Water and Wastewater Rate Study

Municipality of Central Elgin

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List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
A.M.O.	Association of Municipalities of Ontario
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
M.O.E.	Ministry of Environment
O.C.I.F.	Ontario Community Infrastructure Fund
OLT	Ontario Land Tribunal
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.W.S.S.A.	Sustainable Water and Sewage Systems Act, 2002

Executive Summary

Executive Summary

The Municipality of Central Elgin retained Watson & Associates Economists Ltd. (Watson) to undertake a water and wastewater rate study. This study aims to provide an analysis of 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 Municipality of Central Elgin (the Municipality). The rate analysis contained herein provides fiscally responsible practices that are in line with current provincial legislation at a level of rate increases that are reasonable.

The analysis presented herein provides the following:

- The 2024 to 2033 capital spending program for water and wastewater is $12.1 million and $11.7 million (inflated), respectively;
- Reserve transfers for both water and wastewater have been provided over the forecast period to meet the asset management needs beyond 2033;
- The operating expenditures (for water and wastewater) presented herein have been adjusted to recognize the current rates of inflation and interest rates. For items related to utilities, hydro, and chemicals, a 7% annual inflation rate has been assumed. All other operating expenditures assume a 4% annual inflation rate.
- The present rate structure (base monthly charge and a constant volume rate) is continued;
- The Municipality currently has 4,563 water customers and 3,875 wastewater customers. 891 new water and wastewater customers are assumed to be added over 2033 forecast period.

To meet these expenditure requirements, the following rate increases to water and wastewater are suggested:

- The water and wastewater base charges are calculated to increase at 4% per year.
- The water volume rates are calculated to initially increase by 5% per year for 2024 and 2025. Subsequently, the annual increases wil be 4% per year.
- The wastewater volume rates are proposed to remain constant over the forecast period.

Based on the above, the combined water/wastewater bill will increase by an average of 3.3% annually over the 2024 to 2033 forecast period. This represents an average annual increase of $67 on the combined water and wastewater bill (based on 140 cubic metres of usage and a ¾" meter.)

Tabled ES-1 and ES-2 summarizes the recommended water and wastewater rates and average annual bill, respectively, (assuming an annual volume of 140 cubic metres) based on the analysis provided herein over the forecast period.

Table ES-3 provides a summary of the combined water and wastewater bills.

Table ES-1
Municipality of Central Elgin
Water Rate Summary
Customer Bill – Based on a ¾" Meter and Annual Volume of 140 cubic metres

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Monthly Base Rate	$36.19	$37.64	$39.15	$40.72	$42.35	$44.04	$45.80	$47.63	$49.54	$51.52	$53.58
Constant Rate	$3.19	$3.35	$3.52	$3.66	$3.81	$3.96	$4.12	$4.28	$4.45	$4.63	$4.82
Annual Base Rate Bill	**$434.28**	**$451.68**	**$469.80**	**$488.64**	**$508.20**	**$528.48**	**$549.60**	**$571.56**	**$594.48**	**$618.24**	**$642.96**
Volume	140	140	140	140	140	140	140	140	140	140	140
Annual Volume Bill	**$446.60**	**$469.00**	**$492.80**	**$512.40**	**$533.40**	**$554.40**	**$576.80**	**$599.20**	**$623.00**	**$648.20**	**$674.80**
Total Annual Water Bill	**$880.88**	**$920.68**	**$962.60**	**$1,001.04**	**$1,041.60**	**$1,082.88**	**$1,126.40**	**$1,170.76**	**$1,217.48**	**$1,266.44**	**$1,317.76**
%Increase - Base Rate		4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
%Increase - Volume Rate		5%	5%	4%	4%	4%	4%	4%	4%	4%	4%
%Increase - Total Annual Bill		4.5%	4.6%	4.0%	4.1%	4.0%	4.0%	3.9%	4.0%	4.0%	4.1%
$ Increase - Total Annual Bill		**$39.80**	**$41.92**	**$38.44**	**$40.56**	**$41.28**	**$43.52**	**$44.36**	**$46.72**	**$48.96**	**$51.32**

Table ES-2
Municipality of Central Elgin
Wastewater Rate Summary
Customer Bill – Based on a ¾" Meter and Annual Volume of 140 cubic metres

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Monthly Base Rate	$40.84	$42.47	$44.17	$45.94	$47.78	$49.69	$51.68	$53.75	$55.90	$58.14	$60.47
Constant Rate	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85
Annual Base Rate Bill	**$490.08**	**$509.64**	**$530.04**	**$551.28**	**$573.36**	**$596.28**	**$620.16**	**$645.00**	**$670.80**	**$697.68**	**$725.64**
Volume	140	140	140	140	140	140	140	140	140	140	140
Annual Volume Bill	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**
Total Annual Wastewater Bill	**$889.08**	**$908.64**	**$929.04**	**$950.28**	**$972.36**	**$995.28**	**$1,019.16**	**$1,044.00**	**$1,069.80**	**$1,096.68**	**$1,124.64**
%Increase - Base Rate		4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
%Increase - Volume Rate		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
%Increase - Total Annual Bill		2%	2%	2%	2%	2%	2%	2%	2%	3%	3%
$ Increase - Total Annual Bill		**$19.56**	**$20.40**	**$21.24**	**$22.08**	**$22.92**	**$23.88**	**$24.84**	**$25.80**	**$26.88**	**$27.96**

Table ES-3
Municipality of Central Elgin
Water and Wastewater Rate Summary
Total Combined Customer Bill – Based on a ¾" Meter and Annual Volume of 140 cubic metres

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Total Annual Bill	**$1,769.96**	**$1,829.32**	**$1,891.64**	**$1,951.32**	**$2,013.96**	**$2,078.16**	**$2,145.56**	**$2,214.76**	**$2,287.28**	**$2,363.12**	**$2,442.40**
%Increase - Total Annual Bill		3.4%	3.4%	3.2%	3.2%	3.2%	3.2%	3.2%	3.3%	3.3%	3.4%
$ Increase - Total Annual Bill		**$59.36**	**$62.32**	**$59.68**	**$62.64**	**$64.20**	**$67.40**	**$69.20**	**$72.52**	**$75.84**	**$79.28**

Report

Chapter 1
Introduction

1. Introduction

1.1 Background

The Municipality of Central Elgin provides water and wastewater services to customers located in Port Stanley, Belmont, Lynhurst, Oakview, Eagle Ridge, Dexter Line, as well as other urban serviced areas. Of these areas, there are some customers that receive servicing from external sources such as the St. Thomas Secondary Water Supply System, Port Burwell Area Secondary Water Supply System, Aylmer Area Secondary Water Supply System, and the Elgin Area Primary Water Supply System.

Currently, there are 4,563 water customers and 3,875 wastewater customers within the Municipality. These users are billed a fixed monthly charge as well as volume rate based on their consumption. Revenues received from the charges directly fund the capital and operating budgets for water.

The water and wastewater systems are metered and utilize rate structures with a monthly base charge as well as a volume charge on a per cubic metre basis. Table 1-1 provides the existing rates currently in effect.

Table 1-1
Municipality of Central Elgin
Water and Wastewater Rates – 2023

2023 - Water Billing Rates		
Base Charge		
5/8" or ¾"	$	36.19
1"	$	60.64
1 ½"	$	60.64
2"	$	121.40
3"	$	196.46
4"	$	387.43
6"	$	671.05
Volume Charge		
$ 3.190	per m^3	

2023 - Wastewater Billing Rates		
Base Charge		
All Meter Sizes	$	40.84
Volume Charge		
$ 2.850	per m^3	

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 Municipality of Central Elgin 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 forecast 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 2024 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 Municipality 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 waste water."

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:

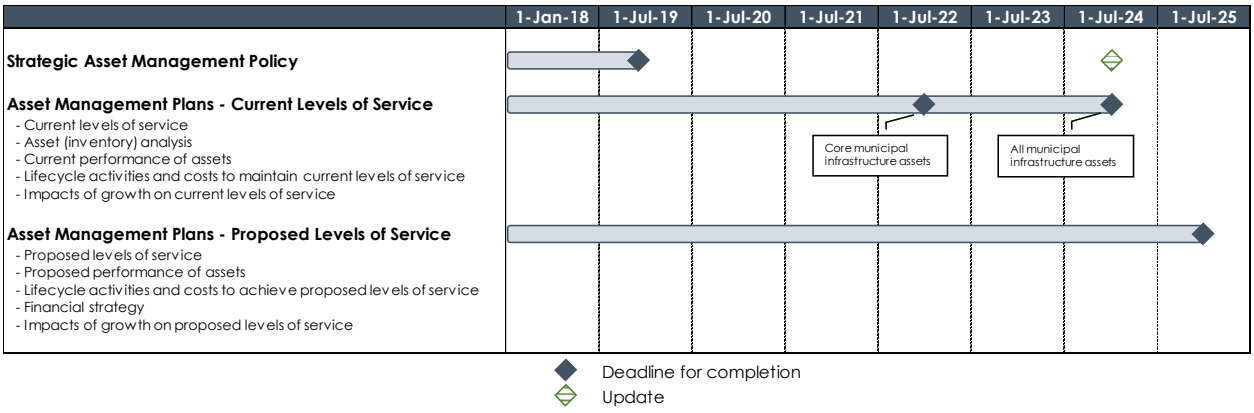
- Timing;
- Contents of the plans;
- Which identified portions of the plan will require certification;
- Public consultation process; and
- Limitations, updates, refinements, etc.

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 Infrastructure for 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 to have prepared 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 were 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 Municipality of Central Elgin services 4,563 water customers and 3,875 wastewater customers. Information on the existing number of customers and existing billable volumes was obtained from the Municipality.

For future water and wastewater customers to be added to the systems, consideration has been given to the potential new developments identified in the Development Charges Background Study over the forecast period between 2023 to 2033.

The forecast assumes the addition of 891 water and wastewater customers over the forecast period. For operating revenue purposes, it would be undesirable to forecast too high as it could produce a potential operating deficit should the growth in the water and wastewater systems not materialize.

Based on historical information, the Municipality's volumes per customer is 140 m^3 per year. For forecasting purposes, the assumed billable volumes per customer will be based on that figure.

Table 1-2 provides for the forecast of water users and volumes for Central Elgin, while Table 1-3 provides the forecast of wastewater users and volumes.

Table 1-2
Municipality of Central Elgin
Water System Forecast

Water Users Forecast

Year	Total Users	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
2023	81	41	81	81	81	81	81	81	81	81	81	81
2024	81		41	81	81	81	81	81	81	81	81	81
2025	81			41	81	81	81	81	81	81	81	81
2026	81				41	81	81	81	81	81	81	81
2027	81					41	81	81	81	81	81	81
2028	81						41	81	81	81	81	81
2029	81							41	81	81	81	81
2030	81								41	81	81	81
2031	81									41	81	81
2032	81										41	81
2033	81											41
Total	**891**	**41**	**122**	**203**	**284**	**365**	**446**	**527**	**608**	**689**	**770**	**851**
m^3/user	140	140	140	140	140	140	140	140	140	140	140	140
Annual Flow		**5,740**	**17,080**	**28,420**	**39,760**	**51,100**	**62,440**	**73,780**	**85,120**	**96,460**	**107,800**	**119,140**

Water Customer Forecast	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing - Central Elgin	3,242	3,242	3,242	3,242	3,242	3,242	3,242	3,242	3,242	3,242	3,242
Existing - Entegrus	954	954	954	954	954	954	954	954	954	954	954
Existing - New Lynhurst	367	367	367	367	367	367	367	367	367	367	367
New - Central Elgin	31	93	155	217	279	341	403	465	527	589	651
New - Entegrus	5	15	25	35	45	55	65	75	85	95	105
New - New Lynhurst	5	14	23	32	41	50	59	68	77	86	95
Total	**4,604**	**4,685**	**4,766**	**4,847**	**4,928**	**5,009**	**5,090**	**5,171**	**5,252**	**5,333**	**5,414**

Water Volume Forecast (m^3)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing - Central Elgin	391,652	391,652	391,652	391,652	391,652	391,652	391,652	391,652	391,652	391,652	391,652
Existing - Entegrus	163,025	163,025	163,025	163,025	163,025	163,025	163,025	163,025	163,025	163,025	163,025
Existing - New Lynhurst	60,343	60,343	60,343	60,343	60,343	60,343	60,343	60,343	60,343	60,343	60,343
New - Central Elgin	4,340	13,020	21,700	30,380	39,060	47,740	56,420	65,100	73,780	82,460	91,140
New - Entegrus	700	2,100	3,500	4,900	6,300	7,700	9,100	10,500	11,900	13,300	14,700
New - New Lynhurst	700	1,960	3,220	4,480	5,740	7,000	8,260	9,520	10,780	12,040	13,300
Total	**620,760**	**632,100**	**643,440**	**654,780**	**666,120**	**677,460**	**688,800**	**700,140**	**711,480**	**722,820**	**734,160**

Table 1-3
Municipality of Central Elgin
Wastewater System Forecast

Wastewater Users Forecast

Year	Total Users	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
2023	81	41	81	81	81	81	81	81	81	81	81	81
2024	81		41	81	81	81	81	81	81	81	81	81
2025	81			41	81	81	81	81	81	81	81	81
2026	81				41	81	81	81	81	81	81	81
2027	81					41	81	81	81	81	81	81
2028	81						41	81	81	81	81	81
2029	81							41	81	81	81	81
2030	81								41	81	81	81
2031	81									41	81	81
2032	81										41	81
2033	81											41
Total	**891**	**41**	**122**	**203**	**284**	**365**	**446**	**527**	**608**	**689**	**770**	**851**
m^3/user	140	140	140	140	140	140	140	140	140	140	140	140
Annual Flow		**5,740**	**17,080**	**28,420**	**39,760**	**51,100**	**62,440**	**73,780**	**85,120**	**96,460**	**107,800**	**119,140**

Wastewater Customer Forecast	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing - Central Elgin	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730
Existing - Entegrus	778	778	778	778	778	778	778	778	778	778	778
Existing - New Lynhurst	367	367	367	367	367	367	367	367	367	367	367
New - Central Elgin	32	97	162	227	292	357	422	487	552	617	682
New - Entegrus	4	11	18	25	32	39	46	53	60	67	74
New - New Lynhurst	5	14	23	32	41	50	59	68	77	86	95
Total	**3,916**	**3,997**	**4,078**	**4,159**	**4,240**	**4,321**	**4,402**	**4,483**	**4,564**	**4,645**	**4,726**

Wastewater Flows Forecast (m^3)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing - Central Elgin	306,742	306,742	306,742	306,742	306,742	306,742	306,742	306,742	306,742	306,742	306,742
Existing - Entegrus	119,709	119,709	119,709	119,709	119,709	119,709	119,709	119,709	119,709	119,709	119,709
Existing - New Lynhurst	55,689	55,689	55,689	55,689	55,689	55,689	55,689	55,689	55,689	55,689	55,689
New - Central Elgin	4,480	13,580	22,680	31,780	40,880	49,980	59,080	68,180	77,280	86,380	95,480
New - Entegrus	560	1,540	2,520	3,500	4,480	5,460	6,440	7,420	8,400	9,380	10,360
New - New Lynhurst	700	1,960	3,220	4,480	5,740	7,000	8,260	9,520	10,780	12,040	13,300
Total	**487,880**	**499,220**	**510,560**	**521,900**	**533,240**	**544,580**	**555,920**	**567,260**	**578,600**	**589,940**	**601,280**

Note: Above flows are water flows on which the wastewater billing will be calculated

Chapter 2
Capital Infrastructure Needs

2. Capital Infrastructure Needs

2.1 Capital Forecast

Capital forecasts have been provided for the water and wastewater systems and are presented in Tables 2-1 and 2-2 (note: the costs are in inflated dollars). The basis for these forecasts include the Municipality's capital requirements, development charge projects, as well as other lifecycle-related works.

For water, the capital costs over the forecast period totals $12.1 million. For wastewater, the capital costs over the forecast period totals $11.7 million.

Table 2-1
Municipality of Central Elgin
2024 to 2033 Water Capital Forecast Summary (Inflated $)

Description	Total 2024-2033	Years Undertaken
Capital Expenditures		
Belmont - Kettle Creek WM Crossing	312,000	2024
SCADA System Upgrades, Water Portion	363,000	2024
Transfer Switch & Generator - Fruit Ridge	10,000	2024
Belmont - Pitless Adapater - Well 2	78,000	2024
Belmont - Generator Connection - Well 2	21,000	2024
Water Meter Replacements - Phase 1	884,000	2024
William Street Watermain, George to Edith Cavell	281,000	2025
Maud and Bessie Servicing Upgrades	97,000	2025
Water Meter Replacements Phase 2	892,000	2025
Union Watermain Sparta Line, Beaver Creek to Sunset	865,000	2025
Port Stanley - Relocate PRV Chambers	865,000	2025
Smith Street Watermain Replacement, Carlow to end	214,000	2026
Port Stanley Booster Station	2,250,000	2026
Port Stanley Water Tower-Exterior Painting	1,404,000	2027
Water Replacement, Elm Line east of Tike	443,000	2028
Rates Study	30,000	2028
Port Burwell Watermain Replacement and Other Capital Works	856,000	2028
Replace Bulk Fill Station	63,000	2029
George Street William to Bridge	190,000	2029
Hetty Street - Watermain Replacement-Colborne to Warren	263,000	2030
Col. Bostwick - Watermain Replacement-End to Bridge	164,000	2030
Borden Avenue Watermain - Belmont Rd. to Louise	263,000	2030
Lyndale Ave Watermain Replacement	575,000	2031
Watermain-Brentwood to Ceasar Road	740,000	2033
Total Capital Expenditures	**12,123,000**	

Table 2-2
Municipality of Central Elgin
2024 to 2033 Wastewater Capital Forecast Summary (Inflated $)

Description	Total 2024-2033	Years Undertaken
Capital Expenditures		
SCADA System Upgrades Wastewater Portion	388,000	2024
Crescent Ave. Pumping Station Control Panel	130,000	2024
Union EA Update - WW	52,000	2024
Union Wastewater Servicing	1,352,000	2025
Union Pumping Station and Forcemain	4,867,000	2025
Replace Control Panel-Lynhurst	162,000	2025
Condition Assessment, Port Stanley Forcemain	65,000	2025
Sewer Upsizing, Colborne Street at Stanley	216,000	2025
George Street Sanitary Sewer Lining Boltville to Bridge	327,000	2026
Pumping Station Control Panel-Woodland	141,000	2026
Belmont Lagoon Repairs Phase 1	688,000	2026
Station 71 Repairs	112,000	2026
Rates Study	30,000	2028
Decommision old station 71	105,000	2030
Sewage Forcemain (Belmont)	1,026,000	2030
Pumping Station 71 (pump install)	99,000	2030
Belmont Lagoon Repairs Phase 2	615,000	2030
Lyndale Ave Sanitary Sewer	781,000	2031
Wet Well Rehabs (Mechanical/Electrical)	285,000	2032
Replace Forcemain on Washurn for station 72	296,000	2033
Total Capital Expenditures	**11,737,000**	

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.

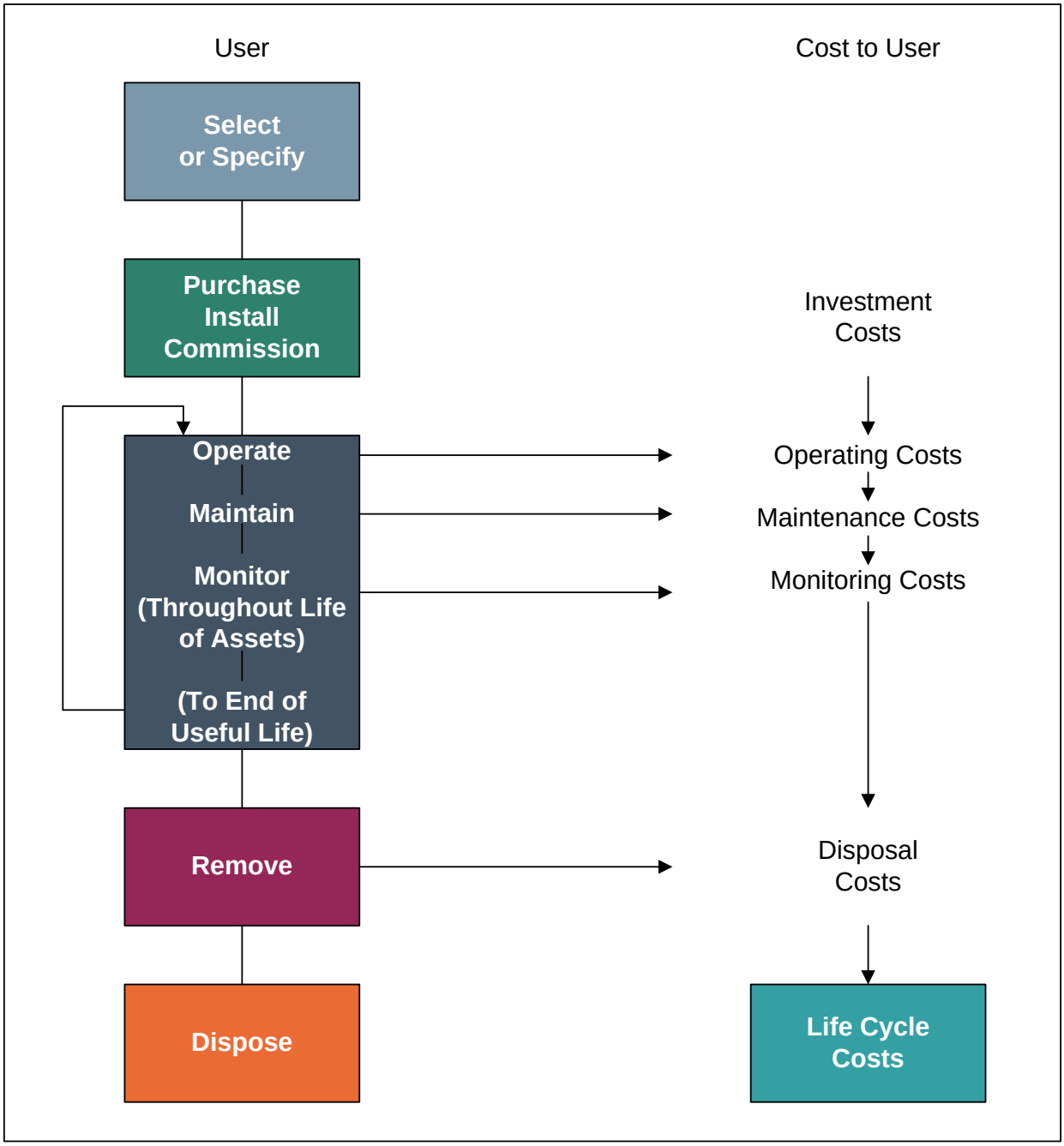
3.1.2 Financing Costs

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 Municipality. 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 Municipality 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.

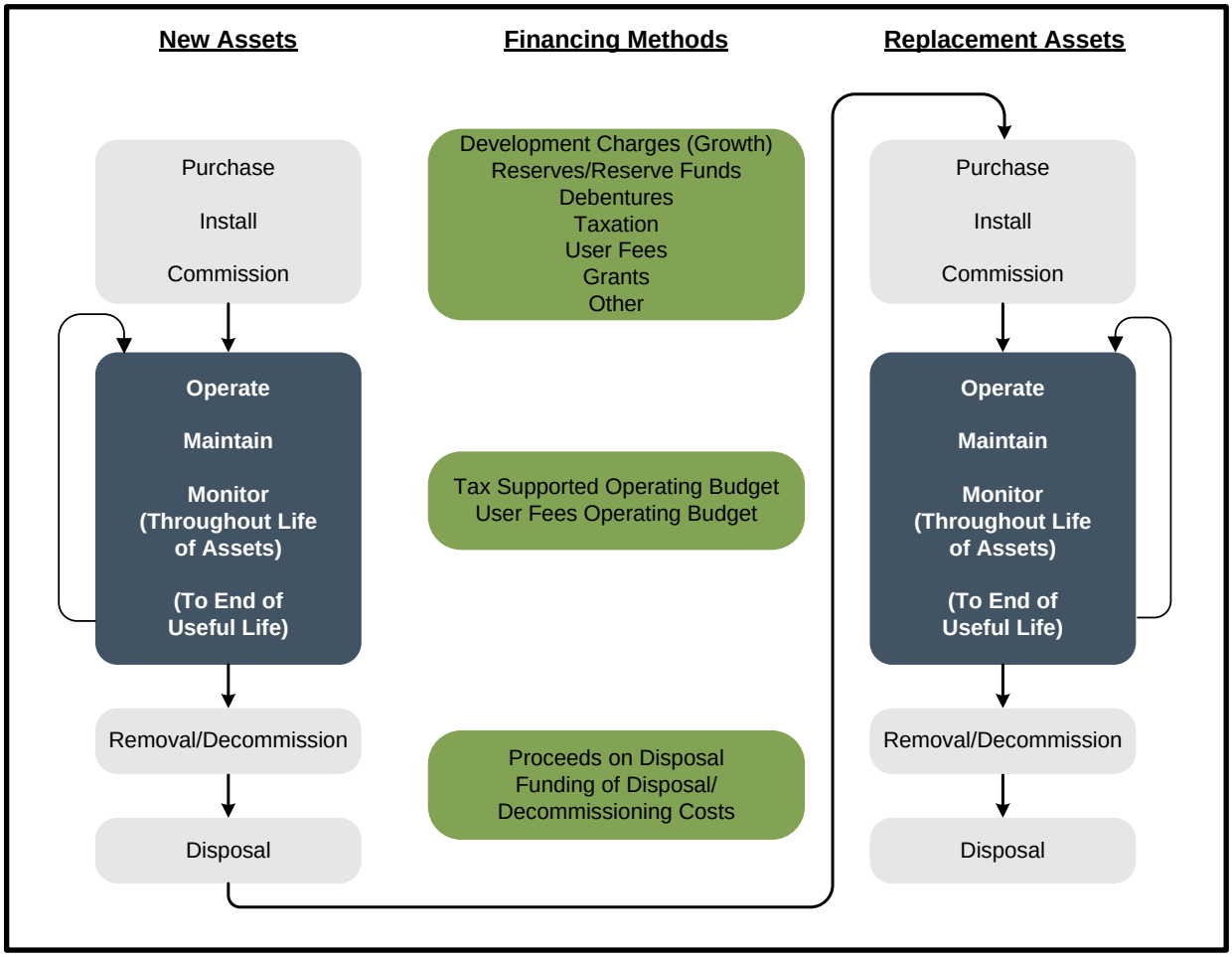
As referred to earlier, growth-related financing methods such as development charges and developer contributions could be utilized to finance the growth-related component of the new asset. These revenues are collected (indirectly) from the new homeowner who benefits directly from the installation of 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

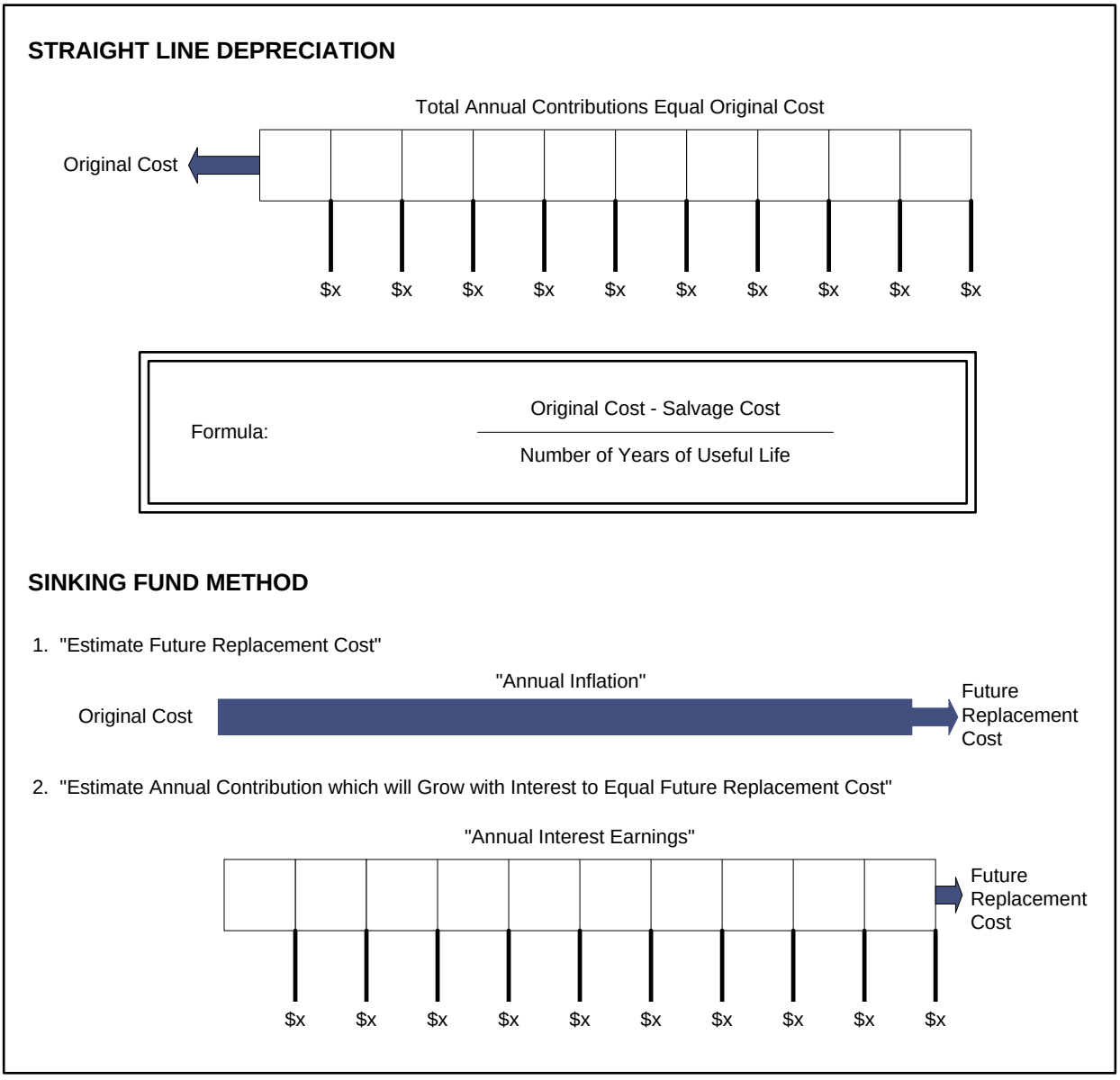
There are two fundamental methods of calculating the cost of the usage of an asset and for the provision of the revenue required when the time comes to retire and replace it. The first method is the Depreciation Method. This method recognizes the reduction in the value of the asset through wear and tear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

Detailed water and wastewater systems inventory information was obtained from the Municipality. The age of the water system dates back to the mid 1950s while the wastewater system dates back to the early 1970s. The total value of existing water infrastructure is $70.7 million, and the value of existing wastewater infrastructure is $130.8 million.

The lifecycle "sinking fund" contribution amounts for each piece of infrastructure have been included, which the Municipality may use to determine the level of investment it considers as part of the budgeting practices. This information is summarized in Figure 3-4.

Figure 3-4
Municipality of Central Elgin
Summary of Water and Wastewater Infrastructure

Area	Total Replacement Value	Suggested amount to be included in 10-year forecast based on estimated life	Amount included in 10-year forecast (Non-Growth Capital)	Net Replacement for Future Lifecycle	Annual Lifecycle Replacement
Water					
Water Facilities	13,479,430	-			619,464
Watermains	22,490,284	1,077,077			906,060
Valves	3,238,445	176,187			181,912
Hydrants	2,949,578	140,809	8,506,750	62,226,669	167,489
Water Chambers	3,144,264	-			199,078
Water Meters	3,338,489	294,748			180,575
Other	22,092,929	1,949,426			1,213,358
Total Water	**70,733,419**	**3,638,247**	**8,506,750**	**62,226,669**	**3,467,937**
Wastewater					
Wastewater Facilities	92,486,234	-			4,463,510
Sanitary Sewers	27,731,747	-	4,105,484	126,663,464	1,386,563
Manholes	10,550,967	-			556,911
Total Wastewater	**130,768,948**	**-**	**4,105,484**	**126,663,464**	**6,406,983**
Total	**201,502,367**	**3,638,247**	**12,612,234**	**188,890,133**	**9,874,921**

Investment per customer is $15,502 for water and $33,747 for wastewater

The total value of the water and wastewater systems equate to an average investment per customer of $15,502 and $33,747 respectively.

With respect to lifecycle costing contained in the Appendices, the following information was taken into consideration:

- approximate age;
- material type;
- main lengths;
- diameter of the mains;
- estimated useful life; and
- estimated replacement costs.

Summaries of both water and wastewater assets are shown on Figures 3-5 and 3-6. These figures show when the assets are coming due and the cost of replacement in 2023 dollars.

Figure 3-5
Municipality of Central Elgin
Summary of Water Infrastructure Replacement Years (2023 $)

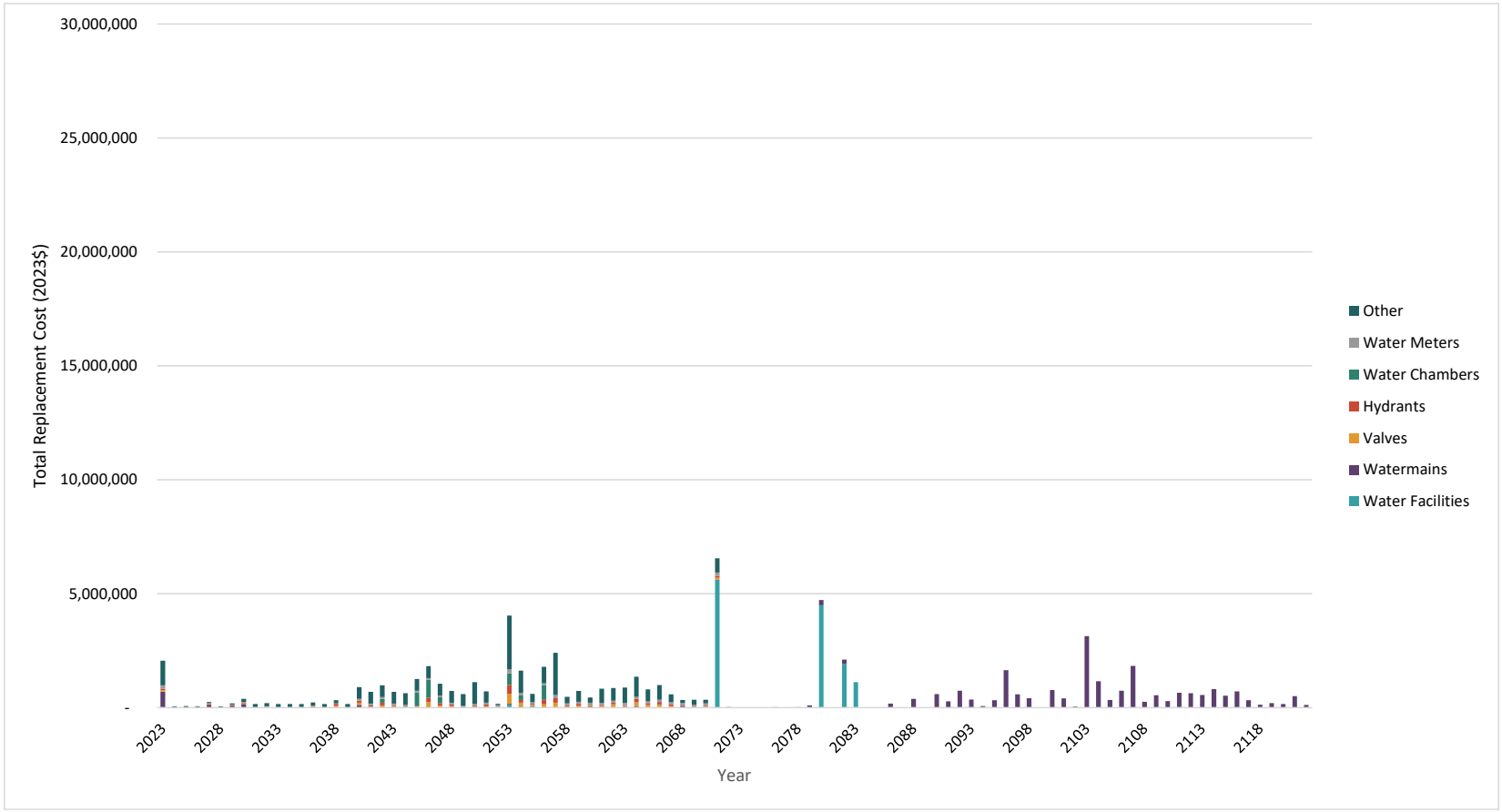
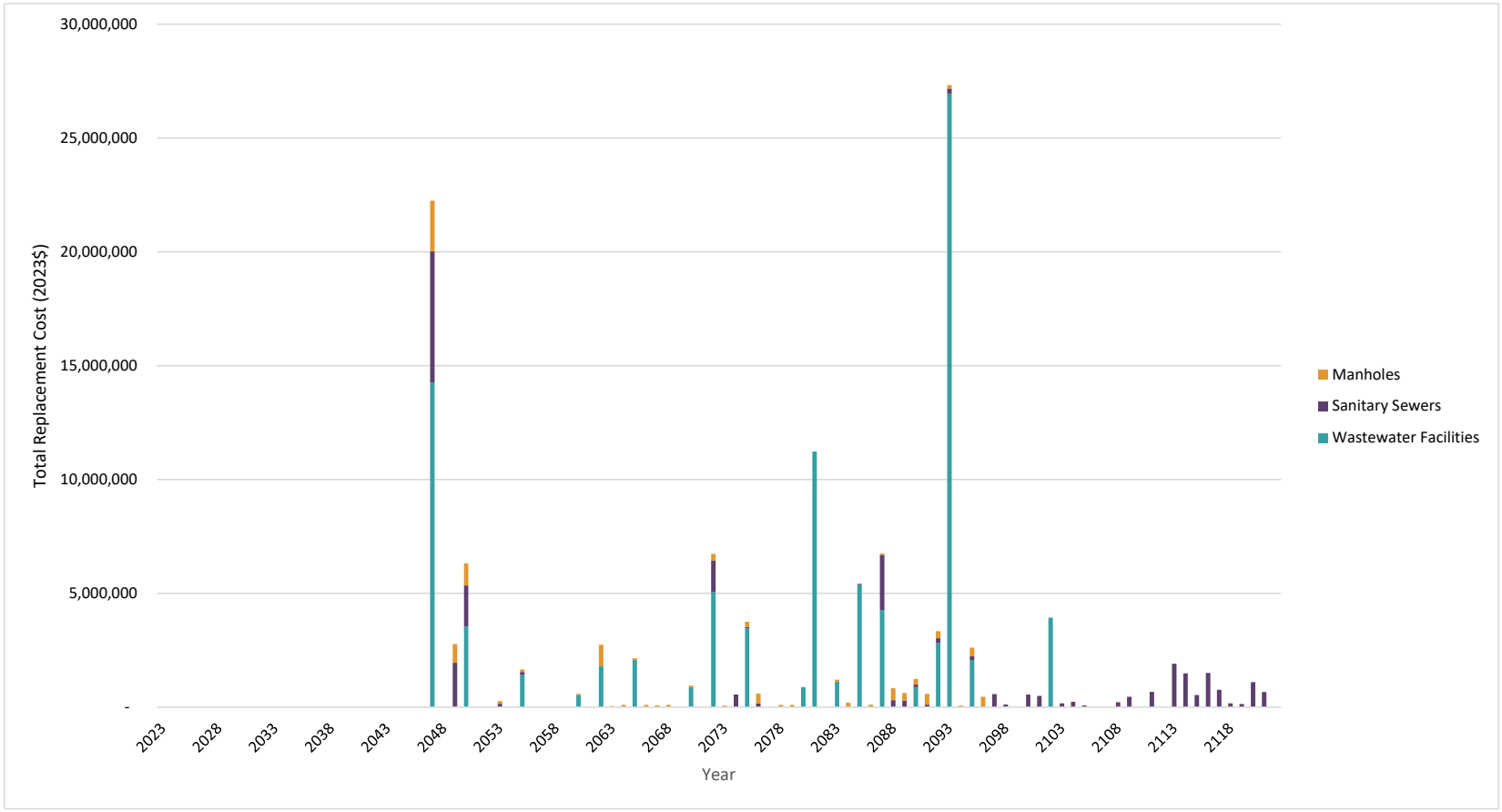


Figure 3-6
Municipality of Central Elgin
Summary of Wastewater Infrastructure Replacement Years (2023 $)



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 (Bill 98 in 1997 providing amendments to the D.C.A. along with recently proposed changes through Bill 23, *More Homes Built Faster Act*, 2022).

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	

Recovery Methods	Section Reference
○ Local Improvements	
• 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

In November, 1996, the Ontario Government introduced Bill 98, a new *Development Charges Act*. The Province's stated intentions were to "create new construction jobs and make home ownership more affordable" by reducing the charges and to "make municipal Council decisions more accountable and more cost effective." The basis for this Act is to allow municipalities to recover the growth-related capital cost of infrastructure necessary to accommodate new growth within the municipality. Generally, the Act provided the following changes to the former Act:

- Replace those sections of the 1989 Act that govern municipal development charges;
- Limit services which can be financed from development charges, specifically excluding parkland acquisition, administration buildings, and cultural, entertainment, tourism, solid waste management and hospital facilities;
- Ensure that the level of service used in the calculation of capital costs will not exceed the average level of service over the previous decade. Level of service is to be measured from both a quality and quantity perspective;
- Provide that uncommitted excess capacity available in existing municipal facilities and benefits to existing residents are removed from the calculation of the charge;
- Ensure that the development charge revenues collected by municipalities are spent only on those capital costs identified in the calculation of the development charge;
- Require municipalities to contribute funds (e.g. taxes, user charges or other non-development charge revenues) to the financing of certain projects primarily funded from development charges. The municipal contribution is 10 percent for services such as recreation, parkland development, libraries, etc.;

- Permit (but apparently not require) municipalities to grant developers credits for the direct provision of services identified in the development charge calculation and, when credits are granted, require the municipality to reimburse the developer for the costs the municipality would have incurred if the project had been financed from the development charge reserve fund;
- Set out provisions for front-end financing capital projects (limited to essential services) required to service new development; and
- Set out provisions for appeals and complaints.

In late 2015, the Province approved further amendments to the D.C.A. With respect to water and wastewater, the only changes are for the municipality to provide an asset management calculation for the growth-related works and for the Council to consider (but not necessarily approve) area-specific rates.

As of 2019, a number of amendments to the D.C.A. were made through the Bill 108 the More Homes, More Choice Act, 2019, Bill 138 the Plan to Build Ontario Together Act, 2019, Bill 197 the COVID-19 Economic Recovery Act, 2020, and Bill 213 the Better for People, Smarter for Business Act, 2020. With respect to water and wastewater, a few changes may impact D.C. revenue collections:

1. Timing of Collection:

    a. D.C. Rate Freeze - For developments proceeding through site plan or zoning by-law amendment, the D.C. rate is frozen at the time the application is submitted. The D.C. remains frozen for two years after the application is approved. Should the D.C. study be updated to increase water and wastewater D.C. rates during this period, the Municipality would not be able to collect for this increase.

    b. D.C. Installment Payments - For rental housing and institutional development D.C.s are paid over 5 years and for non-profit housing, D.C.s are paid over 20 years. This provides a delay in receipt of D.C. revenues which will need to be cash-flowed by the Municipality.

2. Mandatory Exemption (additional units) – For existing dwellings, one additional dwelling unit could be constructed within the existing dwelling. This additional dwelling unit is exempt from D.C.s. With the changes to the Act, one additional dwelling unit may be constructed within a new residential dwelling, which would

be exempt from D.C.s. Further, one ancillary dwelling unit may be constructed on the same property as a new unit. This ancillary dwelling would be exempt from D.C.s. As these new additional units are exempt from D.C.s, no D.C. revenue may be collected for these units, however, each additional unit provides additional population which requires capacity in the water and wastewater treatment plants. As a result, consideration for these additional units should be made during the D.C. study process to ensure all capacity available to growth is allocated appropriately.

3. Mandatory Exemption (universities) – A new mandatory exemption has been introduced which exempts the payment of D.C.s for developments of land intended for use by a university that receives operating funds from the Government.

On October 25, 2022, the Province introduced Bill 23: *More Homes Built Faster Act*, which subsequently received Royal Assent on November 28, 2022. The Bill amended several items within the D.C.A. and other legislation. These changes would impact a municipality's ability to recover D.C.s for growth-related water and wastewater capital costs.

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 known as Local Planning Appeal Tribunal (LPAT)).

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 Grant Funding Availability

Federal Infrastructure Funding

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 is $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 has added $10.1 billion for trade and transportation infrastructure and $2 billion for rural and northern communities. This funding must be implemented by agreements with each Province and Territory.

In Phase 2, Ontario will be 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.

Federal Gas Tax

The federal Gas Tax 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 federal Gas Tax 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. 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.

Grant Funding

For this study process, grant funding from O.C.I.F. has been assumed for the Municipality in the amounts of $884,000 for water meter replacements. However, if the

status of the grant funding changes, the rate study may need to be amended to reflect the appropriate funding sources.

4.5 Existing Reserves/Reserve Funds

The Municipality has established reserves and reserve funds for water and wastewater costs. Currently, their reserves are combined and the balances as of December 31, 2022 are presented in Table 4-1:

Table 4-1
Water and Wastewater Reserves and Reserve Funds
As of December 31, 2022

Reserve	Dec. 31 2022
Water	
General Reserve	255,614
Development Charges Reserve Fund	(61,437)
Wastewater	
General Reserve	1,775,114
Development Charges Reserve Fund	(21,421)
Connection Charge	12,287

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 Municipality of Central Elgin's calculation on Debt Capacity is shown on Schedule 81 of the Municipality's most recent Financial Information Return (F.I.R.). This calculates to the Municipality's estimated annual repayment limit of approximately $2.9 million. Based upon 20-year financing at an assumed rate of 4.3%, the available debt for the Municipality is approximately $39.1 million. Based on the calculations provided herein,

it is assumed that the Municipality will not require any additional debt over the forecast period.

4.7 Infrastructure Ontario

Infrastructure Ontario (I.O.) is an arms-length crown corporation, which has been set up as a tool to offer low-cost and longer-term financing to assist municipalities in renewing their infrastructure (this corporation has merged the former O.S.I.F.A. into its operations). 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 a new investment product called 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 a longer term on their loans than they could obtain in the financial markets, and can also benefit from significant savings on transaction costs such as legal costs 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.

The first round of the former O.S.I.F.A.'s 2004/2005 infrastructure renewal program was focused on municipal priorities of clean water infrastructure, sewage treatment facilities, municipal roads and bridges, public transit and waste management infrastructure. The focus of the program was expanded in 2005/2006 somewhat to include:

- clean water infrastructure;
- sewage infrastructure;
- waste management infrastructure;
- municipal roads and bridges;
- public transit;
- municipal long-term care homes;
- renewal of municipal social housing and culture; and
- tourism and recreation infrastructure.

With the merging of O.S.I.F.A. and I.O., the program was broadened in late 2006 to also include municipal administrative buildings, local police and fire stations, emergency vehicles and equipment, ferries, docks and municipal airports.

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.

4.8 Recommended Capital Financing Approach

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

Table 4-2
Municipality of Central Elgin
Capital Forecasting Financing Sources
Inflated $

Description	Water	Wastewater
	2024-2033	2024-2033
Capital Financing		
Provincial/Federal Grants	884,000	-
Development Charges Reserve Fund	2,206,250	6,828,261
Connection Charge Revenues	-	781,000
Water Reserves	9,032,750	-
Wastewater Reserves	-	4,127,739
Total Capital Financing	**12,123,000**	**11,737,000**

Tables 4-3 and 4-4 provide for the full capital expenditure and funding program by year for water and wastewater, respectively.

Table 4-3
Municipality of Central Elgin
Capital Budget Forecast – Water (inflated $)

Description	Budget	Total	Forecast									
	2023		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Capital Expenditures												
Water Rates Studies	15,000	-	-	-	-	-	-	-	-	-	-	-
W1 - 400 dia New Development Main East of Fairview from Elm to Raven (oversizing)	12,900	-	-	-	-	-	-	-	-	-	-	-
W2 - 300 dia Bill Martyn from Sauve to Southdale	25,800	-	-	-	-	-	-	-	-	-	-	-
W3 - 400 dia Southdale from Fairview to existing 200 dia at Lake Margaret Tr.	107,900	-	-	-	-	-	-	-	-	-	-	-
W5 - 400 dia Southdale from Lake Margaret Tr. To Sunset Drive	110,200	-	-	-	-	-	-	-	-	-	-	-
W6 - 400 dia Southdale from Fairview east to City Limit	51,600	-	-	-	-	-	-	-	-	-	-	-
W7 - 300 dia Southdale from Sunset Drive west to Shaw Valley Drive	42,200	-	-	-	-	-	-	-	-	-	-	-
Belmont - Kettle Creek WM Crossing	-	312,000	312,000	-	-	-	-	-	-	-	-	-
SCADA System Upgrades, Water Portion	-	363,000	363,000	-	-	-	-	-	-	-	-	-
Transfer Switch & Generator - Fruit Ridge	-	10,000	10,000	-	-	-	-	-	-	-	-	-
Belmont - Pitless Adapater - Well 2	-	78,000	78,000	-	-	-	-	-	-	-	-	-
Belmont - Generator Connection - Well 2	-	21,000	21,000	-	-	-	-	-	-	-	-	-
Water Meter Replacements - Phase 1	-	884,000	884,000	-	-	-	-	-	-	-	-	-
William Street Watermain, George to Edith Cavell	-	281,000	-	281,000	-	-	-	-	-	-	-	-
Maud and Bessie Servicing Upgrades	-	97,000	-	97,000	-	-	-	-	-	-	-	-
Water Meter Replacements Phase 2	-	892,000	-	892,000	-	-	-	-	-	-	-	-
Union Watermain Sparta Line, Beaver Creek to Sunset	-	865,000	-	865,000	-	-	-	-	-	-	-	-
Port Stanley - Relocate PRV Chambers	-	865,000	-	865,000	-	-	-	-	-	-	-	-
Smith Street Watermain Replacement, Carlow to end	-	214,000	-	-	214,000	-	-	-	-	-	-	-
Port Stanley Booster Station	-	2,250,000	-	-	2,250,000	-	-	-	-	-	-	-
Port Stanley Water Tower-Exterior Painting	-	1,404,000	-	-	-	1,404,000	-	-	-	-	-	-
Water Replacement, Elm Line east of Tike	-	443,000	-	-	-	-	443,000	-	-	-	-	-
Rates Study	-	30,000	-	-	-	-	30,000	-	-	-	-	-
Port Burwell Watermain Replacement and Other Capital Works	-	856,000	-	-	-	-	856,000	-	-	-	-	-
Replace Bulk Fill Station	-	63,000	-	-	-	-	-	63,000	-	-	-	-
George Street William to Bridge	-	190,000	-	-	-	-	-	190,000	-	-	-	-
Hetty Street - Watermain Replacement-Colborne to Warren	-	263,000	-	-	-	-	-	-	263,000	-	-	-
Col. Bostwick - Watermain Replacement-End to Bridge	-	164,000	-	-	-	-	-	-	164,000	-	-	-
Borden Avenue Watermain - Belmont Rd. to Louise	-	263,000	-	-	-	-	-	-	263,000	-	-	-
Lyndale Ave Watermain Replacement	-	575,000	-	-	-	-	-	-	-	575,000	-	-
Watermain-Brentwood to Ceasar Road	-	740,000	-	-	-	-	-	-	-	-	-	740,000
Total Capital Expenditures	**365,600**	**12,123,000**	**1,668,000**	**3,000,000**	**2,464,000**	**1,404,000**	**1,329,000**	**253,000**	**690,000**	**575,000**	**-**	**740,000**
Capital Financing												
Provincial/Federal Grants		884,000	884,000									
Development Charges Reserve Fund	334,475	2,206,250	-	1,081,250	1,125,000	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Lifecycle Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-
Water Reserve	31,125	9,032,750	784,000	1,918,750	1,339,000	1,404,000	1,329,000	253,000	690,000	575,000	-	740,000
Total Capital Financing	**365,600**	**12,123,000**	**1,668,000**	**3,000,000**	**2,464,000**	**1,404,000**	**1,329,000**	**253,000**	**690,000**	**575,000**	**-**	**740,000**

Table 4-4
Municipality of Central Elgin
Capital Budget Forecast – Wastewater (inflated $)

Description	Budget	Total	Forecast									
	2023		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Capital Expenditures												
Rates Study	15,000	-	-	-	-	-	-	-	-	-	-	-
Pump Station 55 upgrades	100,000	-	-	-	-	-	-	-	-	-	-	-
SCADA System Upgrades Wastewater Portion	-	388,000	388,000	-	-	-	-	-	-	-	-	-
Crescent Ave. Pumping Station Control Panel	-	130,000	130,000	-	-	-	-	-	-	-	-	-
Union EA Update - WW	-	52,000	52,000	-	-	-	-	-	-	-	-	-
Union Wastewater Servicing	-	1,352,000	-	1,352,000	-	-	-	-	-	-	-	-
Union Pumping Station and Forcemain	-	4,867,000	-	4,867,000	-	-	-	-	-	-	-	-
Replace Control Panel-Lynhurst	-	162,000	-	162,000	-	-	-	-	-	-	-	-
Condition Assessment, Port Stanley Forcemain	-	65,000	-	65,000	-	-	-	-	-	-	-	-
Sewer Upsizing, Colborne Street at Stanley	-	216,000	-	216,000	-	-	-	-	-	-	-	-
George Street Sanitary Sewer Lining Boltville to Bridge	-	327,000	-	-	327,000	-	-	-	-	-	-	-
Pumping Station Control Panel-Woodland	-	141,000	-	-	141,000	-	-	-	-	-	-	-
Belmont Lagoon Repairs Phase 1	-	688,000	-	-	688,000	-	-	-	-	-	-	-
Station 71 Repairs	-	112,000	-	-	112,000	-	-	-	-	-	-	-
Rates Study	-	30,000	-	-	-	-	30,000	-	-	-	-	-
Decommision old station 71	-	105,000	-	-	-	-	-	-	105,000	-	-	-
Sewage Forcemain (Belmont)	-	1,026,000	-	-	-	-	-	-	1,026,000	-	-	-
Pumping Station 71 (pump install)	-	99,000	-	-	-	-	-	-	99,000	-	-	-
Belmont Lagoon Repairs Phase 2	-	615,000	-	-	-	-	-	-	615,000	-	-	-
Lyndale Ave Sanitary Sewer	-	781,000	-	-	-	-	-	-	-	781,000	-	-
Wet Well Rehabs (Mechanical/Electrical)	-	285,000	-	-	-	-	-	-	-	-	285,000	-
Replace Forcemain on Washurn for station 72	-	296,000	-	-	-	-	-	-	-	-	-	296,000
Total Capital Expenditures	**115,000**	**11,737,000**	**570,000**	**6,662,000**	**1,268,000**	**-**	**30,000**	**-**	**1,845,000**	**781,000**	**285,000**	**296,000**
Capital Financing												
Provincial/Federal Grants		-										
Development Charges Reserve Fund	-	6,828,261	-	5,703,261	-	-	-	-	1,125,000	-	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Connection Charge Revenues	-	781,000	-	-	-	-	-	-	-	781,000	-	-
Lifecycle Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater Reserve	115,000	4,127,739	570,000	958,739	1,268,000	-	30,000	-	720,000	-	285,000	296,000
Total Capital Financing	**115,000**	**11,737,000**	**570,000**	**6,662,000**	**1,268,000**	**-**	**30,000**	**-**	**1,845,000**	**781,000**	**285,000**	**296,000**

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 (2024 to 2033) are based on the 2023 operating budgets. The costs for each component of the operating budget have been reviewed with staff to establish forecast inflationary adjustments. Note that these operating costs include the costs associated with the purchased water from St. Thomas, Elgin Area Primary System, Port Burwell Secondary System, and the Aylmer Secondary System, which are based on the forecast volumes of the applicable customers.

With respect to all other operating expenditures, items related to utilities, hydro, and chemicals, a 7% annual inflation rate has been assumed. All other operating expenditures assume a 4% annual inflation rate.

In addition, debenture payments and contributions to the water reserve funds have been included. The water reserve fund transfers are used to fund the water capital program identified in Chapter 2, as well as build-up the reserve balance for future lifecycle requirements.

5.2 Water Operating Revenues

The Municipality has base charges and miscellaneous revenue sources to help contribute towards operating expenditures. These miscellaneous revenues, include items such as fire hydrant revenue, meter sales, late payment penalties, etc. Miscellaneous revenues have been assumed to remain constant.

The water base charges are further discussed in section 6.5 of this study.

Note that the operating revenue presented herein represents the fixed component of the total operating revenue. The shortfall of the fixed revenue from the operating expenditures is what is used to calculate the recovery from the water volume rates, which is presented in Chapter 7. Table 5-1 provides for the water operating budget for the Municipality.

Table 5-1
Municipality of Central Elgin
Operating Budget Forecast – Water (inflated $)

Description	Budget	Forecast									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Expenditures											
WATER ADMINISTRATION											
WATER ADMIN - NON-UNION SALARIES	191,649	197,398	205,300	213,500	222,000	230,900	240,100	249,700	259,700	270,100	280,900
WATER ADMIN - UNION SALARIES	60,646	98,070	102,000	106,100	110,300	114,700	119,300	124,100	129,100	134,300	139,700
WATER ADMIN - CPP	11,992	14,346	14,900	15,500	16,100	16,700	17,400	18,100	18,800	19,600	20,400
WATER ADMIN - EI	4,342	5,260	5,500	5,700	5,900	6,100	6,300	6,600	6,900	7,200	7,500
WATER ADMIN - WSIB	7,509	8,806	9,200	9,600	10,000	10,400	10,800	11,200	11,600	12,100	12,600
WATER ADMIN - OMERS	24,244	28,175	29,300	30,500	31,700	33,000	34,300	35,700	37,100	38,600	40,100
WATER ADMIN - EHT	5,016	5,860	6,100	6,300	6,600	6,900	7,200	7,500	7,800	8,100	8,400
WATER ADMIN - LTD/ADD/LIFE	28,241	34,310	35,700	37,100	38,600	40,100	41,700	43,400	45,100	46,900	48,800
WATER ADMIN - EMPLOYEE ASSISTANCE	242	266	300	300	300	300	300	300	300	300	300
WATER ADMIN - TRAVEL & CONVENTIONS	3,100	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	4,000	4,200
WATER ADMIN - CLOTHING ALLOWANCES	3,500	3,500	3,600	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000
WATER ADMIN - DUES/MEMBERSHIPS	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER ADMIN - SUBSCRIPTIONS	200	200	200	200	200	200	200	200	200	200	200
WATER ADMIN - EMPLOYEE RECOGNITION	500	500	500	500	500	500	500	500	500	500	500
WATER ADMIN - ADVERTISING	300	300	300	300	300	300	300	300	300	300	300
WATER ADMIN - INSURANCE	36,100	45,125	46,900	48,800	50,800	52,800	54,900	57,100	59,400	61,800	64,300
WATER ADMIN - RADIO LICENSING	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER ADMIN - LICENCES/PERMITS/CERTS	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
WATER ADMIN - OFFICE SUPPLIES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER ADMIN - OFFICE EQUIPMENT	500	500	500	500	500	500	500	500	500	500	500
WATER ADMIN - EQUIPMENT CHARGES	15,500	15,500	16,100	16,700	17,400	18,100	18,800	19,600	20,400	21,200	22,000
WATER ADMIN - SMALL TOOLS/EQUIP	10,000	10,000	10,400	10,800	11,200	11,600	12,100	12,600	13,100	13,600	14,100
WATER ADMIN - TELEPHONE	4,300	4,300	4,500	4,700	4,900	5,100	5,300	5,500	5,700	5,900	6,100
WATER ADMIN - IT EQUIPMENT	2,000	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900
WATER ADMIN - ANSWERING SERVICE	600	600	600	600	600	600	600	600	600	600	600
WATER ADMIN - IT SERVICES	30,000	30,000	31,200	32,400	33,700	35,000	36,400	37,900	39,400	41,000	42,600
WATER ADMIN - SCADA SERVICES	30,000	30,000	31,200	32,400	33,700	35,000	36,400	37,900	39,400	41,000	42,600
WATER ADMIN - PAYMENTS IN LIEU	17,500	17,500	18,200	18,900	19,700	20,500	21,300	22,200	23,100	24,000	25,000
WATER ADMIN - WHITE STATION LEASE	11,730	11,730	12,200	12,700	13,200	13,700	14,200	14,800	15,400	16,000	16,600
WATER ADMIN - CROSSING AREEMENTS	500	500	500	500	500	500	500	500	500	500	500
WATER ADMIN - COPIER LEASE	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
OPERATOR TRAINING - TRAINING	13,500	13,500	14,000	14,600	15,200	15,800	16,400	17,100	17,800	18,500	19,200
WATER - HEALTH & SAFETY- TRAINING	3,000	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	4,000
HEALTH & SAFETY - H&S SUPPLIES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
SHOP EQUIP & TRUCK MTCE - PARTS & SUPPL	500	500	500	500	500	500	500	500	500	500	500
SHOP EQUIP & TRUCK MTCE - LAB SAMPLING	1,800	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700
DWQMS - AUDIT SERVICES	2,500	5,500	5,700	5,900	6,100	6,300	6,600	6,900	7,200	7,500	7,800

Table 5-1 (Cont'd)

Description	Budget 2023	Forecast 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
BILLING & COLLECTION	-	-	-	-	-	-	-	-	-	-	-
BILLING & COLLECT - NON-UNION SALARIES	40,746	41,968	43,600	45,300	47,100	49,000	51,000	53,000	55,100	57,300	59,600
BILLING & COLLECT - UNION SALARIES	9,098	9,371	9,700	10,100	10,500	10,900	11,300	11,800	12,300	12,800	13,300
BILLING & COLLECT - CPP	2,379	2,450	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300
BILLING & COLLECT - EI	861	887	900	900	900	900	900	900	900	900	900
BILLING & COLLECT - WSIB	1,490	1,535	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
BILLING & COLLECT - OMERS	4,809	4,953	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000
BILLING & COLLECT - EHT	995	1,025	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
BILLING & COLLECT - LTD/ADD/LIFE	5,643	5,812	6,000	6,200	6,400	6,700	7,000	7,300	7,600	7,900	8,200
BILLING & COLLECT - POSTAGE	15,000	15,000	15,600	16,200	16,800	17,500	18,200	18,900	19,700	20,500	21,300
BILLING & COLLECT - BILLING COSTS	20,000	20,000	20,800	21,600	22,500	23,400	24,300	25,300	26,300	27,400	28,500
BILLING & COLLECT - EQUIPMENT CHGS	10,500	10,500	10,900	11,300	11,800	12,300	12,800	13,300	13,800	14,400	15,000
BILLING & COLLECT - SMALL TOOLS & EQUIP	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BILLING & COLLECT - METER READING	23,500	23,500	24,400	25,400	26,400	27,500	28,600	29,700	30,900	32,100	33,400
WATER PURCHASES	-	-	-	-	-	-	-	-	-	-	-
WATER PURCHASES - ELGIN PRIMARY	357,408	377,540	398,650	420,766	443,914	465,917	488,842	512,713	537,594	563,512	590,491
WATER PURCHASES - MALAHIDE SECONDARY	17,175	17,964	18,065	19,657	20,572	21,509	22,491	23,517	24,587	25,702	26,869
WATER PURCHASES - AYLMER SECONDARY	48,869	50,583	52,368	54,178	56,013	57,761	59,739	61,738	63,760	65,806	67,916
WATER PURCHASES - ST. THOMAS SECONDARY	107,693	113,551	119,223	125,137	131,300	137,305	142,481	147,830	153,365	159,090	165,009
WATER PURCHASES - ST. THOMAS SUBURBAN AREA	445,251	456,237	474,086	487,766	501,995	516,781	531,481	546,764	561,294	576,318	591,844
BELMONT WATER TREATMENT	-	-	-	-	-	-	-	-	-	-	-
BELMONT WTP OPS - UNION SALARIES	26,772	27,575	28,700	29,800	31,000	32,200	33,500	34,800	36,200	37,600	39,100
BELMONT WTP OPS - CPP	1,205	1,241	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100
BELMONT WTP OPS - EI	436	449	500	500	500	500	500	500	500	500	500
BELMONT WTP OPS - WSIB	754	777	800	800	800	800	800	800	800	800	800
BELMONT WTP OPS - OMERS	2,436	2,509	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
BELMONT WTP OPS - EHT	504	519	500	500	500	500	500	500	500	500	500
BELMONT WTP OPS - LTD/ADD/Life	2,858	2,944	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	4,000
BELMONT WTP OPS - CHEMICALS	6,500	6,500	7,000	7,500	8,000	8,600	9,200	9,800	10,500	11,200	12,000
BELMONT WTP OPS - EQUIPMENT CHARGES	5,500	5,500	5,700	5,900	6,100	6,300	6,600	6,900	7,200	7,500	7,800
BELMONT WTP OPS - PARTS & SUPPLIES	10,000	10,000	10,400	10,800	11,200	11,600	12,100	12,600	13,100	13,600	14,100
BELMONT WTP OPS - HYDRO	10,000	10,000	10,700	11,400	12,200	13,100	14,000	15,000	16,100	17,200	18,400
BELMONT WTP OPS - TELEPHONE	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BELMONT WTP OPS - CONTRACTED SERVICES	43,000	13,000	13,500	14,000	14,600	15,200	15,800	16,400	17,100	17,800	18,500
PORT STANLEY WATER TOWER OPERATIONS	-	-	-	-	-	-	-	-	-	-	-
PS TOWER OPS - UNION SALARIES	6,187	6,373	6,600	6,900	7,200	7,500	7,800	8,100	8,400	8,700	9,000
PS TOWER OPS - CPP	278	286	300	300	300	300	300	300	300	300	300
PS TOWER OPS - EI	101	104	100	100	100	100	100	100	100	100	100
PS TOWER OPS - WSIB	174	179	200	200	200	200	200	200	200	200	200
PS TOWER OPS - OMERS	563	580	600	600	600	600	600	600	600	600	600
PS TOWER OPS - EHT	116	119	100	100	100	100	100	100	100	100	100
PS TOWER OPS - LTD/ADD/LIFE	661	681	700	700	700	700	700	700	700	700	700
PS TOWER OPS - CHEMICALS	2,100	2,100	2,200	2,400	2,600	2,800	3,000	3,200	3,400	3,600	3,900
PS TOWER OPS - EQUIPMENT CHARGES	1,750	1,750	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600
PS TOWER OPS - PARTS & SUPPLIES	2,500	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
PS TOWER OPS - HYDRO	8,000	8,000	8,600	9,200	9,800	10,500	11,200	12,000	12,800	13,700	14,700
PS TOWER OPS - TELEPHONE	500	500	500	500	500	500	500	500	500	500	500
PS TOWER OPS - CONTRACTED SERVICES	15,000	15,000	15,600	16,200	16,800	17,500	18,200	18,900	19,700	20,500	21,300

Table 5-1 (Cont'd)

Description	Budget 2023	Forecast 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
BELMONT WATER TOWER	-	-	-	-	-	-	-	-	-	-	-
BELMONT WATER TOWER - UNION SALARIES	3,763	3,876	4,000	4,200	4,400	4,600	4,800	5,000	5,200	5,400	5,600
BELMONT WATER TOWER - CPP	169	174	200	200	200	200	200	200	200	200	200
BELMONT WATER TOWER - EI	61	63	100	100	100	100	100	100	100	100	100
BELMONT WATER TOWER - WSIB	106	109	100	100	100	100	100	100	100	100	100
BELMONT WATER TOWER - OMERS	342	352	400	400	400	400	400	400	400	400	400
BELMONT WATER TOWER - EHT	71	73	100	100	100	100	100	100	100	100	100
BELMONT WATER TOWER - LTD/ADD/LIFE	402	414	400	400	400	400	400	400	400	400	400
BELMONT WATER TOWER - EQUIPMENT CHARGES	250	250	300	300	300	300	300	300	300	300	300
BELMONT WATER TOWER - PARTS & SUPPLIES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BELMONT WATER TOWER - HYDRO	3,500	3,500	3,700	4,000	4,300	4,600	4,900	5,200	5,600	6,000	6,400
BELMONT WATER TOWER - CONTRACTED SERVICE	13,000	13,000	13,500	14,000	14,600	15,200	15,800	16,400	17,100	17,800	18,500
BULK FILL STATION	-	-	-	-	-	-	-	-	-	-	-
BULK FILL STATION - UNION SALARIES	619	638	700	700	700	700	700	700	700	700	700
BULK FILL STATION - OMERS	56	58	100	100	100	100	100	100	100	100	100
BULK FILL STATION - LTD/ADD/Life	66	68	100	100	100	100	100	100	100	100	100
BULK FILL STATION - EQUIP CHARGES	100	100	100	100	100	100	100	100	100	100	100
BULK FILL STATION - CONTRACTED SERVICES	2,500	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
FRUIT RIDGE BOOSTER	-	-	-	-	-	-	-	-	-	-	-
FRUIT RIDGE BOOSTER - UNION SALARIES	2,171	2,236	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100
FRUIT RIDGE BOOSTER - CPP	98	101	100	100	100	100	100	100	100	100	100
FRUIT RIDGE BOOSTER - WSIB	61	63	100	100	100	100	100	100	100	100	100
FRUIT RIDGE BOOSTER - OMERS	197	203	200	200	200	200	200	200	200	200	200
FRUIT RIDGE BOOSTER - LTD/ADD/LIFE	232	239	200	200	200	200	200	200	200	200	200
FRUIT RIDGE BOOSTER - EQUIPMENT CHARGES	500	500	500	500	500	500	500	500	500	500	500
FRUIT RIDGE BOOSTER - HYDRO	2,100	2,100	2,200	2,400	2,600	2,800	3,000	3,200	3,400	3,600	3,900
FRUIT RIDGE BOOSTER - CONTRACTED SERVICE	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER CHAMBERS	-	-	-	-	-	-	-	-	-	-	-
WATER CHAMBERS - UNION SALARIES	3,111	3,204	3,300	3,400	3,500	3,600	3,700	3,800	4,000	4,200	4,400
WATER CHAMBERS - CPP	142	146	200	200	200	200	200	200	200	200	200
WATER CHAMBERS - EI	51	53	100	100	100	100	100	100	100	100	100
WATER CHAMBERS - WSIB	88	91	100	100	100	100	100	100	100	100	100
WATER CHAMBERS - OMERS	283	291	300	300	300	300	300	300	300	300	300
WATER CHAMBERS - EHT	59	61	100	100	100	100	100	100	100	100	100
WATER CHAMBERS - LTD/ADD/LIFE	332	342	400	400	400	400	400	400	400	400	400
WATER CHAMBERS - EQUIPMENT CHARGES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER CHAMBERS - PARTS & SUPPLIES	500	500	500	500	500	500	500	500	500	500	500
WATER CHAMBERS - HYDRO	1,000	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900
WATER CHAMBERS - CONTRACTED SERVICES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Table 5-1 (Cont'd)

Description	Budget	Forecast									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
WATER MAINS	-	-	-	-	-	-	-	-	-	-	-
WATER MAINS - UNION SALARIES	60,780	62,603	65,100	67,700	70,400	73,200	76,100	79,100	82,300	85,600	89,000
WATER MAINS - CPP	2,735	2,817	2,900	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700
WATER MAINS - EI	990	1,020	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
WATER MAINS - WSIB	1,713	1,764	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600
WATER MAINS - OMERS	5,530	5,696	5,900	6,100	6,300	6,600	6,900	7,200	7,500	7,800	8,100
WATER MAINS - EHT	1,144	1,178	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
WATER MAINS - LTD/ADD/LIFE	6,489	6,684	7,000	7,300	7,600	7,900	8,200	8,500	8,800	9,200	9,600
WATER MAINS - EQUIPMENT CHARGES	18,500	18,500	19,200	20,000	20,800	21,600	22,500	23,400	24,300	25,300	26,300
WATER MAINS - PARTS & SUPPLIES	10,000	10,000	10,400	10,800	11,200	11,600	12,100	12,600	13,100	13,600	14,100
WATER MAINS - CONTRACTED SERVICES	15,000	15,000	15,600	16,200	16,800	17,500	18,200	18,900	19,700	20,500	21,300
SAMPLING - LAB SAMPLING SERVICES	18,000	18,000	18,700	19,400	20,200	21,000	21,800	22,700	23,600	24,500	25,500
LOCATES - LOCATING SERVICES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER SERVICES	-	-	-	-	-	-	-	-	-	-	-
WATER SERVICES - UNION SALARIES	60,780	62,603	65,100	67,700	70,400	73,200	76,100	79,100	82,300	85,600	89,000
WATER SERVICES - CPP	1,045	1,076	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
WATER SERVICES - EI	378	389	400	400	400	400	400	400	400	400	400
WATER SERVICES - WSIB	654	674	700	700	700	700	700	700	700	700	700
WATER SERVICES - OMERS	2,112	2,175	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100
WATER SERVICES - EHT	437	450	500	500	500	500	500	500	500	500	500
WATER SERVICES - LTD/ADD/LIFE	2,479	2,553	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400	3,500
WATER SERVICES - EQUIPMENT CHARGES	15,000	15,000	15,600	16,200	16,800	17,500	18,200	18,900	19,700	20,500	21,300
WATER SERVICES - PARTS & SUPPLIES	75,000	75,000	78,000	81,100	84,300	87,700	91,200	94,800	98,600	102,500	106,600
WATER SERVICES - CONTRACTED SERVICES	20,000	20,000	20,800	21,600	22,500	23,400	24,300	25,300	26,300	27,400	28,500
FIRE HYDRANTS	-	-	-	-	-	-	-	-	-	-	-
FIRE HYDRANTS - UNION SALARIES	23,218	23,915	24,900	25,900	26,900	28,000	29,100	30,300	31,500	32,800	34,100
FIRE HYDRANTS - CPP	1,045	1,076	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
FIRE HYDRANTS - EI	378	389	400	400	400	400	400	400	400	400	400
FIRE HYDRANTS - WSIB	654	674	700	700	700	700	700	700	700	700	700
FIRE HYDRANTS - OMERS	2,112	2,175	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100
FIRE HYDRANTS - EHT	437	450	500	500	500	500	500	500	500	500	500
FIRE HYDRANTS - LTD/ADD/LIFE	2,479	2,553	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400	3,500
FIRE HYDRANTS - EQUIPMENT CHARGES	8,000	8,000	8,300	8,600	8,900	9,300	9,700	10,100	10,500	10,900	11,300
FIRE HYDRANTS - PARTS & SUPPLIES	6,000	6,000	6,200	6,400	6,700	7,000	7,300	7,600	7,900	8,200	8,500
FIRE HYDRANTS - CONTRACTED SERVICES	500	500	500	500	500	500	500	500	500	500	500
		-	-	-	-	-	-	-	-	-	-
Sub Total Operating	**2,193,685**	**2,282,779**	**2,380,091**	**2,477,004**	**2,577,494**	**2,679,673**	**2,784,233**	**2,893,161**	**3,005,200**	**3,121,627**	**3,242,329**

Table 5-1 (Cont'd)

Description	Budget 2023	Forecast 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Capital-Related											
Existing Debt (Principal) - Growth Related	27,752	29,117	30,550	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Growth Related	3,915	2,550	1,118	-	-	-	-	-	-	-	-
New Growth Related Debt (Principal)		-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)		-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	1,080,323	1,110,507	1,141,725	708,842	468,929	221,878	232,861	244,387	256,484	269,179	282,503
Existing Debt (Interest) - Non-Growth Related	234,765	200,215	164,822	131,562	320,766	93,041	82,059	70,532	58,436	45,740	32,417
New Non-Growth Related Debt (Principal)		-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)		-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital Reserve	693,232	865,330	1,044,631	1,676,977	1,906,841	2,569,350	2,772,647	2,983,066	3,209,815	3,451,563	3,709,614
Sub Total Capital Related	**2,039,987**	**2,207,719**	**2,382,846**	**2,517,381**	**2,696,535**	**2,884,270**	**3,087,566**	**3,297,986**	**3,524,735**	**3,766,483**	**4,024,533**
Total Expenditures	**4,233,672**	**4,490,498**	**4,762,936**	**4,994,386**	**5,274,029**	**5,563,943**	**5,871,799**	**6,191,147**	**6,529,935**	**6,888,110**	**7,266,863**
Revenues											
Base Charge - Central Elgin	1,443,772	1,529,622	1,620,108	1,715,369	1,815,541	1,920,762	2,031,599	2,148,213	2,271,210	2,400,318	2,536,157
Base Charge - New Lynhurst	161,552	172,090	183,222	194,967	207,346	220,376	234,130	248,629	263,949	280,063	297,048
Base Charge - Entegrus Customers	444,115	466,424	489,829	514,355	540,025	566,863	595,015	624,507	655,490	687,872	721,807
WATER ADMIN - SUNDRY INCOME	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BULK FILL STATION REVENUE	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
WATER RECONNECT CHARGE	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
WATER - NEW ACCOUNT SETUP FEE	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
WATER - PAPER BILL FEE	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000
WATER PENALTY	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
WATER RENT	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
WATER NEW SERVICE HOOKUP	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
WATER METER SALES	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
FIRE HYDRANTS - MAINTENANCE RECOVERY	40,341	41,159	41,200	41,200	41,200	41,200	41,200	41,200	41,200	41,200	41,200
Contributions from Development Charges Reserve Fund	31,667	31,667	31,668	-	-	-	-	-	-	-	-
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**2,253,447**	**2,372,963**	**2,498,028**	**2,597,891**	**2,736,112**	**2,881,201**	**3,033,943**	**3,194,548**	**3,363,849**	**3,541,453**	**3,728,211**
Water Billing Recovery - Total	**1,980,225**	**2,117,535**	**2,264,909**	**2,396,495**	**2,537,917**	**2,682,742**	**2,837,856**	**2,996,599**	**3,166,086**	**3,346,657**	**3,538,651**

5.3 Wastewater Operating Expenditures

Similar to water expenditures, the wastewater operating expenditures have been adjusted over the forecast period to reflect the current inflationary pressures in Ontario. Additionally, the costs related to the wastewater contracts with St. Thomas have also been included.

With respect to all other operating expenditures, items related to utilities, hydro, and chemicals, a 7% annual inflation rate has been assumed. All other operating expenditures assume a 4% annual inflation rate.

In addition, debt payments and contributions to the wastewater reserve funds have been included. The wastewater reserve fund transfers are used to fund the wastewater capital program identified in Chapter 2, as well as build-up the reserve balance for future lifecycle requirements.

5.4 Wastewater Operating Revenues

The Municipality's fixed revenue sources are generated primarily from base charges and miscellaneous sources, which includes land leases, connection fees, and penalties. Similar to water, miscellaneous revenues have been assumed to remain constant over the forecast period.

The wastewater base charges are further discussed in section 6.5 of this study.

As noted in the section above, the operating revenue presented herein represents the fixed component of the total operating revenue. The shortfall of the fixed revenue from the operating expenditures is what is used to calculate the recovery from the wastewater volume rates, which is presented in Chapter 7. Table 5-2 provides for the wastewater operating budget for the Municipality.

Table 5-2
Municipality of Central Elgin
Operating Budget Forecast – Wastewater (inflated $)

Description	Budget	Forecast									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Expenditures											
WASTEWATER ADMINISTRATION											
WW ADMIN - NON-UNION SALARIES	250,571	256,353	266,600	277,300	288,400	299,900	311,900	324,400	337,400	350,900	364,900
WW ADMIN - UNION SALARIES	24,430	48,900	50,900	52,900	55,000	57,200	59,500	61,900	64,400	67,000	69,700
WW ADMIN - CASUAL SALARIES	-	2,873	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800
WW ADMIN - CPP	12,556	14,262	14,800	15,400	16,000	16,600	17,300	18,000	18,700	19,400	20,200
WW ADMIN - EI	4,542	5,203	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000	7,300
WW ADMIN - WSIB	7,981	8,934	9,300	9,700	10,100	10,500	10,900	11,300	11,800	12,300	12,800
WW ADMIN - OMERS	26,399	29,327	30,500	31,700	33,000	34,300	35,700	37,100	38,600	40,100	41,700
WW ADMIN - EHT	5,358	5,982	6,200	6,400	6,700	7,000	7,300	7,600	7,900	8,200	8,500
WW ADMIN - LTD/ADD/LIFE	30,010	34,391	35,800	37,200	38,700	40,200	41,800	43,500	45,200	47,000	48,900
WW ADMIN - EMPLOYEE ASSISTANCE	219	235	200	200	200	200	200	200	200	200	200
WW ADMIN - TRAVEL & CONVENTIONS	3,000	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	4,000
WW ADMIN - CLOTHING ALLOWANCE	3,500	3,500	3,600	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000
WW ADMIN - INSURANCE	53,800	67,250	69,900	72,700	75,600	78,600	81,700	85,000	88,400	91,900	95,600
WW ADMIN - RADIO LICENSING	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WW ADMIN - LICENCES/PERMITS/CERTS	1,500	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
WW ADMIN - OFFICE SUPPLIES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WW ADMIN - POSTAGE	20,000	20,000	20,800	21,600	22,500	23,400	24,300	25,300	26,300	27,400	28,500
WW ADMIN - EQUIPMENT CHARGES	6,500	6,500	6,800	7,100	7,400	7,700	8,000	8,300	8,600	8,900	9,300
WW ADMIN - MAINTENANCE	500	500	500	500	500	500	500	500	500	500	500
WW ADMIN - METER READING	23,500	23,500	24,400	25,400	26,400	27,500	28,600	29,700	30,900	32,100	33,400
WW ADMIN - PARTS & SUPPLIES	200	200	200	200	200	200	200	200	200	200	200
WW ADMIN - TELEPHONE	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
WW ADMIN - IT EQUIPMENT	2,000	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900
WW ADMIN - ST. THOMAS SEWER OPS	424,543	457,414	488,352	521,398	546,629	573,212	598,918	624,401	650,884	678,408	706,977
WW ADMIN - ANSWERING SERVICE	600	600	600	600	600	600	600	600	600	600	600
WW ADMIN - IT SERVICES	28,500	28,500	29,600	30,800	32,000	33,300	34,600	36,000	37,400	38,900	40,500
WW ADMIN - CONTRACTED SERVICES	1,500	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
WW ADMIN - SCADA SERVICES	38,500	38,500	40,000	41,600	43,300	45,000	46,800	48,700	50,600	52,600	54,700
WW ADMIN - LOCATES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WW ADMIN - PAYMENTS-IN-LIEU	75,000	75,000	78,000	81,100	84,300	87,700	91,200	94,800	98,600	102,500	106,600
WW ADMIN - WHITE STN LEASE	6,120	6,120	6,400	6,700	7,000	7,300	7,600	7,900	8,200	8,500	8,800
WW ADMIN - COPIER LEASE	900	900	900	900	900	900	900	900	900	900	900
WW ADMIN - TRAINING	11,000	11,000	11,400	11,900	12,400	12,900	13,400	13,900	14,500	15,100	15,700
WW ADMIN - HLTH & SAFETY TRAINING	2,500	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
WW ADMIN - HEALTH/SAFETY	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WW ADMIN - H & S SERVICES	300	300	300	300	300	300	300	300	300	300	300

Table 5-2 (Cont'd)

Description	Budget	Forecast									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
WASTEWATER PUMPING STATIONS	-	-	-	-	-	-	-	-	-	-	-
WW PUMPING STATIONS - UNION SALARIES	22,000	22,660	23,600	24,500	25,500	26,500	27,600	28,700	29,800	31,000	32,200
WW PUMPING STATIONS - CPP	1,004	1,034	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
WW PUMPING STATIONS - EI	363	374	400	400	400	400	400	400	400	400	400
WW PUMPING STATIONS - WSIB	638	657	700	700	700	700	700	700	700	700	700
WW PUMPING STATIONS - OMERS	2,112	2,175	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100
WW PUMPING STATIONS - EHT	429	442	500	500	500	500	500	500	500	500	500
WW PUMPING STATIONS - LTD/ADD/LIFE	2,401	2,473	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
WW PUMPING STATIONS - EQUIPMENT CHARGES	7,000	7,000	7,300	7,600	7,900	8,200	8,500	8,800	9,200	9,600	10,000
WW PUMPING STATIONS - SM TOOLS & EQUIP	2,000	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900
WW PUMPING STATIONS - PARTS & SUPPLIES	5,000	5,000	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000
WW PUMPING STATIONS - HYDRO	55,000	55,000	58,900	63,000	67,400	72,100	77,100	82,500	88,300	94,500	101,100
WW PUMPING STATIONS - WATER	400	400	400	400	400	400	400	400	400	400	400
WW PUMPING STATIONS - TELEPHONE	3,500	3,500	3,600	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000
WW PUMPING STATIONS - CONTRACTED SERVICE	45,000	45,000	46,800	48,700	50,600	52,600	54,700	56,900	59,200	61,600	64,100
WASTEWATER COLLECTION SYSTEM	-	-	-	-	-	-	-	-	-	-	-
WW COLLECTION SYSTEM - UNION SALARIES	18,000	18,540	19,300	20,100	20,900	21,700	22,600	23,500	24,400	25,400	26,400
WW COLLECTION SYSTEM - CPP	822	847	900	900	900	900	900	900	900	900	900
WW COLLECTION SYSTEM - EI	297	306	300	300	300	300	300	300	300	300	300
WW COLLECTION SYSTEM - WSIB	522	538	600	600	600	600	600	600	600	600	600
WW COLLECTION SYSTEM - OMERS	1,728	1,780	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700
WW COLLECTION SYSTEM - EHT	351	362	400	400	400	400	400	400	400	400	400
WW COLLECTION SYSTEM - LTD/ADD/LIFE	1,964	2,023	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900
WW COLLECTION SYSTEM - EQUIPMENT CHARGES	7,500	7,500	7,800	8,100	8,400	8,700	9,000	9,400	9,800	10,200	10,600
WW COLLECTION SYSTEM - PARTS & SUPPLIES	5,000	5,000	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000
WW COLLECTION SYSTEM - CONTRACTED SERVICES	50,000	50,000	52,000	54,100	56,300	58,600	60,900	63,300	65,800	68,400	71,100
BELMONT WASTERWATER TREATMENT PLANT	-	-	-	-	-	-	-	-	-	-	-
BELMONT WWTP - UNION SALARIES	32,000	32,960	34,300	35,700	37,100	38,600	40,100	41,700	43,400	45,100	46,900
BELMONT WWTP - CPP	1,461	1,505	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
BELMONT WWTP - EI	529	545	600	600	600	600	600	600	600	600	600
BELMONT WWTP - WSIB	929	957	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BELMONT WWTP - OMERS	3,072	3,164	3,300	3,400	3,500	3,600	3,700	3,800	4,000	4,200	4,400
BELMONT WWTP - EHT	623	642	700	700	700	700	700	700	700	700	700
BELMONT WWTP - LTD/ADD/LIFE	3,492	3,597	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000	5,200
BELMONT WWTP - CHEMICALS	9,000	9,000	9,600	10,300	11,000	11,800	12,600	13,500	14,400	15,400	16,500
BELMONT WWTP - EQUIPMENT CHARGES	5,000	5,000	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000
BELMONT WWTP - PARTS & SUPPLIES	3,000	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	4,000
BELMONT WWTP - HYDRO	80,000	80,000	85,600	91,600	98,000	104,900	112,200	120,100	128,500	137,500	147,100
BELMONT WWTP - WATER	600	600	600	600	600	600	600	600	600	600	600
BELMONT WWTP - TELEPHONE	1,500	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
BELMONT WWTP - GRAVEL SUPPLY	-	-	-	-	-	-	-	-	-	-	-
BELMONT WWTP - CONTRACTED SERVICES	35,000	35,000	36,400	37,900	39,400	41,000	42,600	44,300	46,100	47,900	49,800
BELMONT WWTP - LAB SAMPLING SERVICES	3,600	3,600	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000	5,200

Table 5-2 (Cont'd)

Description	Budget	Forecast									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
PORT STANLEY WASTEWATER TREATMENT PLANT	-	-	-	-	-	-	-	-	-	-	-
PS WWTP - UNION SALARIES	75,000	77,250	80,300	83,500	86,800	90,300	93,900	97,700	101,600	105,700	109,900
PS WWTP - CPP	3,424	3,527	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000	5,200
PS WWTP - EI	1,239	1,276	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100
PS WWTP - WSIB	2,177	2,242	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100
PS WWTP - OMERS	7,200	7,416	7,700	8,000	8,300	8,600	8,900	9,300	9,700	10,100	10,500
PS WWTP - EHT	1,461	1,505	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
PS WWTP - LTD/ADD/LIFE	8,185	8,431	8,800	9,200	9,600	10,000	10,400	10,800	11,200	11,600	12,100
PS WWTP - CLEANING SUPPLIES	500	500	500	500	500	500	500	500	500	500	500
PS WWTP - CHEMICALS	20,000	20,000	21,400	22,900	24,500	26,200	28,000	30,000	32,100	34,300	36,700
PS WWTP - EQUIPMENT CHARGES	8,000	8,000	8,300	8,600	8,900	9,300	9,700	10,100	10,500	10,900	11,300
PS WWTP - SMALL TOOLS AND EQUIPMENT	5,000	5,000	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000
PS WWTP - PARTS & SUPPLIES	20,000	20,000	20,800	21,600	22,500	23,400	24,300	25,300	26,300	27,400	28,500
PS WWTP - HEALTH & SAFETY SUPPLIES	500	500	500	500	500	500	500	500	500	500	500
PS WWTP - GAS	7,000	7,000	7,500	8,000	8,600	9,200	9,800	10,500	11,200	12,000	12,800
PS WWTP - HYDRO	75,000	75,000	80,300	85,900	91,900	98,300	105,200	112,600	120,500	128,900	137,900
PS WWTP - WATER	4,000	4,000	4,200	4,400	4,600	4,800	5,000	5,200	5,400	5,600	5,800
PS WWTP - TELEPHONE	1,900	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800
PS WWTP - CONTRACTED SERVICES	30,000	30,000	31,200	32,400	33,700	35,000	36,400	37,900	39,400	41,000	42,600
PS WWTP - SNOW REMOVAL/SALT SERVICES	3,500	3,500	3,600	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000
PS WWTP - LAB SAMPLING SERVICES	9,000	9,000	9,400	9,800	10,200	10,600	11,000	11,400	11,900	12,400	12,900
Sub Total Operating	**1,767,152**	**1,863,670**	**1,958,252**	**2,057,298**	**2,151,829**	**2,251,112**	**2,352,518**	**2,457,901**	**2,567,984**	**2,683,308**	**2,804,077**
Capital-Related											
Existing Debt (Principal) - Growth Related	472,063	491,189	511,118	289,579	299,303	309,352	319,740	330,476	341,572	353,041	364,895
Existing Debt (Interest) - Growth Related	262,586	243,460	223,531	205,672	195,948	185,899	175,511	164,775	153,679	142,210	130,356
New Growth Related Debt (Principal)		-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)		-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	974,049	1,005,569	1,038,191	466,691	433,326	398,662	412,047	425,882	440,183	454,963	470,239
Existing Debt (Interest) - Non-Growth Related	360,905	329,385	296,763	267,937	301,301	239,567	226,182	212,346	198,046	183,266	167,989
New Non-Growth Related Debt (Principal)		-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)		-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital Reserve	-	451,589	513,793	1,178,663	1,254,724	1,429,638	1,513,970	1,602,497	1,694,728	1,790,916	1,891,117
Sub Total Capital Related	**2,069,603**	**2,521,192**	**2,583,396**	**2,408,541**	**2,484,602**	**2,563,118**	**2,647,450**	**2,735,976**	**2,828,208**	**2,924,395**	**3,024,596**
Total Expenditures	**3,836,755**	**4,384,862**	**4,541,648**	**4,465,840**	**4,636,431**	**4,814,230**	**4,999,967**	**5,193,877**	**5,396,192**	**5,607,704**	**5,828,674**
Revenues											
Base Charge - Central Elgin	1,919,153	2,037,031	2,161,503	2,292,774	2,431,046	2,576,526	2,729,944	2,891,535	3,061,531	3,240,724	3,429,375
PORT STANLEY LAND LEASE	28,795	28,795	28,800	28,800	28,800	28,800	28,800	28,800	28,800	28,800	28,800
WASTEWATER PENALTY	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
WASTEWATER CONNECTION CHARGES	156,610	156,610	156,600	156,600	156,600	156,600	156,600	156,600	156,600	156,600	156,600
Contributions from Development Charges Reserve Fund	-	734,649	734,649	495,251	495,251	495,251	495,251	495,251	495,251	495,251	495,251
Contributions from Reserves / Reserve Funds	336,739	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**2,446,297**	**2,962,085**	**3,086,552**	**2,978,425**	**3,116,697**	**3,262,177**	**3,415,595**	**3,577,186**	**3,747,182**	**3,926,375**	**4,115,026**
Wastewater Billing Recovery - Total	**1,390,458**	**1,422,777**	**1,455,096**	**1,487,415**	**1,519,734**	**1,552,053**	**1,584,372**	**1,616,691**	**1,649,010**	**1,681,329**	**1,713,648**

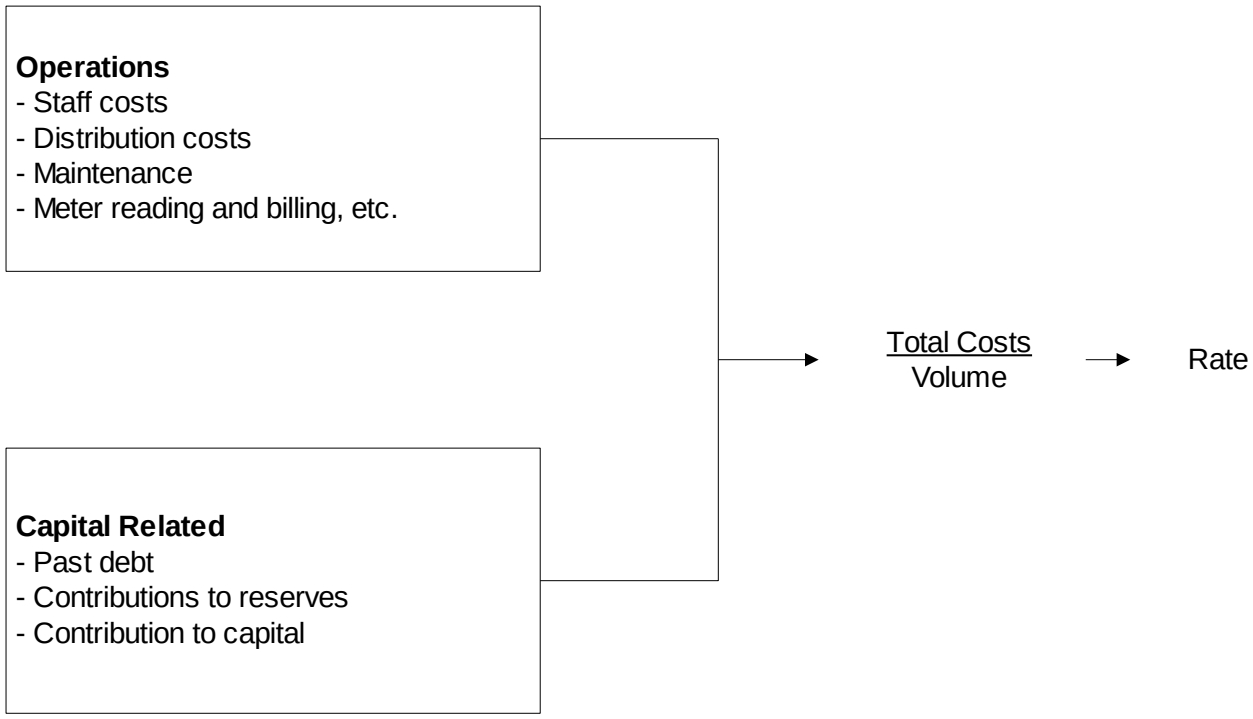
Chapter 6
Pricing Structures

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

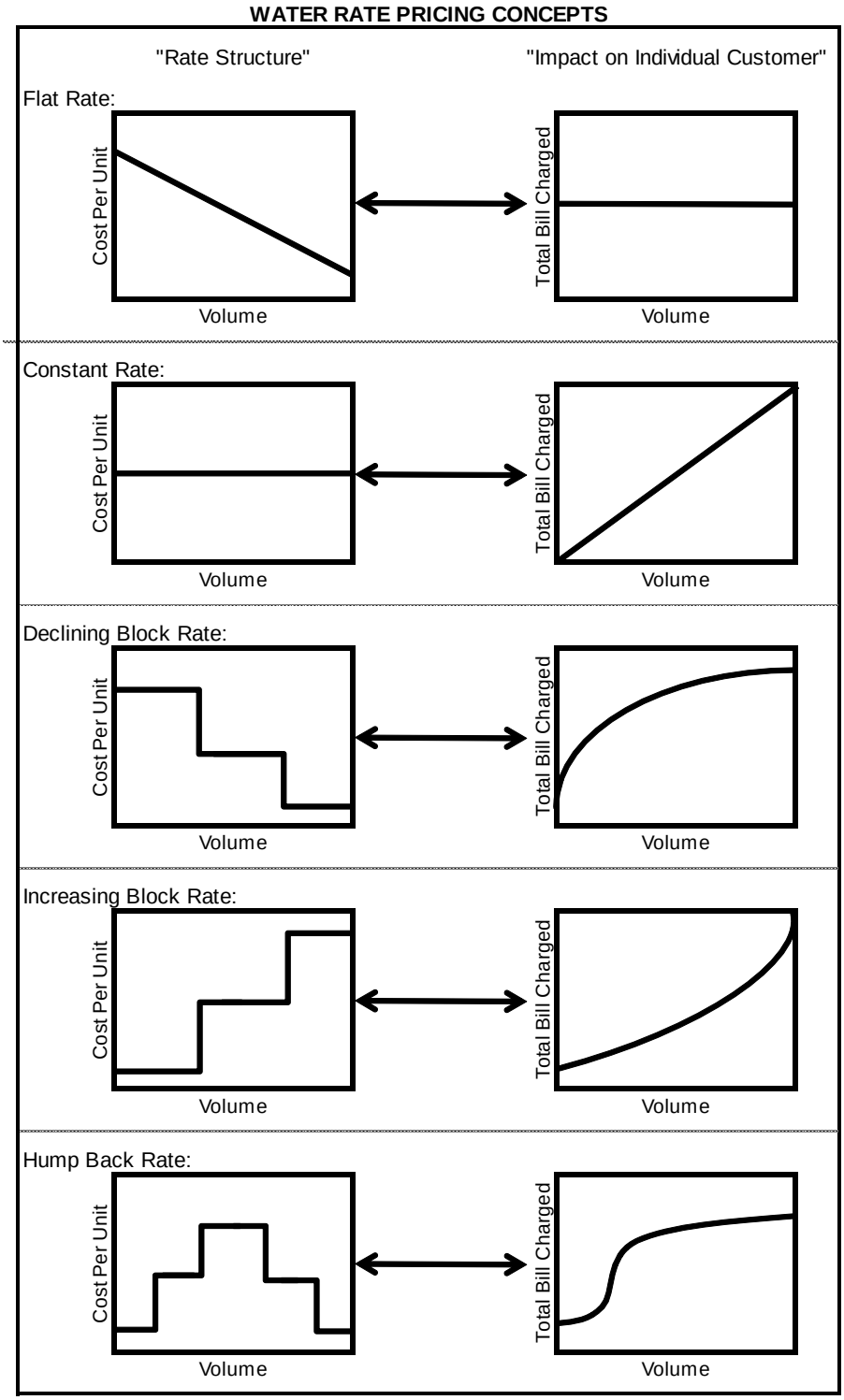

WATER RATE PRICING CONCEPTS
"Rate Structure"
"Impact on Individual Customer"
Flat Rate:
Cost Per Unit
Volume
Total Bill Charged
Volume
Constant Rate:
Cost Per Unit
Volume
Total Bill Charged
Volume
Declining Block Rate:
Cost Per Unit
Volume
Total Bill Charged
Volume
Increasing Block Rate:
Cost Per Unit
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 Recommended Rate Structures and Base Charges

The Municipality currently utilizes a base charge and volume rate for its water and wastewater customers. It is recommended that the same rate structures be continued in the future.

In order to provide for the Municipality's capital expenditures, future asset replacement needs, payments to the primary and secondary systems, as well as the day-to-day operating expenditures, the water base charges are proposed to increase by 4% annually.

With respect to wastewater, the base charges are also calculated to increase by 4% on an annual basis over the forecast period.

The above increases in the base charges are recommended to ensure that the Municipality can fund the capital and operating costs while minimizing the need for debentures.

The forecasted base charges and corresponding revenues are provided in Tables 6-1 and 6-2.

Table 6-1
Municipality of Central Elgin
Base Charge Forecast – Water

Water	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing	4,563	4,563	4,563	4,563	4,563	4,563	4,563	4,563	4,563	4,563	4,563
New	41	122	203	284	365	446	527	608	689	770	851
Total Customers	**4,604**	**4,685**	**4,766**	**4,847**	**4,928**	**5,009**	**5,090**	**5,171**	**5,252**	**5,333**	**5,414**
Total Annual Revenue	**$2,049,439**	**$2,168,136**	**$2,293,160**	**$2,424,691**	**$2,562,912**	**$2,708,001**	**$2,860,743**	**$3,021,348**	**$3,190,649**	**$3,368,253**	**$3,555,011**

5/8" or ¾" Meter Size	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing	4,517	4,517	4,517	4,517	4,517	4,517	4,517	4,517	4,517	4,517	4,517
New	41	122	203	284	365	446	527	608	689	770	851
Subtotal Customers	**4,558**	**4,639**	**4,720**	**4,801**	**4,882**	**4,963**	**5,044**	**5,125**	**5,206**	**5,287**	**5,368**
Monthly Base Charge	$36.19	$37.64	$39.15	$40.72	$42.35	$44.04	$45.80	$47.63	$49.54	$51.52	$53.58
Annual Base Charge	$434.28	$451.68	$469.80	$488.64	$508.20	$528.48	$549.60	$571.56	$594.48	$618.24	$642.96
Total Annual Revenue	**$1,979,448**	**$2,095,344**	**$2,217,456**	**$2,345,961**	**$2,481,032**	**$2,622,846**	**$2,772,182**	**$2,929,245**	**$3,094,863**	**$3,268,635**	**$3,451,409**

1" Meter Size	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing	20	20	20	20	20	20	20	20	20	20	20
New											
Subtotal Customers	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**
Monthly Base Charge	$60.64	$63.07	$65.59	$68.21	$70.94	$73.78	$76.73	$79.80	$82.99	$86.31	$89.76
Annual Base Charge	$727.68	$756.84	$787.08	$818.52	$851.28	$885.36	$920.76	$957.60	$995.88	$1,035.72	$1,077.12
Total Annual Revenue	**$14,554**	**$15,137**	**$15,742**	**$16,370**	**$17,026**	**$17,707**	**$18,415**	**$19,152**	**$19,918**	**$20,714**	**$21,542**

1 ½" Meter Size	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing	4	4	4	4	4	4	4	4	4	4	4
New											
Subtotal Customers	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
Monthly Base Charge	$60.64	$63.07	$65.59	$68.21	$70.94	$73.78	$76.73	$79.80	$82.99	$86.31	$89.76
Annual Base Charge	$727.68	$756.84	$787.08	$818.52	$851.28	$885.36	$920.76	$957.60	$995.88	$1,035.72	$1,077.12
Total Annual Revenue	**$2,911**	**$3,027**	**$3,148**	**$3,274**	**$3,405**	**$3,541**	**$3,683**	**$3,830**	**$3,984**	**$4,143**	**$4,308**

2" Meter Size	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing	17	17	17	17	17	17	17	17	17	17	17
New											
Subtotal Customers	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**	**17**
Monthly Base Charge	$121.40	$126.26	$131.31	$136.56	$142.02	$147.70	$153.61	$159.75	$166.14	$172.79	$179.70
Annual Base Charge	$1,456.80	$1,515.12	$1,575.72	$1,638.72	$1,704.24	$1,772.40	$1,843.32	$1,917.00	$1,993.68	$2,073.48	$2,156.40
Total Annual Revenue	**$24,766**	**$25,757**	**$26,787**	**$27,858**	**$28,972**	**$30,131**	**$31,336**	**$32,589**	**$33,893**	**$35,249**	**$36,659**

3" Meter Size	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing	1	1	1	1	1	1	1	1	1	1	1
New											
Subtotal Customers	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Monthly Base Charge	$196.46	$204.32	$212.49	$220.99	$229.83	$239.02	$248.58	$258.52	$268.86	$279.61	$290.79
Annual Base Charge	$2,357.52	$2,451.84	$2,549.88	$2,651.88	$2,757.96	$2,868.24	$2,982.96	$3,102.24	$3,226.32	$3,355.32	$3,489.48
Total Annual Revenue	**$2,358**	**$2,452**	**$2,550**	**$2,652**	**$2,758**	**$2,868**	**$2,983**	**$3,102**	**$3,226**	**$3,355**	**$3,489**

4" Meter Size	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing	2	2	2	2	2	2	2	2	2	2	2
New											
Subtotal Customers	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Monthly Base Charge	$387.43	$402.93	$419.05	$435.81	$453.24	$471.37	$490.22	$509.83	$530.22	$551.43	$573.49
Annual Base Charge	$4,649.16	$4,835.16	$5,028.60	$5,229.72	$5,438.88	$5,656.44	$5,882.64	$6,117.96	$6,362.64	$6,617.16	$6,881.88
Total Annual Revenue	**$9,298**	**$9,670**	**$10,057**	**$10,459**	**$10,878**	**$11,313**	**$11,765**	**$12,236**	**$12,725**	**$13,234**	**$13,764**

6" Meter Size	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing	2	2	2	2	2	2	2	2	2	2	2
New											
Subtotal Customers	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Monthly Base Charge	$671.05	$697.89	$725.81	$754.84	$785.03	$816.43	$849.09	$883.05	$918.37	$955.10	$993.30
Annual Base Charge	$8,052.60	$8,374.68	$8,709.72	$9,058.08	$9,420.36	$9,797.16	$10,189.08	$10,596.60	$11,020.44	$11,461.20	$11,919.60
Total Annual Revenue	**$16,105**	**$16,749**	**$17,419**	**$18,116**	**$18,841**	**$19,594**	**$20,378**	**$21,193**	**$22,041**	**$22,922**	**$23,839**

Table 6-2
Municipality of Central Elgin
Base Charge Forecast – Wastewater

Wastewater	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875
New	41	122	203	284	365	446	527	608	689	770	851
Subtotal Customers	**3,916**	**3,997**	**4,078**	**4,159**	**4,240**	**4,321**	**4,402**	**4,483**	**4,564**	**4,645**	**4,726**
Total Annual Revenue	**$1,919,153**	**$2,037,031**	**$2,161,503**	**$2,292,774**	**$2,431,046**	**$2,576,526**	**$2,729,944**	**$2,891,535**	**$3,061,531**	**$3,240,724**	**$3,429,375**

All Meter Sizes Meter Size	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Existing	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875	3,875
New	41	122	203	284	365	446	527	608	689	770	851
Subtotal Customers	**3,916**	**3,997**	**4,078**	**4,159**	**4,240**	**4,321**	**4,402**	**4,483**	**4,564**	**4,645**	**4,726**
Monthly Base Charge	$40.84	$42.47	$44.17	$45.94	$47.78	$49.69	$51.68	$53.75	$55.90	$58.14	$60.47
Annual Base Charge	$490.08	$509.64	$530.04	$551.28	$573.36	$596.28	$620.16	$645.00	$670.80	$697.68	$725.64
Total Annual Revenue	**$1,919,153**	**$2,037,031**	**$2,161,503**	**$2,292,774**	**$2,431,046**	**$2,576,526**	**$2,729,944**	**$2,891,535**	**$3,061,531**	**$3,240,724**	**$3,429,375**

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 identified in Chapter 6 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 continue with the present structures, the rates are calculated by taking the net recoverable amounts from Table 5-1 (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. The volume rates are anticipated to increase by:

- 5% in 2024 and 2025; and
- 4% per year from 2026 to 2033.

These increases are required in order to fund the operating and capital expenditure forecast, while providing reserve fund transfers to prepare for the future lifecycle requirements. 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 who consumes 140 cubic meters per year are presented in Table 7-1.

Table 7-1
Annual Customer Water Bill
Based on 140 cubic metres of usage and ¾" Water Meter

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Monthly Base Rate	$36.19	$37.64	$39.15	$40.72	$42.35	$44.04	$45.80	$47.63	$49.54	$51.52	$53.58
Constant Rate	$3.19	$3.35	$3.52	$3.66	$3.81	$3.96	$4.12	$4.28	$4.45	$4.63	$4.82
Annual Base Rate Bill	**$434.28**	**$451.68**	**$469.80**	**$488.64**	**$508.20**	**$528.48**	**$549.60**	**$571.56**	**$594.48**	**$618.24**	**$642.96**
Volume	140	140	140	140	140	140	140	140	140	140	140
Annual Volume Bill	**$446.60**	**$469.00**	**$492.80**	**$512.40**	**$533.40**	**$554.40**	**$576.80**	**$599.20**	**$623.00**	**$648.20**	**$674.80**
Total Annual Water Bill	**$880.88**	**$920.68**	**$962.60**	**$1,001.04**	**$1,041.60**	**$1,082.88**	**$1,126.40**	**$1,170.76**	**$1,217.48**	**$1,266.44**	**$1,317.76**
%Increase - Base Rate		4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
%Increase - Volume Rate		5%	5%	4%	4%	4%	4%	4%	4%	4%	4%
%Increase - Total Annual Bill		4.5%	4.6%	4.0%	4.1%	4.0%	4.0%	3.9%	4.0%	4.0%	4.1%
$ Increase - Total Annual Bill		**$39.80**	**$41.92**	**$38.44**	**$40.56**	**$41.28**	**$43.52**	**$44.36**	**$46.72**	**$48.96**	**$51.32**

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.

Based on the capital and operating needs over the forecast period, the wastewater volume rates are anticipated to remain constant over the entire forecast period.

Table 7-2 summarizes the recommended rates for wastewater and provides the average annual bill for a residential customer who uses 140 cubic meters per year:

Table 7-2
Annual Customer Wastewater Bill
Based on 140 cubic metres of usage and ¾" Water Meter

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Monthly Base Rate	$40.84	$42.47	$44.17	$45.94	$47.78	$49.69	$51.68	$53.75	$55.90	$58.14	$60.47
Constant Rate	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85	$2.85
Annual Base Rate Bill	**$490.08**	**$509.64**	**$530.04**	**$551.28**	**$573.36**	**$596.28**	**$620.16**	**$645.00**	**$670.80**	**$697.68**	**$725.64**
Volume	140	140	140	140	140	140	140	140	140	140	140
Annual Volume Bill	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**	**$399.00**
Total Annual Wastewater Bill	**$889.08**	**$908.64**	**$929.04**	**$950.28**	**$972.36**	**$995.28**	**$1,019.16**	**$1,044.00**	**$1,069.80**	**$1,096.68**	**$1,124.64**
%Increase - Base Rate		4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
%Increase - Volume Rate		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
%Increase - Total Annual Bill		2%	2%	2%	2%	2%	2%	2%	2%	3%	3%
$ Increase - Total Annual Bill		**$19.56**	**$20.40**	**$21.24**	**$22.08**	**$22.92**	**$23.88**	**$24.84**	**$25.80**	**$26.88**	**$27.96**

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 Municipal 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 4-3 and 4-4.

3. That Council consider the base charges provided in Table 6-1 for water and Table 6-2 for wastewater.

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

Appendices

Appendix A
Detailed Water Rate Calculations

Appendix A: Detailed Water Rate Calculations

Table A-1
Municipality of Central Elgin
Water Service
Capital Budget Forecast (Uninflated $)

Description	Budget 2023	Total	Forecast									
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Capital Expenditures												
Water Rates Studies	15,000	-										
W1 - 400 dia New Development Main East of Fairview from Elm to Raven (oversizing)	12,900	-										
W2 - 300 dia Bill Martyn from Sauve to Southdale	25,800	-										
W3 - 400 dia Southdale from Fairview to existing 200 dia at Lake Margaret Tr.	107,900	-										
W5 - 400 dia Southdale from Lake Margaret Tr. To Sunset Drive	110,200	-										
W6 - 400 dia Southdale from Fairview east to City Limit	51,600	-										
W7 - 300 dia Southdale from Sunset Drive west to Shaw Valley Drive	42,200	-										
Belmont - Kettle Creek WM Crossing		300,000	300,000									
SCADA System Upgrades, Water Portion		348,950	348,950									
Transfer Switch & Generator - Fruit Ridge		10,000	10,000									
Belmont - Pitless Adapater - Well 2		75,000	75,000									
Belmont - Generator Connection - Well 2		20,000	20,000									
Water Meter Replacements - Phase 1		850,000	850,000									
William Street Watermain, George to Edith Cavell		260,000		260,000								
Maud and Bessie Servicing Upgrades		90,000		90,000								
Water Meter Replacements Phase 2		825,000		825,000								
Union Watermain Sparta Line, Beaver Creek to Sunset		800,000		800,000								
Port Stanley - Relocate PRV Chambers		800,000		800,000								
Smith Street Watermain Replacement, Carlow to end		190,000			190,000							
Port Stanley Booster Station		2,000,000			2,000,000							
Port Stanley Water Tower-Exterior Painting		1,200,000				1,200,000						
Water Replacement, Elm Line east of Tike		364,000					364,000					
Rates Study		25,000					25,000					
Port Burwell Watermain Replacement and Other Capital Works		703,800					703,800					
Replace Bulk Fill Station		50,000						50,000				
George Street William to Bridge		150,000						150,000				
Hetty Street - Watermain Replacement-Colborne to Warren		200,000							200,000			
Col. Bostwick - Watermain Replacement-End to Bridge		125,000							125,000			
Borden Avenue Watermain - Belmont Rd. to Louise		200,000							200,000			
Lyndale Ave Watermain Replacement		420,000								420,000		
Watermain-Brentwood to Ceasar Road		500,000										500,000
		-										
Total Capital Expenditures	**365,600**	**10,506,750**	**1,603,950**	**2,775,000**	**2,190,000**	**1,200,000**	**1,092,800**	**200,000**	**525,000**	**420,000**	**-**	**500,000**

Table A-2
Municipality of Central Elgin
Water Service
Capital Budget Forecast (Inflated $)

Description	Budget	Total	Forecast									
	2023		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Capital Expenditures												
Water Rates Studies	15,000	-	-	-	-	-	-	-	-	-	-	-
W1 - 400 dia New Development Main East of Fairview from Elm to Raven (oversizing)	12,900	-	-	-	-	-	-	-	-	-	-	-
W2 - 300 dia Bill Martyn from Sauve to Southdale	25,800	-	-	-	-	-	-	-	-	-	-	-
W3 - 400 dia Southdale from Fairview to existing 200 dia at Lake Margaret Tr.	107,900	-	-	-	-	-	-	-	-	-	-	-
W5 - 400 dia Southdale from Lake Margaret Tr. To Sunset Drive	110,200	-	-	-	-	-	-	-	-	-	-	-
W6 - 400 dia Southdale from Fairview east to City Limit	51,600	-	-	-	-	-	-	-	-	-	-	-
W7 - 300 dia Southdale from Sunset Drive west to Shaw Valley Drive	42,200	-	-	-	-	-	-	-	-	-	-	-
Belmont - Kettle Creek WM Crossing	-	312,000	312,000	-	-	-	-	-	-	-	-	-
SCADA System Upgrades, Water Portion	-	363,000	363,000	-	-	-	-	-	-	-	-	-
Transfer Switch & Generator - Fruit Ridge	-	10,000	10,000	-	-	-	-	-	-	-	-	-
Belmont - Pitless Adapater - Well 2	-	78,000	78,000	-	-	-	-	-	-	-	-	-
Belmont - Generator Connection - Well 2	-	21,000	21,000	-	-	-	-	-	-	-	-	-
Water Meter Replacements - Phase 1	-	884,000	884,000	-	-	-	-	-	-	-	-	-
William Street Watermain, George to Edith Cavell	-	281,000	-	281,000	-	-	-	-	-	-	-	-
Maud and Bessie Servicing Upgrades	-	97,000	-	97,000	-	-	-	-	-	-	-	-
Water Meter Replacements Phase 2	-	892,000	-	892,000	-	-	-	-	-	-	-	-
Union Watermain Sparta Line, Beaver Creek to Sunset	-	865,000	-	865,000	-	-	-	-	-	-	-	-
Port Stanley - Relocate PRV Chambers	-	865,000	-	865,000	-	-	-	-	-	-	-	-
Smith Street Watermain Replacement, Carlow to end	-	214,000	-	-	214,000	-	-	-	-	-	-	-
Port Stanley Booster Station	-	2,250,000	-	-	2,250,000	-	-	-	-	-	-	-
Port Stanley Water Tower-Exterior Painting	-	1,404,000	-	-	-	1,404,000	-	-	-	-	-	-
Water Replacement, Elm Line east of Tike	-	443,000	-	-	-	-	443,000	-	-	-	-	-
Rates Study	-	30,000	-	-	-	-	30,000	-	-	-	-	-
Port Burwell Watermain Replacement and Other Capital Works	-	856,000	-	-	-	-	856,000	-	-	-	-	-
Replace Bulk Fill Station	-	63,000	-	-	-	-	-	63,000	-	-	-	-
George Street William to Bridge	-	190,000	-	-	-	-	-	190,000	-	-	-	-
Hetty Street - Watermain Replacement-Colborne to Warren	-	263,000	-	-	-	-	-	-	263,000	-	-	-
Col. Bostwick - Watermain Replacement-End to Bridge	-	164,000	-	-	-	-	-	-	164,000	-	-	-
Borden Avenue Watermain - Belmont Rd. to Louise	-	263,000	-	-	-	-	-	-	263,000	-	-	-
Lyndale Ave Watermain Replacement	-	575,000	-	-	-	-	-	-	-	575,000	-	-
Watermain-Brentwood to Ceasar Road	-	740,000	-	-	-	-	-	-	-	-	-	740,000
Total Capital Expenditures	**365,600**	**12,123,000**	**1,668,000**	**3,000,000**	**2,464,000**	**1,404,000**	**1,329,000**	**253,000**	**690,000**	**575,000**	**-**	**740,000**
Capital Financing												
Provincial/Federal Grants		884,000	884,000									
Development Charges Reserve Fund	334,475	2,206,250	-	1,081,250	1,125,000	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Lifecycle Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-
Water Reserve	31,125	9,032,750	784,000	1,918,750	1,339,000	1,404,000	1,329,000	253,000	690,000	575,000	-	740,000
Total Capital Financing	**365,600**	**12,123,000**	**1,668,000**	**3,000,000**	**2,464,000**	**1,404,000**	**1,329,000**	**253,000**	**690,000**	**575,000**	**-**	**740,000**

Table A-3
Municipality of Central Elgin
Water Service
Water Equipment Reserve Continuity
Inflated $

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Balance	255,614	936,076	1,037,754	166,908	514,982	1,038,180	2,324,101	4,940,622	7,378,362	10,213,441	13,938,305
Transfer from Operating	693,232	865,330	1,044,631	1,676,977	1,906,841	2,569,350	2,772,647	2,983,066	3,209,815	3,451,563	3,709,614
Transfer to Capital	31,125	784,000	1,918,750	1,339,000	1,404,000	1,329,000	253,000	690,000	575,000	-	740,000
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-
Closing Balance	**917,721**	**1,017,405**	**163,635**	**504,885**	**1,017,823**	**2,278,530**	**4,843,747**	**7,233,689**	**10,013,178**	**13,665,005**	**16,907,918**
Interest	18,354	20,348	3,273	10,098	20,356	45,571	96,875	144,674	200,264	273,300	338,158

Table A-4
Municipality of Central Elgin
Water Service
Water Development Charges Reserve Continuity
Inflated $

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Balance	(61,437)	(340,768)	(280,690)	(1,318,345)	(2,384,946)	(2,321,066)	(2,251,414)	(2,175,754)	(2,093,784)	(2,005,185)	(1,909,641)
Development Charge Proceeds	93,493	97,249	101,113	105,163	109,391	113,798	118,322	123,025	127,916	132,988	138,339
Transfer to Capital	334,475	-	1,081,250	1,125,000	-	-	-	-	-	-	-
Transfer to Operating	31,667	31,667	31,668	-	-	-	-	-	-	-	-
Closing Balance	**(334,087)**	**(275,186)**	**(1,292,495)**	**(2,338,182)**	**(2,275,555)**	**(2,207,268)**	**(2,133,092)**	**(2,052,729)**	**(1,965,868)**	**(1,872,197)**	**(1,771,301)**
Interest	(6,682)	(5,504)	(25,850)	(46,764)	(45,511)	(44,145)	(42,662)	(41,055)	(39,317)	(37,444)	(35,426)

Table A-5
Municipality of Central Elgin
Water Service
Operating Budget Forecast – Inflated $
Inflated $

Description	Budget	Forecast									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Expenditures											
WATER ADMINISTRATION											
WATER ADMIN - NON-UNION SALARIES	191,649	197,398	205,300	213,500	222,000	230,900	240,100	249,700	259,700	270,100	280,900
WATER ADMIN - UNION SALARIES	60,646	98,070	102,000	106,100	110,300	114,700	119,300	124,100	129,100	134,300	139,700
WATER ADMIN - CPP	11,992	14,346	14,900	15,500	16,100	16,700	17,400	18,100	18,800	19,600	20,400
WATER ADMIN - EI	4,342	5,260	5,500	5,700	5,900	6,100	6,300	6,600	6,900	7,200	7,500
WATER ADMIN - WSIB	7,509	8,806	9,200	9,600	10,000	10,400	10,800	11,200	11,600	12,100	12,600
WATER ADMIN - OMERS	24,244	28,175	29,300	30,500	31,700	33,000	34,300	35,700	37,100	38,600	40,100
WATER ADMIN - EHT	5,016	5,860	6,100	6,300	6,600	6,900	7,200	7,500	7,800	8,100	8,400
WATER ADMIN - LTD/ADD/LIFE	28,241	34,310	35,700	37,100	38,600	40,100	41,700	43,400	45,100	46,900	48,800
WATER ADMIN - EMPLOYEE ASSISTANCE	242	266	300	300	300	300	300	300	300	300	300
WATER ADMIN - TRAVEL & CONVENTIONS	3,100	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	4,000	4,200
WATER ADMIN - CLOTHING ALLOWANCES	3,500	3,500	3,600	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000
WATER ADMIN - DUES/MEMBERSHIPS	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER ADMIN - SUBSCRIPTIONS	200	200	200	200	200	200	200	200	200	200	200
WATER ADMIN - EMPLOYEE RECOGNITION	500	500	500	500	500	500	500	500	500	500	500
WATER ADMIN - ADVERTISING	300	300	300	300	300	300	300	300	300	300	300
WATER ADMIN - INSURANCE	36,100	45,125	46,900	48,800	50,800	52,800	54,900	57,100	59,400	61,800	64,300
WATER ADMIN - RADIO LICENSING	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER ADMIN - LICENCES/PERMITS/CERTS	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
WATER ADMIN - OFFICE SUPPLIES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER ADMIN - OFFICE EQUIPMENT	500	500	500	500	500	500	500	500	500	500	500
WATER ADMIN - EQUIPMENT CHARGES	15,500	15,500	16,100	16,700	17,400	18,100	18,800	19,600	20,400	21,200	22,000
WATER ADMIN - SMALL TOOLS/EQUIP	10,000	10,000	10,400	10,800	11,200	11,600	12,100	12,600	13,100	13,600	14,100
WATER ADMIN - TELEPHONE	4,300	4,300	4,500	4,700	4,900	5,100	5,300	5,500	5,700	5,900	6,100
WATER ADMIN - IT EQUIPMENT	2,000	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900
WATER ADMIN - ANSWERING SERVICE	600	600	600	600	600	600	600	600	600	600	600
WATER ADMIN - IT SERVICES	30,000	30,000	31,200	32,400	33,700	35,000	36,400	37,900	39,400	41,000	42,600
WATER ADMIN - SCADA SERVICES	30,000	30,000	31,200	32,400	33,700	35,000	36,400	37,900	39,400	41,000	42,600
WATER ADMIN - PAYMENTS IN LIEU	17,500	17,500	18,200	18,900	19,700	20,500	21,300	22,200	23,100	24,000	25,000
WATER ADMIN - WHITE STATION LEASE	11,730	11,730	12,200	12,700	13,200	13,700	14,200	14,800	15,400	16,000	16,600
WATER ADMIN - CROSSING AREEMENTS	500	500	500	500	500	500	500	500	500	500	500
WATER ADMIN - COPIER LEASE	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
OPERATOR TRAINING - TRAINING	13,500	13,500	14,000	14,600	15,200	15,800	16,400	17,100	17,800	18,500	19,200
WATER - HEALTH & SAFETY- TRAINING	3,000	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	4,000
HEALTH & SAFETY - H&S SUPPLIES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
SHOP EQUIP & TRUCK MTCE - PARTS & SUPPL	500	500	500	500	500	500	500	500	500	500	500
SHOP EQUIP & TRUCK MTCE - LAB SAMPLING	1,800	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700
DWQMS - AUDIT SERVICES	2,500	5,500	5,700	5,900	6,100	6,300	6,600	6,900	7,200	7,500	7,800

Table A-5 (Cont'd)

Description	Budget 2023	Forecast 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
BILLING & COLLECTION	-	-	-	-	-	-	-	-	-	-	-
BILLING & COLLECT - NON-UNION SALARIES	40,746	41,968	43,600	45,300	47,100	49,000	51,000	53,000	55,100	57,300	59,600
BILLING & COLLECT - UNION SALARIES	9,098	9,371	9,700	10,100	10,500	10,900	11,300	11,800	12,300	12,800	13,300
BILLING & COLLECT - CPP	2,379	2,450	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300
BILLING & COLLECT - EI	861	887	900	900	900	900	900	900	900	900	900
BILLING & COLLECT - WSIB	1,490	1,535	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
BILLING & COLLECT - OMERS	4,809	4,953	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000
BILLING & COLLECT - EHT	995	1,025	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
BILLING & COLLECT - LTD/ADD/LIFE	5,643	5,812	6,000	6,200	6,400	6,700	7,000	7,300	7,600	7,900	8,200
BILLING & COLLECT - POSTAGE	15,000	15,000	15,600	16,200	16,800	17,500	18,200	18,900	19,700	20,500	21,300
BILLING & COLLECT - BILLING COSTS	20,000	20,000	20,800	21,600	22,500	23,400	24,300	25,300	26,300	27,400	28,500
BILLING & COLLECT - EQUIPMENT CHGS	10,500	10,500	10,900	11,300	11,800	12,300	12,800	13,300	13,800	14,400	15,000
BILLING & COLLECT - SMALL TOOLS & EQUIP	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BILLING & COLLECT - METER READING	23,500	23,500	24,400	25,400	26,400	27,500	28,600	29,700	30,900	32,100	33,400
WATER PURCHASES	-	-	-	-	-	-	-	-	-	-	-
WATER PURCHASES - ELGIN PRIMARY	357,408	377,540	398,650	420,766	443,914	465,917	488,842	512,713	537,594	563,512	590,491
WATER PURCHASES - MALAHIDE SECONDARY	17,175	17,964	18,065	19,657	20,572	21,509	22,491	23,517	24,587	25,702	26,869
WATER PURCHASES - AYLMER SECONDARY	48,869	50,583	52,368	54,178	56,013	57,761	59,739	61,738	63,760	65,806	67,916
WATER PURCHASES - ST. THOMAS SECONDARY	107,693	113,551	119,223	125,137	131,300	137,305	142,481	147,830	153,365	159,090	165,009
WATER PURCHASES - ST. THOMAS SUBURBAN AREA	445,251	456,237	474,086	487,766	501,995	516,781	531,481	546,764	561,294	576,318	591,844
BELMONT WATER TREATMENT	-	-	-	-	-	-	-	-	-	-	-
BELMONT WTP OPS - UNION SALARIES	26,772	27,575	28,700	29,800	31,000	32,200	33,500	34,800	36,200	37,600	39,100
BELMONT WTP OPS - CPP	1,205	1,241	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100
BELMONT WTP OPS - EI	436	449	500	500	500	500	500	500	500	500	500
BELMONT WTP OPS - WSIB	754	777	800	800	800	800	800	800	800	800	800
BELMONT WTP OPS - OMERS	2,436	2,509	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
BELMONT WTP OPS - EHT	504	519	500	500	500	500	500	500	500	500	500
BELMONT WTP OPS - LTD/ADD/Life	2,858	2,944	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	4,000
BELMONT WTP OPS - CHEMICALS	6,500	6,500	7,000	7,500	8,000	8,600	9,200	9,800	10,500	11,200	12,000
BELMONT WTP OPS - EQUIPMENT CHARGES	5,500	5,500	5,700	5,900	6,100	6,300	6,600	6,900	7,200	7,500	7,800
BELMONT WTP OPS - PARTS & SUPPLIES	10,000	10,000	10,400	10,800	11,200	11,600	12,100	12,600	13,100	13,600	14,100
BELMONT WTP OPS - HYDRO	10,000	10,000	10,700	11,400	12,200	13,100	14,000	15,000	16,100	17,200	18,400
BELMONT WTP OPS - TELEPHONE	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BELMONT WTP OPS - CONTRACTED SERVICES	43,000	13,000	13,500	14,000	14,600	15,200	15,800	16,400	17,100	17,800	18,500
PORT STANLEY WATER TOWER OPERATIONS	-	-	-	-	-	-	-	-	-	-	-
PS TOWER OPS - UNION SALARIES	6,187	6,373	6,600	6,900	7,200	7,500	7,800	8,100	8,400	8,700	9,000
PS TOWER OPS - CPP	278	286	300	300	300	300	300	300	300	300	300
PS TOWER OPS - EI	101	104	100	100	100	100	100	100	100	100	100
PS TOWER OPS - WSIB	174	179	200	200	200	200	200	200	200	200	200
PS TOWER OPS - OMERS	563	580	600	600	600	600	600	600	600	600	600
PS TOWER OPS - EHT	116	119	100	100	100	100	100	100	100	100	100
PS TOWER OPS - LTD/ADD/LIFE	661	681	700	700	700	700	700	700	700	700	700
PS TOWER OPS - CHEMICALS	2,100	2,100	2,200	2,400	2,600	2,800	3,000	3,200	3,400	3,600	3,900
PS TOWER OPS - EQUIPMENT CHARGES	1,750	1,750	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600
PS TOWER OPS - PARTS & SUPPLIES	2,500	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
PS TOWER OPS - HYDRO	8,000	8,000	8,600	9,200	9,800	10,500	11,200	12,000	12,800	13,700	14,700
PS TOWER OPS - TELEPHONE	500	500	500	500	500	500	500	500	500	500	500
PS TOWER OPS - CONTRACTED SERVICES	15,000	15,000	15,600	16,200	16,800	17,500	18,200	18,900	19,700	20,500	21,300

Table A-5 (Cont'd)

Description	Budget 2023	Forecast 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
BELMONT WATER TOWER	-	-	-	-	-	-	-	-	-	-	-
BELMONT WATER TOWER - UNION SALARIES	3,763	3,876	4,000	4,200	4,400	4,600	4,800	5,000	5,200	5,400	5,600
BELMONT WATER TOWER - CPP	169	174	200	200	200	200	200	200	200	200	200
BELMONT WATER TOWER - EI	61	63	100	100	100	100	100	100	100	100	100
BELMONT WATER TOWER - WSIB	106	109	100	100	100	100	100	100	100	100	100
BELMONT WATER TOWER - OMERS	342	352	400	400	400	400	400	400	400	400	400
BELMONT WATER TOWER - EHT	71	73	100	100	100	100	100	100	100	100	100
BELMONT WATER TOWER - LTD/ADD/LIFE	402	414	400	400	400	400	400	400	400	400	400
BELMONT WATER TOWER - EQUIPMENT CHARGES	250	250	300	300	300	300	300	300	300	300	300
BELMONT WATER TOWER - PARTS & SUPPLIES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BELMONT WATER TOWER - HYDRO	3,500	3,500	3,700	4,000	4,300	4,600	4,900	5,200	5,600	6,000	6,400
BELMONT WATER TOWER - CONTRACTED SERVICE	13,000	13,000	13,500	14,000	14,600	15,200	15,800	16,400	17,100	17,800	18,500
BULK FILL STATION	-	-	-	-	-	-	-	-	-	-	-
BULK FILL STATION - UNION SALARIES	619	638	700	700	700	700	700	700	700	700	700
BULK FILL STATION - OMERS	56	58	100	100	100	100	100	100	100	100	100
BULK FILL STATION - LTD/ADD/Life	66	68	100	100	100	100	100	100	100	100	100
BULK FILL STATION - EQUIP CHARGES	100	100	100	100	100	100	100	100	100	100	100
BULK FILL STATION - CONTRACTED SERVICES	2,500	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
FRUIT RIDGE BOOSTER	-	-	-	-	-	-	-	-	-	-	-
FRUIT RIDGE BOOSTER - UNION SALARIES	2,171	2,236	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100
FRUIT RIDGE BOOSTER - CPP	98	101	100	100	100	100	100	100	100	100	100
FRUIT RIDGE BOOSTER - WSIB	61	63	100	100	100	100	100	100	100	100	100
FRUIT RIDGE BOOSTER - OMERS	197	203	200	200	200	200	200	200	200	200	200
FRUIT RIDGE BOOSTER - LTD/ADD/LIFE	232	239	200	200	200	200	200	200	200	200	200
FRUIT RIDGE BOOSTER - EQUIPMENT CHARGES	500	500	500	500	500	500	500	500	500	500	500
FRUIT RIDGE BOOSTER - HYDRO	2,100	2,100	2,200	2,400	2,600	2,800	3,000	3,200	3,400	3,600	3,900
FRUIT RIDGE BOOSTER - CONTRACTED SERVICE	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER CHAMBERS	-	-	-	-	-	-	-	-	-	-	-
WATER CHAMBERS - UNION SALARIES	3,111	3,204	3,300	3,400	3,500	3,600	3,700	3,800	4,000	4,200	4,400
WATER CHAMBERS - CPP	142	146	200	200	200	200	200	200	200	200	200
WATER CHAMBERS - EI	51	53	100	100	100	100	100	100	100	100	100
WATER CHAMBERS - WSIB	88	91	100	100	100	100	100	100	100	100	100
WATER CHAMBERS - OMERS	283	291	300	300	300	300	300	300	300	300	300
WATER CHAMBERS - EHT	59	61	100	100	100	100	100	100	100	100	100
WATER CHAMBERS - LTD/ADD/LIFE	332	342	400	400	400	400	400	400	400	400	400
WATER CHAMBERS - EQUIPMENT CHARGES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER CHAMBERS - PARTS & SUPPLIES	500	500	500	500	500	500	500	500	500	500	500
WATER CHAMBERS - HYDRO	1,000	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900
WATER CHAMBERS - CONTRACTED SERVICES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Table A-5 (Cont'd)

Description	Budget 2023	Forecast 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
WATER MAINS	-	-	-	-	-	-	-	-	-	-	-
WATER MAINS - UNION SALARIES	60,780	62,603	65,100	67,700	70,400	73,200	76,100	79,100	82,300	85,600	89,000
WATER MAINS - CPP	2,735	2,817	2,900	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700
WATER MAINS - EI	990	1,020	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
WATER MAINS - WSIB	1,713	1,764	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600
WATER MAINS - OMERS	5,530	5,696	5,900	6,100	6,300	6,600	6,900	7,200	7,500	7,800	8,100
WATER MAINS - EHT	1,144	1,178	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
WATER MAINS - LTD/ADD/LIFE	6,489	6,684	7,000	7,300	7,600	7,900	8,200	8,500	8,800	9,200	9,600
WATER MAINS - EQUIPMENT CHARGES	18,500	18,500	19,200	20,000	20,800	21,600	22,500	23,400	24,300	25,300	26,300
WATER MAINS - PARTS & SUPPLIES	10,000	10,000	10,400	10,800	11,200	11,600	12,100	12,600	13,100	13,600	14,100
WATER MAINS - CONTRACTED SERVICES	15,000	15,000	15,600	16,200	16,800	17,500	18,200	18,900	19,700	20,500	21,300
SAMPLING - LAB SAMPLING SERVICES	18,000	18,000	18,700	19,400	20,200	21,000	21,800	22,700	23,600	24,500	25,500
LOCATES - LOCATING SERVICES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WATER SERVICES	-	-	-	-	-	-	-	-	-	-	-
WATER SERVICES - UNION SALARIES	60,780	62,603	65,100	67,700	70,400	73,200	76,100	79,100	82,300	85,600	89,000
WATER SERVICES - CPP	1,045	1,076	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
WATER SERVICES - EI	378	389	400	400	400	400	400	400	400	400	400
WATER SERVICES - WSIB	654	674	700	700	700	700	700	700	700	700	700
WATER SERVICES - OMERS	2,112	2,175	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100
WATER SERVICES - EHT	437	450	500	500	500	500	500	500	500	500	500
WATER SERVICES - LTD/ADD/LIFE	2,479	2,553	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400	3,500
WATER SERVICES - EQUIPMENT CHARGES	15,000	15,000	15,600	16,200	16,800	17,500	18,200	18,900	19,700	20,500	21,300
WATER SERVICES - PARTS & SUPPLIES	75,000	75,000	78,000	81,100	84,300	87,700	91,200	94,800	98,600	102,500	106,600
WATER SERVICES - CONTRACTED SERVICES	20,000	20,000	20,800	21,600	22,500	23,400	24,300	25,300	26,300	27,400	28,500
FIRE HYDRANTS	-	-	-	-	-	-	-	-	-	-	-
FIRE HYDRANTS - UNION SALARIES	23,218	23,915	24,900	25,900	26,900	28,000	29,100	30,300	31,500	32,800	34,100
FIRE HYDRANTS - CPP	1,045	1,076	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
FIRE HYDRANTS - EI	378	389	400	400	400	400	400	400	400	400	400
FIRE HYDRANTS - WSIB	654	674	700	700	700	700	700	700	700	700	700
FIRE HYDRANTS - OMERS	2,112	2,175	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100
FIRE HYDRANTS - EHT	437	450	500	500	500	500	500	500	500	500	500
FIRE HYDRANTS - LTD/ADD/LIFE	2,479	2,553	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400	3,500
FIRE HYDRANTS - EQUIPMENT CHARGES	8,000	8,000	8,300	8,600	8,900	9,300	9,700	10,100	10,500	10,900	11,300
FIRE HYDRANTS - PARTS & SUPPLIES	6,000	6,000	6,200	6,400	6,700	7,000	7,300	7,600	7,900	8,200	8,500
FIRE HYDRANTS - CONTRACTED SERVICES	500	500	500	500	500	500	500	500	500	500	500
		-	-	-	-	-	-	-	-	-	-
Sub Total Operating	**2,193,685**	**2,282,779**	**2,380,091**	**2,477,004**	**2,577,494**	**2,679,673**	**2,784,233**	**2,893,161**	**3,005,200**	**3,121,627**	**3,242,329**

Table A-5 (Cont'd)

Description	Budget 2023	Forecast 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Capital-Related											
Existing Debt (Principal) - Growth Related	27,752	29,117	30,550	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Growth Related	3,915	2,550	1,118	-	-	-	-	-	-	-	-
New Growth Related Debt (Principal)		-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)		-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	1,080,323	1,110,507	1,141,725	708,842	468,929	221,878	232,861	244,387	256,484	269,179	282,503
Existing Debt (Interest) - Non-Growth Related	234,765	200,215	164,822	131,562	320,766	93,041	82,059	70,532	58,436	45,740	32,417
New Non-Growth Related Debt (Principal)		-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)		-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital Reserve	693,232	865,330	1,044,631	1,676,977	1,906,841	2,569,350	2,772,647	2,983,066	3,209,815	3,451,563	3,709,614
Sub Total Capital Related	**2,039,987**	**2,207,719**	**2,382,846**	**2,517,381**	**2,696,535**	**2,884,270**	**3,087,566**	**3,297,986**	**3,524,735**	**3,766,483**	**4,024,533**
Total Expenditures	**4,233,672**	**4,490,498**	**4,762,936**	**4,994,386**	**5,274,029**	**5,563,943**	**5,871,799**	**6,191,147**	**6,529,935**	**6,888,110**	**7,266,863**
Revenues											
Base Charge - Central Elgin	1,443,772	1,529,622	1,620,108	1,715,369	1,815,541	1,920,762	2,031,599	2,148,213	2,271,210	2,400,318	2,536,157
Base Charge - New Lynhurst	161,552	172,090	183,222	194,967	207,346	220,376	234,130	248,629	263,949	280,063	297,048
Base Charge - Entegrus Customers	444,115	466,424	489,829	514,355	540,025	566,863	595,015	624,507	655,490	687,872	721,807
WATER ADMIN - SUNDRY INCOME	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BULK FILL STATION REVENUE	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
WATER RECONNECT CHARGE	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
WATER - NEW ACCOUNT SETUP FEE	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
WATER - PAPER BILL FEE	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000
WATER PENALTY	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
WATER RENT	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
WATER NEW SERVICE HOOKUP	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
WATER METER SALES	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
FIRE HYDRANTS - MAINTENANCE RECOVERY	40,341	41,159	41,200	41,200	41,200	41,200	41,200	41,200	41,200	41,200	41,200
Contributions from Development Charges Reserve Fund	31,667	31,667	31,668	-	-	-	-	-	-	-	-
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**2,253,447**	**2,372,963**	**2,498,028**	**2,597,891**	**2,736,112**	**2,881,201**	**3,033,943**	**3,194,548**	**3,363,849**	**3,541,453**	**3,728,211**
Water Billing Recovery - Total	**1,980,225**	**2,117,535**	**2,264,909**	**2,396,495**	**2,537,917**	**2,682,742**	**2,837,856**	**2,996,599**	**3,166,086**	**3,346,657**	**3,538,651**

Table A-6
Municipality of Central Elgin
Water Rate Forecast
Inflated $

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Total Water Billing Recovery	1,980,225	2,117,535	2,264,909	2,396,495	2,537,917	2,682,742	2,837,856	2,996,599	3,166,086	3,346,657	3,538,651
Total Volume (m^3)	620,760	632,100	643,440	654,780	666,120	677,460	688,800	700,140	711,480	722,820	734,160
Constant Rate	**3.19**	**3.35**	**3.52**	**3.66**	**3.81**	**3.96**	**4.12**	**4.28**	**4.45**	**4.63**	**4.82**
Annual Percentage Change		**5%**	**5%**	**4%**	**4%**	**4%**	**4%**	**4%**	**4%**	**4%**	**4%**

Appendix B
Detailed Wastewater Rate Calculations

Table B-1
Municipality of Central Elgin
Wastewater Service
Capital Budget Forecast (Uninflated $)

Description	Budget 2023	Total	Forecast									
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Capital Expenditures												
Rates Study	15,000	-										
Pump Station 55 upgrades	100,000	-										
SCADA System Upgrades Wastewater Portion		373,150	373,150									
Crescent Ave. Pumping Station Control Panel		125,000	125,000									
Union EA Update - WW		50,000	50,000									
Union Wastewater Servicing		1,250,000		1,250,000								
Union Pumping Station and Forcemain		4,500,000		4,500,000								
Replace Control Panel-Lynhurst		150,000		150,000								
Condition Assessment, Port Stanley Forcemain		60,000		60,000								
Sewer Upsizing, Colborne Street at Stanley		200,000		200,000								
George Street Sanitary Sewer Lining Boltville to Bridge		291,032			291,032							
Pumping Station Control Panel-Woodland		125,000			125,000							
Belmont Lagoon Repairs Phase 1		612,000			612,000							
Station 71 Repairs		100,000			100,000							
Rates Study		25,000					25,000					
Decommision old station 71		80,000							80,000			
Sewage Forcemain (Belmont)		780,000							780,000			
Pumping Station 71 (pump install)		75,000							75,000			
Belmont Lagoon Repairs Phase 2		467,000							467,000			
Lyndale Ave Sanitary Sewer		570,650								570,650		
Wet Well Rehabs (Mechanical/Electrical)		200,000									200,000	
Replace Forcemain on Washurn for station 72		200,000										200,000
Total Capital Expenditures	**115,000**	**10,233,832**	**548,150**	**6,160,000**	**1,128,032**	**-**	**25,000**	**-**	**1,402,000**	**570,650**	**200,000**	**200,000**

Table B-2
Municipality of Central Elgin
Wastewater Service
Capital Budget Forecast (Inflated $)

Description	Budget	Total	Forecast									
	2023		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Capital Expenditures												
Rates Study	15,000	-	-	-	-	-	-	-	-	-	-	-
Pump Station 55 upgrades	100,000	-	-	-	-	-	-	-	-	-	-	-
SCADA System Upgrades Wastewater Portion	-	388,000	388,000	-	-	-	-	-	-	-	-	-
Crescent Ave. Pumping Station Control Panel	-	130,000	130,000	-	-	-	-	-	-	-	-	-
Union EA Update - WW	-	52,000	52,000	-	-	-	-	-	-	-	-	-
Union Wastewater Servicing	-	1,352,000	-	1,352,000	-	-	-	-	-	-	-	-
Union Pumping Station and Forcemain	-	4,867,000	-	4,867,000	-	-	-	-	-	-	-	-
Replace Control Panel-Lynhurst	-	162,000	-	162,000	-	-	-	-	-	-	-	-
Condition Assessment, Port Stanley Forcemain	-	65,000	-	65,000	-	-	-	-	-	-	-	-
Sewer Upsizing, Colborne Street at Stanley	-	216,000	-	216,000	-	-	-	-	-	-	-	-
George Street Sanitary Sewer Lining Boltville to Bridge	-	327,000	-	-	327,000	-	-	-	-	-	-	-
Pumping Station Control Panel-Woodland	-	141,000	-	-	141,000	-	-	-	-	-	-	-
Belmont Lagoon Repairs Phase 1	-	688,000	-	-	688,000	-	-	-	-	-	-	-
Station 71 Repairs	-	112,000	-	-	112,000	-	-	-	-	-	-	-
Rates Study	-	30,000	-	-	-	-	30,000	-	-	-	-	-
Decommision old station 71	-	105,000	-	-	-	-	-	-	105,000	-	-	-
Sewage Forcemain (Belmont)	-	1,026,000	-	-	-	-	-	-	1,026,000	-	-	-
Pumping Station 71 (pump install)	-	99,000	-	-	-	-	-	-	99,000	-	-	-
Belmont Lagoon Repairs Phase 2	-	615,000	-	-	-	-	-	-	615,000	-	-	-
Lyndale Ave Sanitary Sewer	-	781,000	-	-	-	-	-	-	-	781,000	-	-
Wet Well Rehabs (Mechanical/Electrical)	-	285,000	-	-	-	-	-	-	-	-	285,000	-
Replace Forcemain on Washurn for station 72	-	296,000	-	-	-	-	-	-	-	-	-	296,000
Total Capital Expenditures	**115,000**	**11,737,000**	**570,000**	**6,662,000**	**1,268,000**	**-**	**30,000**	**-**	**1,845,000**	**781,000**	**285,000**	**296,000**
Capital Financing												
Provincial/Federal Grants		-										
Development Charges Reserve Fund	-	6,828,261	-	5,703,261	-	-	-	-	1,125,000	-	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Connection Charge Revenues	-	781,000	-	-	-	-	-	-	-	781,000	-	-
Lifecycle Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater Reserve	115,000	4,127,739	570,000	958,739	1,268,000	-	30,000	-	720,000	-	285,000	296,000
Total Capital Financing	**115,000**	**11,737,000**	**570,000**	**6,662,000**	**1,268,000**	**-**	**30,000**	**-**	**1,845,000**	**781,000**	**285,000**	**296,000**

Table B-3
Municipality of Central Elgin
Wastewater Service
Wastewater Capital Reserve Continuity
Inflated $

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Balance	1,775,114	1,349,842	1,256,060	827,336	752,759	2,047,633	3,516,217	5,130,791	6,133,553	7,984,847	9,680,578
Transfer from Operating	-	451,589	513,793	1,178,663	1,254,724	1,429,638	1,513,970	1,602,497	1,694,728	1,790,916	1,891,117
Transfer to Capital	115,000	570,000	958,739	1,268,000	-	30,000	-	720,000	-	285,000	296,000
Transfer to Operating	336,739	-	-	-	-	-	-	-	-	-	-
Closing Balance	**1,323,375**	**1,231,431**	**811,114**	**737,999**	**2,007,483**	**3,447,271**	**5,030,187**	**6,013,288**	**7,828,282**	**9,490,763**	**11,275,695**
Interest	26,467	24,629	16,222	14,760	40,150	68,945	100,604	120,266	156,566	189,815	225,514

Table B-4
Municipality of Central Elgin
Wastewater Service
Wastewater Development Charges Reserve Continuity
Inflated $

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Balance	(21,421)	726,581	5,360,161	(289,776)	41,199	412,477	826,227	1,284,693	642,738	1,174,841	1,758,542
Development Charge Proceeds	733,755	763,128	793,654	825,418	858,442	892,801	928,526	965,694	1,004,317	1,044,471	1,086,260
Front-Ending from Developers	-	4,500,000									
Transfer to Capital			5,703,261	-	-	-	-	1,125,000	-	-	-
Transfer to Operating	-	734,649	734,649	495,251	495,251	495,251	495,251	495,251	495,251	495,251	495,251
Closing Balance	**712,335**	**5,255,060**	**(284,094)**	**40,391**	**404,389**	**810,027**	**1,259,503**	**630,136**	**1,151,805**	**1,724,061**	**2,349,551**
Interest	14,247	105,101	(5,682)	808	8,088	16,201	25,190	12,603	23,036	34,481	46,991

Table B-5
Municipality of Central Elgin
Wastewater Service
Wastewater Lifecycle Reserve Continuity
Inflated $

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Opening Balance	12,287	12,533	12,784	13,039	13,300	13,566	13,837	14,114	14,396	14,684	14,978
Transfer from Operating	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-
Closing Balance	**12,287**	**12,533**	**12,784**	**13,039**	**13,300**	**13,566**	**13,837**	**14,114**	**14,396**	**14,684**	**14,978**
Interest	246	251	256	261	266	271	277	282	288	294	300

Table B-6
Municipality of Central Elgin
Wastewater Service
Operating Budget Forecast
Inflated $

Description	Budget 2023	Forecast 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Expenditures											
WASTEWATER ADMINISTRATION											
WW ADMIN - NON-UNION SALARIES	250,571	256,353	266,600	277,300	288,400	299,900	311,900	324,400	337,400	350,900	364,900
WW ADMIN - UNION SALARIES	24,430	48,900	50,900	52,900	55,000	57,200	59,500	61,900	64,400	67,000	69,700
WW ADMIN - CASUAL SALARIES	-	2,873	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800
WW ADMIN - CPP	12,556	14,262	14,800	15,400	16,000	16,600	17,300	18,000	18,700	19,400	20,200
WW ADMIN - EI	4,542	5,203	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000	7,300
WW ADMIN - WSIB	7,981	8,934	9,300	9,700	10,100	10,500	10,900	11,300	11,800	12,300	12,800
WW ADMIN - OMERS	26,399	29,327	30,500	31,700	33,000	34,300	35,700	37,100	38,600	40,100	41,700
WW ADMIN - EHT	5,358	5,982	6,200	6,400	6,700	7,000	7,300	7,600	7,900	8,200	8,500
WW ADMIN - LTD/ADD/LIFE	30,010	34,391	35,800	37,200	38,700	40,200	41,800	43,500	45,200	47,000	48,900
WW ADMIN - EMPLOYEE ASSISTANCE	219	235	200	200	200	200	200	200	200	200	200
WW ADMIN - TRAVEL & CONVENTIONS	3,000	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	4,000
WW ADMIN - CLOTHING ALLOWANCE	3,500	3,500	3,600	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000
WW ADMIN - INSURANCE	53,800	67,250	69,900	72,700	75,600	78,600	81,700	85,000	88,400	91,900	95,600
WW ADMIN - RADIO LICENSING	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WW ADMIN - LICENCES/PERMITS/CERTS	1,500	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
WW ADMIN - OFFICE SUPPLIES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WW ADMIN - POSTAGE	20,000	20,000	20,800	21,600	22,500	23,400	24,300	25,300	26,300	27,400	28,500
WW ADMIN - EQUIPMENT CHARGES	6,500	6,500	6,800	7,100	7,400	7,700	8,000	8,300	8,600	8,900	9,300
WW ADMIN - MAINTENANCE	500	500	500	500	500	500	500	500	500	500	500
WW ADMIN - METER READING	23,500	23,500	24,400	25,400	26,400	27,500	28,600	29,700	30,900	32,100	33,400
WW ADMIN - PARTS & SUPPLIES	200	200	200	200	200	200	200	200	200	200	200
WW ADMIN - TELEPHONE	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
WW ADMIN - IT EQUIPMENT	2,000	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900
WW ADMIN - ST. THOMAS SEWER OPS	424,543	457,414	488,352	521,398	546,629	573,212	598,918	624,401	650,884	678,408	706,977
WW ADMIN - ANSWERING SERVICE	600	600	600	600	600	600	600	600	600	600	600
WW ADMIN - IT SERVICES	28,500	28,500	29,600	30,800	32,000	33,300	34,600	36,000	37,400	38,900	40,500
WW ADMIN - CONTRACTED SERVICES	1,500	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
WW ADMIN - SCADA SERVICES	38,500	38,500	40,000	41,600	43,300	45,000	46,800	48,700	50,600	52,600	54,700
WW ADMIN - LOCATES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WW ADMIN - PAYMENTS-IN-LIEU	75,000	75,000	78,000	81,100	84,300	87,700	91,200	94,800	98,600	102,500	106,600
WW ADMIN - WHITE STN LEASE	6,120	6,120	6,400	6,700	7,000	7,300	7,600	7,900	8,200	8,500	8,800
WW ADMIN - COPIER LEASE	900	900	900	900	900	900	900	900	900	900	900
WW ADMIN - TRAINING	11,000	11,000	11,400	11,900	12,400	12,900	13,400	13,900	14,500	15,100	15,700
WW ADMIN - HLTH & SAFETY TRAINING	2,500	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
WW ADMIN - HEALTH/SAFETY	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
WW ADMIN - H & S SERVICES	300	300	300	300	300	300	300	300	300	300	300

Table B-6 (Cont'd)

Description	Budget	Forecast									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
WASTEWATER PUMPING STATIONS	-	-	-	-	-	-	-	-	-	-	-
WW PUMPING STATIONS - UNION SALARIES	22,000	22,660	23,600	24,500	25,500	26,500	27,600	28,700	29,800	31,000	32,200
WW PUMPING STATIONS - CPP	1,004	1,034	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
WW PUMPING STATIONS - EI	363	374	400	400	400	400	400	400	400	400	400
WW PUMPING STATIONS - WSIB	638	657	700	700	700	700	700	700	700	700	700
WW PUMPING STATIONS - OMERS	2,112	2,175	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100
WW PUMPING STATIONS - EHT	429	442	500	500	500	500	500	500	500	500	500
WW PUMPING STATIONS - LTD/ADD/LIFE	2,401	2,473	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
WW PUMPING STATIONS - EQUIPMENT CHARGES	7,000	7,000	7,300	7,600	7,900	8,200	8,500	8,800	9,200	9,600	10,000
WW PUMPING STATIONS - SM TOOLS & EQUIP	2,000	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900
WW PUMPING STATIONS - PARTS & SUPPLIES	5,000	5,000	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000
WW PUMPING STATIONS - HYDRO	55,000	55,000	58,900	63,000	67,400	72,100	77,100	82,500	88,300	94,500	101,100
WW PUMPING STATIONS - WATER	400	400	400	400	400	400	400	400	400	400	400
WW PUMPING STATIONS - TELEPHONE	3,500	3,500	3,600	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000
WW PUMPING STATIONS - CONTRACTED SERVICE	45,000	45,000	46,800	48,700	50,600	52,600	54,700	56,900	59,200	61,600	64,100
WASTEWATER COLLECTION SYSTEM	-	-	-	-	-	-	-	-	-	-	-
WW COLLECTION SYSTEM - UNION SALARIES	18,000	18,540	19,300	20,100	20,900	21,700	22,600	23,500	24,400	25,400	26,400
WW COLLECTION SYSTEM - CPP	822	847	900	900	900	900	900	900	900	900	900
WW COLLECTION SYSTEM - EI	297	306	300	300	300	300	300	300	300	300	300
WW COLLECTION SYSTEM - WSIB	522	538	600	600	600	600	600	600	600	600	600
WW COLLECTION SYSTEM - OMERS	1,728	1,780	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700
WW COLLECTION SYSTEM - EHT	351	362	400	400	400	400	400	400	400	400	400
WW COLLECTION SYSTEM - LTD/ADD/LIFE	1,964	2,023	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900
WW COLLECTION SYSTEM - EQUIPMENT CHARGES	7,500	7,500	7,800	8,100	8,400	8,700	9,000	9,400	9,800	10,200	10,600
WW COLLECTION SYSTEM - PARTS & SUPPLIES	5,000	5,000	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000
WW COLLECTION SYSTEM - CONTRACTED SERVICES	50,000	50,000	52,000	54,100	56,300	58,600	60,900	63,300	65,800	68,400	71,100
BELMONT WASTERWATER TREATMENT PLANT	-	-	-	-	-	-	-	-	-	-	-
BELMONT WWTP - UNION SALARIES	32,000	32,960	34,300	35,700	37,100	38,600	40,100	41,700	43,400	45,100	46,900
BELMONT WWTP - CPP	1,461	1,505	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
BELMONT WWTP - EI	529	545	600	600	600	600	600	600	600	600	600
BELMONT WWTP - WSIB	929	957	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BELMONT WWTP - OMERS	3,072	3,164	3,300	3,400	3,500	3,600	3,700	3,800	4,000	4,200	4,400
BELMONT WWTP - EHT	623	642	700	700	700	700	700	700	700	700	700
BELMONT WWTP - LTD/ADD/LIFE	3,492	3,597	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000	5,200
BELMONT WWTP - CHEMICALS	9,000	9,000	9,600	10,300	11,000	11,800	12,600	13,500	14,400	15,400	16,500
BELMONT WWTP - EQUIPMENT CHARGES	5,000	5,000	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000
BELMONT WWTP - PARTS & SUPPLIES	3,000	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	4,000
BELMONT WWTP - HYDRO	80,000	80,000	85,600	91,600	98,000	104,900	112,200	120,100	128,500	137,500	147,100
BELMONT WWTP - WATER	600	600	600	600	600	600	600	600	600	600	600
BELMONT WWTP - TELEPHONE	1,500	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
BELMONT WWTP - GRAVEL SUPPLY	-	-	-	-	-	-	-	-	-	-	-
BELMONT WWTP - CONTRACTED SERVICES	35,000	35,000	36,400	37,900	39,400	41,000	42,600	44,300	46,100	47,900	49,800
BELMONT WWTP - LAB SAMPLING SERVICES	3,600	3,600	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000	5,200

Table B-6 (Cont'd)

Description	Budget 2023	Forecast 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
PORT STANLEY WASTEWATER TREATMENT PLANT	-	-	-	-	-	-	-	-	-	-	-
PS WWTP - UNION SALARIES	75,000	77,250	80,300	83,500	86,800	90,300	93,900	97,700	101,600	105,700	109,900
PS WWTP - CPP	3,424	3,527	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000	5,200
PS WWTP - EI	1,239	1,276	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100
PS WWTP - WSIB	2,177	2,242	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100
PS WWTP - OMERS	7,200	7,416	7,700	8,000	8,300	8,600	8,900	9,300	9,700	10,100	10,500
PS WWTP - EHT	1,461	1,505	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
PS WWTP - LTD/ADD/LIFE	8,185	8,431	8,800	9,200	9,600	10,000	10,400	10,800	11,200	11,600	12,100
PS WWTP - CLEANING SUPPLIES	500	500	500	500	500	500	500	500	500	500	500
PS WWTP - CHEMICALS	20,000	20,000	21,400	22,900	24,500	26,200	28,000	30,000	32,100	34,300	36,700
PS WWTP - EQUIPMENT CHARGES	8,000	8,000	8,300	8,600	8,900	9,300	9,700	10,100	10,500	10,900	11,300
PS WWTP - SMALL TOOLS AND EQUIPMENT	5,000	5,000	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,700	7,000
PS WWTP - PARTS & SUPPLIES	20,000	20,000	20,800	21,600	22,500	23,400	24,300	25,300	26,300	27,400	28,500
PS WWTP - HEALTH & SAFETY SUPPLIES	500	500	500	500	500	500	500	500	500	500	500
PS WWTP - GAS	7,000	7,000	7,500	8,000	8,600	9,200	9,800	10,500	11,200	12,000	12,800
PS WWTP - HYDRO	75,000	75,000	80,300	85,900	91,900	98,300	105,200	112,600	120,500	128,900	137,900
PS WWTP - WATER	4,000	4,000	4,200	4,400	4,600	4,800	5,000	5,200	5,400	5,600	5,800
PS WWTP - TELEPHONE	1,900	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800
PS WWTP - CONTRACTED SERVICES	30,000	30,000	31,200	32,400	33,700	35,000	36,400	37,900	39,400	41,000	42,600
PS WWTP - SNOW REMOVAL/SALT SERVICES	3,500	3,500	3,600	3,700	3,800	4,000	4,200	4,400	4,600	4,800	5,000
PS WWTP - LAB SAMPLING SERVICES	9,000	9,000	9,400	9,800	10,200	10,600	11,000	11,400	11,900	12,400	12,900
Sub Total Operating	**1,767,152**	**1,863,670**	**1,958,252**	**2,057,298**	**2,151,829**	**2,251,112**	**2,352,518**	**2,457,901**	**2,567,984**	**2,683,308**	**2,804,077**
Capital-Related											
Existing Debt (Principal) - Growth Related	472,063	491,189	511,118	289,579	299,303	309,352	319,740	330,476	341,572	353,041	364,895
Existing Debt (Interest) - Growth Related	262,586	243,460	223,531	205,672	195,948	185,899	175,511	164,775	153,679	142,210	130,356
New Growth Related Debt (Principal)		-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)		-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	974,049	1,005,569	1,038,191	466,691	433,326	398,662	412,047	425,882	440,183	454,963	470,239
Existing Debt (Interest) - Non-Growth Related	360,905	329,385	296,763	267,937	301,301	239,567	226,182	212,346	198,046	183,266	167,989
New Non-Growth Related Debt (Principal)		-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)		-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital Reserve	-	451,589	513,793	1,178,663	1,254,724	1,429,638	1,513,970	1,602,497	1,694,728	1,790,916	1,891,117
Sub Total Capital Related	**2,069,603**	**2,521,192**	**2,583,396**	**2,408,541**	**2,484,602**	**2,563,118**	**2,647,450**	**2,735,976**	**2,828,208**	**2,924,395**	**3,024,596**
Total Expenditures	**3,836,755**	**4,384,862**	**4,541,648**	**4,465,840**	**4,636,431**	**4,814,230**	**4,999,967**	**5,193,877**	**5,396,192**	**5,607,704**	**5,828,674**
Revenues											
Base Charge - Central Elgin	1,919,153	2,037,031	2,161,503	2,292,774	2,431,046	2,576,526	2,729,944	2,891,535	3,061,531	3,240,724	3,429,375
PORT STANLEY LAND LEASE	28,795	28,795	28,800	28,800	28,800	28,800	28,800	28,800	28,800	28,800	28,800
WASTEWATER PENALTY	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
WASTEWATER CONNECTION CHARGES	156,610	156,610	156,600	156,600	156,600	156,600	156,600	156,600	156,600	156,600	156,600
Contributions from Development Charges Reserve Fund	-	734,649	734,649	495,251	495,251	495,251	495,251	495,251	495,251	495,251	495,251
Contributions from Reserves / Reserve Funds	336,739	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**2,446,297**	**2,962,085**	**3,086,552**	**2,978,425**	**3,116,697**	**3,262,177**	**3,415,595**	**3,577,186**	**3,747,182**	**3,926,375**	**4,115,026**
Wastewater Billing Recovery - Total	**1,390,458**	**1,422,777**	**1,455,096**	**1,487,415**	**1,519,734**	**1,552,053**	**1,584,372**	**1,616,691**	**1,649,010**	**1,681,329**	**1,713,648**

Table B-7
Municipality of Central Elgin
Wastewater Rate Forecast
Inflated $

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Total Wastewater Billing Recovery	1,390,458	1,422,777	1,455,096	1,487,415	1,519,734	1,552,053	1,584,372	1,616,691	1,649,010	1,681,329	1,713,648
Total Volume (m^3)	487,880	499,220	510,560	521,900	533,240	544,580	555,920	567,260	578,600	589,940	601,280
Constant Rate	**2.85**	**2.85**	**2.85**	**2.85**	**2.85**	**2.85**	**2.85**	**2.85**	**2.85**	**2.85**	**2.85**
Annual Percentage Change		**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**