45	$34.08	$34.73	$35.39
Annual Base Charge	$143.40	$143.40	$189.96	$268.02	$348.98	$386.53	$393.88	$401.36	$408.99	$416.76	$424.68
Total Annual Revenue	**$430**	**$430**	**$570**	**$804**	**$1,047**	**$1,160**	**$1,182**	**$1,204**	**$1,227**	**$1,250**	**$1,274**

Rockwood 2" Meter Size	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	9	9	9	9	9	9	9	9	9	9	9
New	0	0	0	0	0	0	0	0	0	0	0
Subtotal Customers	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**
Monthly Base Charge	$11.95	$11.95	$24.35	$33.50	$42.99	$51.54	$52.52	$53.51	$54.53	$55.57	$56.62
Annual Base Charge	$143.40	$143.40	$292.25	$402.03	$515.88	$618.45	$630.20	$642.18	$654.38	$666.81	$679.48
Total Annual Revenue	**$1,291**	**$1,291**	**$2,630**	**$3,618**	**$4,643**	**$5,566**	**$5,672**	**$5,780**	**$5,889**	**$6,001**	**$6,115**

Table 6-3
Township of Guelph/Eramosa
Flat Rate Forecast – Gazer-Mooney Water & Wastewater

Annual Bill	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Water & Wastewater											
Annual Flat Rate	$364.11	$371.39	$378.82	$386.40	$394.13	$402.01	$410.05	$418.25	$426.62	$435.15	$443.85
Total Annual Bill	**$364.11**	**$371.39**	**$378.82**	**$386.40**	**$394.13**	**$402.01**	**$410.05**	**$418.25**	**$426.62**	**$435.15**	**$443.85**

Chapter 7
Analysis of Water and Wastewater Rates and Policy Matters

7. Analysis of Water and Wastewater Rates and Policy Matters

7.1 Introduction

To summarize the analysis undertaken thus far, Chapter 2 reviewed capital-related issues and responds to the provincial directives to maintain and upgrade infrastructure to required levels. Chapter 4 provided a review of capital financing options to which water and wastewater reserve contributions will be the predominant basis for financing future capital replacement. Chapter 5 established the 10-year operating forecast of expenditures including an annual capital reserve contribution. The base charge revenues are to ensure that fixed costs are recovered regardless of the amount of volume used by customers. This chapter will provide for the calculation of the volume rates over the forecast period. These calculations will be based on the net operating expenditures (the variable costs) provided in Chapter 5, divided by the water consumption forecast and wastewater volumes provided in section 1.8.

7.2 Water Rates

Based on the discussion of rate structures provided in section 6.5 and the recommendation to adjust the base charge structure, the rates are calculated by taking the net recoverable amounts from Table 5-2 (the product of total expenditures less non-rate revenues and deduct the base charge amounts provided in section 6.5) and completes the calculation by dividing them by the volumes resulting in the forecasted rates. Historically, Rockwood and Hamilton Drive has separate water rates. Based on discussions with staff, this study has been prepared to move towards merging the rates so that each pay an equal rate. This will be achieved by the end of the forecast in 2035.

The volume rates for Rockwood are anticipated to increase annually between $0.07 to $0.09 over the forecast period. The volume rates for Hamilton drive are anticipated to increase by $0.11 in 2026 and $0.02 every year thereafter. The volume rates are presented in Table 7-1 for Rockwood and Table 7-2 for Hamilton Drive. Detailed calculations of the volume rates are provided in Appendix A. A summary of the recommended base charge and volume rates along with the total annual bill for an average residential user (170 cu.m) per year are as follows:

Table 7-1
Township of Guelph/Eramosa
Average Annual Residential Water Bill – Rockwood
(Based on an Annual usage of 170 cu.m)

Annual Bill for Residential Users (5/8" or 3/4" Meter Size)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Water											
Monthly Base Charge	$13.81	$13.81	$14.22	$14.65	$15.09	$15.54	$16.01	$16.49	$16.98	$17.49	$18.02
Volume Rate	$3.06	$3.15	$3.22	$3.30	$3.37	$3.44	$3.52	$3.60	$3.68	$3.77	$3.85
Annual Base Charge Bill	**$165.72**	**$165.72**	**$170.69**	**$175.81**	**$181.09**	**$186.52**	**$192.11**	**$197.88**	**$203.81**	**$209.93**	**$216.23**
Annual Volume Bill	**$520.20**	**$535.81**	**$547.85**	**$560.17**	**$572.77**	**$585.64**	**$598.81**	**$612.28**	**$626.04**	**$640.12**	**$654.51**
Total Water Bill	**$685.92**	**$701.53**	**$718.54**	**$735.98**	**$753.85**	**$772.16**	**$790.93**	**$810.15**	**$829.86**	**$850.05**	**$870.74**
% Increase - Water Base Rate		**0.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**
$ Increase - Water Base Rate		**$0.00**	**$0.41**	**$0.43**	**$0.44**	**$0.45**	**$0.47**	**$0.48**	**$0.49**	**$0.51**	**$0.52**
% Increase - Water Volume Rate		**3.0%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**
$ Increase - Water Volume Rate		**$0.09**	**$0.07**	**$0.07**	**$0.07**	**$0.08**	**$0.08**	**$0.08**	**$0.08**	**$0.08**	**$0.08**
% Increase - Total Water Bill		**2.3%**	**2.4%**	**2.4%**	**2.4%**	**2.4%**	**2.4%**	**2.4%**	**2.4%**	**2.4%**	**2.4%**
$ Increase - Total Water Bill		**$15.61**	**$17.02**	**$17.44**	**$17.87**	**$18.31**	**$18.76**	**$19.23**	**$19.70**	**$20.19**	**$20.69**

Table 7-2
Township of Guelph/Eramosa
Average Annual Residential Water Bill – Hamilton Drive
(Based on an Annual usage of 170 cu.m and 220 cu.m)

Annual Bill for Residential Users (5/8" or 3/4" Meter Size)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Water											
Monthly Base Charge	$13.81	$13.81	$14.22	$14.65	$15.09	$15.54	$16.01	$16.49	$16.98	$17.49	$18.02
Volume Rate	$3.59	$3.70	$3.71	$3.73	$3.75	$3.76	$3.78	$3.80	$3.82	$3.83	$3.85
Annual Base Charge Bill	**$165.72**	**$165.72**	**$170.69**	**$175.81**	**$181.09**	**$186.52**	**$192.11**	**$197.88**	**$203.81**	**$209.93**	**$216.23**
Annual Volume Bill	**$610.30**	**$628.61**	**$631.43**	**$634.27**	**$637.12**	**$639.99**	**$642.87**	**$645.75**	**$648.66**	**$651.57**	**$654.50**
Total Annual Bill	**$776.02**	**$794.33**	**$802.13**	**$810.09**	**$818.21**	**$826.51**	**$834.98**	**$843.63**	**$852.47**	**$861.50**	**$870.73**
% Increase - Water Base Rate		**0.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**
$ Increase - Water Base Rate		**$0.00**	**$0.41**	**$0.43**	**$0.44**	**$0.45**	**$0.47**	**$0.48**	**$0.49**	**$0.51**	**$0.52**
% Increase - Water Volume Rate		**3.0%**	**0.4%**	**0.4%**	**0.4%**	**0.4%**	**0.4%**	**0.4%**	**0.4%**	**0.4%**	**0.4%**
$ Increase - Water Volume Rate		**$0.11**	**$0.02**	**$0.02**	**$0.02**	**$0.02**	**$0.02**	**$0.02**	**$0.02**	**$0.02**	**$0.02**
% Increase - Total Annual Bill		**2.4%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**1.1%**	**1.1%**
$ Increase - Total Annual Bill		**$18.31**	**$7.80**	**$7.96**	**$8.13**	**$8.30**	**$8.47**	**$8.65**	**$8.84**	**$9.03**	**$9.23**

7.3 Wastewater Rates

Similar to water, the calculation of the wastewater rates takes the net recoverable amounts from Table 5-2 and completes the calculation by dividing them by the volumes, resulting in the forecast rates. Detailed calculations are provided in Appendix B.

The wastewater volume rates are anticipated to increase by $0.08 per year from 2026 to 2032 and $0.09 per year from 2033 to 2035.

The following summarizes the recommended rates for wastewater and provides the average annual bill for a residential customer who uses 170 cu.m per year:

Table 7-3
Township of Guelph/Eramosa
Average Annual Residential Wastewater Bill (Based on an Annual Usage of 170 cu.m)

Annual Bill for Residential Users (5/8" or 3/4" Meter Size)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Wastewater											
Monthly Base Charge	$11.95	$11.95	$12.18	$12.41	$12.64	$12.88	$13.13	$13.38	$13.63	$13.89	$14.16
Volume Rate	$3.75	$3.83	$3.91	$3.99	$4.07	$4.15	$4.23	$4.31	$4.40	$4.49	$4.58
Annual Base Charge Bill	**$143.40**	**$143.40**	**$146.12**	**$148.90**	**$151.73**	**$154.61**	**$157.55**	**$160.54**	**$163.59**	**$166.70**	**$169.87**
Annual Volume Bill	**$637.50**	**$651.10**	**$664.70**	**$678.30**	**$691.90**	**$705.50**	**$719.10**	**$732.70**	**$748.00**	**$763.30**	**$778.60**
Total Wastewater Bill	**$780.90**	**$794.50**	**$810.82**	**$827.20**	**$843.63**	**$860.11**	**$876.65**	**$893.24**	**$911.59**	**$930.00**	**$948.47**
% Increase - Wastewater Base Rate		**0.0%**	**1.9%**	**1.9%**	**1.9%**	**1.9%**	**1.9%**	**1.9%**	**1.9%**	**1.9%**	**1.9%**
$ Increase - Wastewater Base Rate		**$0.00**	**$0.23**	**$0.23**	**$0.24**	**$0.24**	**$0.24**	**$0.25**	**$0.25**	**$0.26**	**$0.26**
% Increase - Wastewater Volume Rate		**2.1%**	**2.1%**	**2.0%**	**2.0%**	**2.0%**	**1.9%**	**1.9%**	**2.1%**	**2.0%**	**2.0%**
$ Increase - Wastewater Volume Rate		**$0.08**	**$0.08**	**$0.08**	**$0.08**	**$0.08**	**$0.08**	**$0.08**	**$0.09**	**$0.09**	**$0.09**
% Increase - Total Wastewater Bill		**1.7%**	**2.1%**	**2.0%**	**2.0%**	**2.0%**	**1.9%**	**1.9%**	**2.1%**	**2.0%**	**2.0%**
$ Increase - Total Wastewater Bill		**$13.60**	**$16.32**	**$16.38**	**$16.43**	**$16.48**	**$16.54**	**$16.59**	**$18.35**	**$18.41**	**$18.47**

7.4 Forecast of Combined Water and Wastewater Impact for the Average Residential Customer

Based on the foregoing information, the combined impact of the water and wastewater base charge and volume rate charges for the Rockwood area results in an increase of $29.21 to the total annual bill for residential customers in 2026. Table 7-4 presents the forecast combined annual bill for customers in Rockwood.

Table 7-4
Township of Guelph/Eramosa
Average Annual Residential Water and Wastewater Bill – Rockwood (Based on an annual useage of 170 cu.m)

Annual Bill for Residential Users (5/8" or 3/4" Meter Size)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Water											
Monthly Base Charge	$13.81	$13.81	$14.22	$14.65	$15.09	$15.54	$16.01	$16.49	$16.98	$17.49	$18.02
Volume Rate	$3.06	$3.15	$3.22	$3.30	$3.37	$3.44	$3.52	$3.60	$3.68	$3.77	$3.85
Annual Base Charge Bill	**$165.72**	**$165.72**	**$170.69**	**$175.81**	**$181.09**	**$186.52**	**$192.11**	**$197.88**	**$203.81**	**$209.93**	**$216.23**
Annual Volume Bill	**$520.20**	**$535.81**	**$547.85**	**$560.17**	**$572.77**	**$585.64**	**$598.81**	**$612.28**	**$626.04**	**$640.12**	**$654.51**
Total Water Bill	**$685.92**	**$701.53**	**$718.54**	**$735.98**	**$753.85**	**$772.16**	**$790.93**	**$810.15**	**$829.86**	**$850.05**	**$870.74**
Wastewater											
Monthly Base Charge	$11.95	$11.95	$12.18	$12.41	$12.64	$12.88	$13.13	$13.38	$13.63	$13.89	$14.16
Volume Rate	$3.75	$3.83	$3.91	$3.99	$4.07	$4.15	$4.23	$4.31	$4.40	$4.49	$4.58
Annual Base Charge Bill	**$143.40**	**$143.40**	**$146.12**	**$148.90**	**$151.73**	**$154.61**	**$157.55**	**$160.54**	**$163.59**	**$166.70**	**$169.87**
Annual Volume Bill	**$637.50**	**$651.10**	**$664.70**	**$678.30**	**$691.90**	**$705.50**	**$719.10**	**$732.70**	**$748.00**	**$763.30**	**$778.60**
Total Wastewater Bill	**$780.90**	**$794.50**	**$810.82**	**$827.20**	**$843.63**	**$860.11**	**$876.65**	**$893.24**	**$911.59**	**$930.00**	**$948.47**
Total Combined Bill	**$1,466.82**	**$1,496.03**	**$1,529.37**	**$1,563.18**	**$1,597.48**	**$1,632.28**	**$1,667.58**	**$1,703.40**	**$1,741.45**	**$1,780.05**	**$1,819.21**
% Increase - Total Annual Bill		**2.0%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.1%**	**2.2%**	**2.2%**	**2.2%**
$ Increase - Total Annual Bill		**$29.21**	**$33.34**	**$33.82**	**$34.30**	**$34.79**	**$35.30**	**$35.82**	**$38.05**	**$38.60**	**$39.16**

Chapter 8
Recommendations

8. Recommendations

As presented within this report, capital and operating expenditures have been identified and forecast over a ten-year period for water and wastewater services.

Based upon the foregoing, the following recommendations are identified for consideration by Township Council:

1. That Council provide for the recovery of all water and wastewater costs through full cost recovery rates.

2. That Council consider the Capital Plan for water and wastewater as provided in Tables 2-1 and 2-2 and the associated Capital Financing Plan as set out in Tables 4-2, 4-3 and 4-4.

3. That Council consider the base charges provided in Table 6-1 for water, Table 6-2 for wastewater and Table 6-3 for the flat rate in Gazer-Mooney for water and wastewater and approve using a tiered base charge structure based on meter size.

4. That Council consider the volume rates for water and wastewater as provided in Tables 7-1, 7-2 and 7-3 respectively.

Appendices

Appendix A
Detailed Water Rate Calculations

Appendix A: Detailed Water Rate Calculations

Table A-1
Township of Guelph/Eramosa
Capital Budget Forecast (Uninflated $)

Description	Total	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Rockwood											
Capital Expenditures:											
Railway watermain crossing	-	-	-	-	-	-	-	-	-	-	-
Academy to George Ware Lane W/M connection	140,000	-	-	-	-	-	-	140,000	-	-	-
Dowler to Main St. W/M connection	100,000	-	-	-	-	100,000	-	-	-	-	-
Lifecycle:											
RF Radio Upgrade	-	-	-	-	-	-	-	-	-	-	-
Inkerman to Pasmore W/m replacement	-	-	-	-	-	-	-	-	-	-	-
Hydrant Maintenance & Painting	72,000	72,000	-	-	-	-	-	-	-	-	-
Clean Airlift Production Wells	-	-	-	-	-	-	-	-	-	-	-
Exterior Door Replacements	-	-	-	-	-	-	-	-	-	-	-
Water Meter Replacement Program	75,000	25,000	25,000	25,000	-	-	-	-	-	-	-
Catherine to Main St N W/M replacement	110,000	110,000	-	-	-	-	-	-	-	-	-
Jackson, part Mackenzie & Dennis	360,000	-	360,000	-	-	-	-	-	-	-	-
Mackenzie Brady Queen from Jackson to Christie	365,000	-	-	365,000	-	-	-	-	-	-	-
Christie Mackenzie Brady and Gzowski	470,000	-	-	-	470,000	-	-	-	-	-	-
SCADA upgrades	520,000	130,000	130,000	130,000	130,000	-	-	-	-	-	-
Standpipe Cleaning & Anode replacement	75,000	-	75,000	-	-	-	-	-	-	-	-
UV disinfection system	140,000	-	140,000	-	-	-	-	-	-	-	-
Add VFD Drive	50,000	-	50,000	-	-	-	-	-	-	-	-
Pumps	20,000	20,000	-	-	-	-	-	-	-	-	-
VFD Drive	15,000	15,000	-	-	-	-	-	-	-	-	-
FL-123 Replacement 2017 F-250	50,000	-	50,000	-	-	-	-	-	-	-	-
FL-127 Replacement 2018 Transit Van	35,000	-	-	35,000	-	-	-	-	-	-	-
FL-130 Replacement 2020 F-150	40,000	-	-	-	-	40,000	-	-	-	-	-
FL-134 Replacement 2022 Ford Ranger	30,000	-	-	-	-	-	-	30,000	-	-	-
FL-137 Replacement 2023 Chev Silverado	50,000	-	-	-	-	-	-	-	50,000	-	-
Vac-trailer Valve turner	60,000	-	-	-	-	60,000	-	-	-	-	-
Studies:											
Water Rate Study	22,000	-	-	-	-	22,000	-	-	-	-	-

Table A-1 (Cont'd)
Township of Guelph/Eramosa
Capital Budget Forecast (Uninflated $)

Description	Total	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Hamilton Drive											
Capital Expenditures:	-										
Huntington Pumphouse Back-up Power	-	-	-	-	-	-	-	-	-	-	-
Bedford to Woodfield W/M looping	195,000	-	-	-	-	-	-	195,000	-	-	-
Lifecycle:	-	-	-	-	-	-	-	-	-	-	-
Standpipe Cleaning & Anode replacement	-	-	-	-	-	-	-	-	-	-	-
Vac-trailer Valve turner	60,000	-	-	-	-	60,000	-	-	-	-	-
Replace asphalt shingle roof with Steel	15,000	-	15,000	-	-	-	-	-	-	-	-
Replace High lift pumps with VFD	15,000	-	15,000	-	-	-	-	-	-	-	-
Replace asphalt shingle roof with Steel	15,000	-	15,000	-	-	-	-	-	-	-	-
Township-Wide											
Future Watermain Projects	800,000									400,000	400,000
Total Capital Expenditures	**3,899,000**	**372,000**	**875,000**	**555,000**	**600,000**	**282,000**	**-**	**365,000**	**50,000**	**400,000**	**400,000**

Table A-2
Township of Guelph/Eramosa
Capital Budget Forecast (Inflated $)

Description	Budget 2025	Total	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Rockwood												
Capital Expenditures:		-										
Railway watermain crossing	765,000	-	-	-	-	-	-	-	-	-	-	-
Academy to George Ware Lane W/M connection	-	161,000	-	-	-	-	-	-	161,000	-	-	-
Dowler to Main St. W/M connection	-	110,000	-	-	-	-	110,000	-	-	-	-	-
Lifecycle:												
RF Radio Upgrade	52,000	-	-	-	-	-	-	-	-	-	-	-
Inkerman to Pasmore W/m replacement	315,000	-	-	-	-	-	-	-	-	-	-	-
Hydrant Maintenance & Painting	72,000	73,000	73,000	-	-	-	-	-	-	-	-	-
Clean Airlift Production Wells	100,000	-	-	-	-	-	-	-	-	-	-	-
Exterior Door Replacements	12,200	-	-	-	-	-	-	-	-	-	-	-
Water Meter Replacement Program	25,000	79,000	26,000	26,000	27,000	-	-	-	-	-	-	-
Catherine to Main St N W/M replacement	-	112,000	112,000	-	-	-	-	-	-	-	-	-
Jackson, part Mackenzie & Dennis	-	375,000	-	375,000	-	-	-	-	-	-	-	-
Mackenzie Brady Queen from Jackson to Christie	-	387,000	-	-	387,000	-	-	-	-	-	-	-
Christie Mackenzie Brady and Gzowski	-	509,000	-	-	-	509,000	-	-	-	-	-	-
SCADA upgrades	-	547,000	133,000	135,000	138,000	141,000	-	-	-	-	-	-
Standpipe Cleaning & Anode replacement	-	78,000	-	78,000	-	-	-	-	-	-	-	-
UV disinfection system	-	146,000	-	146,000	-	-	-	-	-	-	-	-
Add VFD Drive	-	52,000	-	52,000	-	-	-	-	-	-	-	-
Pumps	-	20,000	20,000	-	-	-	-	-	-	-	-	-
VFD Drive	-	15,000	15,000	-	-	-	-	-	-	-	-	-
FL-123 Replacement 2017 F-250	-	52,000	-	52,000	-	-	-	-	-	-	-	-
FL-127 Replacement 2018 Transit Van	-	37,000	-	-	37,000	-	-	-	-	-	-	-
FL-130 Replacement 2020 F-150	-	44,000	-	-	-	-	44,000	-	-	-	-	-
FL-134 Replacement 2022 Ford Ranger	-	34,000	-	-	-	-	-	-	34,000	-	-	-
FL-137 Replacement 2023 Chev Silverado	-	59,000	-	-	-	-	-	-	-	59,000	-	-
Vac-trailer Valve turner	-	66,000	-	-	-	-	66,000	-	-	-	-	-
Studies:												
Water Rate Study	19,000	24,000	-	-	-	-	24,000	-	-	-	-	-

Table A-2 (Cont'd)
Township of Guelph/Eramosa
Capital Budget Forecast (Inflated $)

Description	Budget	Total	Forecast									
	2025		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Hamilton Drive												
Capital Expenditures:												
Huntington Pumphouse Back-up Power	86,000	-	-	-	-	-	-	-	-	-	-	-
Bedford to Woodfield W/M looping	-	224,000	-	-	-	-	-	-	224,000	-	-	-
Lifecycle:												
Standpipe Cleaning & Anode replacement	65,000	-	-	-	-	-	-	-	-	-	-	-
Vac-trailer Valve turner	-	66,000	-	-	-	-	66,000	-	-	-	-	-
Replace asphalt shingle roof with Steel	-	16,000	-	16,000	-	-	-	-	-	-	-	-
Replace High lift pumps with VFD	-	16,000	-	16,000	-	-	-	-	-	-	-	-
Replace asphalt shingle roof with Steel	-	16,000	-	16,000	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
Township-Wide												
Future Watermain Projects	-	966,000	-	-	-	-	-	-	-	-	478,000	488,000
Total Capital Expenditures	**1,511,200**	**4,284,000**	**379,000**	**912,000**	**589,000**	**650,000**	**310,000**	**-**	**419,000**	**59,000**	**478,000**	**488,000**
Capital Financing												
Provincial/Federal Grants		-										
Development Charges Reserve Fund	649,000	24,000	-	-	-	-	24,000	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	966,000	-	-	-	-	-	-	-	-	478,000	488,000
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Water Lifecycle Reserve Fund	641,200	2,799,000	379,000	912,000	589,000	650,000	176,000	-	34,000	59,000	-	-
Water Reserve	221,000	495,000	-	-	-	-	110,000	-	385,000	-	-	-
Total Capital Financing	**1,511,200**	**4,284,000**	**379,000**	**912,000**	**589,000**	**650,000**	**310,000**	**-**	**419,000**	**59,000**	**478,000**	**488,000**

Table A-3
Township of Guelph/Eramosa
Schedule of Non-Growth Related Debenture Repayments

Debenture Year	Principal (Inflated)	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2026	-		-	-	-	-	-	-	-	-	-
2027	-			-	-	-	-	-	-	-	-
2028	-				-	-	-	-	-	-	-
2029	-					-	-	-	-	-	-
2030	-						-	-	-	-	-
2031	-							-	-	-	-
2032	-								-	-	-
2033	-									-	-
2034	478,000										40,665
2035	488,000										
Total Annual Debt Charges	**966,000**	-	-	-	-	-	-	-	-	-	40,665

Table A-4
Township of Guelph/Eramosa
Schedule of Growth Related Debenture Repayments

Debenture Year	Principal (Inflated)	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2026	-		-	-	-	-	-	-	-	-	-
2027	-			-	-	-	-	-	-	-	-
2028	-				-	-	-	-	-	-	-
2029	-					-	-	-	-	-	-
2030	-						-	-	-	-	-
2031	-							-	-	-	-
2032	-								-	-	-
2033	-									-	-
2034	-										-
2035	-										
Total Annual Debt Charges	**-**	-	-	-	-	-	-	-	-	-	-

Table A-5
Township of Guelph/Eramosa
Water Township-Wide Capital Reserve Continuity (Inflated $)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	1,145,187	1,168,091	1,191,452	1,215,282	1,239,587	1,152,179	1,175,222	806,027	822,147	838,590
Transfer from Operating	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	110,000	-	385,000	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**1,145,187**	**1,168,091**	**1,191,452**	**1,215,282**	**1,129,587**	**1,152,179**	**790,222**	**806,027**	**822,147**	**838,590**
Interest	22,904	23,362	23,829	24,306	22,592	23,044	15,804	16,121	16,443	16,772

Table A-6
Township of Guelph/Eramosa
Water Township-Wide Operating Reserve Fund Continuity (Inflated $)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	203,165	207,228	211,373	215,600	219,912	224,311	228,797	233,373	238,040	242,801
Transfer from Operating	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**203,165**	**207,228**	**211,373**	**215,600**	**219,912**	**224,311**	**228,797**	**233,373**	**238,040**	**242,801**
Interest	4,063	4,145	4,227	4,312	4,398	4,486	4,576	4,667	4,761	4,856

Table A-7
Township of Guelph/Eramosa
Water Rockwood Development Charges Reserve Fund Continuity (Inflated $)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	(1,188,831)	(1,141,161)	(1,011,253)	(818,251)	(694,796)	(632,320)	(585,444)	(597,153)	(609,096)	(621,278)
Development Charge Proceeds	70,046	149,736	209,047	137,079	98,874	58,355	-	-	-	-
Transfer to Capital	-	-	-	-	24,000	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**(1,118,785)**	**(991,425)**	**(802,207)**	**(681,172)**	**(619,922)**	**(573,965)**	**(585,444)**	**(597,153)**	**(609,096)**	**(621,278)**
Interest	(22,376)	(19,828)	(16,044)	(13,623)	(12,398)	(11,479)	(11,709)	(11,943)	(12,182)	(12,426)
Required from Development Charges	-	-	-	-	24,000	-	-	-	-	-

Table A-8
Township of Guelph/Eramosa
Water Lifecycle Reserve Fund Continuity (Inflated $)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	732,514	1,208,864	1,159,208	1,474,987	1,783,651	2,635,808	3,731,514	4,847,574	6,018,862	7,299,111
Transfer from Operating	831,647	839,614	875,858	923,690	976,474	1,022,540	1,055,009	1,112,271	1,137,129	1,121,226
Transfer to Capital	379,000	912,000	589,000	650,000	176,000	-	34,000	59,000	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**1,185,161**	**1,136,478**	**1,446,066**	**1,748,678**	**2,584,125**	**3,658,348**	**4,752,524**	**5,900,845**	**7,155,991**	**8,420,337**
Interest	23,703	22,730	28,921	34,974	51,683	73,167	95,050	118,017	143,120	168,407

Table A-9
Township of Guelph/Eramosa
Operating Budget Forecast (Inflated $)

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Expenditures										
Operating Costs										
Advertising	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500
Communications	13,000	13,100	13,200	13,400	13,600	13,800	14,000	14,200	14,400	14,600
Conservation Initiatives	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
Fees - Audit	5,400	5,560	5,730	5,900	6,080	6,260	6,450	6,640	6,840	7,050
Fees - Engineering	46,000	46,920	47,860	48,820	49,800	50,800	51,820	52,860	53,920	55,000
Fees - Legal	510	520	531	541	552	563	574	586	598	609
Fleet	16,480	16,970	17,480	18,000	18,540	19,100	19,670	20,260	20,870	21,500
Grounds Maintenance	2,000	2,040	2,080	2,120	2,160	2,200	2,240	2,280	2,330	2,380
Heating	1,575	1,654	1,736	1,823	1,914	2,010	2,111	2,216	2,327	2,443
Hydro	78,750	82,688	86,822	91,163	95,721	100,507	105,533	110,809	116,350	122,167
Insurance	70,510	74,040	77,740	81,630	85,710	90,000	94,500	99,230	104,190	109,400
Licenses	1,500	1,530	1,560	1,590	1,620	2,650	1,700	1,730	1,760	1,800
Locates	510	520	531	541	552	563	574	586	598	609
Memberships and Dues	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	1,828
Meter Repairs	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
Contracted Services	64,000	65,280	66,590	67,920	69,280	70,670	72,080	73,520	74,990	76,490
Postage & Shipping	12,500	12,750	13,010	13,270	13,540	13,810	14,090	14,370	14,660	14,950
Property Taxes	15,754	16,227	16,714	17,215	17,731	18,263	18,811	19,375	19,956	20,555
Repairs & Maint - Buildings	10,000	10,200	10,400	10,610	10,820	11,040	11,260	11,490	11,720	11,950
Repairs & Maint - Equipment	36,000	36,720	37,450	38,200	38,960	39,740	40,530	41,340	42,170	43,010
Repairs & Maint - Water Mains	33,558	34,229	34,914	35,612	36,324	37,051	37,792	38,548	39,319	40,105
Safety	3,060	3,121	3,184	3,247	3,312	3,378	3,446	3,515	3,585	3,657
Salaries and Wages	514,102	546,007	556,927	568,065	579,427	591,015	602,835	614,892	627,190	639,734
Salaries Benefits	174,795	185,642	189,355	193,142	197,005	200,945	204,964	209,063	213,245	217,509
Seminars & Training	13,000	13,260	13,530	13,800	14,080	14,360	14,650	14,940	15,240	15,540
Service Agreements	12,200	12,440	12,690	12,940	13,200	13,460	13,730	14,000	14,280	14,570
Supplies and Services	68,145	71,552	75,130	78,886	82,831	86,972	91,321	95,887	100,681	105,715
Telephone	2,500	2,500	2,500	2,700	2,700	2,700	2,900	2,900	2,900	2,900
Uniforms	3,200	3,260	3,330	3,400	3,470	3,540	3,610	3,680	3,750	3,830
Water Meter Stock	25,500	26,010	26,530	27,061	27,602	28,154	28,717	29,291	29,877	30,475
Overhead Costs	41,000	41,820	42,660	43,510	44,380	45,270	46,180	47,100	48,040	49,000
Sub Total Operating	**1,270,718**	**1,331,901**	**1,365,697**	**1,400,796**	**1,436,776**	**1,474,864**	**1,512,309**	**1,551,709**	**1,592,367**	**1,634,316**

Table A-9 (Cont'd)
Township of Guelph/Eramosa
Operating Budget Forecast (Inflated $)

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital-Related										
Existing Debt (Principal) - Growth Related										
Existing Debt (Interest) - Growth Related										
New Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	43,128	43,128	43,128	43,128	43,128	43,128	43,128	4,005	-	-
Existing Debt (Interest) - Non-Growth Related										
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	13,419
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	27,246
Transfer to Capital										
Transfer to Lifecycle Reserve	831,647	839,614	875,858	923,690	976,474	1,022,540	1,055,009	1,112,271	1,137,129	1,121,226
Transfer to Capital Reserve										
Sub Total Capital Related	**874,775**	**882,742**	**918,986**	**966,818**	**1,019,602**	**1,065,668**	**1,098,137**	**1,116,276**	**1,137,129**	**1,161,891**
Total Expenditures	**2,145,493**	**2,214,643**	**2,284,683**	**2,367,614**	**2,456,378**	**2,540,531**	**2,610,446**	**2,667,986**	**2,729,496**	**2,796,207**
Revenues										
Base Charge	389,773	404,317	420,526	440,059	460,982	480,191	498,357	514,326	529,756	545,649
Penalty and Interest	14,280	14,566	14,857	15,154	15,457	15,766	16,082	16,403	16,731	17,066
Miscellaneous Revenue	15,300	15,606	15,918	16,236	16,561	16,892	17,230	17,575	17,926	18,285
Water Meters	2,000	10,000	10,000	10,000	10,000	10,000	5,000	-	-	-
Meter Maintenance Charges	365,081	382,426	397,495	413,041	429,336	446,126	459,596	471,227	485,442	499,925
Contributions from Development Charges Reserve Fund	-	-	-	-	-	-	-	-	-	-
Contributions from Lifecycle Reserve	-	-	-	-	-	-	-	-	-	-
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**786,434**	**826,914**	**858,796**	**894,490**	**932,337**	**968,976**	**996,265**	**1,019,532**	**1,049,856**	**1,080,925**
Water Billing Recovery - Total	**1,359,059**	**1,387,729**	**1,425,887**	**1,473,124**	**1,524,041**	**1,571,555**	**1,614,181**	**1,648,454**	**1,679,641**	**1,715,283**

Table A-10
Township of Guelph/Eramosa
Water Rate Forecast (Inflated $)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Total Water Billing Recovery	**1,357,181**	**1,387,955**	**1,424,386**	**1,470,229**	**1,520,404**	**1,567,960**	**1,611,437**	**1,647,373**	**1,680,971**	**1,715,309**
Rockwood Metered Volume (m^3)	372,779	373,289	375,499	380,599	386,549	391,309	394,539	395,389	395,389	395,389
Hamilton Drive Metered Volume (m^3)	49,289	49,799	50,139	50,139	50,139	50,139	50,139	50,139	50,139	50,139
Total Metered Volume (m3)	**422,068**	**423,088**	**425,638**	**430,738**	**436,688**	**441,448**	**444,678**	**445,528**	**445,528**	**445,528**
Rockwood Volume Rate	**3.15**	**3.22**	**3.30**	**3.37**	**3.44**	**3.52**	**3.60**	**3.68**	**3.77**	**3.85**
Hamilton Drive Volume Rate	**3.70**	**3.71**	**3.73**	**3.75**	**3.76**	**3.78**	**3.80**	**3.82**	**3.83**	**3.85**
Annual Dollar Change - Rockwood	**0.09**	**0.07**	**0.07**	**0.07**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**
Annual Dollar Change - Hamilton Drive	**0.11**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**

Appendix B
Detailed Wastewater Rate Calculations

Appendix B: Detailed Wastewater Rate Calculations

Table B-1
Township of Guelph/Eramosa
Capital Budget Forecast (Uninflated $)

Description	Total	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Expenditures:											
New Expanded Wetwell	900,000	-	-	-	-	-	900,000	-	-	-	
Lifecycle:											
RF Radio Upgrade	-	-	-	-	-	-	-	-	-	-	
Exterior Door Replacements	-	-	-	-	-	-	-	-	-	-	
Water Meter Replacement Program	75,000	25,000	25,000	25,000	-	-	-	-	-	-	
Forcemain to Guelph	-	-	-	-	-	-	-	-	-	-	
New Sewage Pumps	-	-	-	-	-	-	-	-	-	-	
Jackson, part Mackenzie & Dennis	100,000	-	100,000	-	-	-	-	-	-	-	
Mackenzie Brady Queen from Jackson to Christie	100,000	-	-	100,000	-	-	-	-	-	-	
Christie Mackenzie Brady and Gzowski	100,000	-	-	-	100,000	-	-	-	-	-	
Fountain & Lou's	60,000	-	60,000	-	-	-	-	-	-	-	
SCADA	280,000	140,000	140,000	-	-	-	-	-	-	-	
Replace piping	80,000	-	-	-	-	80,000	-	-	-	-	
Remove Manholes	600,000	-	100,000	100,000	100,000	100,000	100,000	100,000	-	-	
FL-123 Replacement 2017 F-250	50,000	-	50,000	-	-	-	-	-	-	-	
FL-127 Replacement 2018 Transit Van	35,000	-	-	35,000	-	-	-	-	-	-	
FL-130 Replacement 2020 F-150	40,000	-	-	-	-	40,000	-	-	-	-	
FL-134 Replacement 2022 Ford Ranger	30,000	-	-	-	-	-	-	30,000	-	-	
FL-137 Replacement 2023 Chev Silverado	50,000	-	-	-	-	-	-	-	50,000	-	
Vac-trailer Valve turner	60,000	-	-	-	-	60,000	-	-	-	-	
Studies:	-										
Water Rate Study	18,000	-	-	-	-	18,000	-	-	-	-	
Growth Related:	-										
Sanitary Inflow Investigation (Smoke testing)	45,000	-	45,000	-	-	-	-	-	-	-	
Miscellaneous:											
Future Wastewater Projects	600,000									300,000	300,000
	-										
Total Capital Expenditures	**3,223,000**	**165,000**	**520,000**	**260,000**	**200,000**	**298,000**	**1,000,000**	**130,000**	**50,000**	**300,000**	**300,000**

Table B-2
Township of Guelph/Eramosa
Capital Budget Forecast (Inflated $)

Description	Total	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Expenditures:											
New Expanded Wetwell	1,014,000	-	-	-	-	-	1,014,000	-	-	-	-
Lifecycle:											
RF Radio Upgrade	-	-	-	-	-	-	-	-	-	-	-
Exterior Door Replacements	-	-	-	-	-	-	-	-	-	-	-
Water Meter Replacement Program	79,000	26,000	26,000	27,000	-	-	-	-	-	-	-
Forcemain to Guelph	-	-	-	-	-	-	-	-	-	-	-
New Sewage Pumps	-	-	-	-	-	-	-	-	-	-	-
Jackson, part Mackenzie & Dennis	104,000	-	104,000	-	-	-	-	-	-	-	-
Mackenzie Brady Queen from Jackson to Christie	106,000	-	-	106,000	-	-	-	-	-	-	-
Christie Mackenzie Brady and Gzowski	108,000	-	-	-	108,000	-	-	-	-	-	-
Fountain & Lou's	62,000	-	62,000	-	-	-	-	-	-	-	-
SCADA	289,000	143,000	146,000	-	-	-	-	-	-	-	-
Replace piping	88,000	-	-	-	-	88,000	-	-	-	-	-
Remove Manholes	656,000	-	104,000	106,000	108,000	110,000	113,000	115,000	-	-	-
FL-123 Replacement 2017 F-250	52,000	-	52,000	-	-	-	-	-	-	-	-
FL-127 Replacement 2018 Transit Van	37,000	-	-	37,000	-	-	-	-	-	-	-
FL-130 Replacement 2020 F-150	44,000	-	-	-	-	44,000	-	-	-	-	-
FL-134 Replacement 2022 Ford Ranger	34,000	-	-	-	-	-	-	34,000	-	-	-
FL-137 Replacement 2023 Chev Silverado	59,000	-	-	-	-	-	-	-	59,000	-	-
Vac-trailer Valve turner	66,000	-	-	-	-	66,000	-	-	-	-	-
Studies:	-	-	-	-	-	-	-	-	-	-	-
Water Rate Study	20,000	-	-	-	-	20,000	-	-	-	-	-
Growth Related:	-	-	-	-	-	-	-	-	-	-	-
Sanitary Inflow Investigation (Smoke testing)	47,000	-	47,000	-	-	-	-	-	-	-	-
Miscellaneous:											
Future Wastewater Projects	725,000	-	-	-	-	-	-	-	-	359,000	366,000
Total Capital Expenditures	**3,590,000**	**169,000**	**541,000**	**276,000**	**216,000**	**328,000**	**1,127,000**	**149,000**	**59,000**	**359,000**	**366,000**
Capital Financing											
Provincial/Federal Grants	-										
Development Charges Reserve Fund	67,000	-	47,000	-	-	20,000	-	-	-	-	-
Non-Growth Related Debenture Requirements	725,000	-	-	-	-	-	-	-	-	359,000	366,000
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-
Wastewater Lifecycle Reserve Fund	1,784,000	169,000	494,000	276,000	216,000	308,000	113,000	149,000	59,000	-	-
Wastewater Reserve	1,014,000	-	-	-	-	-	1,014,000	-	-	-	-
Total Capital Financing	**3,590,000**	**169,000**	**541,000**	**276,000**	**216,000**	**328,000**	**1,127,000**	**149,000**	**59,000**	**359,000**	**366,000**

Table B-3
Township of Guelph/Eramosa
Schedule of Non-Growth Related Debenture Repayments (Inflated $)

Debenture Year	Principal (Inflated)	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2026	-		-	-	-	-	-	-	-	-	-
2027	-			-	-	-	-	-	-	-	-
2028	-				-	-	-	-	-	-	-
2029	-					-	-	-	-	-	-
2030	-						-	-	-	-	-
2031	-							-	-	-	-
2032	-								-	-	-
2033	-									-	-
2034	359,000										30,541
2035	366,000										
Total Annual Debt Charges	**725,000**	-	-	-	-	-	-	-	-	-	30,541

Table B-4
Township of Guelph/Eramosa
Schedule of Growth-Related Debenture Repayments (Inflated $)

Debenture Year	Principal (Inflated)	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2026	-		-	-	-	-	-	-	-	-	-
2027	-			-	-	-	-	-	-	-	-
2028	-				-	-	-	-	-	-	-
2029	-					-	-	-	-	-	-
2030	-						-	-	-	-	-
2031	-							-	-	-	-
2032	-								-	-	-
2033	-									-	-
2034	-										-
2035	-										
Total Annual Debt Charges	**-**	-	-	-	-	-	-	-	-	-	-

Table B-5
Township of Guelph/Eramosa
Wastewater Rockwood Capital Reserve Continuity (Inflated $)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	1,788,403	1,824,171	1,860,654	1,897,867	1,935,825	1,974,541	979,752	999,347	1,019,334	1,039,721
Transfer from Operating	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	1,014,000	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**1,788,403**	**1,824,171**	**1,860,654**	**1,897,867**	**1,935,825**	**960,541**	**979,752**	**999,347**	**1,019,334**	**1,039,721**
Interest	35,768	36,483	37,213	37,957	38,716	19,211	19,595	19,987	20,387	20,794

Table B-6
Township of Guelph/Eramosa
Wastewater Rockwood Operating Reserve Fund Continuity (Inflated $)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	78,979	80,558	82,170	83,813	85,489	87,199	88,943	90,722	92,536	94,387
Transfer from Operating	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**78,979**	**80,558**	**82,170**	**83,813**	**85,489**	**87,199**	**88,943**	**90,722**	**92,536**	**94,387**
Interest	1,580	1,611	1,643	1,676	1,710	1,744	1,779	1,814	1,851	1,888

Table B-7
Township of Guelph/Eramosa
Wastewater Rockwood Development Charges Reserve Fund Continuity (Inflated $)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	692,024	15,357	78,584	294,034	388,838	398,808	358,975	217,007	72,199	(75,505)
Development Charge Proceeds	119,251	254,910	355,908	233,404	168,374	99,352	-	-	-	-
Transfer to Capital	-	47,000	-	-	20,000	-	-	-	-	-
Transfer to Operating	796,219	146,224	146,224	146,224	146,224	146,224	146,224	146,224	146,224	146,224
Closing Balance	**15,056**	**77,043**	**288,268**	**381,214**	**390,989**	**351,937**	**212,752**	**70,783**	**(74,025)**	**(221,729)**
Interest	301	1,541	5,765	7,624	7,820	7,039	4,255	1,416	(1,480)	(4,435)
Required from Development Charges	-	47,000	-	-	20,000	-	-	-	-	-

Table B-8
Township of Guelph/Eramosa
Wastewater Rockwood Lifecycle Reserve Fund Continuity (Inflated $)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	1,334,131	1,570,694	1,475,350	1,617,380	1,854,800	2,038,926	2,454,659	2,863,027	3,383,319	3,980,822
Transfer from Operating	374,765	369,728	386,317	417,051	452,147	480,602	501,230	512,953	519,448	494,593
Transfer to Capital	169,000	494,000	276,000	216,000	308,000	113,000	149,000	59,000	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**1,539,896**	**1,446,422**	**1,585,667**	**1,818,431**	**1,998,947**	**2,406,528**	**2,806,889**	**3,316,979**	**3,902,767**	**4,475,415**
Interest	30,798	28,928	31,713	36,369	39,979	48,131	56,138	66,340	78,055	89,508

Table B-9
Township of Guelph/Eramosa
Wastewater Operating Budget Forecast (Inflated $)

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Expenditures										
Operating Costs										
Communications	4,500	4,590	4,680	4,770	4,870	4,970	5,070	5,170	5,270	5,380
Conservation Initiatives	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
Fees - Engineering	14,000	14,280	14,570	14,860	15,160	15,460	15,770	16,090	16,410	16,740
Fees - Legal	510	520	531	541	552	563	574	586	598	609
Fleet	7,140	7,280	7,430	7,580	7,730	7,880	8,040	8,200	8,360	8,530
Grounds Maintenance	2,000	2,040	2,080	2,120	2,160	2,200	2,240	2,280	2,330	2,380
Heating	525	551	579	608	638	670	704	739	776	814
Hydro	48,300	50,715	53,251	55,913	58,709	61,644	64,727	67,963	71,361	74,929
Insurance	44,530	46,760	49,100	51,560	54,140	56,850	59,690	62,670	65,800	69,090
Licenses	510	520	531	541	552	563	574	586	598	609
Memberships and Dues	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195
Contracted Services	4,000	4,080	4,160	4,240	4,320	4,410	4,500	4,590	4,680	4,770
Property Taxes	20,050	20,650	21,270	21,910	22,570	23,250	23,950	24,670	25,410	26,170
Repairs & Maint - Building	6,000	6,120	6,240	6,360	6,490	6,620	6,750	6,890	7,030	7,170
Repairs & Maint - Equipment	33,000	33,660	34,330	35,020	35,720	36,430	37,160	37,900	38,660	39,430
Repairs & Maint - Water/WW Mains	35,000	35,700	36,410	37,140	37,880	38,640	39,410	40,200	41,000	41,820
Safety	2,000	2,040	2,080	2,120	2,160	2,200	2,240	2,280	2,330	2,380
Salaries and Wages	257,051	273,003	278,463	284,033	289,713	295,508	301,418	307,446	313,595	319,867
Salaries Benefits	87,397	92,821	94,678	96,571	98,503	100,473	102,482	104,532	106,622	108,755
Seminars and Training	5,000	5,100	5,200	5,300	5,410	5,520	5,630	5,740	5,850	5,970
Service Agreements	2,000	2,040	2,080	2,120	2,160	2,200	2,240	2,280	2,330	2,380
Supplies and Services	58,000	59,160	60,340	61,550	62,780	64,040	65,320	66,630	67,960	69,320
Uniforms	800	820	840	860	880	900	920	940	960	980
W/W Treatment City of Guelph	700,000	714,000	728,280	742,850	757,710	772,860	788,320	804,090	820,170	836,570
Overhead Costs	30,000	30,600	31,210	31,830	32,470	33,120	33,780	34,460	35,150	35,850
Transfers to Reserves (operating)										
Sub Total Operating	**1,364,333**	**1,409,111**	**1,440,433**	**1,472,541**	**1,505,463**	**1,539,201**	**1,573,783**	**1,609,251**	**1,645,616**	**1,682,928**

Table B-9 (Cont'd)
Township of Guelph/Eramosa
Wastewater Operating Budget Forecast (Inflated $)

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital-Related										
Existing Debt (Principal) - Growth Related	748,779	102,735	106,844	111,118	115,563	120,185	124,993	129,992	135,192	140,600
Existing Debt (Interest) - Growth Related	47,440	43,489	39,379	35,106	30,661	26,038	21,231	16,231	11,032	5,624
New Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	-	-	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Non-Growth Related		-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	10,078
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	20,463
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Lifecycle Reserve	374,765	369,728	386,317	417,051	452,147	480,602	501,230	512,953	519,448	494,593
Transfer to Capital Reserve										
Sub Total Capital Related	**1,170,984**	**515,951**	**532,540**	**563,274**	**598,371**	**626,826**	**647,454**	**659,176**	**665,672**	**671,358**
Total Expenditures	**2,535,318**	**1,925,063**	**1,972,974**	**2,035,815**	**2,103,834**	**2,166,027**	**2,221,237**	**2,268,428**	**2,311,288**	**2,354,286**
Revenues										
Base Charge	304,725	312,517	321,611	333,518	346,256	357,246	367,084	374,877	381,999	389,257
Penalty and Interest	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	6,095
Miscellaneous Revenue	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	1,828
Contributions from Development Charges Reserve Fund	796,219	146,224	146,224	146,224	146,224	146,224	146,224	146,224	146,224	146,224
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**1,107,574**	**465,503**	**474,733**	**486,777**	**499,656**	**510,790**	**520,774**	**528,716**	**535,991**	**543,404**
Wastewater Billing Recovery - Total	**1,427,744**	**1,459,560**	**1,498,241**	**1,549,038**	**1,604,178**	**1,655,237**	**1,700,463**	**1,739,712**	**1,775,297**	**1,810,882**

Table B-10
Township of Guelph/Eramosa
Wastewater Rate Forecast

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Total Wastewater Billing Recovery	1,427,744	1,459,560	1,498,241	1,549,038	1,604,178	1,655,237	1,700,463	1,739,712	1,775,297	1,810,882
Total Volume (m^3)	372,779	373,289	375,499	380,599	386,549	391,309	394,539	395,389	395,389	395,389
Constant Rate	**3.83**	**3.91**	**3.99**	**4.07**	**4.15**	**4.23**	**4.31**	**4.40**	**4.49**	**4.58**
Annual Percentage Change	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**

Appendix C
Detailed Water & Wastewater Rate Calculations – Gazer-Mooney

Appendix C: Detailed Water & Wastewater Rate Calculations – Gazer-Mooney

Table C-1
Township of Guelph/Eramosa
Capital Budget Forecast (Uninflated $)

Description	Budget 2025	Total	Forecast 2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Expenditures												
		-										
Lifecycle:		-										
		-										
Studies:		-										
		-										
Growth Related:		-										
		-										
Total Capital Expenditures	-	-	-	-	-	-	-	-	-	-	-	-

Table C-2
Township of Guelph/Eramosa
Capital Budget Forecast (Inflated $)

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Expenditures										
	-	-	-	-	-	-	-	-	-	-
Lifecycle:	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
Studies:	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
Growth Related:	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
Total Capital Expenditures	-	-	-	-	-	-	-	-	-	-
Capital Financing										
Provincial/Federal Grants										
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-
Lifecycle Reserve Fund	-	-	-	-	-	-	-	-	-	-
Total Capital Financing	-	-	-	-	-	-	-	-	-	-

Table C-3
Township of Guelph/Eramosa
Schedule of Non-Growth Related Debenture Repayments (Inflated $)

Debenture Year	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2026		-	-	-	-	-	-	-	-	-
2027			-	-	-	-	-	-	-	-
2028				-	-	-	-	-	-	-
2029					-	-	-	-	-	-
2030						-	-	-	-	-
2031							-	-	-	-
2032								-	-	-
2033									-	-
2034										-
2035										
Total Annual Debt Charges	-	-	-	-	-	-	-	-	-	-

Table C-4
Township of Guelph/Eramosa
Gazer-Mooney Water & Wastewater Lifecycle Reserve Fund Continuity (Inflated $)

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	560,804	598,916	638,329	679,078	721,203	764,740	809,731	856,215	904,235	953,834
Transfer from Operating	26,369	26,896	27,434	27,983	28,543	29,114	29,696	30,290	30,896	31,513
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**587,173**	**625,812**	**665,763**	**707,062**	**749,746**	**793,854**	**839,427**	**886,505**	**935,131**	**985,347**
Interest	11,743	12,516	13,315	14,141	14,995	15,877	16,789	17,730	18,703	19,707

Table C-5
Township of Guelph/Eramosa
Gazer-Mooney Operating Budget Forecast (Inflated $)

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Expenditures										
Operating Costs										
Sub Total Operating	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Capital-Related										
Existing Debt (Principal) - Non-Growth Related										
Existing Debt (Interest) - Non-Growth Related										
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Sub Total Capital Related	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Expenditures	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Revenues										
Other Revenue		-	-	-	-	-	-	-	-	-
Total Operating Revenue	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Water Billing Recovery - Operating	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Lifecycle Reserve Contribution ($)	26,369	26,896	27,434	27,983	28,543	29,114	29,696	30,290	30,896	31,513
Water Billing Recovery - Total	**26,369**	**26,896**	**27,434**	**27,983**	**28,543**	**29,114**	**29,696**	**30,290**	**30,896**	**31,513**

Table G-6
Township of Guelph/Eramosa
Gazer-Mooney Water & Wastewater Rate Forecast

Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Water Billing Recovery	23,883	24,360	24,848	25,345	25,852	26,369	26,896	27,434	27,983	28,543
Total Customers	71	71	71	71	71	71	71	71	71	71
Annual Flat Rate	**336.38**	**343.10**	**349.97**	**356.97**	**364.11**	**371.39**	**378.82**	**386.40**	**394.13**	**402.01**
Annual Dollar Change	**6.60**	**6.73**	**6.87**	**7.00**	**7.14**	**7.28**	**7.43**	**7.58**	**7.73**	**7.88**