



# Water and Wastewater Rate Study

## Municipality of Leamington

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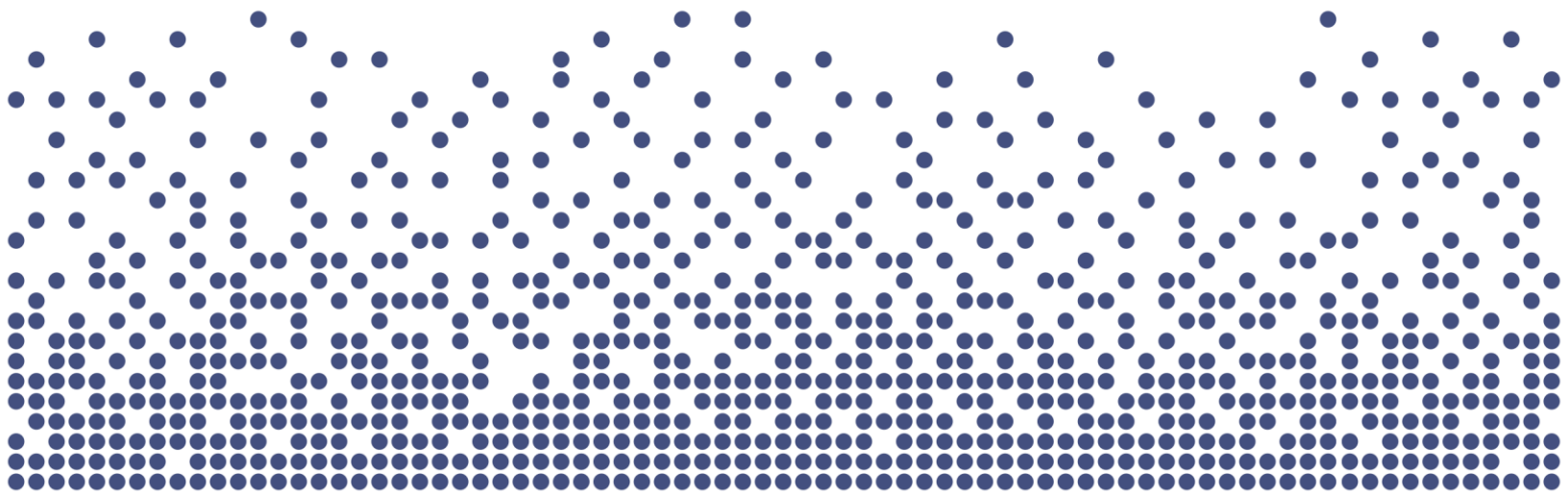
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## List of Acronyms and Abbreviations

<b>Acronym</b>	<b>Full Description of Acronym</b>
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
LPAT	Local Planning Appeal Tribunal
M.O.E.	Ministry of Environment
O.C.I.F.	Ontario Community Infrastructure Fund
OLT	Ontario Land Tribunal
O.M.B.	Ontario Municipal Board
O. Reg.	Ontario Regulation
O.S.I.F.A.	Ontario Strategic Infrastructure Financing Authority
P.S.A.B.	Public Sector Accounting Board
P.T.I.F.	Public Transit Infrastructure Fund
S.W.S.S.A.	Sustainable Water and Sewage Systems Act, 2002



# Executive Summary



# Executive Summary

The Municipality of Leamington retained Watson & Associates Economists Ltd. (Watson) to undertake a water and wastewater rate study. This study aims to prepare an analysis of the Municipality's water and wastewater rate forecast based on current capital and operating forecasts, costing for lifecycle replacement 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 Leamington. The rate analysis contained herein continues to provide fiscally responsible practices that are in line with current provincial legislation.

The analysis presented herein provides the following:

- The 2024 to 2035 capital spending program for water and wastewater is approximately \$150.55 million and \$142.25 million (inflated), respectively;
- A significant portion of the water capital spending program is related to the construction of the Trunk Watermain on County Road 31 from Talbot St. to Mersea Rd. 11;
- For wastewater, a significant portion of the capital spending program is related to the expansion of the wastewater treatment plant expansion;
- Annual operating expenditures related to wages and salaries are increasing by 2.5% per annum over the forecast, while expenditures related to utilities, fuels, chemicals and other materials are increasing at 5% per annum;
- The present rate structure for water and wastewater (base monthly charge and a constant volume rate) is continued;
- Existing water customers total 9,650 (this total includes 7 flat rate users); an average of 159 new customers annually is anticipated over the next 12-year period; and
- Existing wastewater customers total 6,900; an average of 148 new customers annually is anticipated over the next 12-year period.

Based on the above information, rate increases have been balanced for the combined water/wastewater user to experience a 3.9% annual increase on the combined bill from 2025 to 2027, 3.3% for 2028, 2.7% from 2029 to 2030, and 2% every year thereafter. This is achieved by providing the following changes to water and wastewater:



- To meet the needs of the water forecast, an annual increase of 2% to the base charge and volume rate is required.
- To meet the needs of the wastewater forecast, it is recommended that the wastewater volume and base rates increase by 5% from 2025 to 2027, 4% for 2028, 3% from 2029 to 2030, and 2% every year thereafter.
- As noted, the combined impact of the water and wastewater rates above is equal to a 3.9% annual increase on the combined bill from 2025 to 2027, 3.3% for 2028, 2.7% from 2029 to 2030, and 2% every year thereafter for customers in the category “residential, commercial (<25mm)”.

Table ES-1 summarizes the recommended water and wastewater rates and average annual bill (assuming an annual volume of 201 cu.m<sup>1</sup>) based on the analysis provided herein over the forecast period.

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<sup>1</sup> The annual per customer volume utilized is based on the average usage for residential customers in the urban area over the period 2019 to 2022.

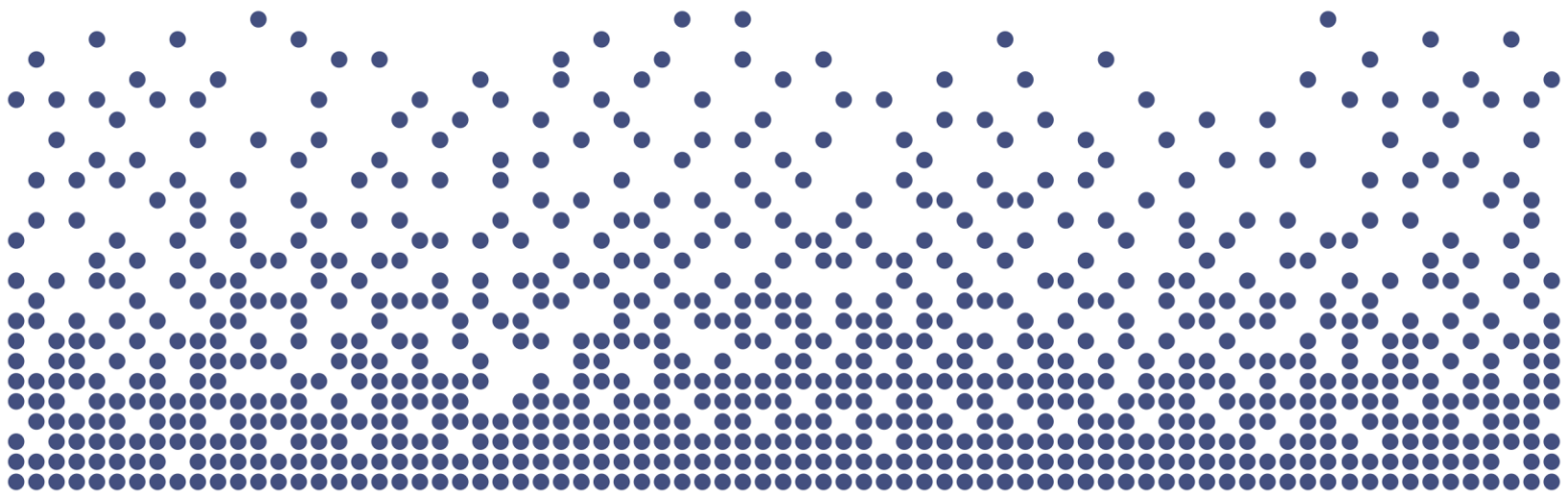
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Table ES-1  
Municipality of Leamington  
Average Annual Residential Water and Wastewater Bill (Based on Annual Usage of 201 cu.m)

Annual Bill for Residential and Commercial Users (<25mm) with 201 cu.m Volume	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Water</b>												
Base Charge	\$329.28	\$335.87	\$342.58	\$349.43	\$356.42	\$363.55	\$370.82	\$378.24	\$385.80	\$393.52	\$401.39	\$409.42
Volume	\$54.38	\$55.47	\$56.58	\$57.71	\$58.86	\$60.04	\$61.24	\$62.46	\$63.71	\$64.99	\$66.29	\$67.61
<b>Total Water Bill</b>	<b>\$383.66</b>	<b>\$391.33</b>	<b>\$399.16</b>	<b>\$407.14</b>	<b>\$415.28</b>	<b>\$423.59</b>	<b>\$432.06</b>	<b>\$440.70</b>	<b>\$449.52</b>	<b>\$458.51</b>	<b>\$467.68</b>	<b>\$477.03</b>
<b>Wastewater</b>												
Base Charge (which includes 250.92 cu.m)	\$647.28	\$679.64	\$713.63	\$749.31	\$779.28	\$802.66	\$826.74	\$843.27	\$860.14	\$877.34	\$894.89	\$912.79
<b>Total Wastewater Bill</b>	<b>\$647.28</b>	<b>\$679.64</b>	<b>\$713.63</b>	<b>\$749.31</b>	<b>\$779.28</b>	<b>\$802.66</b>	<b>\$826.74</b>	<b>\$843.27</b>	<b>\$860.14</b>	<b>\$877.34</b>	<b>\$894.89</b>	<b>\$912.79</b>
<b>Total Combined Bill</b>	<b>\$1,030.94</b>	<b>\$1,070.98</b>	<b>\$1,112.78</b>	<b>\$1,156.45</b>	<b>\$1,194.56</b>	<b>\$1,226.25</b>	<b>\$1,258.80</b>	<b>\$1,283.98</b>	<b>\$1,309.66</b>	<b>\$1,335.85</b>	<b>\$1,362.57</b>	<b>\$1,389.82</b>
<b>Annual Percentage Change</b>		3.9%	3.9%	3.9%	3.3%	2.7%	2.7%	2.0%	2.0%	2.0%	2.0%	2.0%

Note, the above water rates do not include the Union water billing amount, which as of 2024 will be identified separately on the water bill.



# Report



# Chapter 1

## Introduction



# 1. Introduction

## 1.1 Background

The Municipality of Leamington is located in the County of Essex, with a population of 31,390 people. The Municipality services 9,643 metered and 7 flat rate water customers and 6,900 wastewater customers. These customers are comprised of residential, non-residential, regulated, and unregulated greenhouses. Water supply is provided by Union Water Supply System Inc. (U.W.S.S.).

The water and wastewater systems are metered and utilize a rate structure with a monthly base charge as well as a volume charge on a per cubic metre basis which varies by meter size. The volume rates also vary for commercial, field drip irrigation and regulated and unregulated greenhouses based on property size. For wastewater customers there is a base charge in place as well as a volume charge for usage in excess of 20.91 cu.m per month. Table 1-1 provides the 2023 rates.

Table 1-1  
Municipality of Leamington  
Water and Wastewater Rates – 2023

2023 - Water Billing Rates	
Monthly Base Charge	
All Categories	\$ 26.96
Volume Charge	
Residential, Commercial (<25mm)	
\$ 0.980	per cu.m
Regulated Greenhouse, Commercial (>25mm)	
\$ 1.070	per cu.m
Unregulated Greenhouse/Commercial (>25mm) & Field Drip Irrigation	
\$ 1.160	per cu.m under 3 acres
\$ 2.320	per cu.m over 3 acres
Monthly Flat Rate Users	
\$ 57.410	per user

2023 - Wastewater Billing Rates	
Monthly Base Charge	
All Categories	\$ 52.88
Volume Charge	
Block 1 Volume (0 to 20.91 cu.m per month)	
Included in the base charge	
Block 2 Volume (>20.91 cu.m per month)	
\$ 2.53	Block 2 per m <sup>3</sup>

\*A regulated greenhouse must have a Municipality of Leamington approved on-site reservoir and rate of flow control system.

Note that the above water rates include the cost of purchasing water from the U.W.S.S. Beginning in 2024, the U.W.S.S. will be a municipal service corporation. As such, the U.W.S.S. is required to bill their customers directly, rather than bill the local municipalities. Therefore, the water rates calculated herein do not include the purchase costs for water supply. For rate comparison purposes later in this report, the water supply rate has been excluded from the Municipality's water distribution rate.



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 Leamington to assist in addressing these changes in a proactive manner as they relate to the water and wastewater systems. The assessment provided herein addresses changes recommended to the water and wastewater rates based on the most current information and forecasts the implications over the next 12-year period.

## 1.2 Study Process

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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 12-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 2025 and future years.

## 1.3 Regulatory Changes in Ontario

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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**

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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

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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

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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:

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- 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.)**

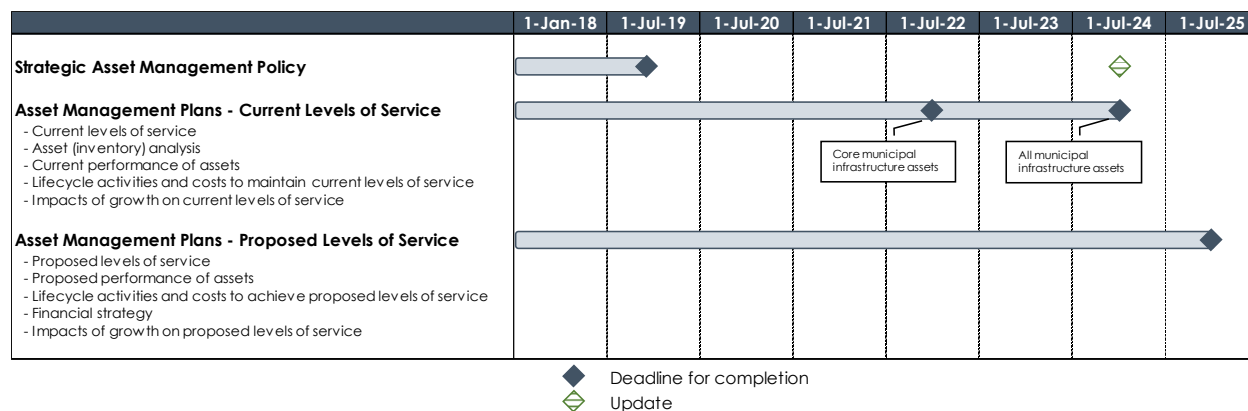
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On June 4, 2015, the Province of Ontario passed the I.J.P.A. which, over time, will require municipalities to undertake and implement asset management plans for all infrastructure they own. On December 27, 2017, the Province released Ontario



Regulation 588/17 under the I.J.P.A. which has three phases that municipalities must meet:

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



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

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

- Phase 1 – Asset Management Plan (by July 1, 2022):
  - For core assets, municipalities must have the following:
    - Inventory of assets;
    - Current levels of service measured by standard metrics; and
    - Costs to maintain levels of service.
- Phase 2 – Asset Management Plan (by July 1, 2024):
  - Same steps as Phase 1 but for all assets.
- Phase 3 – Asset Management Plan (by July 1, 2025):
  - Builds on Phase 1 and 2 by adding:
    - Proposed levels of service; and
    - Lifecycle management and financial strategy.



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

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

## 1.8 Forecast Growth and Servicing Requirements

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The Municipality of Leamington services 9,643 metered water customers, 7 flat rate users, and 6,900 wastewater customers. The metered water customers comprise of residential, commercial, regulated, and unregulated greenhouses, and field drip irrigation properties. Information on the existing number of customers and existing billable volumes was obtained from the Municipality.

As the water rate calculations are based on the number of customers (i.e. flat rate) and there are different rates for various categories of customers, all water customers have been calculated on a “residential, commercial (<25mm)” equivalent basis. To maintain a consistent relationship between the various rate categories, the customers are “weighted” relative to a residential customer based on their existing water rates. For example, a regulated greenhouse or commercial customer (>25mm) is weighted as 1.35 times the “residential, commercial (<25mm)” rate.



For future water and wastewater customers to be added to the systems, consideration has been given to development potential within the serviced areas of the Municipality over the forecast period 2024 to 2035. The growth forecast utilized in the Municipality's 2022 Development Charges Background Study was used to estimate future development. Finally, the forecast assumes annual growth in greenhouses of approximately 6.27 million square feet (144 acres), beginning in 2030.

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



Table 1-2  
Municipality of Leamington  
2023 to 2035 Water System Forecast

**Water Users Forecast**

Year	Total Users	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2023	160	80	160	160	160	160	160	160	160	160	160	160	160	160
2024	160		80	160	160	160	160	160	160	160	160	160	160	160
2025	160			80	160	160	160	160	160	160	160	160	160	160
2026	160				80	160	160	160	160	160	160	160	160	160
2027	160					80	160	160	160	160	160	160	160	160
2028	160						80	160	160	160	160	160	160	160
2029	160							80	160	160	160	160	160	160
2030	160								80	160	160	160	160	160
2031	160									80	160	160	160	160
2032	160										80	160	80	80
2033	160											80	80	80
2034	159												79	79
2035	159													159
<b>Total</b>	<b>2,072</b>	<b>80</b>	<b>240</b>	<b>399</b>	<b>559</b>	<b>718</b>	<b>878</b>	<b>1,037</b>	<b>1,197</b>	<b>1,356</b>	<b>1,516</b>	<b>1,596</b>	<b>1,675</b>	<b>1,833</b>
cu.m/user	201	201	201	201	201	201	201	201	201	201	201	201	201	201
<b>Annual Flow</b>		<b>16,088</b>	<b>48,164</b>	<b>80,240</b>	<b>112,316</b>	<b>144,392</b>	<b>176,468</b>	<b>208,544</b>	<b>240,620</b>	<b>272,696</b>	<b>304,772</b>	<b>320,861</b>	<b>336,748</b>	<b>368,623</b>

**Water Users Forecast - Greenhouses**

Year	Square Feet	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2023	0	-	-	-	-	-	-	-	-	-	-	-	-	-
2024	0		-	-	-	-	-	-	-	-	-	-	-	-
2025	0			-	-	-	-	-	-	-	-	-	-	-
2026	0				-	-	-	-	-	-	-	-	-	-
2027	0					-	-	-	-	-	-	-	-	-
2028	0						-	-	-	-	-	-	-	-
2029	0							-	-	-	-	-	-	-
2030	6,272,727								3,136,364	6,272,727	6,272,727	6,272,727	6,272,727	6,272,727
2031	6,272,727									3,136,364	6,272,727	6,272,727	6,272,727	6,272,727
2032	6,272,727										3,136,364	6,272,727	6,272,727	6,272,727
2033	6,272,727											3,136,364	3,136,364	3,136,364
2034	6,272,727												3,136,364	3,136,364
2035	6,272,727													6,272,727
<b>Total</b>	<b>37,636,362</b>	-	-	-	-	-	-	-	<b>3,136,364</b>	<b>9,409,091</b>	<b>15,681,818</b>	<b>18,818,182</b>	<b>21,954,546</b>	<b>31,363,636</b>
cu.m/sq.ft.	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115
<b>Annual Flow</b>		-	-	-	-	-	-	-	<b>360,005</b>	<b>1,080,015</b>	<b>1,800,025</b>	<b>2,160,030</b>	<b>2,520,035</b>	<b>3,600,050</b>



Table 1-2 (Cont'd)  
Municipality of Leamington  
2023 to 2035 Water System Forecast

Water Customer Forecast	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	9,642	9,642	9,642	9,642	9,642	9,642	9,642	9,642	9,642	9,642	9,642	9,642	9,642
Existing - Large User	1	-	-	-	-	-	-	-	-	-	-	-	-
New Growth	80	240	399	559	718	878	1,037	1,197	1,356	1,516	1,596	1,675	1,833
<b>Total</b>	<b>9,723</b>	<b>9,882</b>	<b>10,041</b>	<b>10,201</b>	<b>10,360</b>	<b>10,520</b>	<b>10,679</b>	<b>10,839</b>	<b>10,998</b>	<b>11,158</b>	<b>11,238</b>	<b>11,317</b>	<b>11,475</b>

Water Volume Forecast (cu.m)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing Residential, Commercial (<25mm)	2,014,368	2,014,368	2,014,368	2,014,368	2,014,368	2,014,368	2,014,368	2,014,368	2,014,368	2,014,368	2,014,368	2,014,368	2,014,368
Existing Regulated Greenhouse, Commercial >25mm	7,329,720	7,329,720	7,329,720	7,329,720	7,329,720	7,329,720	7,329,720	7,329,720	7,329,720	7,329,720	7,329,720	7,329,720	7,329,720
Existing Unregulated Greenhouse, Commercial & Field Drip Irrigation >25mm under 3 acres	388,735	388,735	388,735	388,735	388,735	388,735	388,735	388,735	388,735	388,735	388,735	388,735	388,735
Existing Unregulated Greenhouse, Commercial & Field Drip Irrigation >25mm over 3 acres	52,161	52,161	52,161	52,161	52,161	52,161	52,161	52,161	52,161	52,161	52,161	52,161	52,161
New Residential	16,088	48,164	80,240	112,316	144,392	176,468	208,544	240,620	272,696	304,772	320,861	336,748	368,623
New Greenhouse	-	-	-	-	-	-	-	360,005	1,080,015	1,800,025	2,160,030	2,520,035	3,600,050
<b>Total Excluding Large User</b>	<b>9,801,072</b>	<b>9,833,148</b>	<b>9,865,224</b>	<b>9,897,300</b>	<b>9,929,376</b>	<b>9,961,452</b>	<b>9,993,528</b>	<b>10,385,609</b>	<b>11,137,695</b>	<b>11,889,781</b>	<b>12,265,875</b>	<b>12,641,767</b>	<b>13,753,657</b>
Existing Large User	1,094,842	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Large User</b>	<b>1,094,842</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total</b>	<b>10,895,914</b>	<b>9,833,148</b>	<b>9,865,224</b>	<b>9,897,300</b>	<b>9,929,376</b>	<b>9,961,452</b>	<b>9,993,528</b>	<b>10,385,609</b>	<b>11,137,695</b>	<b>11,889,781</b>	<b>12,265,875</b>	<b>12,641,767</b>	<b>13,753,657</b>

**Purchased Water Table**

Water Purchase Forecast (cu.m)	2023
Billable Volume	10,895,914
Assumed Water Loss	10%
<b>Total Purchased Water</b>	<b>12,106,571</b>
Annual Increase to Wholesale Rate	2%
Wholesale Rate	0.7125
<b>Total</b>	<b>8,625,932</b>



**Table 1-3  
Municipality of Leamington  
2023 to 2035 Wastewater System Forecast**

<b>Wastewater Users Forecast</b>														
Year	Total Users	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2023	148	74	148	148	148	148	148	148	148	148	148	148	148	148
2024	148		74	148	148	148	148	148	148	148	148	148	148	148
2025	148			74	148	148	148	148	148	148	148	148	148	148
2026	148				74	148	148	148	148	148	148	148	148	148
2027	148					74	148	148	148	148	148	148	148	148
2028	148						74	148	148	148	148	148	148	148
2029	148							74	148	148	148	148	148	148
2030	148								74	148	148	148	148	148
2031	148									74	148	148	148	148
2032	148										74	148	148	148
2033	148											74	148	148
2034	147												73	147
2035	147													147
<b>Total</b>	<b>1,921</b>	<b>74</b>	<b>222</b>	<b>370</b>	<b>518</b>	<b>666</b>	<b>814</b>	<b>961</b>	<b>1,109</b>	<b>1,257</b>	<b>1,405</b>	<b>1,553</b>	<b>1,700</b>	<b>1,921</b>
m <sup>3</sup> /user	201	201	201	201	201	201	201	201	201	201	201	201	201	201
<b>Annual Flow</b>		<b>14,882</b>	<b>44,625</b>	<b>74,368</b>	<b>104,111</b>	<b>133,854</b>	<b>163,598</b>	<b>193,341</b>	<b>223,084</b>	<b>252,827</b>	<b>282,571</b>	<b>312,314</b>	<b>341,856</b>	<b>386,259</b>

<b>Wastewater Customer Forecast</b>														
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
Existing	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900	6,900
New - Growth	74	222	370	518	666	814	961	1,109	1,257	1,405	1,553	1,700	1,921	
<b>Total</b>	<b>6,974</b>	<b>7,122</b>	<b>7,270</b>	<b>7,418</b>	<b>7,566</b>	<b>7,714</b>	<b>7,861</b>	<b>8,009</b>	<b>8,157</b>	<b>8,305</b>	<b>8,453</b>	<b>8,600</b>	<b>8,821</b>	

<b>Wastewater Flows Forecast (cu.m)</b>														
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
<b>Block 1</b>														
Existing	1,739,377	1,739,377	1,739,377	1,739,377	1,739,377	1,739,377	1,739,377	1,739,377	1,739,377	1,739,377	1,739,377	1,739,377	1,739,377	
New	14,882	44,625	74,368	104,111	133,854	163,598	193,341	223,084	252,827	282,571	312,314	341,856	386,259	
<b>Subtotal Block 1</b>	<b>1,754,259</b>	<b>1,784,002</b>	<b>1,813,746</b>	<b>1,843,489</b>	<b>1,873,232</b>	<b>1,902,975</b>	<b>1,932,718</b>	<b>1,962,462</b>	<b>1,992,205</b>	<b>2,021,948</b>	<b>2,051,691</b>	<b>2,081,233</b>	<b>2,125,637</b>	
<b>Block 2</b>														
Existing	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	
New	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Subtotal Block 2</b>	<b>941,287</b>	<b>941,287</b>	<b>941,287</b>	<b>941,287</b>	<b>941,287</b>	<b>941,287</b>	<b>941,287</b>	<b>941,287</b>	<b>941,287</b>	<b>941,287</b>	<b>941,287</b>	<b>941,287</b>	<b>941,287</b>	
<b>Total</b>	<b>2,695,546</b>	<b>2,725,289</b>	<b>2,755,033</b>	<b>2,784,776</b>	<b>2,814,519</b>	<b>2,844,262</b>	<b>2,874,005</b>	<b>2,903,749</b>	<b>2,933,492</b>	<b>2,963,235</b>	<b>2,992,978</b>	<b>3,022,520</b>	<b>3,066,924</b>	

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

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Capital forecasts have been provided for the water and wastewater systems and are presented on Tables 2-1 and 2-2 (note: the costs have been provided in uninflated dollars. The analysis presented later in this report, utilizes capital inflation of 8% per year from 2025 to 2028, then 6% for 2029 to 2030, 5% for 2031 to 2032, and 4% thereon). The basis for these forecasts is the Municipality's Capital Budgets in addition to capital infrastructure replacement needs identified in the Municipality's 2021 Asset Management Plan. The capital plan addresses both growth and replacement projects.

A summary of the capital works related to the water and wastewater services is provided in the following tables.



Table 2-1  
Municipality of Leamington  
2024 to 2035 Water Capital Forecast Summary (Uninflated \$)

Description	Total 2024 to 2035	Years Undertaken
<b>Capital Expenditures</b>		
Small Capital - Tools/Equipment	240,000	2024 to 2035
17C and 18C - Wigle/Orange/Settingington/Mill	2,421,500	2024
New HydroVac Unit	-	
Jane St / Claire St- Increase to 150mm	705,125	2024
Watermain Design Projects	200,000	2025
19C and 20C - Ontario/Victoria/Montgomery/Princess -Construction	148,680	2025
Mersea Rd 1 Watermain Upgrade	1,395,000	2025
Mersea Rd 7 to Kent Rd 1	1,000,000	2035
Hodgins/Wilkinson/Smith (158) - CONST	650,000	2030
Pearl/Cameo/Kimball (113/145/146)	917,725	2032
23C MCR- trunk watermain intersection to Oak St W - CONST	600,000	2034
Greenhouse Rate of Flow Valves	500,000	2025
<b>Lifecycle:</b>		
Replace Locate Van 69	150,000	2024
Replace 2003 Backhoe 65	200,000	2024
Office Renovations	100,000	2024
Replace Service Truck #61	100,000	2025
Replace Service Truck #70	100,000	2025
Replace Service Trucks 59	100,000	2026
Replace Service Trucks 71	100,000	2026
Replace Service Trucks 63	100,000	2027
Replace Service Trucks 67	100,000	2027
Replace Main Break Van 66	100,000	2028
Replace Service Truck 58	100,000	2029
Replace Dump Truck 72	180,000	2030
Replace Service Truck 73	100,000	2032
<b>Studies:</b>		
Water Masterplan	500,000	2025



Table 2-1 (Cont'd)  
Municipality of Leamington  
2024 to 2035 Water Capital Forecast Summary (Uninflated \$)

Description	Total 2024 to 2035	Years Undertaken
<b>Growth Related:</b>		
Sherk St Watermain- Increase to: 400mm	1,611,705	2024
Audrey St / Margaret St: Increase to 200mm	646,890	2024
NE Trunk (Talbot St E to Erie St N/Hwy77): Increase to 400mm	2,873,700	2028
Talbot Rd: Increase to 400mm	837,000	2026
Fraser Rd: Increase to 600mm	3,192,900	2026
Bryon St and Warren Ave: Increase to 150mm	283,500	2027
Maxon Ave / Wigle St / Sherman St / James St: Increase to 150mm	579,600	2027
Talbot Rd: Increase to 300mm	397,080	2029
Seacliff Dr W: Increase to 600mm	8,191,440	2029
Malborough St E: Increase to 150mm	128,500	2024
Victoria St: Increase to 150mm	245,700	2025
Montgomery: Increase to 150mm	144,900	2025
Princess St: Increase to 150mm	133,000	2025
Danforth: Increase to 300mm	1,058,880	2033
Erie Streetscape - John to Talbot	665,235	2027
Martin Dr: Increase to 150mm	277,200	2027
Grace Ave: Increase to 150mm	374,850	2031
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	22,333,333	2028
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	22,333,333	2029
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	22,333,333	2030
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	500,000	2026
<b>Total Capital Expenditures</b>	<b>99,950,110</b>	



Table 2-2  
Municipality of Leamington  
2024 to 2035 Wastewater Capital Forecast Summary (Uninflated \$)

Description	Total 2024 to 2035	Years Undertaken
<b>Capital Expenditures</b>		
Wastewater Other M&E Purchases	3,000,000	2024 to 2035
Pump Station Small Capital	1,325,000	2024 to 2035
Biosolids - 2023 carry forward	250,000	2024
Headworks Upgrades - construction	4,865,000	2024 to 2025
Wastewater System Masterplan	280,000	2024
Blower Upgrades	1,000,000	2024
Pump Station #200 (Cherry Lane) Upgrades	300,000	2024
Office Renovations	100,000	2024
Outfall Sewer Upgrades	12,400,000	2025 to 2027
Combined Sewage Upgrades	4,400,000	2025 to 2027
UV System Upgrades	1,000,000	2028
Painting clarifier mechanisms (done in 2011)	500,000	2028
Replace Centrifuge #1	1,500,000	2028
Replace Centrifuge #2	1,500,000	2028
Non-Potable Pump System Upgrades	500,000	2028
Greenhouse receiving station	1,000,000	2029
Hauled Sewage Station Upgrades	1,000,000	2029
Future Capital Needs - 2029 to 2035	7,000,000	2029 to 2035
<b>Growth Related:</b>		
Plant expansion	50,000,000	2029 to 2031
<b>Total Capital Expenditures</b>	<b>91,920,000</b>	



# Chapter 3

## Lifecycle Costing



## 3. Lifecycle Costing

### 3.1 Overview of Lifecycle Costing

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#### 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

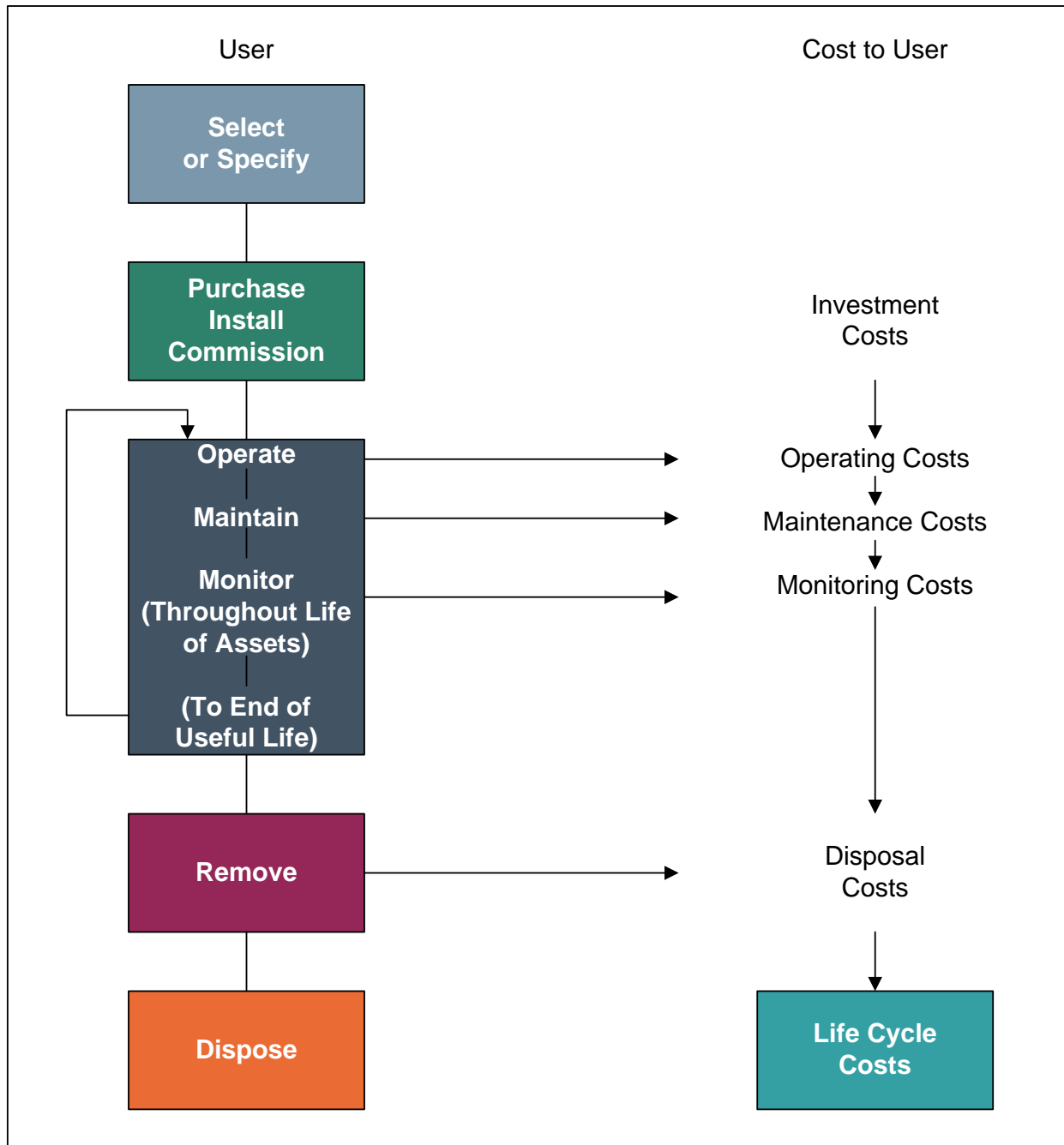
This section will focus on financing mechanisms in place to fund the costs incurred throughout the asset's life.

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.

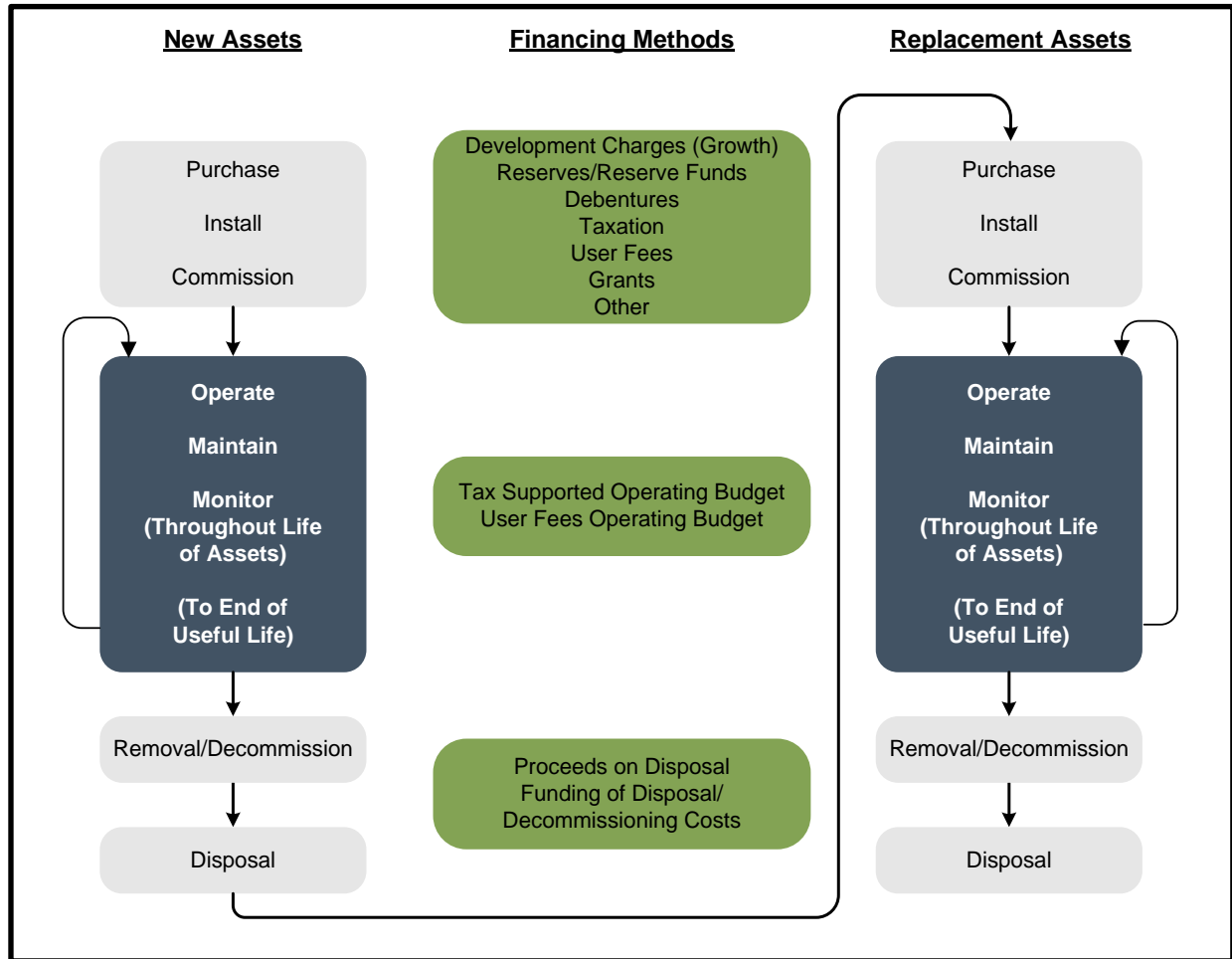
When the asset requires replacement, the sources of financing will be limited to reserves, debentures and contributions from the operating budget. At this point, the question is raised: "If the cost of replacement is to be assessed against the tax/rate payer who benefits from the replacement of the asset, 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).

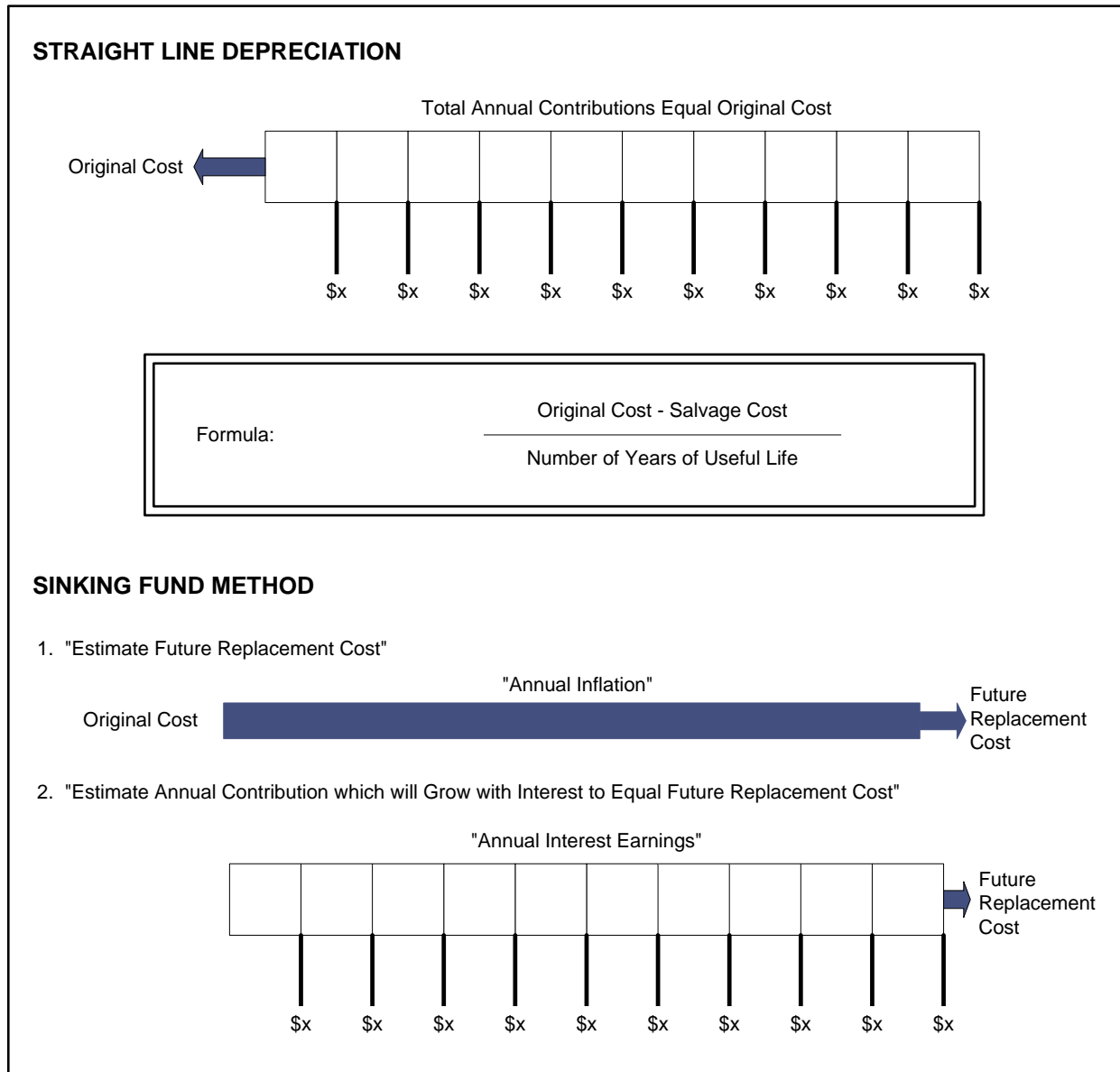
The straight-line method is calculated by taking the original cost of the asset, subtracting its estimated salvage value (estimated value of the asset at the time it is disposed of) and dividing this by the estimated number of years of useful life. The reducing balance method is calculated by utilizing 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 early 1930s. The wastewater system dates back to the early 1960s. The total value of existing water infrastructure is approximately \$401.21 million, and the value of existing wastewater infrastructure is approximately \$380.86 million.



The detailed water and wastewater inventories are provided in Appendices A and B (under separate cover), respectively. As well, the lifecycle “sinking fund” contribution amounts for each item of infrastructure have also been included. These calculations determine the level of investment the Municipality may wish to consider as part of its budgeting practices. This information is summarized in Figure 3-4.

**Figure 3-4**  
**Municipality of Leamington**  
**Summary of Water and Wastewater Infrastructure**

Area	Total Replacement Value	Amount included in 12-year forecast	Net Replacement for Future Lifecycle	Annual Lifecycle Replacement
<b>Water</b>				
Water Facilities	1,526,054	20,690,555	380,518,153	2,294
Watermains	317,394,927			10,242,747
Water Meters	5,514,561			385,617
Water Valves	16,998,352			656,518
Hydrants	17,817,782			715,495
Water Vehicles	1,781,960			16,488
Water Connections	39,884,989			1,388,487
Water Machinery and Equipment	290,082			-
<b>Total Water</b>	<b>401,208,708</b>	<b>20,690,555</b>	<b>380,518,153</b>	<b>13,407,646</b>
<b>Wastewater</b>				
Wastewater Facilities	138,399,536	41,920,000	338,938,006	6,827,871
Sanitary Sewer Mains	115,000,357			3,513,887
Combined Mains	69,674,835			711,092
Combined Manholes	6,441,568			8,650
Sanitary Manholes	15,738,572			615,957
Wastewater Maintenance Shafts	105,010			2,452
Wastewater Overflow Chambers	265,246			12,172
Wastewater Overflows	1,073,243			37,953
Wastewater Machinery and Equipment	33,885,613			2,164,849
Wastewater Vehicles	274,027			-
<b>Total Wastewater</b>	<b>380,858,006</b>	<b>41,920,000</b>	<b>338,938,006</b>	<b>13,894,883</b>
<b>Total</b>	<b>782,066,714</b>	<b>62,610,555</b>	<b>719,456,159</b>	<b>27,302,529</b>

Investment per customer is \$41,609 for water and \$55,197 for wastewater

The total value of the water and wastewater systems equate to an average investment per customer of \$41,609 for water and \$55,197 for wastewater.

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 in 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 Leamington  
Summary of Water Infrastructure Replacement Years (2023 \$)

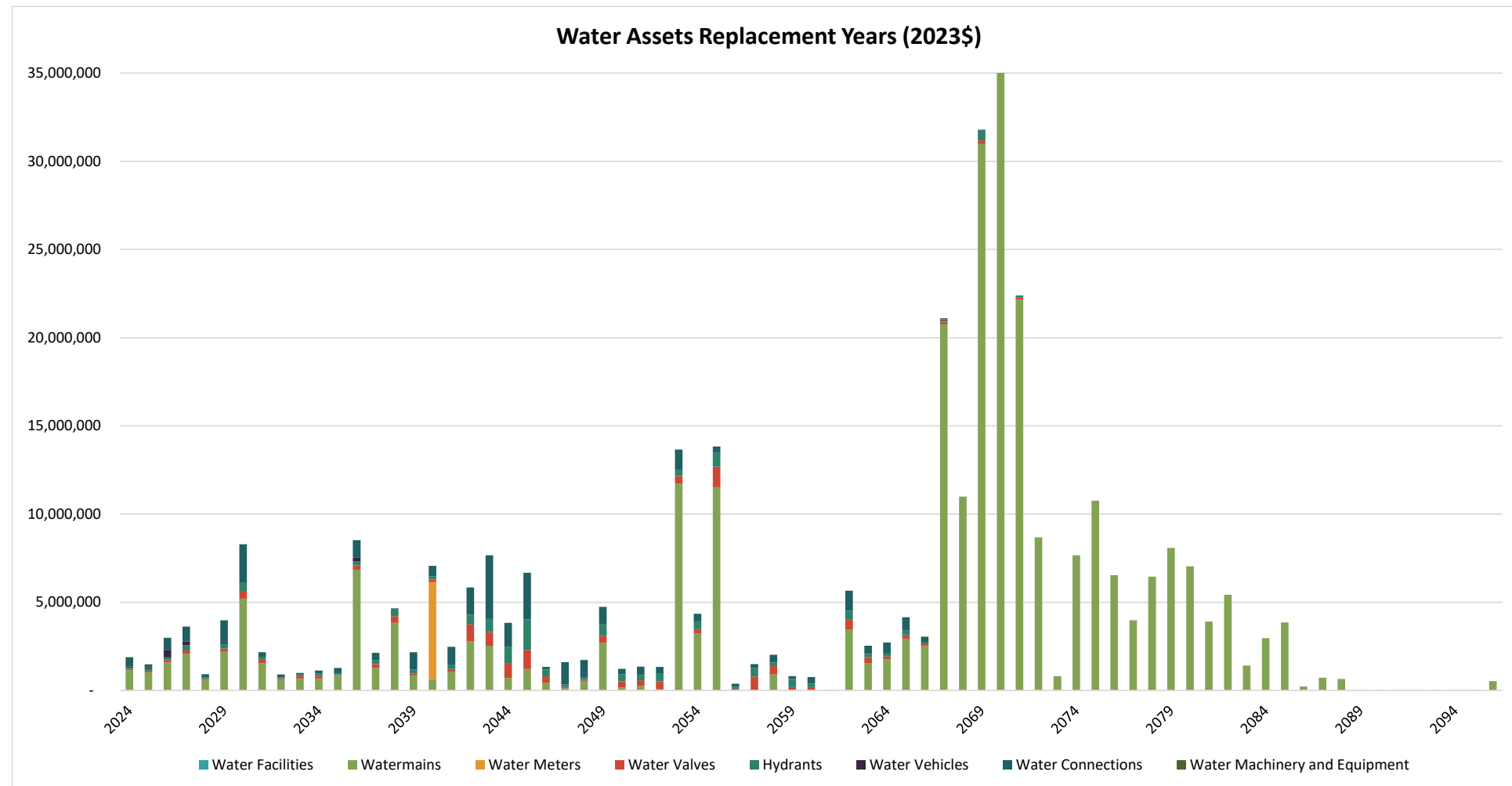
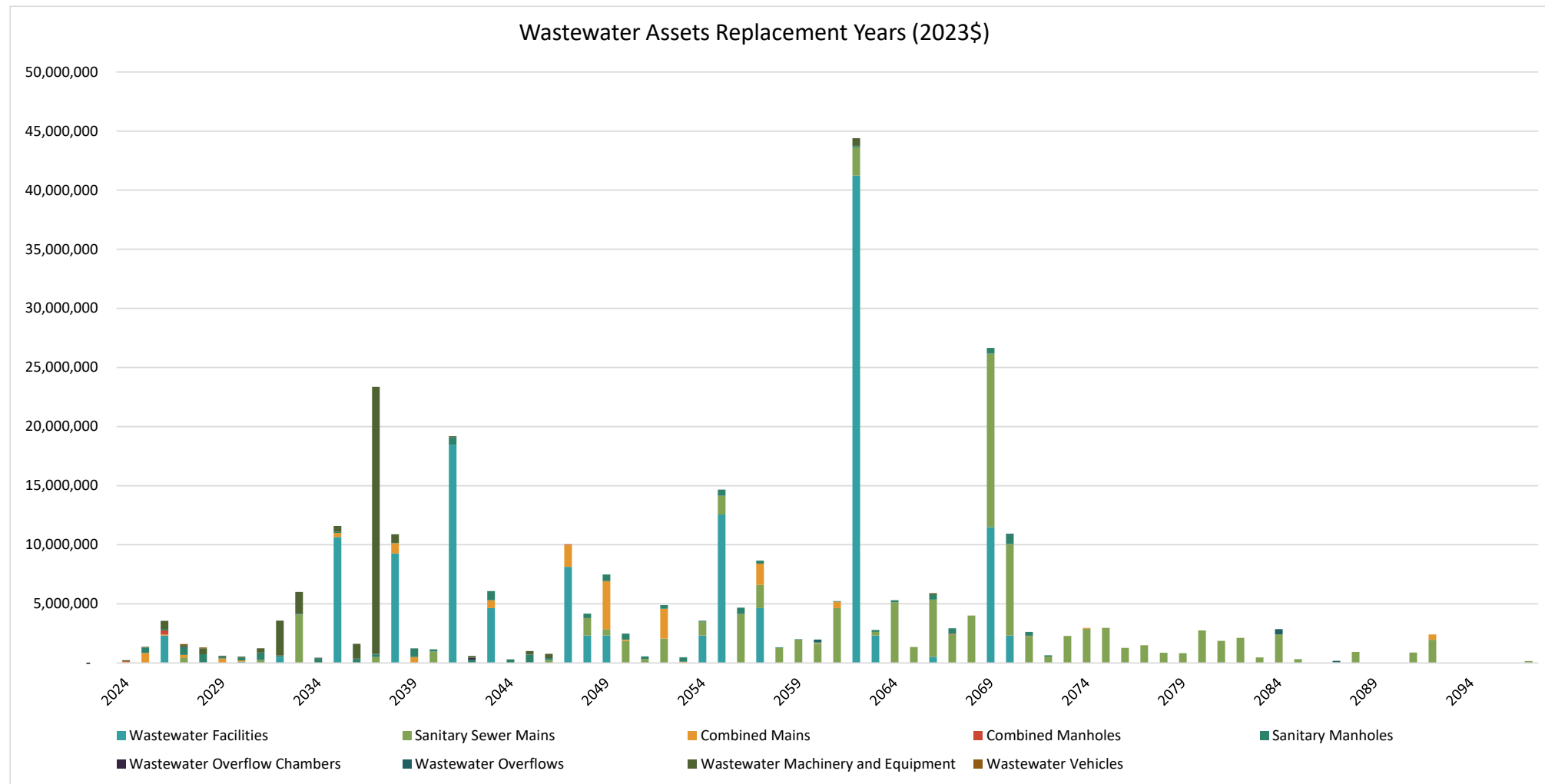




Figure 3-5  
Municipality of Leamington  
Summary of Wastewater Infrastructure Replacement Years (2023 \$)





# Chapter 4

## Capital Cost Financing Options



## 4. Capital Cost Financing Options

### 4.1 Summary of Capital Cost Financing Alternatives

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

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

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

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

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

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

## 4.2 Development Charges Act, 1997

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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.

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

## 4.3 Municipal Act

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

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

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

Section 221 of the previous *Municipal Act* permitted municipalities to impose charges, by by-law, on owners or occupants of land who would or might derive benefit from the



construction of sewage (storm and sanitary) or water works being authorized (in a specific benefit area). For a by-law imposed under this section of the previous Act:

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

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

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

Under the previous *Local Improvement Act*:



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

## 4.4 Historical Grant Funding Availability

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### 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 was \$1.1 billion for water, wastewater, and storm water systems in Ontario. The federal government provided \$569 million and Ontario and municipal governments provided \$275 million each.

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



## Phase 2: Next Steps

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

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

## Canada Community-Building Fund

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

## **Ontario Government**

The Province has taken steps to increase municipal infrastructure funding. The Ontario Community Infrastructure Fund (O.C.I.F.) was increased in 2016 with formula-based support growing to \$200 million, and application funding growing to \$100 million annually by 2018/2019. As well, \$15 million annually will go to the new Connecting Links program to help pay for the construction and repair costs of municipal roads that connect communities to provincial highways. This is on top of the Building Ontario Up investment of \$130 billion in public infrastructure over 10 years starting in 2015.

Recently the Province announced funding through a new Ontario Infrastructure Bank. This new, arms-length, board-governed agency will assist investors and institutions to further participate in large-scale infrastructure projects. The total amount available for municipal water and wastewater infrastructure is not yet known, however, recent



announcements suggested a share of the total available funds would be allocated to housing-enabling infrastructure.

## 4.5 Existing Reserves/Reserve Funds

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The Municipality has established reserves and reserve funds for water and wastewater costs. The following table summarizes the water and wastewater reserves utilized in this analysis and their respective balances at December 31, 2022:

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

Reserve	Dec. 31 2022
<b>Water</b>	
Working Capital Reserve	505,289
Development Charges Reserve Fund	8,260,320
Line Renewals	13,352,788
Greenhouse Connections	4,565,852
Wheatley Service Area	207,383
<b>Wastewater</b>	
Capital Reserve	17,444,300

## 4.6 Debenture Financing

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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 Leamington's 2024 calculation on debt capacity is provided in the Annual Repayment Limit statement provided by the Province (Ministry of Municipal Affairs and



Housing). This calculates to the Municipality's estimated annual repayment limit of approximately \$16.38 million. Based upon 20-year financing at an assumed rate of 5.0%, the available debt for the Municipality is approximately \$204.07 million.

## 4.7 Infrastructure Ontario

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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.

The analysis provided herein assumes that the Municipality will require growth related debt financing for the capital projects identified. For water services, approximately \$110.55 million for growth-related debt is required. For wastewater services, approximately \$83.26 million for growth-related debt is required.

## 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 of Leamington for the capital expenditures (inflated) provided in Chapter 2.

Table 4-2  
Municipality of Leamington  
Capital Forecasting Financing Sources  
Inflated \$

Description	Water	Wastewater
<b>Capital Financing</b>		
Provincial/Federal Grants	1,869,915.00	-
Development Charges Reserve Fund	11,390,691	-
Non-Growth Related Debenture Requirements	-	-
Growth Related Debenture Requirements	110,553,000	83,264,000
Operating Contributions	-	-
Working Capital Reserve Fund	-	-
Line Renewal Reserve Fund	26,733,114	-
Greenhouse Connections Reserve Fund	-	-
Wheatley Watermain Capital Reserve Fund	-	-
Wastewater Capital Reserve	-	58,986,000
<b>Total Capital Financing</b>	<b>150,546,720</b>	<b>142,250,000</b>

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  
Capital Budget Forecast – Water (inflated \$)**

Description	Budget 2023	Total	Forecast											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Capital Expenditures</b>														
Small Capital - Tools/Equipment	20,000	377,000	20,000	23,000	25,000	27,000	29,000	31,000	33,000	35,000	36,000	38,000	39,000	41,000
17C and 18C - Wigle/Orange/Settlington/Mill	-	2,421,500	2,421,500	-	-	-	-	-	-	-	-	-	-	-
New HydroVac Unit	140,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Jane St / Claire St- Increase to 150mm	-	705,125	705,125	-	-	-	-	-	-	-	-	-	-	-
Watermain Design Projects	-	233,000	-	233,000	-	-	-	-	-	-	-	-	-	-
19C and 20C - Ontario/Victoria/Montgomery/Princess - Construction	-	173,000	-	173,000	-	-	-	-	-	-	-	-	-	-
Mersea Rd 1 Watermain Upgrade	-	1,627,000	-	1,627,000	-	-	-	-	-	-	-	-	-	-
Mersea Rd 7 to Kent Rd 1	-	2,047,000	-	-	-	-	-	-	-	-	-	-	-	2,047,000
Hodgins/Wilkinson/Smith (158) - CONST	-	1,073,000	-	-	-	-	-	-	-	1,073,000	-	-	-	-
Pearl/Cameo/Kimball (113/145/146)	-	1,670,000	-	-	-	-	-	-	-	-	1,670,000	-	-	-
23C MCR- trunk watermain intersection to Oak St W - CONST	-	1,181,000	-	-	-	-	-	-	-	-	-	-	1,181,000	-
Greenhouse Rate of Flow Valves		583,000	-	583,000	-	-	-	-	-	-	-	-	-	-
<b>Lifecycle:</b>														
Replace Truck 60	85,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Replace Locate Van 69	-	150,000	150,000	-	-	-	-	-	-	-	-	-	-	-
Replace 2003 Backhoe 65	-	200,000	200,000	-	-	-	-	-	-	-	-	-	-	-
Office Renovations	-	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-
Replace Service Truck #61	-	117,000	-	117,000	-	-	-	-	-	-	-	-	-	-
Replace Service Truck #70	-	117,000	-	117,000	-	-	-	-	-	-	-	-	-	-
Replace Service Trucks 59	-	126,000	-	-	126,000	-	-	-	-	-	-	-	-	-
Replace Service Trucks 71	-	126,000	-	-	126,000	-	-	-	-	-	-	-	-	-
Replace Service Trucks 63	-	136,000	-	-	-	136,000	-	-	-	-	-	-	-	-
Replace Service Trucks 67	-	136,000	-	-	-	136,000	-	-	-	-	-	-	-	-
Replace Main Break Van 66	-	147,000	-	-	-	-	147,000	-	-	-	-	-	-	-
Replace Service Truck 58	-	156,000	-	-	-	-	-	156,000	-	-	-	-	-	-
Replace Dump Truck 72	-	297,000	-	-	-	-	-	-	297,000	-	-	-	-	-
Replace Service Truck 73	-	182,000	-	-	-	-	-	-	-	182,000	-	-	-	-
<b>Studies:</b>														
Water Masterplan	-	583,000	-	583,000	-	-	-	-	-	-	-	-	-	-
<b>Growth Related:</b>														
Sherk St Watermain- Increase to: 400mm	-	1,611,705	1,611,705	-	-	-	-	-	-	-	-	-	-	-
Audrey St / Margaret St: Increase to 200mm	-	646,890	646,890	-	-	-	-	-	-	-	-	-	-	-
NE Trunk (Talbot St E to Erie St N/Hwy77): Increase to 400mm	-	4,222,000	-	-	-	-	4,222,000	-	-	-	-	-	-	-



Table 4-3 (Cont'd)  
Capital Budget Forecast – Water (inflated \$)

Description	Budget 2023	Total	Forecast											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Growth Related:</b>														
Talbot Rd: Increase to 400mm	-	1,054,000	-	-	1,054,000	-	-	-	-	-	-	-	-	-
Fraser Rd: Increase to 600mm	-	4,022,000	-	-	4,022,000	-	-	-	-	-	-	-	-	-
Bryon St and Warren Ave: Increase to 150mm	-	386,000	-	-	-	386,000	-	-	-	-	-	-	-	-
Maxon Ave / Wigle St / Sherman St / James St: Increase to 150mm	-	789,000	-	-	-	789,000	-	-	-	-	-	-	-	-
Talbot Rd: Increase to 300mm	-	618,000	-	-	-	-	-	618,000	-	-	-	-	-	-
Seacliff Dr W: Increase to 600mm	-	12,758,000	-	-	-	-	-	12,758,000	-	-	-	-	-	-
Malborough St E: Increase to 150mm	-	128,500	128,500	-	-	-	-	-	-	-	-	-	-	-
Victoria St: Increase to 150mm	-	287,000	-	287,000	-	-	-	-	-	-	-	-	-	-
Montgomery: Increase to 150mm	-	169,000	-	169,000	-	-	-	-	-	-	-	-	-	-
Princess St: Increase to 150mm	-	155,000	-	155,000	-	-	-	-	-	-	-	-	-	-
Danforth: Increase to 300mm	-	2,004,000	-	-	-	-	-	-	-	-	-	2,004,000	-	-
Erie Streetscape - John to Talbot	-	905,000	-	-	-	905,000	-	-	-	-	-	-	-	-
Sherk St: Increase to 400mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Martin Dr: Increase to 150mm	-	377,000	-	-	-	377,000	-	-	-	-	-	-	-	-
Grace Ave: Increase to 150mm	-	650,000	-	-	-	-	-	-	-	650,000	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	32,815,000	-	-	-	-	32,815,000	-	-	-	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	34,784,000	-	-	-	-	-	34,784,000	-	-	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	36,871,000	-	-	-	-	-	-	36,871,000	-	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	630,000	-	-	630,000	-	-	-	-	-	-	-	-	-
<b>Total Capital Expenditures</b>	<b>245,000</b>	<b>150,546,720</b>	<b>5,983,720</b>	<b>4,067,000</b>	<b>5,983,000</b>	<b>2,756,000</b>	<b>37,213,000</b>	<b>48,347,000</b>	<b>38,274,000</b>	<b>685,000</b>	<b>1,888,000</b>	<b>2,042,000</b>	<b>1,220,000</b>	<b>2,088,000</b>
<b>Capital Financing</b>														
Provincial/Federal Grants		1,869,915	1,869,915											
Development Charges Reserve Fund	-	11,520,691	805,059	116,758	4,149,611	471,596	4,957,000	-	-	130,000	-	890,667	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	110,423,000	-	-	-	-	32,080,000	41,472,000	36,871,000	-	-	-	-	-
Operating Contributions	245,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Working Capital Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Line Renewal Reserve Fund	-	26,733,114	3,308,746	3,950,242	1,833,389	2,284,404	176,000	6,875,000	1,403,000	555,000	1,888,000	1,151,333	1,220,000	2,088,000
Greenhouse Connections Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheatley Watermain Capital Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Capital Financing</b>	<b>245,000</b>	<b>150,546,720</b>	<b>5,983,720</b>	<b>4,067,000</b>	<b>5,983,000</b>	<b>2,756,000</b>	<b>37,213,000</b>	<b>48,347,000</b>	<b>38,274,000</b>	<b>685,000</b>	<b>1,888,000</b>	<b>2,042,000</b>	<b>1,220,000</b>	<b>2,088,000</b>



**Table 4-4  
Capital Budget Forecast – Wastewater (inflated \$)**

Description	Budget 2023	Total	Forecast											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Capital Expenditures</b>														
Outfall Sewer Upgrades	400,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater System Masterplan	500,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Headworks Upgrades - construction	1,800,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Blower Upgrades	700,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Centrifuge #1 Rebuild	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater Other M&E Purchases	225,000	4,731,000	250,000	292,000	315,000	340,000	367,000	389,000	413,000	433,000	455,000	473,000	492,000	512,000
Pump Station Small Capital	130,000	2,018,000	225,000	117,000	126,000	136,000	147,000	156,000	165,000	173,000	182,000	189,000	197,000	205,000
Biosolids - 2019 carry forward	1,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Pump Station #200 (Cherry Lane) Upgrades	1,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Biosolids - 2023 carry forward	-	250,000	250,000	-	-	-	-	-	-	-	-	-	-	-
Headworks Upgrades - construction	-	5,281,000	2,365,000	2,916,000	-	-	-	-	-	-	-	-	-	-
Wastewater System Masterplan	-	280,000	280,000	-	-	-	-	-	-	-	-	-	-	-
Blower Upgrades	-	1,000,000	1,000,000	-	-	-	-	-	-	-	-	-	-	-
Pump Station #200 (Cherry Lane) Upgrades	-	300,000	300,000	-	-	-	-	-	-	-	-	-	-	-
Office Renovations	-	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-
Outfall Sewer Upgrades	-	16,188,000	-	467,000	7,558,000	8,163,000	-	-	-	-	-	-	-	-
Combined Sewage Upgrades	-	5,707,000	-	467,000	2,519,000	2,721,000	-	-	-	-	-	-	-	-
UV System Upgrades	-	1,469,000	-	-	-	-	1,469,000	-	-	-	-	-	-	-
Painting clarifier mechanisms (done in 2011)	-	735,000	-	-	-	-	735,000	-	-	-	-	-	-	-
Replace Centrifuge #1	-	2,204,000	-	-	-	-	2,204,000	-	-	-	-	-	-	-
Replace Centrifuge #2	-	2,204,000	-	-	-	-	2,204,000	-	-	-	-	-	-	-
Non-Potable Pump System Upgrades	-	735,000	-	-	-	-	735,000	-	-	-	-	-	-	-
Greenhouse receiving station	-	1,557,000	-	-	-	-	-	1,557,000	-	-	-	-	-	-
Hauled Sewage Station Upgrades	-	1,557,000	-	-	-	-	-	1,557,000	-	-	-	-	-	-
Future Capital Needs - 2029 to 2035	-	12,670,000	-	-	-	-	-	1,557,000	1,651,000	1,733,000	1,820,000	1,893,000	1,969,000	2,047,000
<b>Growth Related:</b>														
Plant expansion	-	83,264,000	-	-	-	-	-	15,575,000	33,019,000	34,670,000	-	-	-	-
<b>Total Capital Expenditures</b>	<b>5,855,000</b>	<b>142,250,000</b>	<b>4,770,000</b>	<b>4,259,000</b>	<b>10,518,000</b>	<b>11,360,000</b>	<b>7,861,000</b>	<b>20,791,000</b>	<b>35,248,000</b>	<b>37,009,000</b>	<b>2,457,000</b>	<b>2,555,000</b>	<b>2,658,000</b>	<b>2,764,000</b>
<b>Capital Financing</b>														
Provincial/Federal Grants	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development Charges Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	83,264,000	-	-	-	-	-	15,575,000	33,019,000	34,670,000	-	-	-	-
Operating Contributions	4,074,214	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater Capital Reserve	1,780,786	58,986,000	4,770,000	4,259,000	10,518,000	11,360,000	7,861,000	5,216,000	2,229,000	2,339,000	2,457,000	2,555,000	2,658,000	2,764,000
<b>Total Capital Financing</b>	<b>5,855,000</b>	<b>142,250,000</b>	<b>4,770,000</b>	<b>4,259,000</b>	<b>10,518,000</b>	<b>11,360,000</b>	<b>7,861,000</b>	<b>20,791,000</b>	<b>35,248,000</b>	<b>37,009,000</b>	<b>2,457,000</b>	<b>2,555,000</b>	<b>2,658,000</b>	<b>2,764,000</b>



# Chapter 5

## Overview of Expenditures and Revenues



## 5. Overview of Expenditures and Revenues

### 5.1 Water Operating Expenditures

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In this report, the forecast water budget figures (2024 to 2035) are based on the 2024 operating budgets. The costs for each component of the operating budget have been reviewed with staff to establish forecast inflationary adjustments. Annual water operating expenditures are assumed to increase by 2.5% per annum, while expenditures related to utilities, fuels, chemicals and other materials are assumed to increase by 5% per annum.

Annual contributions have been provided to the capital reserves over the forecast period in order to minimize the need for additional debt to finance the capital program. Also included are growth-related debenture expenditures, which are to be recovered through the D.C. reserve fund.

### 5.2 Water Operating Revenues

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The Municipality has various miscellaneous revenue sources to help contribute towards operating expenditures. These miscellaneous revenues including water service connection fee, private hydrant maintenance, etc. are assumed to increase at 2% per year. Tables 5-1 provides for the operating budget for the water system.



**Table 5-1  
Operating Budget Forecast – Water (inflated \$)**

Description	Budget 2023	Forecast												
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
<b>Expenditures</b>														
<u>Operating Costs</u>														
5000-002000 - Salaried Wages	436,959	538,798	552,270	566,080	580,230	594,740	609,610	624,850	640,470	656,480	672,890	689,710	706,950	
5010-002000 - Regular Full Time	652,104	678,142	695,100	712,480	730,290	748,550	767,260	786,440	806,100	826,250	846,910	868,080	889,780	
5040-002000 - Overtime-FT	55,000	50,000	51,250	52,530	53,840	55,190	56,570	57,980	59,430	60,920	62,440	64,000	65,600	
5080-002000 - Long Service Pay	880	830	850	870	890	910	930	950	970	990	1,010	1,040	1,070	
5083-002000 - Standby Pay	21,900	21,900	22,450	23,010	23,590	24,180	24,780	25,400	26,040	26,690	27,360	28,040	28,740	
5090-002001 - Vacation Pay - PT	39	35	40	40	40	40	40	40	40	40	40	40	40	
5200-002000 - CPP - FT	49,991	57,565	59,000	60,480	61,990	63,540	65,130	66,760	68,430	70,140	71,890	73,690	75,530	
5200-002001 - CPP - PT	47	43	40	40	40	40	40	40	40	40	40	40	40	
5201-002000 - EI - FT	17,032	18,984	19,460	19,950	20,450	20,960	21,480	22,020	22,570	23,130	23,710	24,300	24,910	
5201-002001 - EI - PT	20	18	20	20	20	20	20	20	20	20	20	20	20	
5202-002000 - EHT - FT	21,386	23,853	24,450	25,060	25,690	26,330	26,990	27,660	28,350	29,060	29,790	30,530	31,290	
5202-002001 - EHT - PT	21	17	20	20	20	20	20	20	20	20	20	20	20	
5203-002000 - Extended Health - FT	60,041	79,689	81,680	83,720	85,810	87,960	90,160	92,410	94,720	97,090	99,520	102,010	104,560	
5205-002000 - WSIB - FT	28,296	30,703	31,470	32,260	33,070	33,900	34,750	35,620	36,510	37,420	38,360	39,320	40,300	
5205-002001 - WSIB - PT	25	22	20	20	20	20	20	20	20	20	20	20	20	
5207-002000 - OMERS	110,481	123,771	126,870	130,040	133,290	136,620	140,040	143,540	147,130	150,810	154,580	158,440	162,400	
5208-002000 - Life & LTD	39,255	37,520	38,460	39,420	40,410	41,420	42,460	43,520	44,610	45,730	46,870	48,040	49,240	
5210-002000 - Retiree Benefits	40,614	42,936	44,010	45,110	46,240	47,400	48,590	49,800	51,050	52,330	53,640	54,980	56,350	
7010-002030 - Office Supplies	88,180	88,900	91,120	93,400	95,740	98,130	100,580	103,090	105,670	108,310	111,020	113,800	116,650	
7012-002030 - Water Billing Discount	111,600	140,000	143,500	147,090	150,770	154,540	158,400	162,360	166,420	170,580	174,840	179,210	183,690	
7020-002030 - Dues, Memberships & Subscriptions	2,600	2,275	2,330	2,390	2,450	2,510	2,570	2,630	2,700	2,770	2,840	2,910	2,980	
7030-002030 - Travel	250	250	260	270	280	290	300	310	320	330	340	350	360	
7040-002030 - Training	15,000	15,000	15,380	15,760	16,150	16,550	16,960	17,380	17,810	18,260	18,720	19,190	19,670	
7050-002030 - Conferences	8,000	8,000	8,200	8,410	8,620	8,840	9,060	9,290	9,520	9,760	10,000	10,250	10,510	
7070-002030 - Uniforms and PPE	15,000	15,000	15,380	15,760	16,150	16,550	16,960	17,380	17,810	18,260	18,720	19,190	19,670	
7054-002030 - Recruitment Expenses	-	500	510	520	530	540	550	560	570	580	590	600	620	
7110-002030-002081 - Telecommunications Usage-Land Lines	2,000	2,000	2,050	2,100	2,150	2,200	2,260	2,320	2,380	2,440	2,500	2,560	2,620	
7110-002030-002083 - Telecommunications Usage -Mobile Phones	4,250	4,400	4,510	4,620	4,740	4,860	4,980	5,100	5,230	5,360	5,490	5,630	5,770	
7110-002030-002088 - Telecommunications Usage -GPS monthly services	2,750	2,750	2,820	2,890	2,960	3,030	3,110	3,190	3,270	3,350	3,430	3,520	3,610	
7130-002030 - Advertising & Promotion	750	500	510	520	530	540	550	560	570	580	590	600	620	
7140-002030 - Insurance - Liability	13,736	14,656	15,020	15,400	15,790	16,180	16,580	16,990	17,410	17,850	18,300	18,760	19,230	
7560-002030-007420 - Vehicle Insurance	22,993	26,397	27,060	27,740	28,430	29,140	29,870	30,620	31,390	32,170	32,970	33,790	34,630	



**Table 5-1 (Cont'd)**  
**Operating Budget Forecast – Water (inflated \$)**

Description	Budget 2023	Forecast												
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
<b>Expenditures</b>														
7562-002030 - Property Insurance	883	1,027	1,050	1,080	1,110	1,140	1,170	1,200	1,230	1,260	1,290	1,320	1,350	
7190-002067 - Internal Office Overhead Allocation	37,275	36,625	37,540	38,480	39,440	40,430	41,440	42,480	43,540	44,630	45,750	46,890	48,060	
7250-002030 - Tech Hardware Purchases (non TCA)	500	500	510	520	530	540	550	560	570	580	590	600	620	
7280-002030 - Telecommunication Purchases (non TCA)	3,000	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210	1,240	1,270	1,300	1,330	
7832-002050 - Credit, Debit & Bank Charges (No HST)	1,425	2,245	2,300	2,360	2,420	2,480	2,540	2,600	2,670	2,740	2,810	2,880	2,950	
7950-002040 - Professional Services	80,000	50,000	51,250	52,530	53,840	55,190	56,570	57,980	59,430	60,920	62,440	64,000	65,600	
7986-002040 - Water Purchase from UWSS	8,242,645	-	-	-	-	-	-	-	-	-	-	-	-	
7052-002030 - Meeting Expenses	500	500	510	520	530	540	550	560	570	580	590	600	620	
7080-002030 - Operational Supplies	1,200	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210	1,240	1,270	1,300	1,330	
7992-002040 - Office Equipment Rental	1,350	-	-	-	-	1,400	1,400	1,400	1,400	-	-	-	-	
7993-002040 - Office Equipment Maintenance	4,800	4,800	4,920	5,040	5,170	5,300	5,430	5,570	5,710	5,850	6,000	6,150	6,300	
7995-002040-002130 - Software Licensing-Other	55,020	58,000	59,450	60,940	62,460	64,020	65,620	67,260	68,940	70,660	72,430	74,240	76,100	
7950-002040-002410 - Professional Services-Source Water Protection	10,500	10,500	10,760	11,030	11,310	11,590	11,880	12,180	12,480	12,790	13,110	13,440	13,780	
7610-002030-002600 - Project Materials-Boil Water Advisory	5,000	5,000	5,130	5,260	5,390	5,520	5,660	5,800	5,950	6,100	6,250	6,410	6,570	
7410-002030-007400 - Gas	12,000	13,000	13,650	14,330	15,050	15,800	16,590	17,420	18,290	19,200	20,160	21,170	22,230	
7420-002030-007400 - Electricity-Building Mtce	12,000	13,000	13,650	14,330	15,050	15,800	16,590	17,420	18,290	19,200	20,160	21,170	22,230	
7430-002030-007400 - Water-Building Mtce	2,000	2,500	2,560	2,620	2,690	2,760	2,830	2,900	2,970	3,040	3,120	3,200	3,280	
7610-002030-007400 - Project Materials-Building Mtce	2,500	2,000	2,050	2,100	2,150	2,200	2,260	2,320	2,380	2,440	2,500	2,560	2,620	
7630-002030-007400 - Project Contracts-Building Maintenance	6,000	5,000	5,130	5,260	5,390	5,520	5,660	5,800	5,950	6,100	6,250	6,410	6,570	
7955-002040-007400 - Service Contracts-Building Mtce	15,000	15,115	15,490	15,880	16,280	16,690	17,110	17,540	17,980	18,430	18,890	19,360	19,840	
7958-002040-007400 - Garbage Collection-Building Mtce	1,460	1,560	1,600	1,640	1,680	1,720	1,760	1,800	1,850	1,900	1,950	2,000	2,050	
7520-002050-007410 - Equipment Rental-Equip Mtce	-	500	510	520	530	540	550	560	570	580	590	600	620	
7610-002030-007410 - Project Materials-Equip Mtce	4,000	4,000	4,100	4,200	4,310	4,420	4,530	4,640	4,760	4,880	5,000	5,130	5,260	



**Table 5-1 (Cont'd)**  
**Operating Budget Forecast – Water (inflated \$)**

Description	Budget 2023	Forecast												
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
<b>Expenditures</b>														
7630-002030-007410 - Project Contracts-Equipment Mtce	1,000	2,000	2,050	2,100	2,150	2,200	2,260	2,320	2,380	2,440	2,500	2,560	2,620	
7955-002040-007410 - Service Contracts-Equipment Mtce	1,200	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210	1,240	1,270	1,300	1,330	
5011-002000-007420 - Regular Full Time - PW Allocation	6,983	5,727	5,870	6,020	6,170	6,320	6,480	6,640	6,810	6,980	7,150	7,330	7,510	
5022-002001-007420 - Part-Time-PW Allocation	966	878	900	920	940	960	980	1,000	1,030	1,060	1,090	1,120	1,150	
7550-002030-007420 - Vehicle Licence	4,223	4,223	4,330	4,440	4,550	4,660	4,780	4,900	5,020	5,150	5,280	5,410	5,550	
7610-002030-007420 - Project Materials-Vehicle Mtce	8,000	8,000	8,200	8,410	8,620	8,840	9,060	9,290	9,520	9,760	10,000	10,250	10,510	
7630-002030-007420 - Project Contracts-Vehicle Maintenance	2,000	2,000	2,050	2,100	2,150	2,200	2,260	2,320	2,380	2,440	2,500	2,560	2,620	
5011-002000-007470 - Regular Full Time - PW allocation	230	567	580	590	600	620	640	660	680	700	720	740	760	
7620-002030-007470 - Project Equipment-Property Mtce	250	250	260	270	280	290	300	310	320	330	340	350	360	
7531-002030-008545 - Fuel Purchases - Unleaded	31,000	30,000	31,500	33,080	34,730	36,470	38,290	40,200	42,210	44,320	46,540	48,870	51,310	
7532-002030-008545 - Fuel Purchases - Diesel	9,500	8,000	8,400	8,820	9,260	9,720	10,210	10,720	11,260	11,820	12,410	13,030	13,680	
7533-002030-008545 - Oil & Lubricants-Fuel	-	250	260	270	280	290	300	320	340	360	380	400	420	
7610-002030-008547 - Project Materials-Meter Mtce	35,000	40,000	41,000	42,030	43,080	44,160	45,260	46,390	47,550	48,740	49,960	51,210	52,490	
7610-002030-008549 - Project Materials-Hydrant Mtce	30,000	30,000	30,750	31,520	32,310	33,120	33,950	34,800	35,670	36,560	37,470	38,410	39,370	
7610-002030-008556 - Project Materials-Health & Safety	1,500	1,500	1,540	1,580	1,620	1,660	1,700	1,740	1,780	1,820	1,870	1,920	1,970	
7630-002030-008556 - Project Contracts-Health & Safety	500	500	510	520	530	540	550	560	570	580	590	600	620	
7520-002050-008680 - Equipment Rental-Watermains & Services	-	500	510	520	530	540	550	560	570	580	590	600	620	
7610-002030-008680 - Project Materials-Watermains & Services	200,000	220,000	225,500	231,140	236,920	242,840	248,910	255,130	261,510	268,050	274,750	281,620	288,660	
7630-002030-008680 - Project Contracts-Watermains & Services	45,000	58,500	59,960	61,460	63,000	64,580	66,190	67,840	69,540	71,280	73,060	74,890	76,760	
<b>Sub Total Operating</b>	<b>10,697,608</b>	<b>2,667,222</b>	<b>2,735,530</b>	<b>2,805,630</b>	<b>2,877,540</b>	<b>2,952,710</b>	<b>3,028,430</b>	<b>3,106,100</b>	<b>3,185,890</b>	<b>3,266,350</b>	<b>3,350,350</b>	<b>3,436,580</b>	<b>3,525,110</b>	



Table 5-1 (Cont'd)  
Operating Budget Forecast – Water (inflated \$)

Description	Budget	Forecast											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Capital-Related</b>													
Existing Debt (Principal) - Growth Related	-	-	-	-	-	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Growth Related	-	-	-	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Principal)	-	-	-	-	-	-	485,343	1,136,900	1,751,231	1,838,267	1,929,629	2,025,532	2,126,201
New Growth Related Debt (Interest)	-	-	-	-	-	-	1,594,376	3,631,413	5,407,398	5,320,361	5,229,000	5,133,097	5,032,428
Existing Debt (Principal) - Non-Growth Related	500	-	-	-	-	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Non-Growth Related	-	-	-	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Wheatley Watermain Capital Reserve	6,520	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Water Line Reserve	3,264,334	4,205,338	4,336,889	4,471,897	4,610,472	4,751,286	4,897,205	5,234,679	5,774,911	6,335,966	6,679,910	7,034,417	7,852,646
Transfer to Greenhouse Connections Reserve	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Working Capital Reserve	232,560	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	245,000	-	-	-	-	-	-	-	-	-	-	-	-
<b>Sub Total Capital Related</b>	<b>3,748,914</b>	<b>4,205,338</b>	<b>4,336,889</b>	<b>4,471,897</b>	<b>4,610,472</b>	<b>4,751,286</b>	<b>6,976,924</b>	<b>10,002,992</b>	<b>12,933,540</b>	<b>13,494,594</b>	<b>13,838,538</b>	<b>14,193,045</b>	<b>15,011,274</b>
<b>Total Expenditures</b>	<b>14,446,522</b>	<b>6,872,560</b>	<b>7,072,419</b>	<b>7,277,527</b>	<b>7,488,012</b>	<b>7,703,996</b>	<b>10,005,354</b>	<b>13,109,092</b>	<b>16,119,430</b>	<b>16,760,944</b>	<b>17,188,888</b>	<b>17,629,625</b>	<b>18,536,384</b>
<b>Revenues</b>													
Base Charge	3,145,693	3,254,219	3,372,874	3,494,974	3,620,608	3,749,870	3,882,854	4,019,657	4,160,379	4,305,123	4,422,707	4,542,871	4,698,621
<b>Other Revenue</b>													
Flat Rate Fire Line	2,067	2,110	2,150	2,190	2,230	2,270	2,320	2,370	2,420	2,470	2,520	2,570	2,620
Private Hydrant Maintenance	2,074	2,120	2,160	2,200	2,240	2,280	2,330	2,380	2,430	2,480	2,530	2,580	2,630
Hydrant Meter	15,000	15,300	15,610	15,920	16,240	16,560	16,890	17,230	17,570	17,920	18,280	18,650	19,020
Water Service Connection Fee	25,000	25,500	26,010	26,530	27,060	27,600	28,150	28,710	29,280	29,870	30,470	31,080	31,700
Wheatley Surcharge Harbour	6,520	6,650	6,780	6,920	7,060	7,200	7,340	7,490	7,640	7,790	7,950	8,110	8,270
Water Buy-in Fee	25,000	25,500	26,010	26,530	27,060	27,600	28,150	28,710	29,280	29,870	30,470	31,080	31,700
Invoice Penalties	35,000	35,700	36,410	37,140	37,880	38,640	39,410	40,200	41,000	41,820	42,660	43,510	44,380
Sundry Revenue	5,000	5,100	5,200	5,300	5,410	5,520	5,630	5,740	5,850	5,970	6,090	6,210	6,330
Contributions from Development Charges Re	-	-	-	-	-	-	2,079,719	4,768,313	7,158,629	7,158,629	7,158,629	7,158,629	7,158,629
Contributions from Reserves / Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Operating Revenue</b>	<b>3,261,354</b>	<b>3,372,199</b>	<b>3,493,204</b>	<b>3,617,704</b>	<b>3,745,788</b>	<b>3,877,540</b>	<b>6,092,793</b>	<b>8,920,800</b>	<b>11,454,478</b>	<b>11,601,941</b>	<b>11,722,305</b>	<b>11,845,289</b>	<b>12,003,899</b>
<b>Water Billing Recovery - Total</b>	<b>11,185,169</b>	<b>3,500,361</b>	<b>3,579,215</b>	<b>3,659,823</b>	<b>3,742,224</b>	<b>3,826,457</b>	<b>3,912,562</b>	<b>4,188,292</b>	<b>4,664,952</b>	<b>5,159,003</b>	<b>5,466,583</b>	<b>5,784,336</b>	<b>6,532,485</b>



## 5.3 Wastewater Operating Expenditures

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Annual wastewater operating expenditures are assumed to increase by 2.5% per annum, while expenditures related to utilities, fuels, chemicals and other materials have been increased at 5% per annum.

Debenture expenditures and transfers to the capital reserve fund are also included in the operating budget .

## 5.4 Wastewater Operating Revenues

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The operating revenue for the wastewater program comes mainly from base charges along with volumetric revenue from customers. Revenue is also generated from Sewer surcharge, overstrength, invoice penalties, hauled waste, and leachate. Table 5-2 outlines the operating budget for the Leamington wastewater system.



**Table 5-2  
Operating Budget Forecast – Wastewater (inflated \$)**

Description	Budget 2023	Forecast											
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Expenditures</b>													
<u>Operating Costs</u>													
5000-002000 - Salaried Wages	400,488	414,044	424,390	435,000	445,880	457,030	468,460	480,170	492,170	504,470	517,080	530,010	543,260
5000-002000-008002 - Salaried Wages-COVID-19	-	-	-	-	-	-	-	-	-	-	-	-	-
5010-002000 - Regular Full Time	537,871	557,190	571,120	585,400	600,040	615,040	630,420	646,180	662,330	678,890	695,860	713,260	731,090
5021-002001 - Part-Time Wage Base Account	13,611	14,017	14,370	14,730	15,100	15,480	15,870	16,270	16,680	17,100	17,530	17,970	18,420
5042-002000 - Overtime 2x	100,000	130,000	133,250	136,580	139,990	143,490	147,080	150,760	154,530	158,390	162,350	166,410	170,570
5045-002000 - Shift Premium	3,808	3,808	3,900	4,000	4,100	4,200	4,310	4,420	4,530	4,640	4,760	4,880	5,000
5080-002000 - Long Service Pay	1,080	720	740	760	780	800	820	840	860	880	900	920	940
5083-002000 - Standby Pay	20,075	21,900	22,450	23,010	23,590	24,180	24,780	25,400	26,040	26,690	27,360	28,040	28,740
5090-002001 - Vacation Pay - PT	776	596	610	630	650	670	690	710	730	750	770	790	810
5200-002000 - CPP - FT	40,817	44,002	45,100	46,230	47,390	48,570	49,780	51,020	52,300	53,610	54,950	56,320	57,730
5200-002001 - CPP - PT	1,020	807	830	850	870	890	910	930	950	970	990	1,010	1,040
5201-002000 - EI - FT	13,908	14,440	14,800	15,170	15,550	15,940	16,340	16,750	17,170	17,600	18,040	18,490	18,950
5201-002001 - EI - PT	398	309	320	330	340	350	360	370	380	390	400	410	420
5202-002000 - EHT - FT	18,358	18,985	19,460	19,950	20,450	20,960	21,480	22,020	22,570	23,130	23,710	24,300	24,910
5202-002001 - EHT - PT	378	290	300	310	320	330	340	350	360	370	380	390	400
5203-002000 - Extended Health - FT	53,603	65,847	67,490	69,180	70,910	72,680	74,500	76,360	78,270	80,230	82,240	84,300	86,410
5205-002000 - WSIB - FT	24,289	24,437	25,050	25,680	26,320	26,980	27,650	28,340	29,050	29,780	30,520	31,280	32,060
5205-002001 - WSIB - PT	501	374	380	390	400	410	420	430	440	450	460	470	480
5207-002000 - OMERS	96,973	100,454	102,970	105,540	108,180	110,880	113,650	116,490	119,400	122,390	125,450	128,590	131,800
5208-002000 - Life & LTD	33,661	29,911	30,660	31,430	32,220	33,030	33,860	34,710	35,580	36,470	37,380	38,310	39,270
5210-002000 - Retiree Benefits	17,831	19,562	20,050	20,550	21,060	21,590	22,130	22,680	23,250	23,830	24,430	25,040	25,670
7010-002030 - Office Supplies	1,000	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210	1,240	1,270	1,300	1,330
7020-002030 - Dues, Memberships & Subscriptions	1,200	1,825	1,870	1,920	1,970	2,020	2,070	2,120	2,170	2,220	2,280	2,340	2,400
7030-002030 - Travel	500	500	510	520	530	540	550	560	570	580	590	600	620
7040-002030 - Training	10,000	10,000	10,250	10,510	10,770	11,040	11,320	11,600	11,890	12,190	12,490	12,800	13,120
7050-002030 - Conferences	6,000	6,000	6,150	6,300	6,460	6,620	6,790	6,960	7,130	7,310	7,490	7,680	7,870
7054-002030 - Recruitment Expenses	500	-	500	-	-	-	-	500	-	-	-	-	-
7070-002030 - Uniforms and PPE	25,000	32,000	32,800	33,620	34,460	35,320	36,200	37,110	38,040	38,990	39,960	40,960	41,980
7110-002030-002081 - Telecommunications Usage-Land Lines	350	350	360	370	380	390	400	410	420	430	440	450	460
7110-002030-002083 - Telecommunications Usage-Mobile Phones	6,950	7,500	7,690	7,880	8,080	8,280	8,490	8,700	8,920	9,140	9,370	9,600	9,840



**Figure 5-2 (Cont'd)**  
**Operating Budget Forecast – Wastewater (inflated \$)**

Description	Budget 2023	Forecast											
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Expenditures</b>													
7110-002030-002087 - Telecommunications Usage -Security	1,000	1,600	1,640	1,680	1,720	1,760	1,800	1,850	1,900	1,950	2,000	2,050	2,100
7110-002030-002088 - Telecommunications Usage -GPS monthly services	950	950	970	990	1,010	1,040	1,070	1,100	1,130	1,160	1,190	1,220	1,250
7140-002030 - Insurance - Liability	243,456	259,769	266,260	272,920	279,740	286,730	293,900	301,250	308,780	316,500	324,410	332,520	340,830
7560-002030-007420 - Vehicle Insurance	4,721	5,420	5,560	5,700	5,840	5,990	6,140	6,290	6,450	6,610	6,780	6,950	7,120
7562-002030 - Property Insurance	80,093	93,141	95,470	97,860	100,310	102,820	105,390	108,020	110,720	113,490	116,330	119,240	122,220
7190-002067 - Internal Office Overhead Allocation	37,275	36,625	37,540	38,480	39,440	40,430	41,440	42,480	43,540	44,630	45,750	46,890	48,060
7250-002030 - Tech Hardware Purchases (non TCA)	-	500	510	520	530	540	550	560	570	580	590	600	620
7280-002030 - Telecommunication Purchases (non TCA)	3,000	4,000	4,100	4,200	4,310	4,420	4,530	4,640	4,760	4,880	5,000	5,130	5,260
7831-002050 - Credit Card Charges (HST Applicable)	-	-	-	-	-	-	-	-	-	-	-	-	-
7832-002050 - Credit, Debit & Bank Charges (No HST)	920	920	940	960	980	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210
7950-002040 - Professional Services	17,500	69,500	71,240	73,020	74,850	76,720	78,640	80,610	82,630	84,700	86,820	88,990	91,210
7052-002030 - Meeting Expenses	250	250	260	270	280	290	300	310	320	330	340	350	360
7080-002030 - Operational Supplies	5,000	5,000	5,130	5,260	5,390	5,520	5,660	5,800	5,950	6,100	6,250	6,410	6,570
7905-002030 - Septic Tank Clean Out	1,350	1,400	1,440	1,480	1,520	1,560	1,600	1,640	1,680	1,720	1,760	1,800	1,850
7992-002040 - Office Equipment Rental	1,300	-	-	-	-	1,300	1,300	1,300	1,300	-	-	-	-
7993-002040 - Office Equipment Maintenance	300	350	360	370	380	390	400	410	420	430	440	450	460
7995-002040-002130 - Software Licensing-Other	26,000	32,100	32,900	33,720	34,560	35,420	36,310	37,220	38,150	39,100	40,080	41,080	42,110
7490-002030-007400 - Property Taxes-Building Mtce	213,356	220,073	225,570	231,210	236,990	242,910	248,980	255,200	261,580	268,120	274,820	281,690	288,730
7610-002030-007400 - Project Materials-Building Mtce	10,000	10,000	10,300	10,600	10,900	11,200	11,500	23,600	24,200	24,800	25,400	26,000	26,700
7630-002030-007400 - Project Contracts-Building Maintenance	34,000	30,000	30,800	31,600	32,400	33,200	34,000	69,800	71,500	73,300	75,100	77,000	78,900
7955-002040-007400 - Service Contracts-Building Mtce	16,340	20,610	21,130	21,660	22,200	22,760	23,330	23,910	24,510	25,120	25,750	26,390	27,050
7958-002040-007400 - Garbage Collection-Building Mtce	860	920	940	960	980	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210
7570-002030-007410 - Safety Equipment-Equip Mtce	10,000	10,000	10,250	10,510	10,770	11,040	11,320	11,600	11,890	12,190	12,490	12,800	13,120
7610-002030-007410 - Project Materials-Equip Mtce	150,000	150,000	153,800	157,600	161,500	165,500	169,600	347,600	356,300	365,200	374,300	383,700	393,300



**Figure 5-2 (Cont'd)**  
**Operating Budget Forecast – Wastewater (inflated \$)**

Description	Budget 2023	Forecast											
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Expenditures</b>													
7630-002030-007410 - Project Contracts-Equipment Mtce	100,000	80,000	82,000	84,100	86,200	88,400	90,600	185,800	190,400	195,200	200,100	205,100	210,200
7955-002040-007410 - Service Contracts-Equipment Mtce	-	35,600	36,490	37,400	38,340	39,300	40,280	41,290	42,320	43,380	44,460	45,570	46,710
5011-002000-007420 - Regular Full Time - PW Allocation	3,070	2,360	2,420	2,480	2,540	2,600	2,670	2,740	2,810	2,880	2,950	3,020	3,100
7550-002030-007420 - Vehicle Licence	892	892	910	930	950	970	990	1,010	1,040	1,070	1,100	1,130	1,160
7610-002030-007420 - Project Materials-Vehicle Mtce	3,000	3,000	3,080	3,160	3,240	3,320	3,400	3,490	3,580	3,670	3,760	3,850	3,950
7630-002030-007420 - Project Contracts-Vehicle Maintenance	2,000	2,000	2,050	2,100	2,150	2,200	2,260	2,320	2,380	2,440	2,500	2,560	2,620
7410-002030-007430-2020 - Natural Gas - Wastewater-Op Costs - Biosolids Building	60,000	80,000	84,000	88,200	92,600	97,200	102,100	134,000	140,700	147,700	155,100	162,900	171,000
7410-002030-007430-2030 - Natural Gas - Wastewater-Op Costs - UV, Admin, Mtce Shop	7,000	8,500	8,900	9,300	9,800	10,300	10,800	22,600	23,700	24,900	26,100	27,400	28,800
7420-002030-007430-2000 - Electricity-Headworks (Gen 1)	800,000	750,000	787,500	826,900	868,200	911,600	957,200	1,507,650	1,583,000	1,662,200	1,745,300	1,832,600	1,924,200
7430-002030-007430-2000 - Water-WW Op Costs-Headworks (Gen 1)	17,000	25,000	25,600	26,200	26,900	27,600	28,300	58,000	59,500	61,000	62,500	64,100	65,700
7500-002030-007430-2020 - Biosolids Disposal - Wastewater-Op Costs - Biosolids Building	115,000	120,000	123,000	126,080	129,230	132,460	135,770	139,160	142,640	146,210	149,870	153,620	157,460
7520-002050-007430 - Equipment Rental-WW Op Costs	15,000	15,000	15,400	15,800	16,200	16,600	17,000	34,800	35,700	36,600	37,500	38,400	39,400
7706-002030-007430-2010 - Aluminum Sulphate-Liquid stream (Gen 2)	165,000	155,000	158,900	162,900	167,000	171,200	175,500	359,800	368,800	378,000	387,500	397,200	407,100
7708-002030-007430 - Miscellaneous Reagents	9,000	9,000	9,230	9,460	9,700	9,940	10,190	10,440	10,700	10,970	11,240	11,520	11,810
7710-002030-007430-2010 - Polymers - Wastewater-Op Costs - Liquid stream (Gen 2)	14,000	30,000	30,800	31,600	32,400	33,200	34,000	43,625	44,700	45,800	46,900	48,100	49,300
7710-002030-007430-2020 - Polymers - Wastewater-Op Costs - Biosolids Building	200,430	250,000	256,300	262,700	269,300	276,000	282,900	362,500	371,600	380,900	390,400	400,200	410,200
7712-002030-007430-2010 - Nutrients-WW Op Costs-Liquid stream (Gen 2)	5,000	5,000	5,130	5,260	5,390	5,520	5,660	5,800	5,950	6,100	6,250	6,410	6,570
7714-002030-007430-2020 - Misc Chemical Purchases - Wastewater-Op Costs - Biosolids Building	40,000	32,000	32,800	33,620	34,460	35,320	36,200	37,110	38,040	38,990	39,960	40,960	41,980
7716-002030-007410 - Laboratory Analysis	15,000	20,000	20,500	21,010	21,540	22,080	22,630	23,200	23,780	24,370	24,980	25,600	26,240
7718-002030-007430 - Laboratory Materials - Wastewater-Op Costs	7,000	10,000	10,250	10,510	10,770	11,040	11,320	11,600	11,890	12,190	12,490	12,800	13,120



**Figure 5-2 (Cont'd)**  
**Operating Budget Forecast – Wastewater (inflated \$)**

Description	Budget 2023	Forecast											
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Expenditures</b>													
7732-002030-007430-2020 - Lime-Wastewater-Op Costs - Biosolids Building	150,000	150,000	153,800	157,600	161,500	165,500	169,600	217,250	222,700	228,300	234,000	239,900	245,900
7957-002040-007430-2000 - Grit Disposal-Headworks (Gen 1)	65,000	65,000	66,600	68,300	70,000	71,800	73,600	94,250	96,600	99,000	101,500	104,000	106,600
7420-002030-007440-2100 - Electricity-Pumping Stations - Cherry Lane	25,000	30,000	31,500	33,100	34,800	36,500	38,300	60,300	63,300	66,500	69,800	73,300	77,000
7610-002030-007440-2100 - Project Materials-Pumping Stations - Cherry Lane	10,000	12,000	12,300	12,610	12,930	13,250	13,580	13,920	14,270	14,630	15,000	15,380	15,760
7630-002030-007440-2100 - Project Contracts-Pumping Stations - Cherry Lane	30,000	20,000	20,500	21,010	21,540	22,080	22,630	23,200	23,780	24,370	24,980	25,600	26,240
7955-002040-007440-2140 - Service Contracts-Pumping Stations General	-	12,000	12,300	12,610	12,930	13,250	13,580	13,920	14,270	14,630	15,000	15,380	15,760
5022-002001-007470 - Part-Time-PW Allocation	5,797	878	900	920	940	960	980	1,000	1,030	1,060	1,090	1,120	1,150
7610-002030-007470 - Project Materials-Property Mtce	2,500	3,000	3,080	3,160	3,240	3,320	3,400	3,490	3,580	3,670	3,760	3,850	3,950
7620-002030-007470 - Project Equipment-Property Mtce	-	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210	1,240	1,270	1,300	1,330
7630-002030-007470 - Project Contracts-Property Mtce	5,000	10,000	10,250	10,510	10,770	11,040	11,320	11,600	11,890	12,190	12,490	12,800	13,120
7955-002040-007470 - Service Contracts-Property Mtce	15,000	7,000	7,180	7,360	7,540	7,730	7,920	8,120	8,320	8,530	8,740	8,960	9,180
7531-002030-008545 - Fuel Purchases - Unleaded	5,000	5,000	5,300	5,600	5,900	6,200	6,500	6,800	7,100	7,500	7,900	8,300	8,700
7532-002030-008545 - Fuel Purchases - Diesel	17,000	17,000	17,900	18,800	19,700	20,700	21,700	22,800	23,900	25,100	26,400	27,700	29,100
7533-002030-008545 - Oil & Lubricants-Fuel	6,000	8,000	8,400	8,800	9,200	9,700	10,200	10,700	11,200	11,800	12,400	13,000	13,700
Compliance/Project Manager Operator	-	-	85,000	87,130	89,310	91,540	93,830	96,180	98,580	101,040	103,570	106,160	108,810
								90,000	92,250	94,560	96,920	99,340	101,820
<b>Sub Total Operating</b>	<b>4,203,305</b>	<b>4,448,227</b>	<b>4,667,810</b>	<b>4,807,750</b>	<b>4,952,780</b>	<b>5,103,910</b>	<b>5,258,700</b>	<b>6,753,295</b>	<b>6,965,610</b>	<b>7,184,970</b>	<b>7,413,130</b>	<b>7,649,670</b>	<b>7,894,570</b>



Figure 5-2 (Cont'd)  
Operating Budget Forecast – Wastewater (inflated \$)

Description	Budget 2023	Forecast											
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Capital-Related</b>													
Existing Debt (Principal) - Growth Related	-	-	-	-	-	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Growth Related	-	-	-	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Principal)	-	-	-	-	-	-	-	235,636	746,897	1,308,545	1,513,506	5,397,934	5,397,934
New Growth Related Debt (Interest)	-	-	-	-	-	-	-	774,078	2,403,411	4,089,389	3,884,428	-	-
Existing Debt (Principal) - Non-Growth Related	1,203,970	1,233,877	792,977	820,930	440,310	455,506	471,300	487,630	504,572	120,014	-	-	-
Existing Debt (Interest) - Non-Growth Related	223,181	175,963	133,063	105,110	79,759	64,563	48,769	32,439	15,498	1,811	-	-	-
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	4,074,214	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital Reserve	59,999	3,761,801	4,530,701	4,924,175	5,748,906	6,107,542	6,395,685	5,360,320	5,525,403	6,091,724	6,383,121	6,553,978	6,794,683
<b>Sub Total Capital Related</b>	<b>5,561,364</b>	<b>5,171,640</b>	<b>5,456,741</b>	<b>5,850,215</b>	<b>6,268,975</b>	<b>6,627,611</b>	<b>6,915,754</b>	<b>6,890,103</b>	<b>9,195,779</b>	<b>11,611,482</b>	<b>11,781,055</b>	<b>11,951,912</b>	<b>12,192,617</b>
<b>Total Expenditures</b>	<b>9,764,669</b>	<b>9,619,867</b>	<b>10,124,551</b>	<b>10,657,965</b>	<b>11,221,755</b>	<b>11,731,521</b>	<b>12,174,454</b>	<b>13,643,398</b>	<b>16,161,389</b>	<b>18,796,452</b>	<b>19,194,185</b>	<b>19,601,582</b>	<b>20,087,187</b>
<b>Revenues</b>													
Base Charge	4,445,727	4,630,576	4,962,625	5,316,301	5,692,939	6,035,912	6,335,702	6,648,048	6,905,729	7,171,058	7,444,238	7,724,582	8,080,616
<b>Other Revenue</b>													
Hauled Waste	639,410	652,200	665,240	678,540	692,110	705,950	720,070	734,470	749,160	764,140	779,420	795,010	810,910
Leachate	77,800	79,360	80,950	82,570	84,220	85,900	87,620	89,370	91,160	92,980	94,840	96,740	98,670
Surcharges-Highbury-Sewer Surcharge	1,248,082	1,273,040	1,298,500	1,324,470	1,350,960	1,377,980	1,405,540	1,433,650	1,462,320	1,491,570	1,521,400	1,551,830	1,582,870
Overstrength	442,133	450,980	460,000	469,200	478,580	488,150	497,910	507,870	518,030	528,390	538,960	549,740	560,730
PCC Greenhouse Sewer Surcharge	75,729	77,240	78,780	80,360	81,970	83,610	85,280	86,990	88,730	90,500	92,310	94,160	96,040
Invoice Penalties	25,000	25,500	26,010	26,530	27,060	27,600	28,150	28,710	29,280	29,870	30,470	31,080	31,700
Sundry Revenue	2,400	2,450	2,500	2,550	2,600	2,650	2,700	2,750	2,810	2,870	2,930	2,990	3,050
Contributions from Development Charges Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-
Contributions from Reserves / Reserve Funds	426,931	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Operating Revenue</b>	<b>7,383,212</b>	<b>7,191,346</b>	<b>7,574,605</b>	<b>7,980,521</b>	<b>8,410,439</b>	<b>8,807,752</b>	<b>9,162,972</b>	<b>10,541,572</b>	<b>12,997,526</b>	<b>15,569,312</b>	<b>15,902,502</b>	<b>16,244,065</b>	<b>16,662,520</b>
<b>Wastewater Billing Recovery - Total</b>	<b>2,381,456</b>	<b>2,428,521</b>	<b>2,549,947</b>	<b>2,677,444</b>	<b>2,811,316</b>	<b>2,923,769</b>	<b>3,011,482</b>	<b>3,101,826</b>	<b>3,163,863</b>	<b>3,227,140</b>	<b>3,291,683</b>	<b>3,357,517</b>	<b>3,424,667</b>



# Chapter 6

## Pricing Structures



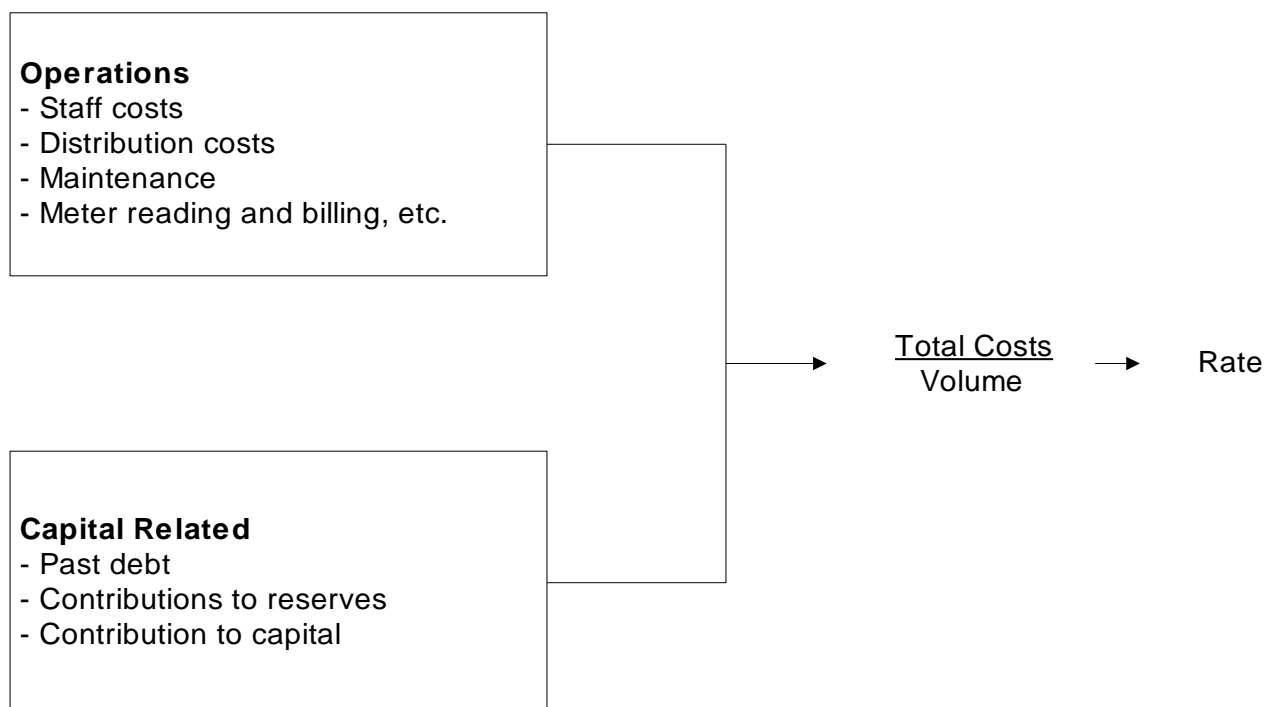
## 6. Pricing Structures

### 6.1 Introduction

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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

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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

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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

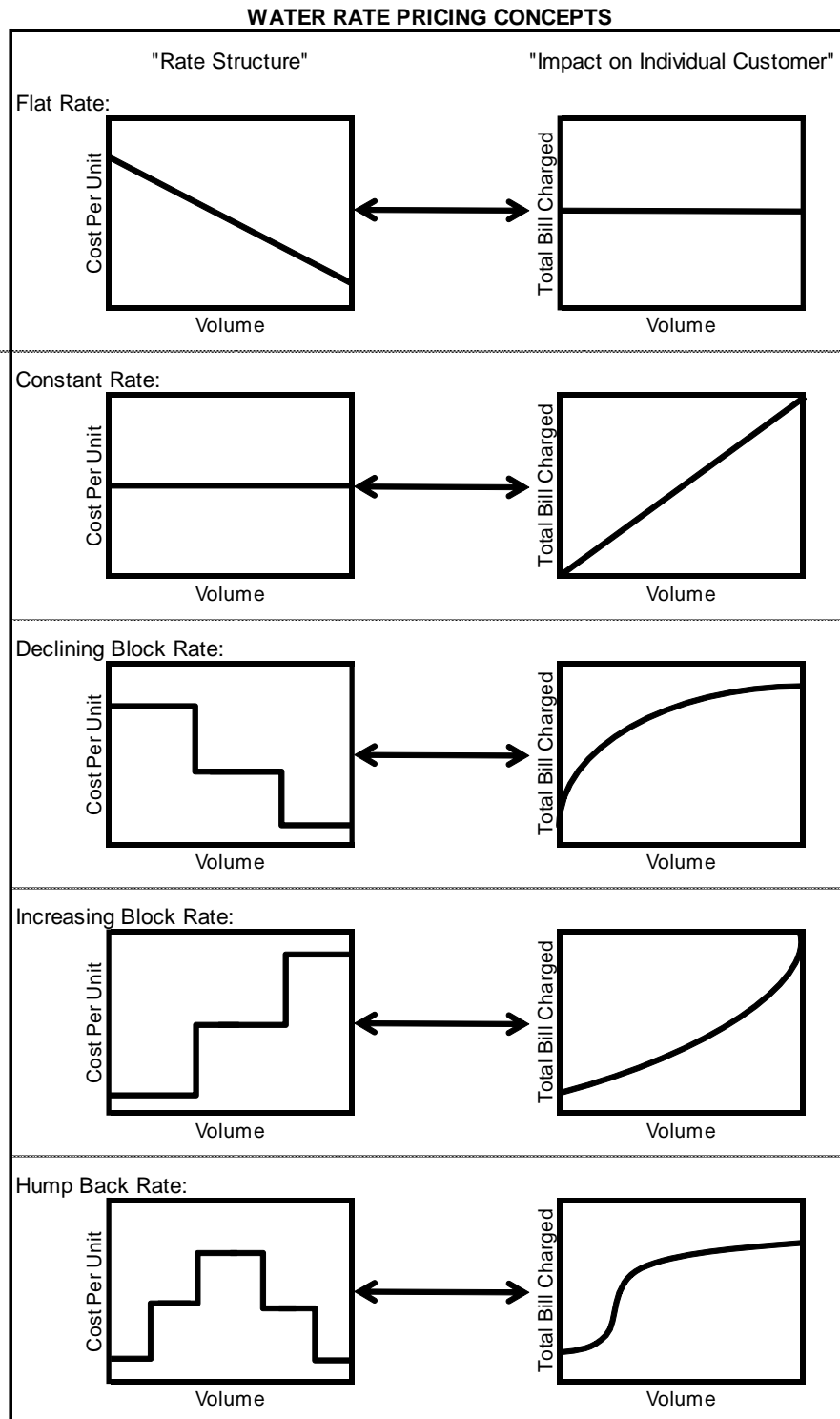




Figure 6-2  
Summary of Various Rate Structures and their Impact on Customer Bills as Volume Usage Increases

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

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Based on the foregoing, it is recommended that the same rate structures be continued in the future.

The needs for water and wastewater are significant over the forecast period. Additional operating expenditures and the requirement for significant capital expenditures create pressure on the financial sustainability of the water and wastewater systems. Hence rate increases have been balanced for the combined water/wastewater user to experience a 3.9% annual increase from 2025 to 2027, 3.3% for 2028, 2.7% from 2029 to 2030, and 2% every year thereafter (excluding the water bill for Union water).

Although the needs are significant for both systems, the water line renewals reserve fund has a balance of approximately \$13.35 million as of December 31, 2022. This reserve balance can be used to assist in funding capital works over the forecast period without the need to issue debentures for non-growth-related capital projects. In order to meet the needs for water, it is recommended that both the base rate and volume rates (all four categories) increase by 2% annually over the forecast period. As the operating and capital needs are significant for water services, this rate increase, combined with the reserve fund balance, allows the Municipality to fund capital works and operating expenditures without the need to issue debt for non-growth-related capital projects. The forecast base charges are presented in Table 6-1. The volume rates are presented in section 7.2.

As for wastewater, the capital reserve fund has a balance of \$17.44 million as of December 31, 2022. The Municipality has numerous required capital expenditures planned for the forecast period. This reserve balance can be used to assist in funding capital works over the forecast period without the need to issue debentures for non-growth-related capital projects. It is recommended that the wastewater base charge and volume charge increase by 5% from 2025 to 2027, 4% for 2028, 3% from 2029 to 2030, and 2% every year thereafter. The forecast base charges are presented in Table 6-2. The volume rates are presented in section 7.3.



The above increases are recommended to ensure that the Municipality can fund the capital and operating costs while keeping the overall reserve fund balance in a positive position.



**Table 6-1  
Municipality of Leamington  
Base Charge Forecast – Water**

Water	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	9,643	9,643	9,643	9,643	9,643	9,643	9,643	9,643	9,643	9,643	9,643	9,643	9,643
New	80	240	399	559	718	878	1,037	1,197	1,356	1,516	1,596	1,675	1,833
<b>Total Customers</b>	<b>9,723</b>	<b>9,883</b>	<b>10,042</b>	<b>10,202</b>	<b>10,361</b>	<b>10,521</b>	<b>10,680</b>	<b>10,840</b>	<b>10,999</b>	<b>11,159</b>	<b>11,239</b>	<b>11,318</b>	<b>11,476</b>
<b>Total Annual Revenue</b>	<b>\$3,145,693</b>	<b>\$3,254,219</b>	<b>\$3,372,874</b>	<b>\$3,494,974</b>	<b>\$3,620,608</b>	<b>\$3,749,870</b>	<b>\$3,882,854</b>	<b>\$4,019,657</b>	<b>\$4,160,379</b>	<b>\$4,305,123</b>	<b>\$4,422,707</b>	<b>\$4,542,871</b>	<b>\$4,698,621</b>

Residential and Commercial (<25mm)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	9,195	9,195	9,195	9,195	9,195	9,195	9,195	9,195	9,195	9,195	9,195	9,195	9,195
New	80	240	399	559	718	878	1,037	1,197	1,356	1,516	1,596	1,675	1,833
<b>Subtotal Customers</b>	<b>9,275</b>	<b>9,434</b>	<b>9,594</b>	<b>9,753</b>	<b>9,913</b>	<b>10,072</b>	<b>10,232</b>	<b>10,391</b>	<b>10,551</b>	<b>10,710</b>	<b>10,790</b>	<b>10,869</b>	<b>11,028</b>
Monthly Base Charge	\$26.96	\$27.44	\$27.99	\$28.55	\$29.12	\$29.70	\$30.30	\$30.90	\$31.52	\$32.15	\$32.79	\$33.45	\$34.12
Annual Base Charge	\$323.52	\$329.28	\$335.87	\$342.58	\$349.43	\$356.42	\$363.55	\$370.82	\$378.24	\$385.80	\$393.52	\$401.39	\$409.42
<b>Total Annual Revenue</b>	<b>\$3,000,621</b>	<b>\$3,106,565</b>	<b>\$3,222,267</b>	<b>\$3,341,354</b>	<b>\$3,463,916</b>	<b>\$3,590,044</b>	<b>\$3,719,831</b>	<b>\$3,853,374</b>	<b>\$3,990,770</b>	<b>\$4,132,122</b>	<b>\$4,246,246</b>	<b>\$4,362,880</b>	<b>\$4,515,031</b>

Regulated Greenhouse, Commercial (>25mm)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	384	384	384	384	384	384	384	384	384	384	384	384	384
New													
<b>Subtotal Customers</b>	<b>384</b>	<b>384</b>	<b>384</b>	<b>384</b>	<b>384</b>	<b>384</b>	<b>384</b>	<b>384</b>	<b>384</b>	<b>384</b>	<b>384</b>	<b>384</b>	<b>384</b>
Monthly Base Charge	\$26.96	\$27.44	\$27.99	\$28.55	\$29.12	\$29.70	\$30.30	\$30.90	\$31.52	\$32.15	\$32.79	\$33.45	\$34.12
Annual Base Charge	\$323.52	\$329.28	\$335.87	\$342.58	\$349.43	\$356.42	\$363.55	\$370.82	\$378.24	\$385.80	\$393.52	\$401.39	\$409.42
<b>Total Annual Revenue</b>	<b>\$124,232</b>	<b>\$126,444</b>	<b>\$128,972</b>	<b>\$131,552</b>	<b>\$134,183</b>	<b>\$136,867</b>	<b>\$139,604</b>	<b>\$142,396</b>	<b>\$145,244</b>	<b>\$148,149</b>	<b>\$151,112</b>	<b>\$154,134</b>	<b>\$157,217</b>

Unregulated Greenhouse/Commercial (>25mm) & Field Drip Irrigation <3 acres	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	53	53	53	53	53	53	53	53	53	53	53	53	53
New													
<b>Subtotal Customers</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>
Monthly Base Charge	\$26.96	\$27.44	\$27.99	\$28.55	\$29.12	\$29.70	\$30.30	\$30.90	\$31.52	\$32.15	\$32.79	\$33.45	\$34.12
Annual Base Charge	\$323.52	\$329.28	\$335.87	\$342.58	\$349.43	\$356.42	\$363.55	\$370.82	\$378.24	\$385.80	\$393.52	\$401.39	\$409.42
<b>Total Annual Revenue</b>	<b>\$17,039</b>	<b>\$17,342</b>	<b>\$17,689</b>	<b>\$18,043</b>	<b>\$18,404</b>	<b>\$18,772</b>	<b>\$19,147</b>	<b>\$19,530</b>	<b>\$19,921</b>	<b>\$20,319</b>	<b>\$20,725</b>	<b>\$21,140</b>	<b>\$21,563</b>

Unregulated Greenhouse/Commercial (>25mm) & Field Drip Irrigation >3 acres	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	12	12	12	12	12	12	12	12	12	12	12	12	12
New													
<b>Subtotal Customers</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
Monthly Base Charge	\$26.96	\$27.44	\$27.99	\$28.55	\$29.12	\$29.70	\$30.30	\$30.90	\$31.52	\$32.15	\$32.79	\$33.45	\$34.12
Annual Base Charge	\$323.52	\$329.28	\$335.87	\$342.58	\$349.43	\$356.42	\$363.55	\$370.82	\$378.24	\$385.80	\$393.52	\$401.39	\$409.42
<b>Total Annual Revenue</b>	<b>\$3,801</b>	<b>\$3,869</b>	<b>\$3,946</b>	<b>\$4,025</b>	<b>\$4,106</b>	<b>\$4,188</b>	<b>\$4,272</b>	<b>\$4,357</b>	<b>\$4,444</b>	<b>\$4,533</b>	<b>\$4,624</b>	<b>\$4,716</b>	<b>\$4,811</b>



Table 6-2  
Municipality of Leamington  
Base Charge Forecast – Wastewater

Wastewater	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932
New	74	222	370	518	666	814	961	1,109	1,257	1,405	1,553	1,700	1,921
<b>Subtotal Customers</b>	<b>7,006</b>	<b>7,154</b>	<b>7,302</b>	<b>7,450</b>	<b>7,598</b>	<b>7,746</b>	<b>7,893</b>	<b>8,041</b>	<b>8,189</b>	<b>8,337</b>	<b>8,485</b>	<b>8,632</b>	<b>8,853</b>
<b>Total Annual Revenue</b>	<b>\$4,445,727</b>	<b>\$4,630,576</b>	<b>\$4,962,625</b>	<b>\$5,316,301</b>	<b>\$5,692,939</b>	<b>\$6,035,912</b>	<b>\$6,335,702</b>	<b>\$6,648,048</b>	<b>\$6,905,729</b>	<b>\$7,171,058</b>	<b>\$7,444,238</b>	<b>\$7,724,582</b>	<b>\$8,080,616</b>

Base Rate (Equivalent to 20.91 cu.m Volume)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932	6,932
New	74	222	370	518	666	814	961	1,109	1,257	1,405	1,553	1,700	1,921
<b>Subtotal Customers</b>	<b>7,006</b>	<b>7,154</b>	<b>7,302</b>	<b>7,450</b>	<b>7,598</b>	<b>7,746</b>	<b>7,893</b>	<b>8,041</b>	<b>8,189</b>	<b>8,337</b>	<b>8,485</b>	<b>8,632</b>	<b>8,853</b>
Monthly Base Charge	\$52.88	\$53.94	\$56.64	\$59.47	\$62.44	\$64.94	\$66.89	\$68.89	\$70.27	\$71.68	\$73.11	\$74.57	\$76.07
Annual Base Charge	\$634.56	\$647.28	\$679.64	\$713.63	\$749.31	\$779.28	\$802.66	\$826.74	\$843.27	\$860.14	\$877.34	\$894.89	\$912.79
<b>Total Annual Revenue</b>	<b>\$4,445,727</b>	<b>\$4,630,576</b>	<b>\$4,962,625</b>	<b>\$5,316,301</b>	<b>\$5,692,939</b>	<b>\$6,035,912</b>	<b>\$6,335,702</b>	<b>\$6,648,048</b>	<b>\$6,905,729</b>	<b>\$7,171,058</b>	<b>\$7,444,238</b>	<b>\$7,724,582</b>	<b>\$8,080,616</b>



# Chapter 7

## Analysis of Water and Wastewater Rates and Policy Matters



## 7. Analysis of Water and Wastewater Rates and Policy Matters

### 7.1 Introduction

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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 12-year operating forecast of expenditures including an annual capital reserve contribution. The base charge revenues are to ensure that fixed costs are recovered regardless of the amount of volume used by customers. This chapter will provide for the calculation of the volume rates over the forecast period. These calculations will be based on the net operating expenditures (the variable costs) provided in Chapter 5, divided by the water consumption forecast and wastewater volumes provided in section 1.8.

### 7.2 Water Rates

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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 base charge and volume rates are anticipated to increase at average rate of 2% per year over the entire forecast period. The volume rates are presented in Table 7-1. Detailed calculations of the volume rates are provided in Appendix C. A summary of the recommended base charge and volume rates along with the total annual bill for an average residential user who consumes 201 cu.m. per year are as follows:



**Table 7-1**  
**Municipality of Leamington**  
**Average Annual Residential Water Bill (Based on an Annual Usage of 201 cu.m)**

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Monthly Base Charge (all categories)	\$27.44	\$27.99	\$28.55	\$29.12	\$29.70	\$30.30	\$30.90	\$31.52	\$32.15	\$32.79	\$33.45	\$34.12
<b>Annual Residential and Commercial Base Rate Bill</b>	<b>\$329.28</b>	<b>\$335.87</b>	<b>\$342.58</b>	<b>\$349.43</b>	<b>\$356.42</b>	<b>\$363.55</b>	<b>\$370.82</b>	<b>\$378.24</b>	<b>\$385.80</b>	<b>\$393.52</b>	<b>\$401.39</b>	<b>\$409.42</b>
Residential, Commercial (<25mm) (per cu.m/mth)	\$0.2704	\$0.2758	\$0.2813	\$0.2870	\$0.2927	\$0.2985	\$0.3045	\$0.3106	\$0.3168	\$0.3232	\$0.3296	\$0.3362
Block 1 Volume	201	201	201	201	201	201	201	201	201	201	201	201
<b>Annual Volume Bill</b>	<b>\$54.38</b>	<b>\$55.47</b>	<b>\$56.58</b>	<b>\$57.71</b>	<b>\$58.86</b>	<b>\$60.04</b>	<b>\$61.24</b>	<b>\$62.46</b>	<b>\$63.71</b>	<b>\$64.99</b>	<b>\$66.29</b>	<b>\$67.61</b>
<b>Total Annual Bill (Residential, Commercial &lt;25mm)</b>	<b>\$383.66</b>	<b>\$391.33</b>	<b>\$399.16</b>	<b>\$407.14</b>	<b>\$415.28</b>	<b>\$423.59</b>	<b>\$432.06</b>	<b>\$440.70</b>	<b>\$449.52</b>	<b>\$458.51</b>	<b>\$467.68</b>	<b>\$477.03</b>
<b>%Increase - Total Annual Bill</b>		2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%

Note, the above rates do not include the Union water billing amount, which as of 2024 will be identified separately on the water bill.

### 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 D.

Based on the timing of the capital needs, coupled with the positive wastewater reserve balance, the wastewater base and volume rates are anticipated to increase by 5% from 2025 to 2027, 4% for 2028, 3% from 2029 to 2030, and 2% every year thereafter.

The following summarizes the recommended rates for wastewater and provides the average annual bill for a residential customer who uses 201 cu.m per year:

**Table 7-2**  
**Municipality of Leamington**  
**Average Annual Residential Wastewater Bill (Based on an Annual Usage of 201 cu.m)**

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Monthly Base Rate (includes 20.91 cu.m)	\$53.94	\$56.64	\$59.47	\$62.44	\$64.94	\$66.89	\$68.89	\$70.27	\$71.68	\$73.11	\$74.57	\$76.07
<b>Annual Base Rate Bill</b>	<b>\$647.28</b>	<b>\$679.64</b>	<b>\$713.63</b>	<b>\$749.31</b>	<b>\$779.28</b>	<b>\$802.66</b>	<b>\$826.74</b>	<b>\$843.27</b>	<b>\$860.14</b>	<b>\$877.34</b>	<b>\$894.89</b>	<b>\$912.79</b>
Block 1 Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Block 2 Rate (>20.91 cu.m)	\$2.5800	\$2.7090	\$2.8445	\$2.9867	\$3.1061	\$3.1993	\$3.2953	\$3.3612	\$3.4284	\$3.4970	\$3.5669	\$3.6383
Volume	201	201	201	201	201	201	201	201	201	201	201	201
<b>Annual Volume Bill</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Total Annual Bill</b>	<b>\$647.28</b>	<b>\$679.64</b>	<b>\$713.63</b>	<b>\$749.31</b>	<b>\$779.28</b>	<b>\$802.66</b>	<b>\$826.74</b>	<b>\$843.27</b>	<b>\$860.14</b>	<b>\$877.34</b>	<b>\$894.89</b>	<b>\$912.79</b>
<b>%Increase - Total Annual Bill</b>		5.0%	5.0%	5.0%	4.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%

Note: based on the assumed usage of 201 cu.m, the monthly volumes would be billed under the minimum monthly base rate.



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

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Based on the foregoing information, the combined impact of the water and wastewater base charge and volume rate charges equal to a 3.9% annual increase on the combined bill from 2025 to 2027, 3.3% for 2028, 2.7% for 2029 to 2030, and 2% every year thereafter for residential customers. Table 7-3 presents the forecast combined annual bill for customers based on an annual usage of 201 cu.m (excluding Union water bill amounts).



Table 7-3  
Municipality of Leamington  
Annual Average Water and Wastewater Bill Based on 201 cu.m.

Annual Bill for Residential and Commercial Users (<25mm) with 201 cu.m Volume	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Water</b>												
Base Charge	\$329.28	\$335.87	\$342.58	\$349.43	\$356.42	\$363.55	\$370.82	\$378.24	\$385.80	\$393.52	\$401.39	\$409.42
Volume	\$54.38	\$55.47	\$56.58	\$57.71	\$58.86	\$60.04	\$61.24	\$62.46	\$63.71	\$64.99	\$66.29	\$67.61
<b>Total Water Bill</b>	<b>\$383.66</b>	<b>\$391.33</b>	<b>\$399.16</b>	<b>\$407.14</b>	<b>\$415.28</b>	<b>\$423.59</b>	<b>\$432.06</b>	<b>\$440.70</b>	<b>\$449.52</b>	<b>\$458.51</b>	<b>\$467.68</b>	<b>\$477.03</b>
<b>Wastewater</b>												
Base Charge (up to 250.92 cu.m)	\$647.28	\$679.64	\$713.63	\$749.31	\$779.28	\$802.66	\$826.74	\$843.27	\$860.14	\$877.34	\$894.89	\$912.79
<b>Total Wastewater Bill</b>	<b>\$647.28</b>	<b>\$679.64</b>	<b>\$713.63</b>	<b>\$749.31</b>	<b>\$779.28</b>	<b>\$802.66</b>	<b>\$826.74</b>	<b>\$843.27</b>	<b>\$860.14</b>	<b>\$877.34</b>	<b>\$894.89</b>	<b>\$912.79</b>
<b>Total Combined Bill</b>	<b>\$1,030.94</b>	<b>\$1,070.98</b>	<b>\$1,112.78</b>	<b>\$1,156.45</b>	<b>\$1,194.56</b>	<b>\$1,226.25</b>	<b>\$1,258.80</b>	<b>\$1,283.98</b>	<b>\$1,309.66</b>	<b>\$1,335.85</b>	<b>\$1,362.57</b>	<b>\$1,389.82</b>
<b>Annual Percentage Change</b>		3.9%	3.9%	3.9%	3.3%	2.7%	2.7%	2.0%	2.0%	2.0%	2.0%	2.0%

Note, the above water rates do not include the Union water billing amount, which as of 2024 will be identified separately on the water bill.



# Chapter 8

## Recommendations



## 8. Recommendations

As presented within this report, capital and operating expenditures have been identified and forecast over a 12-year period for water and wastewater services.

Based upon the foregoing, the following recommendations are identified for consideration by the Municipality's 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 through 7-3 respectively.



# Appendices



# Appendix A

## Water System Inventory Data (provided under separate cover)



# Appendix B

## Wastewater System Inventory Data

(provided under separate cover)



# Appendix C

## Detailed Water Rate Calculations



# Appendix C: Detailed Water Rate Calculations

Table C-1  
Municipality of Leamington  
Capital Budget Forecast (Uninflated \$)

Description	Budget 2023	Total	Forecast											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Capital Expenditures</b>														
Small Capital - Tools/Equipment	20,000	240,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
17C and 18C - Wigle/Orange/Setterington/Mill	-	2,421,500	2,421,500	-	-	-	-	-	-	-	-	-	-	-
New HydroVac Unit	140,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Jane St / Claire St- Increase to 150mm	-	705,125	705,125	-	-	-	-	-	-	-	-	-	-	-
Watermain Design Projects	-	200,000	-	200,000	-	-	-	-	-	-	-	-	-	-
19C and 20C - Ontario/Victoria/Montgomery/Princess - Construction	-	148,680	-	148,680	-	-	-	-	-	-	-	-	-	-
Mersea Rd 1 Watermain Upgrade	-	1,395,000	-	1,395,000	-	-	-	-	-	-	-	-	-	-
Mersea Rd 7 to Kent Rd 1	-	1,000,000	-	-	-	-	-	-	-	-	-	-	-	1,000,000
Hodgins/Wilkinson/Smith (158) - CONST	-	650,000	-	-	-	-	-	-	650,000	-	-	-	-	-
Pearl/Cameo/Kimball (113/145/146)	-	917,725	-	-	-	-	-	-	-	-	917,725	-	-	-
23C MCR- trunk watermain intersection to Oak St W - CONST	-	600,000	-	-	-	-	-	-	-	-	-	-	600,000	-
Greenhouse Rate of Flow Valves	-	500,000	-	500,000	-	-	-	-	-	-	-	-	-	-
<b>Lifecycle:</b>														
Replace Truck 60	85,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Replace Locate Van 69	-	150,000	150,000	-	-	-	-	-	-	-	-	-	-	-
Replace 2003 Backhoe 65	-	200,000	200,000	-	-	-	-	-	-	-	-	-	-	-
Office Renovations	-	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-
Replace Service Truck #61	-	100,000	-	100,000	-	-	-	-	-	-	-	-	-	-
Replace Service Truck #70	-	100,000	-	100,000	-	-	-	-	-	-	-	-	-	-
Replace Service Trucks 59	-	100,000	-	-	100,000	-	-	-	-	-	-	-	-	-
Replace Service Trucks 71	-	100,000	-	-	100,000	-	-	-	-	-	-	-	-	-
Replace Service Trucks 63	-	100,000	-	-	-	100,000	-	-	-	-	-	-	-	-
Replace Service Trucks 67	-	100,000	-	-	-	100,000	-	-	-	-	-	-	-	-
Replace Main Break Van 66	-	100,000	-	-	-	-	100,000	-	-	-	-	-	-	-
Replace Service Truck 58	-	100,000	-	-	-	-	-	100,000	-	-	-	-	-	-
Replace Dump Truck 72	-	180,000	-	-	-	-	-	-	180,000	-	-	-	-	-
Replace Service Truck 73	-	100,000	-	-	-	-	-	-	-	-	100,000	-	-	-
<b>Studies:</b>														
Water Masterplan	-	500,000	-	500,000	-	-	-	-	-	-	-	-	-	-
<b>Growth Related:</b>														
Sherk St Watermain- Increase to: 400mm	-	1,611,705	1,611,705	-	-	-	-	-	-	-	-	-	-	-
Audrey St / Margaret St: Increase to 200mm	-	646,890	646,890	-	-	-	-	-	-	-	-	-	-	-
NE Trunk (Talbot St E to Erie St N/Hwy77): Increase to 400mm	-	2,873,700	-	-	-	-	-	2,873,700	-	-	-	-	-	-



**Table C-1 (Cont'd)**  
**Municipality of Leamington**  
**Capital Budget Forecast (Uninflated \$)**

Description	Budget 2023	Total	Forecast												
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
<b>Growth Related:</b>															
Talbot Rd: Increase to 400mm	-	837,000	-	-	837,000	-	-	-	-	-	-	-	-	-	-
Fraser Rd: Increase to 600mm	-	3,192,900	-	-	3,192,900	-	-	-	-	-	-	-	-	-	-
Bryon St and Warren Ave: Increase to 150mm	-	283,500	-	-	-	283,500	-	-	-	-	-	-	-	-	-
Maxon Ave / Wigle St / Sherman St / James St: Increase to 150mm	-	579,600	-	-	-	579,600	-	-	-	-	-	-	-	-	-
Talbot Rd: Increase to 300mm	-	397,080	-	-	-	-	-	397,080	-	-	-	-	-	-	-
Seacliff Dr W: Increase to 600mm	-	8,191,440	-	-	-	-	-	8,191,440	-	-	-	-	-	-	-
Malborough St E: Increase to 150mm	-	128,500	128,500	-	-	-	-	-	-	-	-	-	-	-	-
Victoria St: Increase to 150mm	-	245,700	-	245,700	-	-	-	-	-	-	-	-	-	-	-
Montgomery: Increase to 150mm	-	144,900	-	144,900	-	-	-	-	-	-	-	-	-	-	-
Princess St: Increase to 150mm	-	133,000	-	133,000	-	-	-	-	-	-	-	-	-	-	-
Danforth: Increase to 300mm	-	1,058,880	-	-	-	-	-	-	-	-	-	1,058,880	-	-	-
Erie Streetscape - John to Talbot	-	665,235	-	-	-	665,235	-	-	-	-	-	-	-	-	-
Martin Dr: Increase to 150mm	-	277,200	-	-	-	277,200	-	-	-	-	-	-	-	-	-
Grace Ave: Increase to 150mm	-	374,850	-	-	-	-	-	-	-	374,850	-	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	22,333,333	-	-	-	-	22,333,333	-	-	-	-	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	22,333,333	-	-	-	-	-	22,333,333	-	-	-	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	22,333,333	-	-	-	-	-	-	22,333,333	-	-	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	500,000	-	-	500,000	-	-	-	-	-	-	-	-	-	-
<b>Total Capital Expenditures</b>	<b>245,000</b>	<b>99,950,110</b>	<b>5,983,720</b>	<b>3,487,280</b>	<b>4,749,900</b>	<b>2,025,535</b>	<b>25,327,033</b>	<b>31,041,853</b>	<b>23,183,333</b>	<b>394,850</b>	<b>1,037,725</b>	<b>1,078,880</b>	<b>620,000</b>	<b>1,020,000</b>	



**Table C-2  
Municipality of Leamington  
Capital Budget Forecast (Inflated \$)**

Description	Budget 2023	Total	Forecast											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Capital Expenditures</b>														
Small Capital - Tools/Equipment	20,000	377,000	20,000	23,000	25,000	27,000	29,000	31,000	33,000	35,000	36,000	38,000	39,000	41,000
17C and 18C - Wigle/Orange/Settington/Mill	-	2,421,500	2,421,500	-	-	-	-	-	-	-	-	-	-	-
New HydroVac Unit	140,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Jane St / Claire St- Increase to 150mm	-	705,125	705,125	-	-	-	-	-	-	-	-	-	-	-
Watermain Design Projects	-	233,000	-	233,000	-	-	-	-	-	-	-	-	-	-
19C and 20C - Ontario/Victoria/Montgomery/Princess - Construction	-	173,000	-	173,000	-	-	-	-	-	-	-	-	-	-
Mersea Rd 1 Watermain Upgrade	-	1,627,000	-	1,627,000	-	-	-	-	-	-	-	-	-	-
Mersea Rd 7 to Kent Rd 1	-	2,047,000	-	-	-	-	-	-	-	-	-	-	-	2,047,000
Hodgins/Wilkinson/Smith (158) - CONST	-	1,073,000	-	-	-	-	-	-	1,073,000	-	-	-	-	-
Pearl/Cameo/Kimball (113/145/146)	-	1,670,000	-	-	-	-	-	-	-	-	1,670,000	-	-	-
23C MCR- trunk watermain intersection to Oak St W - CONST	-	1,181,000	-	-	-	-	-	-	-	-	-	-	1,181,000	-
Greenhouse Rate of Flow Valves	-	583,000	-	583,000	-	-	-	-	-	-	-	-	-	-
<b>Lifecycle:</b>														
Replace Truck 60	85,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Replace Locate Van 69	-	150,000	150,000	-	-	-	-	-	-	-	-	-	-	-
Replace 2003 Backhoe 65	-	200,000	200,000	-	-	-	-	-	-	-	-	-	-	-
Office Renovations	-	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-
Replace Service Truck #61	-	117,000	-	117,000	-	-	-	-	-	-	-	-	-	-
Replace Service Truck #70	-	117,000	-	117,000	-	-	-	-	-	-	-	-	-	-
Replace Service Trucks 59	-	126,000	-	-	126,000	-	-	-	-	-	-	-	-	-
Replace Service Trucks 71	-	126,000	-	-	126,000	-	-	-	-	-	-	-	-	-
Replace Service Trucks 63	-	136,000	-	-	-	136,000	-	-	-	-	-	-	-	-
Replace Service Trucks 67	-	136,000	-	-	-	136,000	-	-	-	-	-	-	-	-
Replace Main Break Van 66	-	147,000	-	-	-	-	147,000	-	-	-	-	-	-	-
Replace Service Truck 58	-	156,000	-	-	-	-	-	156,000	-	-	-	-	-	-
Replace Dump Truck 72	-	297,000	-	-	-	-	-	-	297,000	-	-	-	-	-
Replace Service Truck 73	-	182,000	-	-	-	-	-	-	-	-	182,000	-	-	-
<b>Studies:</b>														
Water Masterplan	-	583,000	-	583,000	-	-	-	-	-	-	-	-	-	-
<b>Growth Related:</b>														
Sherk St Watermain- Increase to: 400mm	-	1,611,705	1,611,705	-	-	-	-	-	-	-	-	-	-	-
Audrey St / Margaret St: Increase to 200mm	-	646,890	646,890	-	-	-	-	-	-	-	-	-	-	-
NE Trunk (Talbot St E to Erie St N/Hwy77): Increase to 400mm	-	4,222,000	-	-	-	-	4,222,000	-	-	-	-	-	-	-
Talbot Rd: Increase to 400mm	-	1,054,000	-	-	1,054,000	-	-	-	-	-	-	-	-	-
Fraser Rd: Increase to 600mm	-	4,022,000	-	-	4,022,000	-	-	-	-	-	-	-	-	-
Bryon St and Warren Ave: Increase to 150mm	-	386,000	-	-	-	386,000	-	-	-	-	-	-	-	-
Maxon Ave / Wigle St / Sherman St / James St: Increase to 150mm	-	789,000	-	-	-	789,000	-	-	-	-	-	-	-	-
Talbot Rd: Increase to 300mm	-	618,000	-	-	-	-	-	618,000	-	-	-	-	-	-
Seacliff Dr W: Increase to 600mm	-	12,758,000	-	-	-	-	-	12,758,000	-	-	-	-	-	-
Malborough St E: Increase to 150mm	-	128,500	128,500	-	-	-	-	-	-	-	-	-	-	-



Table C-2 (Cont'd)  
Municipality of Leamington  
Capital Budget Forecast (Inflated \$)

Description	Budget 2023	Total	Forecast											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Growth Related:</b>														
Victoria St: Increase to 150mm	-	287,000	-	287,000	-	-	-	-	-	-	-	-	-	-
Montgomery: Increase to 150mm	-	169,000	-	169,000	-	-	-	-	-	-	-	-	-	-
Princess St: Increase to 150mm	-	155,000	-	155,000	-	-	-	-	-	-	-	-	-	-
Danforth: Increase to 300mm	-	2,004,000	-	-	-	-	-	-	-	-	-	2,004,000	-	-
Erie Streetscape - John to Talbot	-	905,000	-	-	-	905,000	-	-	-	-	-	-	-	-
Sherk St: Increase to 400mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Martin Dr: Increase to 150mm	-	377,000	-	-	-	377,000	-	-	-	-	-	-	-	-
Grace Ave: Increase to 150mm	-	650,000	-	-	-	-	-	-	-	650,000	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	32,815,000	-	-	-	-	32,815,000	-	-	-	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	34,784,000	-	-	-	-	-	34,784,000	-	-	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	36,871,000	-	-	-	-	-	-	36,871,000	-	-	-	-	-
Trunk Watermain Cnty Rd 31 - Talbot to Mersea Rd 11	-	630,000	-	-	630,000	-	-	-	-	-	-	-	-	-
<b>Total Capital Expenditures</b>	<b>245,000</b>	<b>150,546,720</b>	<b>5,983,720</b>	<b>4,067,000</b>	<b>5,983,000</b>	<b>2,756,000</b>	<b>37,213,000</b>	<b>48,347,000</b>	<b>38,274,000</b>	<b>685,000</b>	<b>1,888,000</b>	<b>2,042,000</b>	<b>1,220,000</b>	<b>2,088,000</b>
<b>Capital Financing</b>														
Provincial/Federal Grants		1,869,915	1,869,915											
Development Charges Reserve Fund	-	11,520,691	805,059	116,758	4,149,611	471,596	4,957,000	-	-	130,000	-	890,667	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	110,423,000	-	-	-	-	32,080,000	41,472,000	36,871,000	-	-	-	-	-
Operating Contributions	245,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Working Capital Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Line Renewal Reserve Fund	-	26,733,114	3,308,746	3,950,242	1,833,389	2,284,404	176,000	6,875,000	1,403,000	555,000	1,888,000	1,151,333	1,220,000	2,088,000
Greenhouse Connections Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheatley Watermain Capital Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Capital Financing</b>	<b>245,000</b>	<b>150,546,720</b>	<b>5,983,720</b>	<b>4,067,000</b>	<b>5,983,000</b>	<b>2,756,000</b>	<b>37,213,000</b>	<b>48,347,000</b>	<b>38,274,000</b>	<b>685,000</b>	<b>1,888,000</b>	<b>2,042,000</b>	<b>1,220,000</b>	<b>2,088,000</b>



Table C-3  
Municipality of Leamington  
Schedule of Non-Growth-Related Debenture Repayments

Debenture Year	2023	Principal (Inflated)	Forecast											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2024		-		-	-	-	-	-	-	-	-	-	-	-
2025		-			-	-	-	-	-	-	-	-	-	-
2026		-				-	-	-	-	-	-	-	-	-
2027		-					-	-	-	-	-	-	-	-
2028		-						-	-	-	-	-	-	-
2029		-							-	-	-	-	-	-
2030		-								-	-	-	-	-
2031		-									-	-	-	-
2032		-										-	-	-
2033		-											-	-
2034		-												-
2035		-												-
<b>Total Annual Debt Charges</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-4  
Municipality of Leamington  
Schedule of Growth-Related Debenture Repayments

Debenture Year	2023	Principal (Inflated)	Forecast											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2024		-		-	-	-	-	-	-	-	-	-	-	-
2025		-			-	-	-	-	-	-	-	-	-	-
2026		-				-	-	-	-	-	-	-	-	-
2027		-					-	-	-	-	-	-	-	-
2028		32,080,000						-	-	-	-	-	-	-
2029		41,472,000						2,079,719	2,079,719	2,079,719	2,079,719	2,079,719	2,079,719	2,079,719
2030		36,871,000							2,688,594	2,688,594	2,688,594	2,688,594	2,688,594	2,688,594
2031		-								2,390,315	2,390,315	2,390,315	2,390,315	2,390,315
2032		-									-	-	-	-
2033		-										-	-	-
2034		-											-	-
2035		-												-
<b>Total Annual Debt Charges</b>	-	<b>110,423,000</b>	-	-	-	-	-	<b>2,079,719</b>	<b>4,768,313</b>	<b>7,158,629</b>	<b>7,158,629</b>	<b>7,158,629</b>	<b>7,158,629</b>	<b>7,158,629</b>



**Table C-5**  
**Municipality of Leamington**  
**Working Capital Reserves Continuity (Inflated \$)**

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	505,289	774,741	813,479	854,152	896,860	941,703	988,788	1,038,228	1,090,139	1,144,646	1,201,878	1,261,972	1,325,071
Transfer from Operating	232,560	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Closing Balance</b>	<b>737,849</b>	<b>774,741</b>	<b>813,479</b>	<b>854,152</b>	<b>896,860</b>	<b>941,703</b>	<b>988,788</b>	<b>1,038,228</b>	<b>1,090,139</b>	<b>1,144,646</b>	<b>1,201,878</b>	<b>1,261,972</b>	<b>1,325,071</b>
Interest	36,892	38,737	40,674	42,708	44,843	47,085	49,439	51,911	54,507	57,232	60,094	63,099	66,254

**Table C-6**  
**Municipality of Leamington**  
**Water Development Charges Reserve Continuity (Inflated \$)**

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	8,260,320	9,358,132	9,692,991	10,795,852	7,749,032	8,442,647	4,493,318	3,400,927	(164,719)	(6,504,150)	(12,971,269)	(20,641,960)	(27,703,802)
Development Charge Proceeds	652,187	678,346	705,532	733,789	763,179	793,704	825,379	1,210,510	1,258,919	1,309,190	1,361,554	1,416,015	1,472,765
Transfer to Capital	-	805,059	116,758	4,149,611	471,596	4,957,000	-	-	130,000	-	890,667	-	-
Transfer to Operating	-	-	-	-	-	-	2,079,719	4,768,313	7,158,629	7,158,629	7,158,629	7,158,629	7,158,629
<b>Closing Balance</b>	<b>8,912,507</b>	<b>9,231,420</b>	<b>10,281,764</b>	<b>7,380,031</b>	<b>8,040,616</b>	<b>4,279,350</b>	<b>3,238,978</b>	<b>(156,876)</b>	<b>(6,194,429)</b>	<b>(12,353,589)</b>	<b>(19,659,010)</b>	<b>(26,384,573)</b>	<b>(33,389,666)</b>
Interest	445,625	461,571	514,088	369,002	402,031	213,968	161,949	(7,844)	(309,721)	(617,679)	(982,950)	(1,319,229)	(1,669,483)
Required from Development Charges	-	805,059	116,758	4,149,611	471,596	37,037,000	41,472,000	36,871,000	130,000	-	890,667	-	-

**Table C-7**  
**Municipality of Leamington**  
**Line Renewals Reserve Continuity (Inflated \$)**

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	13,352,788	17,447,979	19,261,799	20,630,869	24,432,846	28,096,859	34,305,753	33,944,357	39,664,837	47,128,986	54,155,799	62,668,594	71,907,162
Transfer from Operating	3,264,334	4,205,338	4,336,889	4,471,897	4,610,472	4,751,286	4,897,205	5,234,679	5,774,911	6,335,966	6,679,910	7,034,417	7,852,646
Transfer to Capital	-	3,308,746	3,950,242	1,833,389	2,284,404	176,000	6,875,000	1,403,000	555,000	1,888,000	1,151,333	1,220,000	2,088,000
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Closing Balance</b>	<b>16,617,122</b>	<b>18,344,571</b>	<b>19,648,447</b>	<b>23,269,377</b>	<b>26,758,914</b>	<b>32,672,146</b>	<b>32,327,959</b>	<b>37,776,036</b>	<b>44,884,749</b>	<b>51,576,952</b>	<b>59,684,376</b>	<b>68,483,011</b>	<b>77,671,807</b>
Interest	830,856	917,229	982,422	1,163,469	1,337,946	1,633,607	1,616,398	1,888,802	2,244,237	2,578,848	2,984,219	3,424,151	3,883,590



Table C-8  
Municipality of Leamington  
Greenhouse Connections Reserve Continuity (Inflated \$)

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	4,565,852	4,794,145	5,033,852	5,285,544	5,549,822	5,827,313	6,118,678	6,424,612	6,745,843	7,083,135	7,437,292	7,809,156	8,199,614
Transfer from Operating	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Closing Balance</b>	<b>4,565,852</b>	<b>4,794,145</b>	<b>5,033,852</b>	<b>5,285,544</b>	<b>5,549,822</b>	<b>5,827,313</b>	<b>6,118,678</b>	<b>6,424,612</b>	<b>6,745,843</b>	<b>7,083,135</b>	<b>7,437,292</b>	<b>7,809,156</b>	<b>8,199,614</b>
Interest	228,293	239,707	251,693	264,277	277,491	291,366	305,934	321,231	337,292	354,157	371,865	390,458	409,981

Table C-9  
Municipality of Leamington  
Wheatley Watermain Capital Reserve Continuity (Inflated \$)

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	207,383	224,598	235,828	247,619	260,000	273,000	286,650	300,983	316,032	331,834	348,425	365,847	384,139
Transfer from Operating	6,520	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Closing Balance</b>	<b>213,903</b>	<b>224,598</b>	<b>235,828</b>	<b>247,619</b>	<b>260,000</b>	<b>273,000</b>	<b>286,650</b>	<b>300,983</b>	<b>316,032</b>	<b>331,834</b>	<b>348,425</b>	<b>365,847</b>	<b>384,139</b>
Interest	10,695	11,230	11,791	12,381	13,000	13,650	14,333	15,049	15,802	16,592	17,421	18,292	19,207



**Table C-10  
Municipality of Leamington  
Operating Budget Forecast  
(Inflated \$)**

Description	Budget	Forecast											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Expenditures</b>													
<b>Operating Costs</b>													
5000-002000 - Salaried Wages	436,959	538,798	552,270	566,080	580,230	594,740	609,610	624,850	640,470	656,480	672,890	689,710	706,950
5010-002000 - Regular Full Time	652,104	678,142	695,100	712,480	730,290	748,550	767,260	786,440	806,100	826,250	846,910	868,080	889,780
5040-002000 - Overtime-FT	55,000	50,000	51,250	52,530	53,840	55,190	56,570	57,980	59,430	60,920	62,440	64,000	65,600
5080-002000 - Long Service Pay	880	830	850	870	890	910	930	950	970	990	1,010	1,040	1,070
5083-002000 - Standby Pay	21,900	21,900	22,450	23,010	23,590	24,180	24,780	25,400	26,040	26,690	27,360	28,040	28,740
5090-002001 - Vacation Pay - PT	39	35	40	40	40	40	40	40	40	40	40	40	40
5200-002000 - CPP - FT	49,991	57,565	59,000	60,480	61,990	63,540	65,130	66,760	68,430	70,140	71,890	73,690	75,530
5200-002001 - CPP - PT	47	43	40	40	40	40	40	40	40	40	40	40	40
5201-002000 - EI - FT	17,032	18,984	19,460	19,950	20,450	20,960	21,480	22,020	22,570	23,130	23,710	24,300	24,910
5201-002001 - EI - PT	20	18	20	20	20	20	20	20	20	20	20	20	20
5202-002000 - EHT - FT	21,386	23,853	24,450	25,060	25,690	26,330	26,990	27,660	28,350	29,060	29,790	30,530	31,290
5202-002001 - EHT - PT	21	17	20	20	20	20	20	20	20	20	20	20	20
5203-002000 - Extended Health - FT	60,041	79,689	81,680	83,720	85,810	87,960	90,160	92,410	94,720	97,090	99,520	102,010	104,560
5205-002000 - WSIB - FT	28,296	30,703	31,470	32,260	33,070	33,900	34,750	35,620	36,510	37,420	38,360	39,320	40,300
5205-002001 - WSIB - PT	25	22	20	20	20	20	20	20	20	20	20	20	20
5207-002000 - OMERS	110,481	123,771	126,870	130,040	133,290	136,620	140,040	143,540	147,130	150,810	154,580	158,440	162,400
5208-002000 - Life & LTD	39,255	37,520	38,460	39,420	40,410	41,420	42,460	43,520	44,610	45,730	46,870	48,040	49,240
5210-002000 - Retiree Benefits	40,614	42,936	44,010	45,110	46,240	47,400	48,590	49,800	51,050	52,330	53,640	54,980	56,350
7010-002030 - Office Supplies	88,180	88,900	91,120	93,400	95,740	98,130	100,580	103,090	105,670	108,310	111,020	113,800	116,650
7012-002030 - Water Billing Discount	111,600	140,000	143,500	147,090	150,770	154,540	158,400	162,360	166,420	170,580	174,840	179,210	183,690
7020-002030 - Dues, Memberships & Subscriptions	2,600	2,275	2,330	2,390	2,450	2,510	2,570	2,630	2,700	2,770	2,840	2,910	2,980
7030-002030 - Travel	250	250	260	270	280	290	300	310	320	330	340	350	360
7040-002030 - Training	15,000	15,000	15,380	15,760	16,150	16,550	16,960	17,380	17,810	18,260	18,720	19,190	19,670
7050-002030 - Conferences	8,000	8,000	8,200	8,410	8,620	8,840	9,060	9,290	9,520	9,760	10,000	10,250	10,510
7070-002030 - Uniforms and PPE	15,000	15,000	15,380	15,760	16,150	16,550	16,960	17,380	17,810	18,260	18,720	19,190	19,670
7054-002030 - Recruitment Expenses	-	500	510	520	530	540	550	560	570	580	590	600	620
7110-002030-002081 - Telecommunications Usage-Land Lines	2,000	2,000	2,050	2,100	2,150	2,200	2,260	2,320	2,380	2,440	2,500	2,560	2,620
7110-002030-002083 - Telecommunications Usage-Mobile Phones	4,250	4,400	4,510	4,620	4,740	4,860	4,980	5,100	5,230	5,360	5,490	5,630	5,770
7110-002030-002088 - Telecommunications Usage-GPS monthly services	2,750	2,750	2,820	2,890	2,960	3,030	3,110	3,190	3,270	3,350	3,430	3,520	3,610



**Table C-10 (Cont'd)**  
**Municipality of Leamington**  
**Operating Budget Forecast**  
**(Inflated \$)**

Description	Budget	Forecast											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Expenditures</b>													
7130-002030 - Advertising & Promotion	750	500	510	520	530	540	550	560	570	580	590	600	620
7140-002030 - Insurance - Liability	13,736	14,656	15,020	15,400	15,790	16,180	16,580	16,990	17,410	17,850	18,300	18,760	19,230
7560-002030-007420 - Vehicle Insurance	22,993	26,397	27,060	27,740	28,430	28,430	29,140	30,620	31,390	32,170	32,970	33,790	34,630
7562-002030 - Property Insurance	883	1,027	1,050	1,080	1,110	1,140	1,170	1,200	1,230	1,260	1,290	1,320	1,350
7190-002067 - Internal Office Overhead Allocation	37,275	36,625	37,540	38,480	39,440	40,430	41,440	42,480	43,540	44,630	45,750	46,890	48,060
7250-002030 - Tech Hardware Purchases (non TCA)	500	500	510	520	530	540	550	560	570	580	590	600	620
7280-002030 - Telecommunication Purchases (non TCA)	3,000	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210	1,240	1,270	1,300	1,330
7832-002050 - Credit, Debit & Bank Charges (No HST)	1,425	2,245	2,300	2,360	2,420	2,480	2,540	2,600	2,670	2,740	2,810	2,880	2,950
7950-002040 - Professional Services	80,000	50,000	51,250	52,530	53,840	55,190	56,570	57,980	59,430	60,920	62,440	64,000	65,600
7986-002040 - Water Purchase from UWSS	8,242,645	-	-	-	-	-	-	-	-	-	-	-	-
7052-002030 - Meeting Expenses	500	500	510	520	530	540	550	560	570	580	590	600	620
7080-002030 - Operational Supplies	1,200	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210	1,240	1,270	1,300	1,330
7992-002040 - Office Equipment Rental	1,350	-	-	-	-	1,400	1,400	1,400	1,400	-	-	-	-
7993-002040 - Office Equipment Maintenance	4,800	4,800	4,920	5,040	5,170	5,300	5,430	5,570	5,710	5,850	6,000	6,150	6,300
7995-002040-002130 - Software Licensing-Other	55,020	58,000	59,450	60,940	62,460	64,020	65,620	67,260	68,940	70,660	72,430	74,240	76,100
7950-002040-002410 - Professional Services-Source Water Protection	10,500	10,500	10,760	11,030	11,310	11,590	11,880	12,180	12,480	12,790	13,110	13,440	13,780
7610-002030-002600 - Project Materials-Boil Water Advisory	5,000	5,000	5,130	5,260	5,390	5,520	5,660	5,800	5,950	6,100	6,250	6,410	6,570
7410-002030-007400 - Gas	12,000	13,000	13,650	14,330	15,050	15,800	16,590	17,420	18,290	19,200	20,160	21,170	22,230
7420-002030-007400 - Electricity-Building Mfce	12,000	13,000	13,650	14,330	15,050	15,800	16,590	17,420	18,290	19,200	20,160	21,170	22,230
7430-002030-007400 - Water-Building Mfce	2,000	2,500	2,560	2,620	2,690	2,760	2,830	2,900	2,970	3,040	3,120	3,200	3,280
7610-002030-007400 - Project Materials-Building Mfce	2,500	2,000	2,050	2,100	2,150	2,200	2,260	2,320	2,380	2,440	2,500	2,560	2,620
7630-002030-007400 - Project Contracts-Building Maintenance	6,000	5,000	5,130	5,260	5,390	5,520	5,660	5,800	5,950	6,100	6,250	6,410	6,570
7955-002040-007400 - Service Contracts-Building Mfce	15,000	15,115	15,490	15,880	16,280	16,690	17,110	17,540	17,980	18,430	18,890	19,360	19,840
7958-002040-007400 - Garbage Collection-Building Mfce	1,460	1,560	1,600	1,640	1,680	1,720	1,760	1,800	1,850	1,900	1,950	2,000	2,050
7520-002050-007410 - Equipment Rental-Equip Mfce	-	500	510	520	530	540	550	560	570	580	590	600	620
7610-002030-007410 - Project Materials-Equip Mfce	4,000	4,000	4,100	4,200	4,310	4,420	4,530	4,640	4,760	4,880	5,000	5,130	5,260
7630-002030-007410 - Project Contracts-Equipment Mfce	1,000	2,000	2,050	2,100	2,150	2,200	2,260	2,320	2,380	2,440	2,500	2,560	2,620
7955-002040-007410 - Service Contracts-Equipment Mfce	1,200	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210	1,240	1,270	1,300	1,330
5011-002000-007420 - Regular Full Time - PW Allocation	6,983	5,727	5,870	6,020	6,170	6,320	6,480	6,640	6,810	6,980	7,150	7,330	7,510
5022-002001-007420 - Part-Time-PW Allocation	966	878	900	920	940	960	980	1,000	1,030	1,060	1,090	1,120	1,150
7550-002030-007420 - Vehicle Licence	4,223	4,223	4,330	4,440	4,550	4,660	4,780	4,900	5,020	5,150	5,280	5,410	5,550



**Table C-10 (Cont'd)**  
**Municipality of Leamington**  
**Operating Budget Forecast**  
**(Inflated \$)**

Description	Budget	Forecast											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Expenditures</b>													
7610-002030-007420 - Project Materials-Vehicle Mtce	8,000	8,000	8,200	8,410	8,620	8,840	9,060	9,290	9,520	9,760	10,000	10,250	10,510
7630-002030-007420 - Project Contracts-Vehicle Maintenance	2,000	2,000	2,050	2,100	2,150	2,200	2,260	2,320	2,380	2,440	2,500	2,560	2,620
5011-002000-007470 - Regular Full Time - PW allocation	230	567	580	590	600	620	640	660	680	700	720	740	760
7620-002030-007470 - Project Equipment-Property Mtce	250	250	260	270	280	290	300	310	320	330	340	350	360
7531-002030-008545 - Fuel Purchases - Unleaded	31,000	30,000	31,500	33,080	34,730	36,470	38,290	40,200	42,210	44,320	46,540	48,870	51,310
7532-002030-008545 - Fuel Purchases - Diesel	9,500	8,000	8,400	8,820	9,260	9,720	10,210	10,720	11,260	11,820	12,410	13,030	13,680
7533-002030-008545 - Oil & Lubricants-Fuel	-	250	260	270	280	290	300	320	340	360	380	400	420
7610-002030-008547 - Project Materials-Meter Mtce	35,000	40,000	41,000	42,030	43,080	44,160	45,260	46,390	47,550	48,740	49,960	51,210	52,490
7610-002030-008549 - Project Materials-Hydrant Mtce	30,000	30,000	30,750	31,520	32,310	33,120	33,950	34,800	35,670	36,560	37,470	38,410	39,370
7610-002030-008556 - Project Materials-Health & Safety	1,500	1,500	1,540	1,580	1,620	1,660	1,700	1,740	1,780	1,820	1,870	1,920	1,970
7630-002030-008556 - Project Contracts-Health & Safety	500	500	510	520	530	540	550	560	570	580	590	600	620
7520-002050-008680 - Equipment Rental-Watermains & Services	-	500	510	520	530	540	550	560	570	580	590	600	620
7610-002030-008680 - Project Materials-Watermains & Services	200,000	220,000	225,500	231,140	236,920	242,840	248,910	255,130	261,510	268,050	274,750	281,620	288,660
7630-002030-008680 - Project Contracts-Watermains & Services	45,000	58,500	59,960	61,460	63,000	64,580	66,190	67,840	69,540	71,280	73,060	74,890	76,760
<b>Sub Total Operating</b>	<b>10,697,608</b>	<b>2,667,222</b>	<b>2,735,530</b>	<b>2,805,630</b>	<b>2,877,540</b>	<b>2,952,710</b>	<b>3,028,430</b>	<b>3,106,100</b>	<b>3,185,890</b>	<b>3,266,350</b>	<b>3,350,350</b>	<b>3,436,580</b>	<b>3,525,110</b>
<b>Capital-Related</b>													
Existing Debt (Principal) - Growth Related	-	-	-	-	-	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Growth Related	-	-	-	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Principal)	-	-	-	-	-	-	485,343	1,136,900	1,751,231	1,838,267	1,929,629	2,025,532	2,126,201
New Growth Related Debt (Interest)	-	-	-	-	-	-	1,594,376	3,631,413	5,407,398	5,320,361	5,229,000	5,133,097	5,032,428
Existing Debt (Principal) - Non-Growth Related	500	-	-	-	-	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Non-Growth Related	-	-	-	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Wheatley Watermain Capital Reserve	6,520	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Water Line Reserve	3,264,334	4,205,338	4,336,889	4,471,897	4,610,472	4,751,286	4,897,205	5,234,679	5,774,911	6,335,966	6,679,910	7,034,417	7,852,646
Transfer to Greenhouse Connections Reserve	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Working Capital Reserve	232,560	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	245,000	-	-	-	-	-	-	-	-	-	-	-	-
<b>Sub Total Capital Related</b>	<b>3,748,914</b>	<b>4,205,338</b>	<b>4,336,889</b>	<b>4,471,897</b>	<b>4,610,472</b>	<b>4,751,286</b>	<b>6,976,924</b>	<b>10,002,992</b>	<b>12,933,540</b>	<b>13,494,594</b>	<b>13,838,538</b>	<b>14,193,045</b>	<b>15,011,274</b>
<b>Total Expenditures</b>	<b>14,446,522</b>	<b>6,872,560</b>	<b>7,072,419</b>	<b>7,277,527</b>	<b>7,488,012</b>	<b>7,703,996</b>	<b>10,005,354</b>	<b>13,109,092</b>	<b>16,119,430</b>	<b>16,760,944</b>	<b>17,188,888</b>	<b>17,629,625</b>	<b>18,536,384</b>



Table C-10 (Cont'd)  
Municipality of Leamington  
Operating Budget Forecast  
(Inflated \$)

Description	Budget	Forecast											
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Revenues</b>													
Base Charge	3,145,693	3,254,219	3,372,874	3,494,974	3,620,608	3,749,870	3,882,854	4,019,657	4,160,379	4,305,123	4,422,707	4,542,871	4,698,621
<b>Other Revenue</b>													
Flat Rate Fire Line	2,067	2,110	2,150	2,190	2,230	2,270	2,320	2,370	2,420	2,470	2,520	2,570	2,620
Private Hydrant Maintenance	2,074	2,120	2,160	2,200	2,240	2,280	2,330	2,380	2,430	2,480	2,530	2,580	2,630
Hydrant Meter	15,000	15,300	15,610	15,920	16,240	16,560	16,890	17,230	17,570	17,920	18,280	18,650	19,020
Water Service Connection Fee	25,000	25,500	26,010	26,530	27,060	27,600	28,150	28,710	29,280	29,870	30,470	31,080	31,700
Wheatley Surcharge Harbour	6,520	6,650	6,780	6,920	7,060	7,200	7,340	7,490	7,640	7,790	7,950	8,110	8,270
Water Buy-in Fee	25,000	25,500	26,010	26,530	27,060	27,600	28,150	28,710	29,280	29,870	30,470	31,080	31,700
Invoice Penalties	35,000	35,700	36,410	37,140	37,880	38,640	39,410	40,200	41,000	41,820	42,660	43,510	44,380
Sundry Revenue	5,000	5,100	5,200	5,300	5,410	5,520	5,630	5,740	5,850	5,970	6,090	6,210	6,330
Contributions from Development Charges Reserve Fund	-	-	-	-	-	-	2,079,719	4,768,313	7,158,629	7,158,629	7,158,629	7,158,629	7,158,629
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Operating Revenue</b>	<b>3,261,354</b>	<b>3,372,199</b>	<b>3,493,204</b>	<b>3,617,704</b>	<b>3,745,788</b>	<b>3,877,540</b>	<b>6,092,793</b>	<b>8,920,800</b>	<b>11,454,478</b>	<b>11,601,941</b>	<b>11,722,305</b>	<b>11,845,289</b>	<b>12,003,899</b>
<b>Water Billing Recovery - Total</b>	<b>11,185,169</b>	<b>3,500,361</b>	<b>3,579,215</b>	<b>3,659,823</b>	<b>3,742,224</b>	<b>3,826,457</b>	<b>3,912,562</b>	<b>4,188,292</b>	<b>4,664,952</b>	<b>5,159,003</b>	<b>5,466,583</b>	<b>5,784,336</b>	<b>6,532,485</b>



Table C-11  
Municipality of Leamington  
Water Rate Forecast  
(Inflated \$)

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Total Water Billing Recovery	11,185,169	3,500,361	3,579,215	3,659,823	3,742,224	3,826,457	3,912,562	4,188,292	4,664,952	5,159,003	5,466,583	5,784,336	6,532,485
Total Volume (cu.m)	10,895,914	9,833,148	9,865,224	9,897,300	9,929,376	9,961,452	9,993,528	10,385,609	11,137,695	11,889,781	12,265,875	12,641,767	13,753,657
<b>Rates (\$/cu.m.)</b>													
Residential, Commercial (<25mm)	0.9800	0.2704	0.2758	0.2813	0.2870	0.2927	0.2985	0.3045	0.3106	0.3168	0.3232	0.3296	0.3362
Regulated Greenhouse, Commercial, (>25mm)	1.0700	0.3651	0.3724	0.3799	0.3874	0.3952	0.4031	0.4112	0.4194	0.4278	0.4363	0.4451	0.4540
Unregulated Greenhouse/Commercial (>25mm) & Field Drip Irrigation under 3 acres	1.1600	0.4630	0.4723	0.4817	0.4913	0.5012	0.5112	0.5214	0.5318	0.5425	0.5533	0.5644	0.5757
Unregulated Greenhouse/Commercial (>25mm) & Field Drip Irrigation over 3 acres	2.3200	1.6600	1.6932	1.7271	1.7616	1.7968	1.8328	1.8694	1.9068	1.9450	1.9839	2.0235	2.0640
<b>Annual Percentage Change</b>													
Residential, Commercial (<25mm)			2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Regulated Greenhouse, Commercial (>25mm)			2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Unregulated Greenhouse/Commercial (>25mm) & Field Drip Irrigation under 3 acres			2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Unregulated Greenhouse/Commercial (>25mm) & Field Drip Irrigation over 3 acres			2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%



# Appendix D

## Detailed Wastewater Rate Calculations



# Appendix D: Detailed Wastewater Rate Calculations

Table D-1  
Municipality of Leamington  
Capital Budget Forecast (Uninflated \$)

Description	Budget 2023	Total	Forecast											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Capital Expenditures</b>														
Outfall Sewer Upgrades	400,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater System Masterplan	500,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Headworks Upgrades - construction	1,800,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Blower Upgrades	700,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Centrifuge #1 Rebuild	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater Other M&E Purchases	225,000	3,000,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
Pump Station Small Capital	130,000	1,325,000	225,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Biosolids - 2019 carry forward	1,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Pump Station #200 (Cherry Lane) Upgrades	1,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Biosolids - 2023 carry forward	-	250,000	250,000	-	-	-	-	-	-	-	-	-	-	-
Headworks Upgrades - construction	-	4,865,000	2,365,000	2,500,000	-	-	-	-	-	-	-	-	-	-
Wastewater System Masterplan	-	280,000	280,000	-	-	-	-	-	-	-	-	-	-	-
Blower Upgrades	-	1,000,000	1,000,000	-	-	-	-	-	-	-	-	-	-	-
Pump Station #200 (Cherry Lane) Upgrades	-	300,000	300,000	-	-	-	-	-	-	-	-	-	-	-
Office Renovations	-	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-
Outfall Sewer Upgrades	-	12,400,000	-	400,000	6,000,000	6,000,000	-	-	-	-	-	-	-	-
Combined Sewage Upgrades	-	4,400,000	-	400,000	2,000,000	2,000,000	-	-	-	-	-	-	-	-
UV System Upgrades	-	1,000,000	-	-	-	-	1,000,000	-	-	-	-	-	-	-
Painting clarifier mechanisms (done in 2011)	-	500,000	-	-	-	-	500,000	-	-	-	-	-	-	-
Replace Centrifuge #1	-	1,500,000	-	-	-	-	1,500,000	-	-	-	-	-	-	-
Replace Centrifuge #2	-	1,500,000	-	-	-	-	1,500,000	-	-	-	-	-	-	-
Non-Potable Pump System Upgrades	-	500,000	-	-	-	-	500,000	-	-	-	-	-	-	-
Greenhouse receiving station	-	1,000,000	-	-	-	-	-	1,000,000	-	-	-	-	-	-
Hauled Sewage Station Upgrades	-	1,000,000	-	-	-	-	-	1,000,000	-	-	-	-	-	-
Future Capital Needs - 2029 to 2035	-	7,000,000	-	-	-	-	-	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<b>Growth Related:</b>														
Plant expansion	-	50,000,000	-	-	-	-	-	10,000,000	20,000,000	20,000,000	-	-	-	-
<b>Total Capital Expenditures</b>	<b>5,855,000</b>	<b>91,920,000</b>	<b>4,770,000</b>	<b>3,650,000</b>	<b>8,350,000</b>	<b>8,350,000</b>	<b>5,350,000</b>	<b>13,350,000</b>	<b>21,350,000</b>	<b>21,350,000</b>	<b>1,350,000</b>	<b>1,350,000</b>	<b>1,350,000</b>	<b>1,350,000</b>



**Table D-2  
Municipality of Leamington  
Capital Budget Forecast (Inflated \$)**

Description	Budget 2023	Total	Forecast													
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035		
<b>Capital Expenditures</b>																
Outfall Sewer Upgrades	400,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater System Masterplan	500,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Headworks Upgrades - construction	1,800,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blower Upgrades	700,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Centrifuge #1 Rebuild	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater Other M&E Purchases	225,000	4,731,000	250,000	292,000	315,000	340,000	367,000	389,000	413,000	433,000	455,000	473,000	492,000	512,000		
Pump Station Small Capital	130,000	2,018,000	225,000	117,000	126,000	136,000	147,000	156,000	165,000	173,000	182,000	189,000	197,000	205,000		
Biosolids - 2019 carry forward	1,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pump Station #200 (Cherry Lane) Upgrades	1,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biosolids - 2023 carry forward	-	250,000	250,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Headworks Upgrades - construction	-	5,281,000	2,365,000	2,916,000	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater System Masterplan	-	280,000	280,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Blower Upgrades	-	1,000,000	1,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Pump Station #200 (Cherry Lane) Upgrades	-	300,000	300,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Office Renovations	-	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Outfall Sewer Upgrades	-	16,188,000	-	467,000	7,558,000	8,163,000	-	-	-	-	-	-	-	-	-	-
Combined Sewage Upgrades	-	5,707,000	-	467,000	2,519,000	2,721,000	-	-	-	-	-	-	-	-	-	-
UV System Upgrades	-	1,469,000	-	-	-	-	1,469,000	-	-	-	-	-	-	-	-	-
Painting clarifier mechanisms (done in 2011)	-	735,000	-	-	-	-	735,000	-	-	-	-	-	-	-	-	-
Replace Centrifuge #1	-	2,204,000	-	-	-	-	2,204,000	-	-	-	-	-	-	-	-	-
Replace Centrifuge #2	-	2,204,000	-	-	-	-	2,204,000	-	-	-	-	-	-	-	-	-
Non-Potable Pump System Upgrades	-	735,000	-	-	-	-	735,000	-	-	-	-	-	-	-	-	-
Greenhouse receiving station	-	1,557,000	-	-	-	-	-	1,557,000	-	-	-	-	-	-	-	-
Hauled Sewage Station Upgrades	-	1,557,000	-	-	-	-	-	1,557,000	-	-	-	-	-	-	-	-
Future Capital Needs - 2029 to 2035	-	12,670,000	-	-	-	-	-	1,557,000	1,651,000	1,733,000	1,820,000	1,893,000	1,969,000	2,047,000		
<b>Growth Related:</b>																
Plant expansion	-	83,264,000	-	-	-	-	-	15,575,000	33,019,000	34,670,000	-	-	-	-	-	-
<b>Total Capital Expenditures</b>	<b>5,855,000</b>	<b>142,250,000</b>	<b>4,770,000</b>	<b>4,259,000</b>	<b>10,518,000</b>	<b>11,360,000</b>	<b>7,861,000</b>	<b>20,791,000</b>	<b>35,248,000</b>	<b>37,009,000</b>	<b>2,457,000</b>	<b>2,555,000</b>	<b>2,658,000</b>	<b>2,764,000</b>		
<b>Capital Financing</b>																
Provincial/Federal Grants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development Charges Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	83,264,000	-	-	-	-	-	15,575,000	33,019,000	34,670,000	-	-	-	-	-	-
Operating Contributions	4,074,214	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wastewater Capital Reserve	1,780,786	58,986,000	4,770,000	4,259,000	10,518,000	11,360,000	7,861,000	5,216,000	2,229,000	2,339,000	2,457,000	2,555,000	2,658,000	2,764,000		
<b>Total Capital Financing</b>	<b>5,855,000</b>	<b>142,250,000</b>	<b>4,770,000</b>	<b>4,259,000</b>	<b>10,518,000</b>	<b>11,360,000</b>	<b>7,861,000</b>	<b>20,791,000</b>	<b>35,248,000</b>	<b>37,009,000</b>	<b>2,457,000</b>	<b>2,555,000</b>	<b>2,658,000</b>	<b>2,764,000</b>		



**Table D-3**  
**Municipality of Leamington**  
**Schedule of Non-Growth-Related Debenture Repayments**

Debenture Year	2023	Principal (Inflated)	Forecast											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2024		-												
2025		-												
2026		-												
2027		-												
2028		-												
2029		-												
2030		-												
2031		-												
2032		-												
2033		-												
2034		-												
2035		-												
<b>Total Annual Debt Charges</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Table D-4**  
**Municipality of Leamington**  
**Schedule of Growth-Related Debenture Repayments**

Debenture Year	2023	Principal (Inflated)	Forecast											
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2024		-												
2025		-												
2026		-												
2027		-												
2028		-												
2029		15,575,000							1,009,714	1,009,714	1,009,714	1,009,714	1,009,714	1,009,714
2030		33,019,000								2,140,594	2,140,594	2,140,594	2,140,594	2,140,594
2031		34,670,000									2,247,626	2,247,626	2,247,626	2,247,626
2032		-												
2033		-												
2034		-												
2035		-												
<b>Total Annual Debt Charges</b>	-	<b>83,264,000</b>	-	-	-	-	-	-	<b>1,009,714</b>	<b>3,150,307</b>	<b>5,397,934</b>	<b>5,397,934</b>	<b>5,397,934</b>	<b>5,397,934</b>

**Table D-5**  
**Municipality of Leamington**  
**Capital Reserve Continuity (Inflated \$)**

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	17,444,300	16,061,412	15,805,873	16,881,453	11,852,009	6,552,961	5,039,477	6,530,120	10,144,513	13,997,461	18,513,794	23,459,011	28,722,738
Transfer from Operating	59,999	3,761,801	4,530,701	4,924,175	5,748,906	6,107,542	6,395,685	5,360,320	5,525,403	6,091,724	6,383,121	6,553,978	6,794,683
Transfer to Capital	1,780,786	4,770,000	4,259,000	10,518,000	11,360,000	7,861,000	5,216,000	2,229,000	2,339,000	2,457,000	2,555,000	2,658,000	2,764,000
Transfer to Operating	426,931	-	-	-	-	-	-	-	-	-	-	-	-
<b>Closing Balance</b>	<b>15,296,582</b>	<b>15,053,212</b>	<b>16,077,574</b>	<b>11,287,628</b>	<b>6,240,915</b>	<b>4,799,502</b>	<b>6,219,162</b>	<b>9,661,441</b>	<b>13,330,915</b>	<b>17,632,185</b>	<b>22,341,915</b>	<b>27,354,989</b>	<b>32,753,421</b>
Interest	764,829	752,661	803,879	564,381	312,046	239,975	310,958	483,072	666,546	881,609	1,117,096	1,367,749	1,637,671



Table D-6  
Municipality of Leamington  
Development Charges Reserve Continuity (Inflated \$)

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	-	132,358	276,692	433,767	604,437	789,558	990,190	1,207,327	381,828	(2,725,568)	(8,341,109)	(14,229,840)	(20,405,185)
Development Charge Proceeds	126,056	131,158	136,419	141,888	147,523	153,480	159,645	166,033	172,700	179,589	186,813	194,265	202,057
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	1,009,714	3,150,307	5,397,934	5,397,934	5,397,934	5,397,934
<b>Closing Balance</b>	<b>126,056</b>	<b>263,516</b>	<b>413,111</b>	<b>575,655</b>	<b>751,960</b>	<b>943,038</b>	<b>1,149,835</b>	<b>363,646</b>	<b>(2,595,779)</b>	<b>(7,943,913)</b>	<b>(13,552,229)</b>	<b>(19,433,510)</b>	<b>(25,601,062)</b>
Interest	6,303	13,176	20,656	28,783	37,598	47,152	57,492	18,182	(129,789)	(397,196)	(677,611)	(971,675)	(1,280,053)
Required from Development Charges	-	-	-	-	-	-	15,575,000	33,019,000	34,670,000	-	-	-	-



**Table D-7  
Municipality of Leamington  
Operating Budget Forecast (Inflated \$)**

Description	Budget 2023	Forecast											
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Expenditures</b>													
<u>Operating Costs</u>													
5000-002000 - Salaried Wages	400,488	414,044	424,390	435,000	445,880	457,030	468,460	480,170	492,170	504,470	517,080	530,010	543,260
5000-002000-008002 - Salaried Wages-COVID-19	-	-	-	-	-	-	-	-	-	-	-	-	-
5010-002000 - Regular Full Time	537,871	557,190	571,120	585,400	600,040	615,040	630,420	646,180	662,330	678,890	695,860	713,260	731,090
5021-002001 - Part-Time Wage Base Account	13,611	14,017	14,370	14,730	15,100	15,480	15,870	16,270	16,680	17,100	17,530	17,970	18,420
5042-002000 - Overtime 2x	100,000	130,000	133,250	136,580	139,990	143,490	147,080	150,760	154,530	158,390	162,350	166,410	170,570
5045-002000 - Shift Premium	3,808	3,808	3,900	4,000	4,100	4,200	4,310	4,420	4,530	4,640	4,760	4,880	5,000
5080-002000 - Long Service Pay	1,080	720	740	760	780	800	820	840	860	880	900	920	940
5083-002000 - Standby Pay	20,075	21,900	22,450	23,010	23,590	24,180	24,780	25,400	26,040	26,690	27,360	28,040	28,740
5090-002001 - Vacation Pay - PT	776	596	610	630	650	670	690	710	730	750	770	790	810
5200-002000 - CPP - FT	40,817	44,002	45,100	46,230	47,390	48,570	49,780	51,020	52,300	53,610	54,950	56,320	57,730
5200-002001 - CPP - PT	1,020	807	830	850	870	890	910	930	950	970	990	1,010	1,040
5201-002000 - EI - FT	13,908	14,440	14,800	15,170	15,550	15,940	16,340	16,750	17,170	17,600	18,040	18,490	18,950
5201-002001 - EI - PT	398	309	320	330	340	350	360	370	380	390	400	410	420
5202-002000 - EHT - FT	18,358	18,985	19,460	19,950	20,450	20,960	21,480	22,020	22,570	23,130	23,710	24,300	24,910
5202-002001 - EHT - PT	378	290	300	310	320	330	340	350	360	370	380	390	400
5203-002000 - Extended Health - FT	53,603	65,847	67,490	69,180	70,910	72,680	74,500	76,360	78,270	80,230	82,240	84,300	86,410
5205-002000 - WSIB - FT	24,289	24,437	25,050	25,680	26,320	26,980	27,650	28,340	29,050	29,780	30,520	31,280	32,060
5205-002001 - WSIB - PT	501	374	380	390	400	410	420	430	440	450	460	470	480
5207-002000 - OMERS	96,973	100,454	102,970	105,540	108,180	110,880	113,650	116,490	119,400	122,390	125,450	128,590	131,800
5208-002000 - Life & LTD	33,661	29,911	30,660	31,430	32,220	33,030	33,860	34,710	35,580	36,470	37,380	38,310	39,270
5210-002000 - Retiree Benefits	17,831	19,562	20,050	20,550	21,060	21,590	22,130	22,680	23,250	23,830	24,430	25,040	25,670
7010-002030 - Office Supplies	1,000	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210	1,240	1,270	1,300	1,330
7020-002030 - Dues, Memberships & Subscriptions	1,200	1,825	1,870	1,920	1,970	2,020	2,070	2,120	2,170	2,220	2,280	2,340	2,400
7030-002030 - Travel	500	500	510	520	530	540	550	560	570	580	590	600	620
7040-002030 - Training	10,000	10,000	10,250	10,510	10,770	11,040	11,320	11,600	11,890	12,190	12,490	12,800	13,120
7050-002030 - Conferences	6,000	6,000	6,150	6,300	6,460	6,620	6,790	6,960	7,130	7,310	7,490	7,680	7,870
7054-002030 - Recruitment Expenses	500	500	500	-	-	-	500	-	-	-	-	-	-
7070-002030 - Uniforms and PPE	25,000	32,000	32,800	33,620	34,460	35,320	36,200	37,110	38,040	38,990	39,960	40,960	41,980
7110-002030-002081 - Telecommunications Usage-Land Lines	350	350	360	370	380	390	400	410	420	430	440	450	460
7110-002030-002083 - Telecommunications Usage -Mobile Phones	6,950	7,500	7,690	7,880	8,080	8,280	8,490	8,700	8,920	9,140	9,370	9,600	9,840
7110-002030-002087 - Telecommunications Usage -Security	1,000	1,600	1,640	1,680	1,720	1,760	1,800	1,850	1,900	1,950	2,000	2,050	2,100
7110-002030-002088 - Telecommunications Usage -GPS monthly services	950	950	970	990	1,010	1,040	1,070	1,100	1,130	1,160	1,190	1,220	1,250
7140-002030 - Insurance - Liability	243,456	259,769	266,260	272,920	279,740	286,730	293,900	301,250	308,780	316,500	324,410	332,520	340,830
7560-002030-007420 - Vehicle Insurance	4,721	5,420	5,560	5,700	5,840	5,990	6,140	6,290	6,450	6,610	6,780	6,950	7,120
7562-002030 - Property Insurance	80,093	93,141	95,470	97,860	100,310	102,820	105,390	108,020	110,720	113,490	116,330	119,240	122,220
7190-002067 - Internal Office Overhead Allocation	37,275	36,625	37,540	38,480	39,440	40,430	41,440	42,480	43,540	44,630	45,750	46,890	48,060
7250-002030 - Tech Hardware Purchases (non TCA)	-	500	510	520	530	540	550	560	570	580	590	600	620
7280-002030 - Telecommunication Purchases (non TCA)	3,000	4,000	4,100	4,200	4,310	4,420	4,530	4,640	4,760	4,880	5,000	5,130	5,260
7831-002050 - Credit Card Charges (HST Applicable)	-	-	-	-	-	-	-	-	-	-	-	-	-
7832-002050 - Credit, Debit & Bank Charges (No HST)	920	920	940	960	980	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210



**Table D-7 (Cont'd)**  
**Municipality of Leamington**  
**Operating Budget Forecast (Inflated \$)**

Description	Budget 2023	Forecast											
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Expenditures</b>													
7950-002040 - Professional Services	17,500	69,500	71,240	73,020	74,850	76,720	78,640	80,610	82,630	84,700	86,820	88,990	91,210
7052-002030 - Meeting Expenses	250	250	260	270	280	290	300	310	320	330	340	350	360
7080-002030 - Operational Supplies	5,000	5,000	5,130	5,260	5,390	5,520	5,660	5,800	5,950	6,100	6,250	6,410	6,570
7905-002030 - Septic Tank Clean Out	1,350	1,400	1,440	1,480	1,520	1,560	1,600	1,640	1,680	1,720	1,760	1,800	1,850
7992-002040 - Office Equipment Rental	1,300	-	-	-	-	1,300	1,300	1,300	1,300	-	-	-	-
7993-002040 - Office Equipment Maintenance	300	350	360	370	380	390	400	410	420	430	440	450	460
7995-002040-002130 - Software Licensing-Other	26,000	32,100	32,900	33,720	34,560	35,420	36,310	37,220	38,150	39,100	40,080	41,080	42,110
7490-002030-007400 - Property Taxes-Building Mtce	213,356	220,073	225,570	231,210	236,990	242,910	248,980	255,200	261,580	268,120	274,820	281,690	288,730
7610-002030-007400 - Project Materials-Building Mtce	10,000	10,000	10,300	10,600	10,900	11,200	11,500	23,600	24,200	24,800	25,400	26,000	26,700
7630-002030-007400 - Project Contracts-Building Maintenance	34,000	30,000	30,800	31,600	32,400	33,200	34,000	69,800	71,500	73,300	75,100	77,000	78,900
7955-002040-007400 - Service Contracts-Building Mtce	16,340	20,610	21,130	21,660	22,200	22,760	23,330	23,910	24,510	25,120	25,750	26,390	27,050
7958-002040-007400 - Garbage Collection-Building Mtce	860	920	940	960	980	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210
7570-002030-007410 - Safety Equipment-Equip Mtce	10,000	10,000	10,250	10,510	10,770	11,040	11,320	11,600	11,890	12,190	12,490	12,800	13,120
7610-002030-007410 - Project Materials-Equip Mtce	150,000	150,000	153,800	157,600	161,500	165,500	169,600	347,600	356,300	365,200	374,300	383,700	393,300
7630-002030-007410 - Project Contracts-Equipment Mtce	100,000	80,000	82,000	84,100	86,200	88,400	90,600	185,800	190,400	195,200	200,100	205,100	210,200
7955-002040-007410 - Service Contracts-Equipment Mtce	-	35,600	36,490	37,400	38,340	39,300	40,280	41,290	42,320	43,380	44,460	45,570	46,710
5011-002000-007420 - Regular Full Time - PW Allocation	3,070	2,360	2,420	2,480	2,540	2,600	2,670	2,740	2,810	2,880	2,950	3,020	3,100
7550-002030-007420 - Vehicle Licence	892	892	910	930	950	970	990	1,010	1,040	1,070	1,100	1,130	1,160
7610-002030-007420 - Project Materials-Vehicle Mtce	3,000	3,000	3,080	3,160	3,240	3,320	3,400	3,490	3,580	3,670	3,760	3,850	3,950
7630-002030-007420 - Project Contracts-Vehicle Maintenance	2,000	2,000	2,050	2,100	2,150	2,200	2,260	2,320	2,380	2,440	2,500	2,560	2,620
7410-002030-007430-2020 - Natural Gas - Wastewater-Op Costs - Biosolids Building	60,000	80,000	84,000	88,200	92,600	97,200	102,100	134,000	140,700	147,700	155,100	162,900	171,000
7410-002030-007430-2030 - Natural Gas - Wastewater-Op Costs - UV, Admin, Mtce Shop	7,000	8,500	8,900	9,300	9,800	10,300	10,800	22,600	23,700	24,900	26,100	27,400	28,800
7420-002030-007430-2000 - Electricity-Headworks (Gen 1)	800,000	750,000	787,500	826,900	868,200	911,600	957,200	1,507,650	1,583,000	1,662,200	1,745,300	1,832,600	1,924,200
7430-002030-007430-2000 - Water-WW Op Costs-Headworks (Gen 1)	17,000	25,000	25,600	26,200	26,900	27,600	28,300	58,000	59,500	61,000	62,500	64,100	65,700
7500-002030-007430-2020 - Biosolids Disposal - Wastewater-Op Costs - Biosolids Building	115,000	120,000	123,000	126,080	129,230	132,460	135,770	139,160	142,640	146,210	149,870	153,620	157,460
7520-002050-007430 - Equipment Rental-WW Op Costs	15,000	15,000	15,400	15,800	16,200	16,600	17,000	34,800	35,700	36,600	37,500	38,400	39,400
7706-002030-007430-2010 - Aluminum Sulphate-Liquid stream (Gen 2)	165,000	155,000	158,900	162,900	167,000	171,200	175,500	359,800	368,800	378,000	387,500	397,200	407,100
7708-002030-007430 - Miscellaneous Reagents	9,000	9,000	9,230	9,460	9,700	9,940	10,190	10,440	10,700	10,970	11,240	11,520	11,810
7710-002030-007430-2010 - Polymers - Wastewater-Op Costs - Liquid stream (Gen 2)	14,000	30,000	30,800	31,600	32,400	33,200	34,000	43,625	44,700	45,800	46,900	48,100	49,300



**Table D-7 (Cont'd)**  
**Municipality of Leamington**  
**Operating Budget Forecast (Inflated \$)**

Description	Budget 2023	Forecast												
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
<b>Expenditures</b>														
<b>Operating Costs</b>														
7710-002030-007430-2020 - Polymers - Wastewater-Op Costs - Biosolids Building	200,430	250,000	256,300	262,700	269,300	276,000	282,900	362,500	371,600	380,900	390,400	400,200	410,200	
7712-002030-007430-2010 - Nutrients-WW Op Costs-Liquid stream (Gen 2)	5,000	5,000	5,130	5,260	5,390	5,520	5,660	5,800	5,950	6,100	6,250	6,410	6,570	
7714-002030-007430-2020 - Misc Chemical Purchases - Wastewater-Op Costs - Biosolids Building	40,000	32,000	32,800	33,620	34,460	35,320	36,200	37,110	38,040	38,990	39,960	40,960	41,980	
7716-002030-007410 - Laboratory Analysis	15,000	20,000	20,500	21,010	21,540	22,080	22,630	23,200	23,780	24,370	24,980	25,600	26,240	
7718-002030-007430 - Laboratory Materials - Wastewater-Op Costs	7,000	10,000	10,250	10,510	10,770	11,040	11,320	11,600	11,890	12,190	12,490	12,800	13,120	
7732-002030-007430-2020 - Lime-Wastewater-Op Costs - Biosolids Building	150,000	150,000	153,800	157,600	161,500	165,500	169,600	217,250	222,700	228,300	234,000	239,900	245,900	
7957-002040-007430-2000 - Grit Disposal-Headworks (Gen 1)	65,000	65,000	66,600	68,300	70,000	71,800	73,600	94,250	96,600	99,000	101,500	104,000	106,600	
7420-002030-007440-2100 - Electricity-Pumping Stations - Cherry Lane	25,000	30,000	31,500	33,100	34,800	36,500	38,300	60,300	63,300	66,500	69,800	73,300	77,000	
7610-002030-007440-2100 - Project Materials-Pumping Stations - Cherry Lane	10,000	12,000	12,300	12,610	12,930	13,250	13,580	13,920	14,270	14,630	15,000	15,380	15,760	
7630-002030-007440-2100 - Project Contracts-Pumping Stations - Cherry Lane	30,000	20,000	20,500	21,010	21,540	22,080	22,630	23,200	23,780	24,370	24,980	25,600	26,240	
7955-002040-007440-2140 - Service Contracts-Pumping Stations General	-	12,000	12,300	12,610	12,930	13,250	13,580	13,920	14,270	14,630	15,000	15,380	15,760	
5022-002001-007470 - Part-Time-PW Allocation	5,797	878	900	920	940	960	980	1,000	1,030	1,060	1,090	1,120	1,150	
7610-002030-007470 - Project Materials-Property Mce	2,500	3,000	3,080	3,160	3,240	3,320	3,400	3,490	3,580	3,670	3,760	3,850	3,950	
7620-002030-007470 - Project Equipment-Property Mce	-	1,000	1,030	1,060	1,090	1,120	1,150	1,180	1,210	1,240	1,270	1,300	1,330	
7630-002030-007470 - Project Contracts-Property Mce	5,000	10,000	10,250	10,510	10,770	11,040	11,320	11,600	11,890	12,190	12,490	12,800	13,120	
7955-002040-007470 - Service Contracts-Property Mce	15,000	7,000	7,180	7,360	7,540	7,730	7,920	8,120	8,320	8,530	8,740	8,960	9,180	
7531-002030-008545 - Fuel Purchases - Unleaded	5,000	5,000	5,300	5,600	5,900	6,200	6,500	6,800	7,100	7,500	7,900	8,300	8,700	
7532-002030-008545 - Fuel Purchases - Diesel	17,000	17,000	17,900	18,800	19,700	20,700	21,700	22,800	23,900	25,100	26,400	27,700	29,100	
7533-002030-008545 - Oil & Lubricants-Fuel	6,000	8,000	8,400	8,800	9,200	9,700	10,200	10,700	11,200	11,800	12,400	13,000	13,700	
Compliance/Project Manager Operator	-	-	85,000	87,130	89,310	91,540	93,830	96,180	98,580	101,040	103,570	106,160	108,810	
								90,000	92,250	94,560	96,920	99,340	101,820	
<b>Sub Total Operating</b>	<b>4,203,305</b>	<b>4,448,227</b>	<b>4,667,810</b>	<b>4,807,750</b>	<b>4,952,780</b>	<b>5,103,910</b>	<b>5,258,700</b>	<b>6,753,295</b>	<b>6,965,610</b>	<b>7,184,970</b>	<b>7,413,130</b>	<b>7,649,670</b>	<b>7,894,570</b>	
<b>Capital-Related</b>														
Existing Debt (Principal) - Growth Related	-	-	-	-	-	-	-	-	-	-	-	-	-	
Existing Debt (Interest) - Growth Related	-	-	-	-	-	-	-	-	-	-	-	-	-	
New Growth Related Debt (Principal)	-	-	-	-	-	-	-	235,636	746,897	1,308,545	1,513,506	5,397,934	5,397,934	
New Growth Related Debt (Interest)	-	-	-	-	-	-	-	774,078	2,403,411	4,089,389	3,884,428	-	-	
Existing Debt (Principal) - Non-Growth Related	1,203,970	1,233,877	792,977	820,930	440,310	455,506	471,300	487,630	504,572	120,014	-	-	-	
Existing Debt (Interest) - Non-Growth Related	223,181	175,963	133,063	105,110	79,759	64,563	48,769	32,439	15,498	1,811	-	-	-	
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-	-	-	-	
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-	-	-	-	
Transfer to Capital	4,074,214	-	-	-	-	-	-	-	-	-	-	-	-	
Transfer to Capital Reserve	59,999	3,761,801	4,530,701	4,924,175	5,748,906	6,107,542	6,395,685	5,360,320	5,525,403	6,091,724	6,383,121	6,553,978	6,794,683	
<b>Sub Total Capital Related</b>	<b>5,561,364</b>	<b>5,171,640</b>	<b>5,456,741</b>	<b>5,850,215</b>	<b>6,268,975</b>	<b>6,627,611</b>	<b>6,915,754</b>	<b>6,890,103</b>	<b>9,195,779</b>	<b>11,611,482</b>	<b>11,781,055</b>	<b>11,951,912</b>	<b>12,192,617</b>	
<b>Total Expenditures</b>	<b>9,764,669</b>	<b>9,619,867</b>	<b>10,124,551</b>	<b>10,657,965</b>	<b>11,221,755</b>	<b>11,731,521</b>	<b>12,174,454</b>	<b>13,643,398</b>	<b>16,161,389</b>	<b>18,796,452</b>	<b>19,194,185</b>	<b>19,601,582</b>	<b>20,087,187</b>	



**Table D-7 (Cont'd)**  
**Municipality of Leamington**  
**Operating Budget Forecast (Inflated \$)**

Description	Budget 2023	Forecast											
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>Revenues</b>													
Base Charge	4,445,727	4,630,576	4,962,625	5,316,301	5,692,939	6,035,912	6,335,702	6,648,048	6,905,729	7,171,058	7,444,238	7,724,582	8,080,616
<b>Other Revenue</b>													
Hauled Waste	639,410	652,200	665,240	678,540	692,110	705,950	720,070	734,470	749,160	764,140	779,420	795,010	810,910
Leachate	77,800	79,360	80,950	82,570	84,220	85,900	87,620	89,370	91,160	92,980	94,840	96,740	98,670
Surcharges-Highbury-Sewer Surcharge	1,248,082	1,273,040	1,298,500	1,324,470	1,350,960	1,377,980	1,405,540	1,433,650	1,462,320	1,491,570	1,521,400	1,551,830	1,582,870
Overstrength	442,133	450,980	460,000	469,200	478,580	488,150	497,910	507,870	518,030	528,390	538,960	549,740	560,730
PCC Greenhouse Sewer Surcharge	75,729	77,240	78,780	80,360	81,970	83,610	85,280	86,990	88,730	90,500	92,310	94,160	96,040
Invoice Penalties	25,000	25,500	26,010	26,530	27,060	27,600	28,150	28,710	29,280	29,870	30,470	31,080	31,700
Sundry Revenue	2,400	2,450	2,500	2,550	2,600	2,650	2,700	2,750	2,810	2,870	2,930	2,990	3,050
Contributions from Development Charges	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserve Fund	-	-	-	-	-	-	-	1,009,714	3,150,307	5,397,934	5,397,934	5,397,934	5,397,934
Contributions from Reserves / Reserve Funds	426,931	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Operating Revenue</b>	<b>7,383,212</b>	<b>7,191,346</b>	<b>7,574,605</b>	<b>7,980,521</b>	<b>8,410,439</b>	<b>8,807,752</b>	<b>9,162,972</b>	<b>10,541,572</b>	<b>12,997,526</b>	<b>15,569,312</b>	<b>15,902,502</b>	<b>16,244,065</b>	<b>16,662,520</b>
<b>Wastewater Billing Recovery - Total</b>	<b>2,381,456</b>	<b>2,428,521</b>	<b>2,549,947</b>	<b>2,677,444</b>	<b>2,811,316</b>	<b>2,923,769</b>	<b>3,011,482</b>	<b>3,101,826</b>	<b>3,163,863</b>	<b>3,227,140</b>	<b>3,291,683</b>	<b>3,357,517</b>	<b>3,424,667</b>

**Table D-8**  
**Municipality of Leamington**  
**Wastewater Rate Forecast**  
**(Inflated \$)**

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
Total Wastewater Billing Recovery	2,381,456	2,428,521	2,549,947	2,677,444	2,811,316	2,923,769	3,011,482	3,101,826	3,163,863	3,227,140	3,291,683	3,357,517	3,424,667	
<b>Increasing Block Structure</b>														
<i>Volume Forecast By Block (cu.m)</i>														
Block 1	1,754,259	1,784,002	1,813,746	1,843,489	1,873,232	1,902,975	1,932,718	1,962,462	1,992,205	2,021,948	2,051,691	2,081,233	2,125,637	
Block 2	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	941,287	
<b>Check Total Volume</b>	<b>2,695,546</b>	<b>2,725,289</b>	<b>2,755,033</b>	<b>2,784,776</b>	<b>2,814,519</b>	<b>2,844,262</b>	<b>2,874,005</b>	<b>2,903,749</b>	<b>2,933,492</b>	<b>2,963,235</b>	<b>2,992,978</b>	<b>3,022,520</b>	<b>3,066,924</b>	
<b>Block 1 (includes 20.91 cu.m per month)</b>							Calculated as a base charge							
Block 2	2.53	2.58	2.71	2.84	2.99	3.11	3.20	3.30	3.36	3.43	3.50	3.57	3.64	
<b>Percentage Increase Rate</b>			<b>5.0%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>4.0%</b>	<b>3.0%</b>	<b>3.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	<b>2.0%</b>	