Water Rate Study

Town of Kingsville

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List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
A.M.O.	Association of Municipalities of Ontario
C.W.W.F.	Clean Water and Wastewater Fund
D.C.A.	Development Charges Act, 1997
F.I.R.	Financial Information Return
I.J.P.A.	Infrastructure for Jobs and Prosperity Act, 2015
I.O.	Infrastructure Ontario
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 Town of Kingsville retained Watson & Associates Economists Ltd. (Watson) to undertake a water rate study. This study aims to update the analysis of the Town's water 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 base charge and volume rates for customers within the Town of Kingsville. 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 2025 to 2034 capital spending program for water is approximately $28.00 million (inflated);
- A significant portion (approximately 48%) of the water capital spending program is related to the Southwest Water Main;
- Annual operating expenditures related to wages and salaries are increasing by 3% 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 (base capital surcharge and a constant volume rate) is continued; and
- Existing water customers total 8,664; an average of 93 new customers annually is anticipated over the next 10-year period.

Based on the above information, rate increases have been balanced for water users to experience a 3% annual increase on the water bill from 2025 to 2034, note this is equivalent to a $0.02 annual increase on the constant volume water rate, and an average $4.72 annual increase on the base capital surcharge.

Table ES-1 summarizes the recommended water rates and the average annual bill (assuming an annual median volume of 180 cu.m[1]) based on the analysis provided herein over the forecast period.

[1] The annual per customer volume utilized is based on the median usage for residential customers.

Table ES-1
Town of Kingsville
Average Annual Residential Water Bill (Based on Annual Usage of 180 cu.m)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Quarterly Capital Surcharge	$33.81	$34.82	$35.87	$36.95	$38.05	$39.20	$40.37	$41.58	$42.83	$44.11	$45.44
Annual Base Rate Bill	**$135.24**	**$139.30**	**$143.48**	**$147.78**	**$152.21**	**$156.78**	**$161.48**	**$166.33**	**$171.32**	**$176.46**	**$181.75**
Constant Rate	$0.49	$0.50	$0.52	$0.54	$0.55	$0.57	$0.59	$0.60	$0.62	$0.64	$0.66
Volume (cu.m)	180	180	180	180	180	180	180	180	180	180	180
Annual Volume Bill	**$88.20**	**$90.85**	**$93.56**	**$96.37**	**$99.27**	**$102.24**	**$105.30**	**$108.47**	**$111.73**	**$115.07**	**$118.53**
Total Annual Bill	**$223.44**	**$230.14**	**$237.04**	**$244.15**	**$251.48**	**$259.02**	**$266.78**	**$274.80**	**$283.04**	**$291.53**	**$300.28**
Annual Dollar Increase		$6.70	$6.90	$7.11	$7.33	$7.54	$7.76	$8.01	$8.25	$8.49	$8.75

Note, the above water rates do not include the Union Water Supply System Inc. billing amount, which as of 2024 is identified separately on the water bill. Based on the current Union Water Supply System Inc. rate of $0.7313 per cu.m and an assumed average of 180 cu.m, this would add $131.63 to the average water bill.

Report

Chapter 1
Introduction

1. Introduction

1.1 Background

The Town of Kingsville, located in the County of Essex, currently services 8,664 metered water customers. These customers are comprised of residential, multi-residential, commercial, greenhouse, and high-agricultural customers. Water supply is provided by Union Water Supply System Inc. (U.W.S.S.).

The water system is metered and utilizes a rate structure with a quarterly capital surcharge as well as a constant volume charge on a per cubic metre basis for all customers. Table 1-1 provides the 2024 rates.

Table 1-1
Town of Kingsville
Water Rates – 2024

2024 - Water Billing Rates	
Base Charge	
Capital Surcharge (Quarterly)	33.81
Volume Charge*	
$ 0.49	per cu.m (distribution)

*Effective January 1, 2024 U.W.S.S. directly bills customers in Kingsville for water supply costs.

Note that the above water rates do not include the cost of purchasing water from the U.W.S.S. Effective January 1, 2024, the U.W.S.S. is 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 Town's water distribution rate.

Since the Walkerton crisis, the Province has continued to make legislative changes for municipal water 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 Town of Kingsville to assist in addressing

these changes in a proactive manner as they relate to the water system. The assessment provided herein addresses changes recommended to the water rates based on the most current information and forecasts the implications over the next 10-year period.

1.2 Study Process

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

- Identify all current and future water 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 rates;
- Identify existing operating costs by component and estimate future operating costs over the next 10-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 Council the findings to assist in gaining approval of the rates for 2025 and future years.

1.3 Regulatory Changes in Ontario

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

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

- lifecycle costing.

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

1.4 Sustainable Water and Sewage Systems Act

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

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

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

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

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

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

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

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

1.5 Financial Plans Regulation

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

- The financial plan will represent one of the key elements for the municipality to obtain its Drinking Water Licence;
- The financial plans shall be for a period of at least six years, but longer planning horizons are encouraged;
- As the regulation is under the *Safe Drinking Water Act, 2002*, the preparation of the plan is mandatory for water and encouraged for wastewater;
- The plan is considered a living document (i.e. will be updated as annual budgets are prepared) but will need to be undertaken, at a minimum, every five years;
- The plans generally require the forecasting of capital, operating and reserve fund positions, providing detailed inventories, forecasting future users and volume usage and corresponding calculation of rates. In addition, P.S.A.B. information on the system must be provided for each year of the forecast (i.e. total non-financial assets, tangible capital asset acquisitions, tangible capital asset construction, betterments, write-downs, disposals, total liabilities and net debt);
- The financial plans must be made available to the public (at no charge) upon request and be available on the municipality's website. The availability of this information must also be advertised; and
- The financial plans are to be approved by Resolution of the Council or governing body indicating that the drinking water system is financially viable.

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

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

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

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

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

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

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

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

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

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

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

1.6 Water Opportunities Act, 2010

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

The Act provides for the following elements:

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

With regard to the sustainability plans:

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

The financial plan shall include:

- An asset management plan for the physical infrastructure;
- A financial plan;
- For water, a water conservation plan;
- An assessment of risks that may interfere with the future delivery of the municipal service, including, if required by the regulations, the risks posed by climate change and a plan to deal with those risks; and

- Strategies for maintaining and improving the municipal service, including strategies to ensure the municipal service can satisfy future demand, consider technologies, services and practices that promote the efficient use of water and reduce negative impacts on Ontario's water resources, and increase co-operation with other municipal service providers.

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

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

Regulations will prescribe:

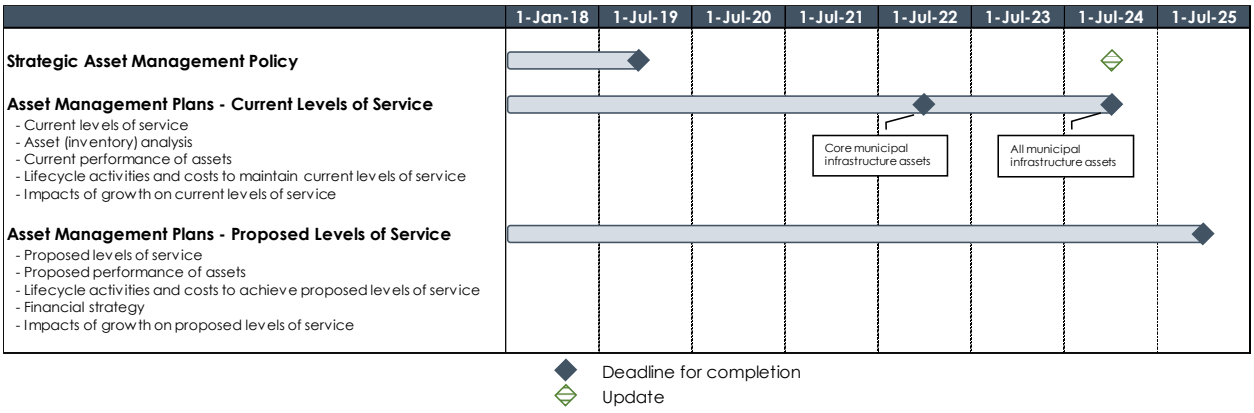
- Timing;
- Contents of the plans;
- Which identified portions of the plan will require certification;
- Public consultation process; and
- Limitations, updates, refinements, etc.

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

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

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

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

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

1.8 Forecast Growth and Servicing Requirements

The Town of Kingsville services 8,664 metered water customers. These customers are comprised of residential, multi-residential, commercial, greenhouse, and high-agricultural customers. Information on the existing number of customers and existing billable volumes was obtained from the Town.

For future water customers to be added to the systems, consideration has been given to development potential within the serviced areas of the Town over the forecast period of 2025 to 2034. The growth forecast utilized in the Town's 2022 Development Charges Background Study was used to estimate future development. The forecast also assumes average annual growth in greenhouses of approximately 1.79 million sq.ft. annually over the forecast period. Note, the forecast of greenhouse development is only considered for the estimation of Development Charge revenue and no additional volumes have been assumed in the forecast.

Table 1-2 provides for the forecast of water users and volumes for Kingsville.

Table 1-2
Town of Kingsville
2024 to 2034 Water System Forecast

Year	Total Users	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2024	93	46	93	93	93	93	93	93	93	93	93	93
2025	93		46	93	93	93	93	93	93	93	93	93
2026	93			46	93	93	93	93	93	93	93	93
2027	93				46	93	93	93	93	93	93	93
2028	93					46	93	93	93	93	93	93
2029	93						46	93	93	93	93	93
2030	94							47	94	94	94	94
2031	94								47	94	94	94
2032	94									47	94	94
2033	94										47	94
2034	94											47
Total	**1,023**	**46**	**139**	**231**	**324**	**416**	**509**	**602**	**696**	**789**	**883**	**976**
m^3/user	180	180	180	180	180	180	180	180	180	180	180	180
Annual Flow		**8,280**	**24,930**	**41,580**	**58,230**	**74,880**	**91,530**	**108,360**	**125,190**	**142,020**	**158,850**	**175,680**

Water Customer Forecast	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing	8,664	8,664	8,664	8,664	8,664	8,664	8,664	8,664	8,664	8,664	8,664
New - Growth	46	139	231	324	416	509	602	696	789	883	976
Total	**8,710**	**8,803**	**8,895**	**8,988**	**9,080**	**9,173**	**9,266**	**9,360**	**9,453**	**9,547**	**9,640**

Water Volume Forecast (m^3)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing	6,621,138	6,621,138	6,621,138	6,621,138	6,621,138	6,621,138	6,621,138	6,621,138	6,621,138	6,621,138	6,621,138
New	8,280	24,930	41,580	58,230	74,880	91,530	108,360	125,190	142,020	158,850	175,680
Total	**6,629,418**	**6,646,068**	**6,662,718**	**6,679,368**	**6,696,018**	**6,712,668**	**6,729,498**	**6,746,328**	**6,763,158**	**6,779,988**	**6,796,818**

Chapter 2
Capital Infrastructure Needs

2. Capital Infrastructure Needs

2.1 Capital Forecast

The capital forecast has been provided for the water system and is presented in Table 2-1 (note: the costs have been provided in uninflated dollars). The basis for this forecast is the Town's capital budget in addition to capital infrastructure replacement needs based on recommendations from the Town's Asset Management Plan. These estimates were refined through discussions with staff. The capital plan addresses both growth and replacement projects.

A summary of the capital works related to water service is provided in the following table.

Table 2-1
Town of Kingsville
2025 to 2034 Water Capital Forecast Summary (Uninflated $)

Description	Total 2025-2034	Years Undertaken
Capital Expenditures		
Southwest Water Main	12,908,116	2025
Woodfern / Peach / Queen / Willow	748,150	2026
Victoria Street (from Cty Rd 34 West to Fox Street)	100,750	2027
Heritage Road	960,000	2027
Herrington to Bayview and Queen in Between	750,000	2027
Cherrywood	266,500	2028
Melbourne and Elm	720,000	2028
Palmer / Westlawn / Cameron	553,000	2029
Laurel (from Elm to Mill) / Elm (from Division to McDonald)	526,500	2029
2012 Valve Excercising/Hydro-Excavation Trailer	85,000	2025
17-03 Ford F250 Pickup Truck With Slider	80,000	2027
18-06 Ford F350 with Service Body	95,000	2028
19-03 Ford F350 with Service Body	95,000	2029
20-05 Chevy Silverado 1500	65,000	2030
20-07 Ford 350 with Service Box	95,000	2030
22-02 Case Backhoe w Attachments	43,750	2032
22-03 Case Loader with Attachments	65,000	2032
Lifecycle Requirements from AMP	7,580,750	2029-2034
Water Servicing Master Plan - Townwide	150,000	2025
Water Enviromental Services Office Expansion	150,000	2028
Total	**26,037,516**	

Chapter 3
Lifecycle Costing

3. Lifecycle Costing

3.1 Overview of Lifecycle Costing

3.1.1 Definition

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

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

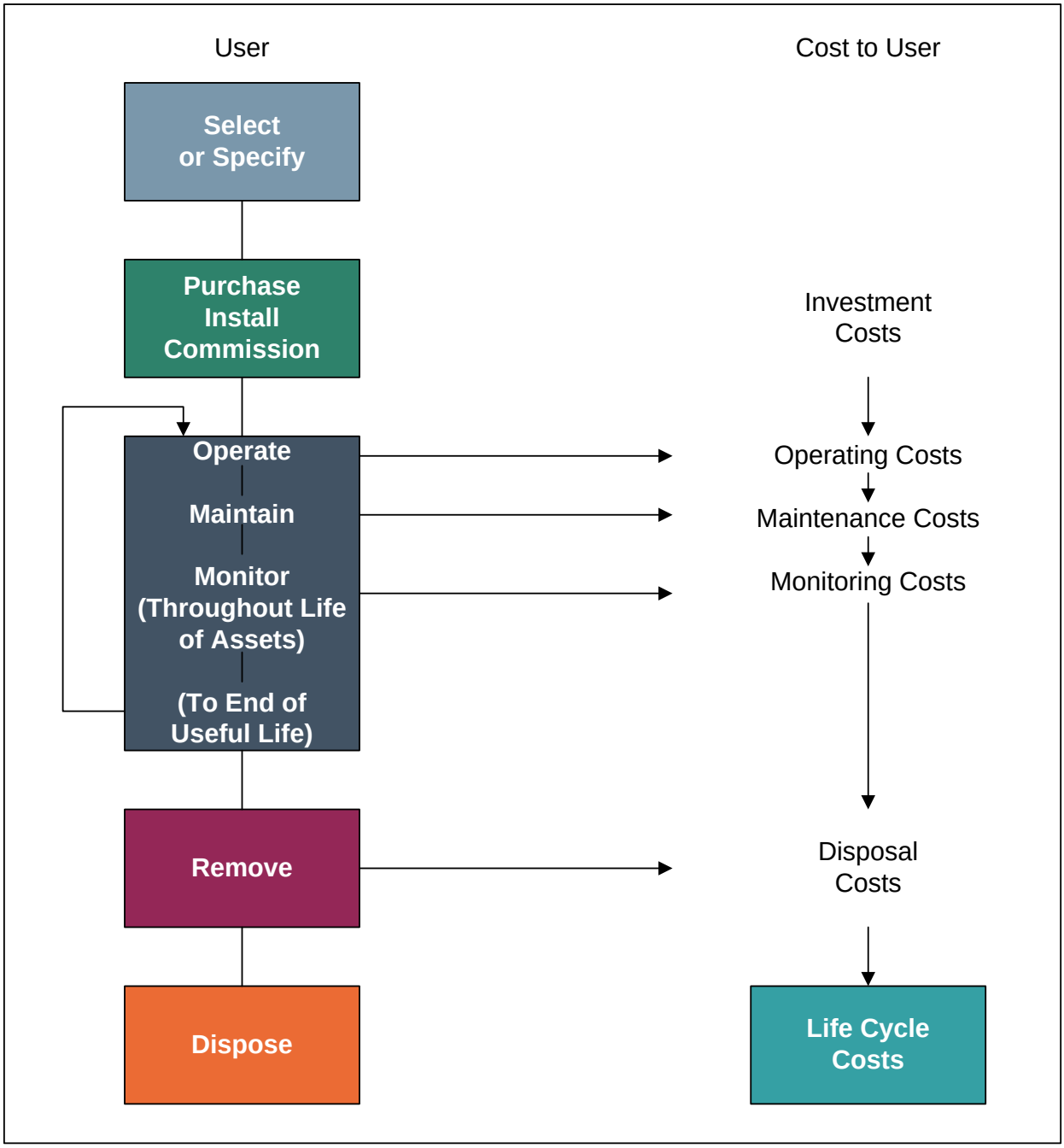
3.1.2 Financing Costs

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

In a municipal context, services are provided to benefit tax/rate payers. Acquisition of assets is normally timed in relation to direct needs within the community. At times, economies of scale or technical efficiencies will lead to oversizing an asset to accommodate future growth within the Town. 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 Town 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 Town will be dependent upon debentures, reserves and contributions from the operating budget to fund these works.

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

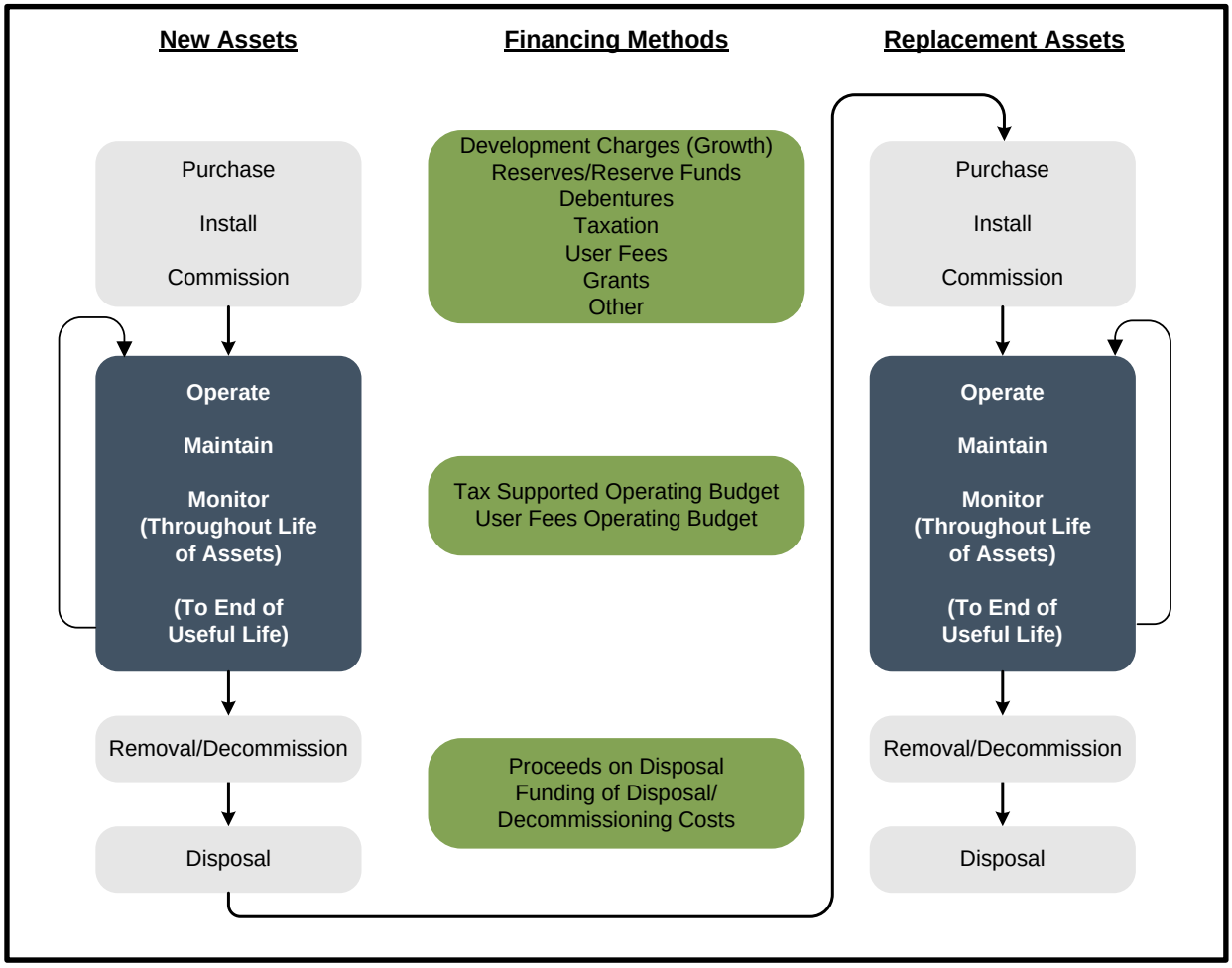
As referred to earlier, growth-related financing methods such as development charges and developer contributions could be utilized to finance the growth-related component of the new asset. These revenues are collected (indirectly) from the new homeowner who benefits directly from the installation of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

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

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

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

Figure 3-2
Financing Lifecycle Costs



3.1.3 Costing Methods

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

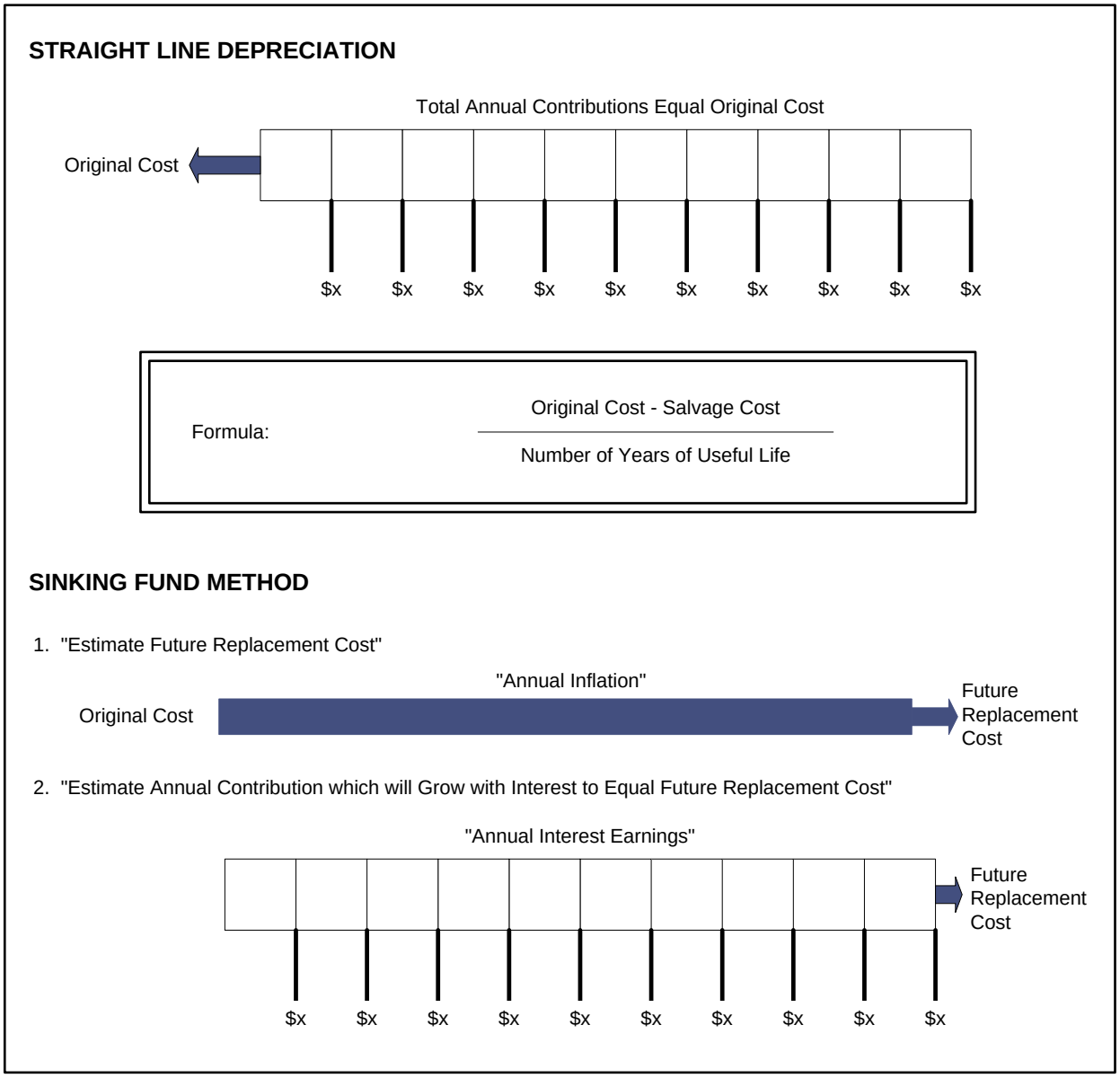
forms of depreciation: the straight-line method and the reducing balance method (shown graphically in Figure 3-3).

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

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

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

Figure 3-3



3.2 Impact on Budgets

The Town's Asset Management Plan outlines the total replacement cost of the Municipality's water infrastructure to be approximately $158.69 million. Note, this amount may differ from the Town's asset inventory due to ongoing database updates.

The recommended levels of investment for lifecycle rehabilitation and replacement needs in the Town's Asset Management Plan are as follows:

Table 3-1
Town of Kingsville
Lifecycle Costs as per Asset Management Plan

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Water											
Water Mains & Related	538,668	690,792	72,540	191,880	777,240	1,315,000	1,315,000	1,315,000	1,315,000	1,315,000	1,315,000
Water Meters	-	-	-	-	-	189,000	189,000	189,000	189,000	189,000	189,000
Water Total	**538,668**	**690,792**	**72,540**	**191,880**	**777,240**	**1,504,000**	**1,504,000**	**1,504,000**	**1,504,000**	**1,504,000**	**1,504,000**

These recommended amounts were incorporated into the Town's capital forecast.

Chapter 4
Capital Cost Financing Options

4. Capital Cost Financing Options

4.1 Summary of Capital Cost Financing Alternatives

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

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

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

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

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

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

4.2 Development Charges Act, 1997

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

The Town currently imposes Development Charges via by-law 4-2023. Water capital projects associated with new development were included in the Town's background study (e.g. Southwest Watermain). To the extent these projects are growth-related, this rate study has identified Development Charges as the funding source. The *Development Charges Act* includes a number of mandatory exemptions from the charges and as such, some level of funding from the water rates will be required for financing the growth-related capital projects.

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

4.3 Municipal Act

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

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

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

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

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

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

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

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

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

Under the previous *Local Improvement Act*:

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

4.4 Historical Grant Funding Availability

Federal Infrastructure Funding

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

Funding was provided by the Government of Canada to expressly help municipalities with repair and rehabilitation projects. Funding was mainly provided through the Clean Water and Wastewater Fund (C.W.W.F.) and Public Transit Infrastructure Fund

(P.T.I.F.) in Federal Phase 1 projects. The C.W.W.F. was announced in Ontario on September 15, 2016. The Fund was $1.1 billion for water, wastewater, and storm water systems in Ontario. The federal government provided $569 million and Ontario and municipal governments provided $275 million each.

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

Phase 2: Next Steps

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

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

Canada Community-Building Fund

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

Ontario Government

The Province has taken steps to increase municipal infrastructure funding. The Ontario Community Infrastructure Fund (O.C.I.F.) was increased in 2016 with formula-based

support growing to $200 million, and application funding growing to $100 million annually by 2018/2019. As well, $15 million annually will go to the new Connecting Links program to help pay for the construction and repair costs of municipal roads that connect communities to provincial highways. This is on top of the Building Ontario Up investment of $130 billion in public infrastructure over 10 years starting in 2015.

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

4.5 Existing Reserves/Reserve Funds

The Town has established reserves and reserve funds for water costs. The following table summarizes the water reserves utilized in this analysis and their respective balances at December 31, 2023:

Table 4-1
Water Reserves and Reserve Funds
As of December 31, 2023

Reserve/Reserve Fund	Dec. 31 2023
Water	
Working Capital Reserve Water	1,488,613
Development Charges Reserve Fund	1,411,298
Reserve Meter Changeout Water	200,000
MOE Reserves - GS Water	59,278
Reserve Equipment Water	125,706
Reserve Water Lifecycle	1,596,043
Total	**4,880,938**

4.6 Debenture Financing

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

The Ministry of Municipal Affairs regulates the level of debt incurred by Ontario municipalities, through its powers established under the *Municipal Act*. Ontario Regulation 403/02 provides the current rules respecting municipal debt and financial obligations. Through the rules established under these regulations, a municipality's debt capacity is capped at a level where no more than 25% of the municipality's own purpose revenue may be allotted for servicing the debt (i.e. debt charges). The Town of Kingsville's 2024 calculation on debt capacity is identified in their 2024 Annual Repayment Limit provided by the Province. This calculates the Town's estimated annual repayment limit to be approximately $7.04 million. Based upon 20-year financing at an assumed rate of 5%, the available debt for the Town is approximately $87.75 million.

4.7 Infrastructure Ontario

Infrastructure Ontario (I.O.) is an arms-length crown corporation, which has been set up as a tool to offer low-cost and longer-term financing to assist municipalities in renewing their infrastructure (this corporation has merged the former O.S.I.F.A. into its operations). I.O. combines the infrastructure renewal needs of municipalities into an infrastructure investment "pool." I.O. will raise investment capital to finance loans to the public sector by selling a new investment product called Infrastructure Renewal Bonds to individual and institutional investors.

I.O. provides access to infrastructure capital that would not otherwise be available to smaller borrowers. Larger borrowers receive a longer term on their loans than they could obtain in the financial markets, and can also benefit from significant savings on transaction costs such as legal costs and underwriting commissions. Under the I.O. approach, all borrowers receive the same low interest rate. I.O. will enter into a financial agreement with each municipality subject to technical and credit reviews, for a loan up to the maximum amount of the loan request.

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

- clean water infrastructure;
- sewage infrastructure;

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

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

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

The analysis provided herein assumes that the Town will require growth-related debt financing of approximately $9.87 million for the capital projects identified.

4.8 Recommended Capital Financing Approach

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

Table 4-2
Town of Kingsville
Capital Forecasting Financing Sources
Inflated $

Description	Water 2025-2034
Capital Financing	
Provincial/Federal Grants	-
Development Charges Reserve Fund	315,000
Non-Growth Related Debenture Requirements	-
Internal Financing	-
Growth Related Debenture Requirements	9,874,500
Operating Contributions	-
Lifecycle Reserve Fund	14,321,500
Water Meter Change Out Reserve	-
Equipment Reserve	687,000
MOE Reserve	-
Water Reserve	2,800,000
Total Capital Financing	**27,998,000**

Table 4-3 provides the full capital expenditure and funding program by year for water.

Table 4-3
Capital Budget Forecast – Water (inflated $)

Description	Budget 2024	Total 2025 to 2034	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
Owenwood / James / Katrishe / Hertiage Road (Greenway to Main)	1,200,000	-	-	-	-	-	-	-	-	-	-	-
Southwest Water Main	330,000	13,166,000	13,166,000	-	-	-	-	-	-	-	-	-
Woodfern / Peach / Queen / Willow	-	778,000	-	778,000	-	-	-	-	-	-	-	-
Victoria Street (from Cty Rd 34 West to Fox Street)	-	107,000	-	-	107,000	-	-	-	-	-	-	-
Heritage Road	-	1,019,000	-	-	1,019,000	-	-	-	-	-	-	-
Herrington to Bayview and Queen in Between	-	796,000	-	-	796,000	-	-	-	-	-	-	-
Cherrywood	-	288,000	-	-	-	288,000	-	-	-	-	-	-
Melbourne and Elm	-	779,000	-	-	-	779,000	-	-	-	-	-	-
Palmer / Westlawn / Cameron	-	611,000	-	-	-	-	611,000	-	-	-	-	-
Laurel (from Elm to Mill) / Elm (from Division to McDonald)	-	581,000	-	-	-	-	581,000	-	-	-	-	-
12-01 International Workstar Tandem Dump	100,000	-	-	-	-	-	-	-	-	-	-	-
2012 Valve Excercising/Hydro-Excavation Trailer	-	87,000	87,000	-	-	-	-	-	-	-	-	-
17-03 Ford F250 Pickup Truck With Slider	-	85,000	-	-	85,000	-	-	-	-	-	-	-
18-06 Ford F350 with Service Body	-	103,000	-	-	-	103,000	-	-	-	-	-	-
19-03 Ford F350 with Service Body	-	105,000	-	-	-	-	105,000	-	-	-	-	-
20-05 Chevy Silverado 1500	-	73,000	-	-	-	-	-	73,000	-	-	-	-
20-07 Ford 350 with Service Box	-	107,000	-	-	-	-	-	107,000	-	-	-	-
22-02 Case Backhoe w Attachments	-	51,000	-	-	-	-	-	-	-	51,000	-	-
22-03 Case Loader with Attachments	-	76,000	-	-	-	-	-	-	-	76,000	-	-
Lifecycle Requirements from AMP	-	8,871,000	-	-	-	-	364,000	1,514,000	1,728,000	1,635,000	1,797,000	1,833,000
Water Meter Change Out	4,000,000	-	-	-	-	-	-	-	-	-	-	-
Utility Trailer	25,000	-	-	-	-	-	-	-	-	-	-	-
Meter Van Vehicle	100,000	-	-	-	-	-	-	-	-	-	-	-
Water Servicing Master Plan - Townwide	-	153,000	153,000	-	-	-	-	-	-	-	-	-
Water Enviromental Services Office Expansion	-	162,000	-	-	-	162,000	-	-	-	-	-	-
Total Capital Expenditures	**5,755,000**	**27,998,000**	**13,406,000**	**778,000**	**2,007,000**	**1,332,000**	**1,661,000**	**1,694,000**	**1,728,000**	**1,762,000**	**1,797,000**	**1,833,000**
Capital Financing												
Provincial/Federal Grants	879,600	-										
Development Charges Reserve Fund	1,047,500	315,000	153,000	-	-	162,000	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Internal Financing	2,110,000	-										
Growth Related Debenture Requirements	-	9,874,500	9,874,500	-	-	-	-	-	-	-	-	-
Operating Contributions	65,722	-	-	-	-	-	-	-	-	-	-	-
Lifecycle Reserve Fund	-	14,321,500	491,500	778,000	1,922,000	1,067,000	1,556,000	1,514,000	1,728,000	1,635,000	1,797,000	1,833,000
Water Meter Change Out Reserve	200,000	-	-	-	-	-	-	-	-	-	-	-
Equipment Reserve	100,000	687,000	87,000	-	85,000	103,000	105,000	180,000	-	127,000	-	-
MOE Reserve	59,278	-	-	-	-	-	-	-	-	-	-	-
Water Reserve	1,292,900	2,800,000	2,800,000	-	-	-	-	-	-	-	-	-
Total Capital Financing	**5,755,000**	**27,998,000**	**13,406,000**	**778,000**	**2,007,000**	**1,332,000**	**1,661,000**	**1,694,000**	**1,728,000**	**1,762,000**	**1,797,000**	**1,833,000**

Chapter 5
Overview of Expenditures and Revenues

5. Overview of Expenditures and Revenues

5.1 Water Operating Expenditures

In this report, the forecasted water budget figures (2025 to 2034) are based on the 2024 operating budget. The costs for each component of the operating budget have been reviewed with staff to establish forecast inflationary adjustments. Most of the expenditures have been assumed to increase at a rate of 3% annually based on the Town's budget estimates, 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

The Town has various miscellaneous revenue sources to help contribute towards operating expenditures. These miscellaneous revenues include water service connection and commissioning, meter installation/maintenance, water meter sales, etc., and are assumed to increase at 2% per year. Table 5-1 provides for the operating budget for the water system.

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

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Operating Costs											
Salaries - Full Time	923,371	1,043,571	1,074,878	1,107,124	1,140,338	1,174,548	1,209,785	1,246,100	1,283,500	1,322,000	1,361,700
Engineering Tech	-	-	-	-	-	-	-	-	-	-	-
Water & Wastewater Billing Supervisor	-	-	-	-	-	-	-	-	-	-	-
New Staff - Office Support (25%) - 2023	-	-	-	-	-	-	-	-	-	-	-
New Staff - Full-time - 2023	-	-	-	-	-	-	-	-	-	-	-
Salaries - Overtime	20,804	21,428	22,071	22,733	23,415	24,118	24,841	25,600	26,400	27,200	28,000
Salaries - Student	14,227	14,654	15,093	15,546	16,013	16,493	16,988	17,500	18,000	18,500	19,100
Committee Honorarium	-	-	-	-	-	-	-	-	-	-	-
Salaries - contract	-	-	-	-	-	-	-	-	-	-	-
Benefits - EI	16,394	16,886	17,392	17,914	18,452	19,005	19,575	20,200	20,800	21,400	22,000
Benefits - CPP	44,701	46,042	47,423	48,846	50,311	51,821	53,375	55,000	56,700	58,400	60,200
Benefits - EHT	18,689	19,250	19,827	20,422	21,035	21,666	22,316	23,000	23,700	24,400	25,100
Benefits - OMERS	94,570	97,407	100,329	103,339	106,439	109,633	112,922	116,300	119,800	123,400	127,100
Benefits - Health Coverage	102,429	105,502	108,667	111,927	115,285	118,743	122,306	126,000	129,800	133,700	137,700
Benefits - WSIB	27,277	28,095	28,938	29,806	30,701	31,622	32,570	33,500	34,500	35,500	36,600
Benefits - Uniforms	5,100	5,253	5,411	5,573	5,740	5,912	6,090	6,300	6,500	6,700	6,900
Benefits - Meal Allowance	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,200	1,200	1,200	1,200
Benefits - Eyeglasses	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,100	3,200	3,300	3,400
Benefits - Ortho	4,000	4,120	4,244	4,371	4,502	4,637	4,776	4,900	5,000	5,200	5,400
New Staff - Water Compliance Technician	120,200	-	-	-	-	-	-	-	-	-	-
Training & Development	20,000	20,600	21,218	21,855	22,510	23,185	23,881	24,600	25,300	26,100	26,900
Office Supplies	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,700	3,800	3,900	4,000
Computer Supplies	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,200	1,200	1,200	1,200
Postage Supplies	35,000	36,050	37,132	38,245	39,393	40,575	41,792	43,000	44,300	45,600	47,000
Courier & Express	500	515	530	546	563	580	597	600	600	600	600
Advertising	500	515	530	546	563	580	597	600	600	600	600
Computer Maintenance	-	-	-	-	-	-	-	-	-	-	-
Computer Consultants	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,200	1,200	1,200	1,200
General Insurance	92,972	95,761	98,634	101,593	104,641	107,780	111,013	114,300	117,700	121,200	124,800
Utilities	100	103	106	109	113	116	119	100	100	100	100
Facility Maintenance	7,500	7,725	7,957	8,195	8,441	8,695	8,955	9,200	9,500	9,800	10,100
Equipment Repair	18,000	18,540	19,096	19,669	20,259	20,867	21,493	22,100	22,800	23,500	24,200
Miscellaneous	500	515	530	546	563	580	597	600	600	600	600
Equipment Rental	500	515	530	546	563	580	597	600	600	600	600
Professional Svc (Legal Audits)	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,100	6,300	6,500	6,700
Membership & Subscription	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,100	3,200	3,300	3,400
Write offs	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,500	2,600	2,700	2,800
Professional Fees (Engineering)	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,100	6,300	6,500	6,700
Communication	7,500	7,725	7,957	8,195	8,441	8,695	8,955	9,200	9,500	9,800	10,100
Shop Supplies	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,700	3,800	3,900	4,000

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

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Fuel & Oil	25,000	25,750	26,523	27,318	28,138	28,982	29,851	31,300	32,900	34,500	36,200
Licences & Permits	5,200	5,356	5,517	5,682	5,853	6,028	6,209	6,400	6,600	6,800	7,000
Safety Supplies	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,700	3,800	3,900	4,000
Small Tools	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,100	6,300	6,500	6,700
Mileage	500	515	530	546	563	580	597	600	600	600	600
Curb Stop Repairs	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,400	19,000	19,600	20,200
Back Flow Program	30,000	30,900	31,827	32,782	33,765	34,778	35,822	36,900	38,000	39,100	40,300
Road Repair / Restoration	35,000	36,050	37,132	38,245	39,393	40,575	41,792	43,000	44,300	45,600	47,000
Meter Reading Expense	3,500	3,605	3,713	3,825	3,939	4,057	4,179	4,300	4,400	4,500	4,600
Water Purchases - Kingsville	-	-	-	-	-	-	-	-	-	-	-
Water Purchases - Gosfield S.	-	-	-	-	-	-	-	-	-	-	-
Water Purchases - Gosfield N.	-	-	-	-	-	-	-	-	-	-	-
Water Loss	325,225	-	-	-	-	-	-	-	-	-	-
Water Meters	50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,500	63,300	65,200	67,200
Water Meter Maintenance	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,400	19,000	19,600	20,200
Water Locates	17,500	68,025	70,066	72,168	74,333	76,563	78,860	81,200	83,600	86,100	88,700
Water Service Connections	-	-	-	-	-	-	-	-	-	-	-
Watermain Line Breaks	90,000	92,700	95,481	98,345	101,296	104,335	107,465	110,700	114,000	117,400	120,900
Water Line Maintenance	30,000	30,900	31,827	32,782	33,765	34,778	35,822	36,900	38,000	39,100	40,300
Hydrant Maintenance	45,000	46,350	47,741	49,173	50,648	52,167	53,732	55,300	57,000	58,700	60,500
Source Water Protection	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,100	6,300	6,500	6,700
Property Taxes	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,100	3,200	3,300	3,400
Program Support Costs	425,000	437,750	450,883	464,409	478,341	492,691	507,472	522,700	538,400	554,600	571,200
Sub Total Operating	**2,728,259**	**2,493,818**	**2,568,632**	**2,645,691**	**2,725,062**	**2,806,814**	**2,891,018**	**2,977,800**	**3,067,800**	**3,160,200**	**3,255,700**
Capital-Related											
Existing Debt (Principal) - Growth Related		165,512	173,787	182,477	191,601	201,181	211,240	221,802	232,892	244,536	256,763
Existing Debt (Interest) - Growth Related		273,640	265,365	256,675	247,552	237,972	227,913	217,351	206,260	194,616	182,389
New Growth Related Debt (Principal)		-	321,411	335,232	349,647	364,682	380,363	396,719	413,778	431,570	450,128
New Growth Related Debt (Interest)		-	424,604	410,783	396,368	381,333	365,652	349,296	332,237	314,445	295,887
Existing Debt (Principal) - Non-Growth Related											
Existing Debt (Interest) - Non-Growth Related		-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Principal)		-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)		-	-	-	-	-	-	-	-	-	-
Transfer to Capital	65,722	-	-	-	-	-	-	-	-	-	-
Transfer to Working Capital Reserve	508,775	2,146,985	933,244	973,042	1,016,405	1,052,690	1,098,860	1,203,186	1,310,761	1,422,298	1,537,987
Transfer to Lifecycle Reserve	1,192,000		1,300,000	1,350,000	1,400,000	1,450,000	1,504,000	1,504,000	1,504,000	1,504,000	1,504,000
Transfer to Water Equipment Reserve	70,000	80,000	80,000	80,000	80,000	90,000	90,000	90,000	90,000	90,000	90,000
Sub Total Capital Related	**1,836,497**	**2,666,137**	**3,498,411**	**3,588,209**	**3,681,572**	**3,777,857**	**3,878,027**	**3,982,353**	**4,089,929**	**4,201,466**	**4,317,154**

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

Description	Budget	Forecast									
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total Expenditures	**4,564,755**	**5,159,955**	**6,067,044**	**6,233,900**	**6,406,634**	**6,584,671**	**6,769,045**	**6,960,153**	**7,157,729**	**7,361,666**	**7,572,854**
Revenues											
Base Charge	1,177,940	1,226,164	1,276,220	1,328,176	1,382,101	1,438,067	1,496,307	1,556,748	1,619,469	1,684,552	1,752,082
Other Revenue			-	-	-	-	-	-	-	-	-
Service Connection and Commissioning Fee	7,500	7,650	7,803	7,959	8,118	8,281	8,446	8,600	8,800	9,000	9,200
Meter Installation/ Maintenance	3,500	3,570	3,641	3,714	3,789	3,864	3,942	4,000	4,100	4,200	4,300
Extra Charges	4,200	4,284	4,370	4,457	4,546	4,637	4,730	4,800	4,900	5,000	5,100
Recovered Wages	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,100	1,100	1,100	1,100
Account Set-up Fees	15,200	15,504	15,814	16,130	16,453	16,782	17,118	17,500	17,900	18,300	18,700
Water Meter Sales	48,500	49,470	50,459	51,469	52,498	53,548	54,619	55,700	56,800	57,900	59,100
Miscellaneous Revenue	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,700	5,800	5,900	6,000
Penalties & Interest	13,500	13,770	14,045	14,326	14,613	14,905	15,203	15,500	15,800	16,100	16,400
Investment Income	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Contributions from Development Charges Reser	-	439,152	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167
Total Operating Revenue	**1,316,340**	**1,805,684**	**2,603,763**	**2,657,766**	**2,713,780**	**2,771,875**	**2,832,289**	**2,894,815**	**2,959,836**	**3,027,219**	**3,097,149**
Water Billing Recovery - Total	**3,248,415**	**3,354,271**	**3,463,281**	**3,576,134**	**3,692,854**	**3,812,796**	**3,936,757**	**4,065,337**	**4,197,892**	**4,334,447**	**4,475,705**

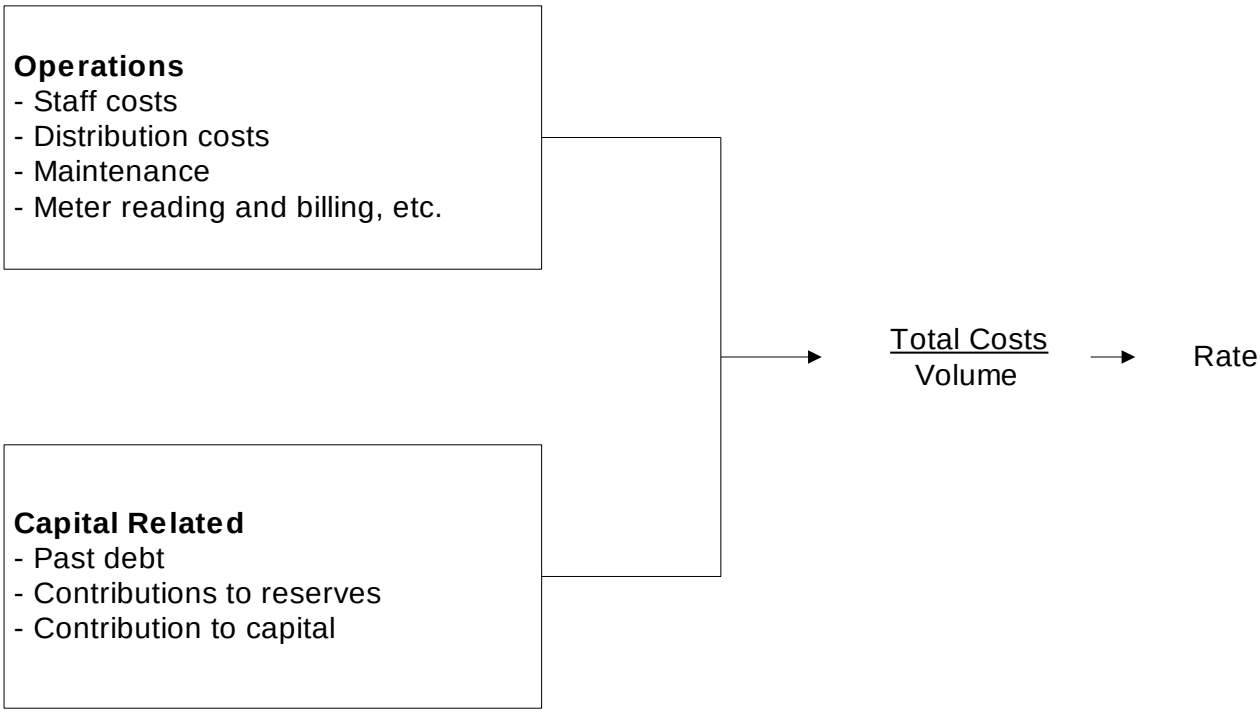
Chapter 6
Pricing Structures

6. Pricing Structures

6.1 Introduction

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

"Annual Costs"



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

Operations

- Inflation;
- Increased maintenance as system ages; and

- Changes to provincial legislation.

Capital Related

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

6.2 Alternative Pricing Structures

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

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

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

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

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

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

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

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

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

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

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

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

6.3 Assessment of Alternative Pricing Structures

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

Cost Recovery

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

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

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

Administration

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

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

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

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

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

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

Equity

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

Conservation

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

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

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

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

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

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

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

Figure 6-1

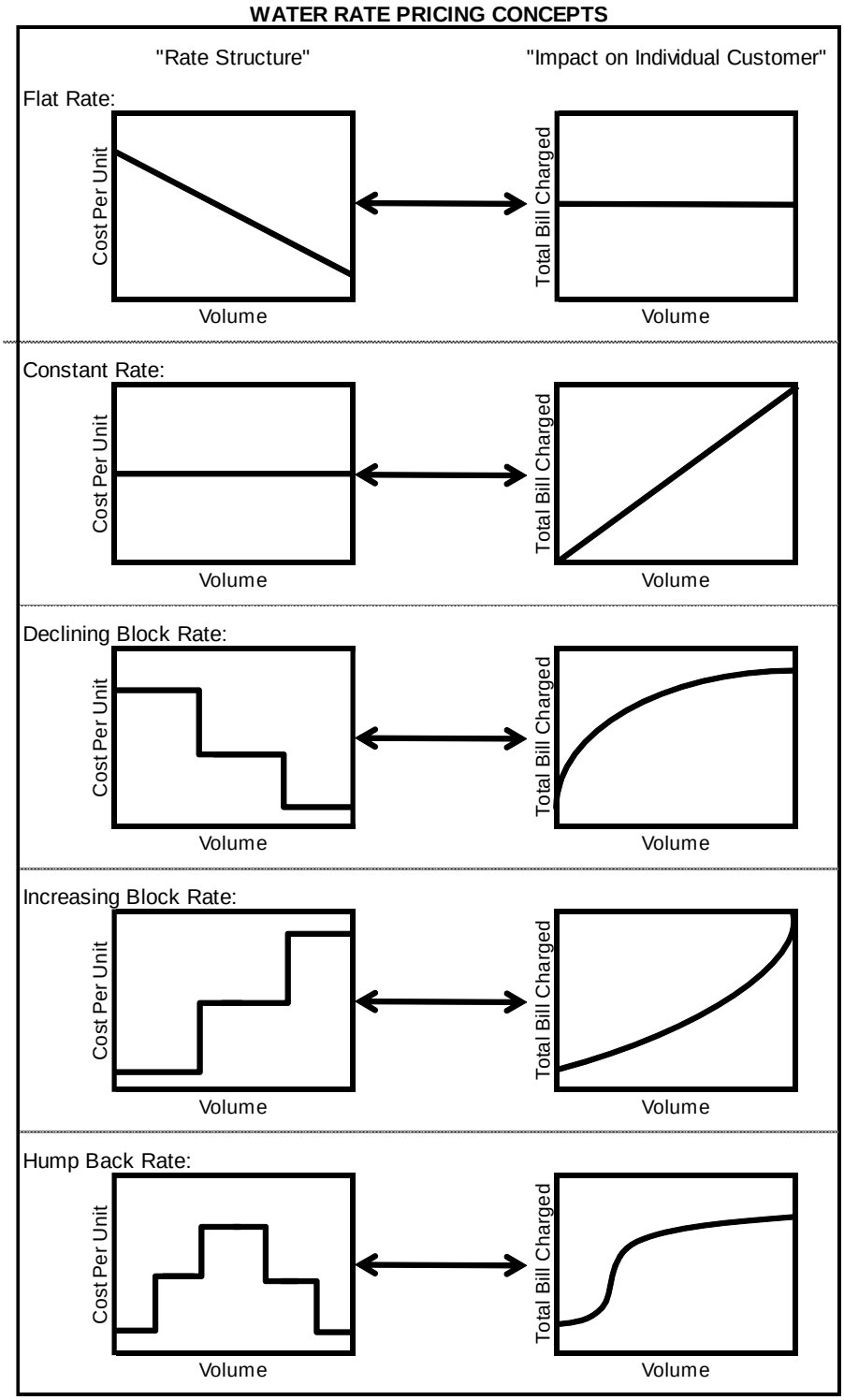

WATER RATE PRICING CONCEPTS
"Rate Structure"
"Impact on Individual Customer"
Flat Rate:
Cost Per Unit
Volume
Total Bill Charged
Volume
Constant Rate:
Cost Per Unit
Volume
Total Bill Charged
Volume
Declining Block Rate:
Cost Per Unit
Volume
Total Bill Charged
Volume
Increasing Block Rate:
Cost Per Unit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

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

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

6.4 Rate Structures in Ontario

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

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

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

6.5 Recommended Rate Structures

Based on the foregoing, it is recommended that the same rate structure be continued in the future (base capital surcharge and a constant volume rate).

The needs for water are highest early in the forecast period. Inflation and the requirement for ongoing capital expenditures due to asset management requirements create pressure on the financial sustainability of the water system.

The total balance for all the Town's water reserves and reserve funds as of December 31, 2023, was approximately $4.88 million. The Town anticipates the Southwest Watermain project to occur in 2025 with a capital cost of approximately $13.17 million, of which 75% is growth-related. The Town will need to issue growth-related debt in the amount of approximately $9.87 million to be paid back over a 20-year period. As a result, the D.C. reserve fund balance over the forecast period will be in a deficit position, ending with a negative balance of approximately $6.44 million by the end of 2034. This deficit will need to be interim-financed with non-D.C. water rate reserves.

Therefore it is recommended that both the base capital surcharge and volume rate increase by 3% annually over the forecast period, from 2025-2034, which is equivalent to a $0.02 annual increase on the volume water rate, and an average $4.72 annual increase on the capital surcharge rate. This rate increase will help to bring the total combined water reserve and reserve fund balance over the forecast period to an ending balance in 2034 of approximately $5.92 million (including the deficit in the D.C. reserve fund).

The forecast base capital surcharges are presented in Table 6-1. The volume rates are presented in section 7.2.

Table 6-1
Town of Kingsville
Base Charge Forecast – Water

Water	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing	8,664	8,664	8,664	8,664	8,664	8,664	8,664	8,664	8,664	8,664	8,664
New	46	139	231	324	416	509	602	696	789	883	976
Total Customers	**8,710**	**8,803**	**8,895**	**8,988**	**9,080**	**9,173**	**9,266**	**9,360**	**9,453**	**9,547**	**9,640**
Total Annual Revenue	**$1,177,940**	**$1,226,164**	**$1,276,220**	**$1,328,176**	**$1,382,101**	**$1,438,067**	**$1,496,307**	**$1,556,748**	**$1,619,469**	**$1,684,552**	**$1,752,082**

Capital Surcharge	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Surcharge (Quarterly)	$33.81	$34.82	$35.87	$36.95	$38.05	$39.20	$40.37	$41.58	$42.83	$44.11	$45.44
Capital Surcharge (Annually)	$135.24	$139.30	$143.48	$147.78	$152.21	$156.78	$161.48	$166.33	$171.32	$176.46	$181.75

Chapter 7
Analysis of Water Rates and Policy Matters

7. Analysis of Water Rates and Policy Matters

7.1 Introduction

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

7.2 Water Rates

Based on the discussion of rate structures provided in section 6.5 and the recommendation to continue with the present structure, 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 a rate of 3% 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 A. A summary of the recommended base charge and volume rates along with the total annual bill for an average residential user who consumes 180 cu.m. per year are as follows:

Table 7-1
Town of Kingsville
Average Annual Residential Water Bill (Based on an Annual Usage of 180 cu.m)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Quarterly Capital Surcharge	$33.81	$34.82	$35.87	$36.95	$38.05	$39.20	$40.37	$41.58	$42.83	$44.11	$45.44
Annual Base Rate Bill	**$135.24**	**$139.30**	**$143.48**	**$147.78**	**$152.21**	**$156.78**	**$161.48**	**$166.33**	**$171.32**	**$176.46**	**$181.75**
Constant Rate	$0.49	$0.50	$0.52	$0.54	$0.55	$0.57	$0.59	$0.60	$0.62	$0.64	$0.66
Volume (cu.m)	180	180	180	180	180	180	180	180	180	180	180
Annual Volume Bill	**$88.20**	**$90.85**	**$93.56**	**$96.37**	**$99.27**	**$102.24**	**$105.30**	**$108.47**	**$111.73**	**$115.07**	**$118.53**
Total Annual Bill	**$223.44**	**$230.14**	**$237.04**	**$244.15**	**$251.48**	**$259.02**	**$266.78**	**$274.80**	**$283.04**	**$291.53**	**$300.28**
Annual Dollar Increase		$6.70	$6.90	$7.11	$7.33	$7.54	$7.76	$8.01	$8.25	$8.49	$8.75

Note, the above water rates do not include the Union Water Supply System Inc. billing amount, which as of 2024 is identified separately on the water bill. Based on the current Union Water Supply System Inc. rate of $0.7313 per cu.m and an assumed average of 180 cu.m, this would add $131.63 to the average water bill.

Chapter 8
Recommendations

8. Recommendations

As presented within this report, capital and operating expenditures have been identified and forecasted over a 10-year period for water services.

Based upon the foregoing, the following recommendations are identified for consideration by the Town's Council:

1. That Council provide for the recovery of all water costs through full cost recovery rates.
2. That Council consider the Capital Plan for water as provided in Table 2-1 and the associated Capital Financing Plan as set out in Table 4-3.
3. That Council consider the base charges for water provided in Table 6-1.
4. That Council consider the volume rates for water as provided in Table 7-1.

Appendices

Appendix A
Detailed Water Rate Calculations

Appendix A: Detailed Water Rate Calculations

Table A-1
Town of Kingsville
Capital Budget Forecast (Uninflated $)

Description	Budget	Total	Forecast									
	2024	2025 to 2034	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
Owenwood / James / Katrishe / Hertiage Road (Greenway to Main)	1,200,000	-										
Southwest Water Main	330,000	12,908,116	12,908,116									
Woodfern / Peach / Queen / Willow		748,150		748,150								
Victoria Street (from Cty Rd 34 West to Fox Street)		100,750			100,750							
Heritage Road		960,000			960,000							
Herrington to Bayview and Queen in Between		750,000			750,000							
Cherrywood		266,500				266,500						
Melbourne and Elm		720,000				720,000						
Palmer / Westlawn / Cameron		553,000					553,000					
Laurel (from Elm to Mill) / Elm (from Division to McDonald)		526,500					526,500					
12-01 International Workstar Tandem Dump	100,000	-										
2012 Valve Excercising/Hydro-Excavation Trailer		85,000	85,000									
17-03 Ford F250 Pickup Truck With Slider		80,000			80,000							
18-06 Ford F350 with Service Body		95,000				95,000						
19-03 Ford F350 with Service Body		95,000					95,000					
20-05 Chevy Silverado 1500		65,000						65,000				
20-07 Ford 350 with Service Box		95,000						95,000				
22-02 Case Backhoe w Attachments		43,750								43,750		
22-03 Case Loader with Attachments		65,000								65,000		
Lifecycle Requirements from AMP		7,580,750					329,500	1,344,000	1,504,000	1,395,250	1,504,000	1,504,000
Water Meter Change Out	4,000,000	-										
Utility Trailer	25,000											
Meter Van Vehicle	100,000											
Water Servicing Master Plan - Townwide		150,000	150,000									
Water Enviromental Services Office Expansion		150,000				150,000						
Total Capital Expenditures	**5,755,000**	**26,037,516**	**13,143,116**	**748,150**	**1,890,750**	**1,231,500**	**1,504,000**	**1,504,000**	**1,504,000**	**1,504,000**	**1,504,000**	**1,504,000**

Table A-2
Town of Kingsville
Capital Budget Forecast (Inflated $)

Description	Budget 2024	Total 2025 to 2034	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
Owenwood / James / Katrishe / Hertiage Road (Greenway to Main)	1,200,000	-	-	-	-	-	-	-	-	-	-	-
Southwest Water Main	330,000	13,166,000	13,166,000	-	-	-	-	-	-	-	-	-
Woodfern / Peach / Queen / Willow	-	778,000	-	778,000	-	-	-	-	-	-	-	-
Victoria Street (from Cty Rd 34 West to Fox Street)	-	107,000	-	-	107,000	-	-	-	-	-	-	-
Heritage Road	-	1,019,000	-	-	1,019,000	-	-	-	-	-	-	-
Herrington to Bayview and Queen in Between	-	796,000	-	-	796,000	-	-	-	-	-	-	-
Cherrywood	-	288,000	-	-	-	288,000	-	-	-	-	-	-
Melbourne and Elm	-	779,000	-	-	-	779,000	-	-	-	-	-	-
Palmer / Westlawn / Cameron	-	611,000	-	-	-	-	611,000	-	-	-	-	-
Laurel (from Elm to Mill) / Elm (from Division to McDonald)	-	581,000	-	-	-	-	581,000	-	-	-	-	-
12-01 International Workstar Tandem Dump	100,000	-	-	-	-	-	-	-	-	-	-	-
2012 Valve Excercising/Hydro-Excavation Trailer	-	87,000	87,000	-	-	-	-	-	-	-	-	-
17-03 Ford F250 Pickup Truck With Slider	-	85,000	-	-	85,000	-	-	-	-	-	-	-
18-06 Ford F350 with Service Body	-	103,000	-	-	-	103,000	-	-	-	-	-	-
19-03 Ford F350 with Service Body	-	105,000	-	-	-	-	105,000	-	-	-	-	-
20-05 Chevy Silverado 1500	-	73,000	-	-	-	-	-	73,000	-	-	-	-
20-07 Ford 350 with Service Box	-	107,000	-	-	-	-	-	107,000	-	-	-	-
22-02 Case Backhoe w Attachments	-	51,000	-	-	-	-	-	-	-	51,000	-	-
22-03 Case Loader with Attachments	-	76,000	-	-	-	-	-	-	-	76,000	-	-
Lifecycle Requirements from AMP	-	8,871,000	-	-	-	-	364,000	1,514,000	1,728,000	1,635,000	1,797,000	1,833,000
Water Meter Change Out	4,000,000	-	-	-	-	-	-	-	-	-	-	-
Utility Trailer	25,000	-	-	-	-	-	-	-	-	-	-	-
Meter Van Vehicle	100,000	-	-	-	-	-	-	-	-	-	-	-
Water Servicing Master Plan - Townwide	-	153,000	153,000	-	-	-	-	-	-	-	-	-
Water Enviromental Services Office Expansion	-	162,000	-	-	-	162,000	-	-	-	-	-	-
Total Capital Expenditures	**5,755,000**	**27,998,000**	**13,406,000**	**778,000**	**2,007,000**	**1,332,000**	**1,661,000**	**1,694,000**	**1,728,000**	**1,762,000**	**1,797,000**	**1,833,000**
Capital Financing												
Provincial/Federal Grants	879,600	-										
Development Charges Reserve Fund	1,047,500	315,000	153,000	-	-	162,000	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Internal Financing	2,110,000	-										
Growth Related Debenture Requirements	-	9,874,500	9,874,500	-	-	-	-	-	-	-	-	-
Operating Contributions	65,722	-	-	-	-	-	-	-	-	-	-	-
Lifecycle Reserve Fund	-	14,321,500	491,500	778,000	1,922,000	1,067,000	1,556,000	1,514,000	1,728,000	1,635,000	1,797,000	1,833,000
Water Meter Change Out Reserve	200,000	-	-	-	-	-	-	-	-	-	-	-
Equipment Reserve	100,000	687,000	87,000	-	85,000	103,000	105,000	180,000	-	127,000	-	-
MOE Reserve	59,278	-	-	-	-	-	-	-	-	-	-	-
Water Reserve	1,292,900	2,800,000	2,800,000	-	-	-	-	-	-	-	-	-
Total Capital Financing	**5,755,000**	**27,998,000**	**13,406,000**	**778,000**	**2,007,000**	**1,332,000**	**1,661,000**	**1,694,000**	**1,728,000**	**1,762,000**	**1,797,000**	**1,833,000**

Table A-3
Town of Kingsville
Schedule of Non-Growth-Related Debenture Repayments

Debenture Year	2024	Principal (Inflated)	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2025		-		-	-	-	-	-	-	-	-	-
2026		-			-	-	-	-	-	-	-	-
2027		-				-	-	-	-	-	-	-
2028		-					-	-	-	-	-	-
2029		-						-	-	-	-	-
2030		-							-	-	-	-
2031		-								-	-	-
2032		-									-	-
2033		-										-
2034		-										
Total Annual Debt Charges	-	**-**	-	-	-	-	-	-	-	-	-	-

Table A-4
Town of Kingsville
Schedule of Growth-Related Debenture Repayments

Debenture Year	2024	Principal (Inflated)	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2025		9,874,500		746,015	746,015	746,015	746,015	746,015	746,015	746,015	746,015	746,015
2026		-			-	-	-	-	-	-	-	-
2027		-				-	-	-	-	-	-	-
2028		-					-	-	-	-	-	-
2029		-						-	-	-	-	-
2030		-							-	-	-	-
2031		-								-	-	-
2032		-									-	-
2033		-										-
2034		-										
Total Annual Debt Charges	-	**9,874,500**	**-**	**746,015**	**746,015**	**746,015**	**746,015**	**746,015**	**746,015**	**746,015**	**746,015**	**746,015**

Table A-5
Town of Kingsville
Water Working Capital Reserve (Inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	1,488,613	704,487	51,472	984,716	1,957,758	2,974,163	4,026,853	5,125,713	6,328,899	7,639,660	9,061,959
Transfer from Operating	508,775	2,146,985	933,244	973,042	1,016,405	1,052,690	1,098,860	1,203,186	1,310,761	1,422,298	1,537,987
Transfer to Capital	1,292,900	2,800,000	-	-	-	-	-	-	-	-	-
Closing Balance	**704,487**	**51,472**	**984,716**	**1,957,758**	**2,974,163**	**4,026,853**	**5,125,713**	**6,328,899**	**7,639,660**	**9,061,959**	**10,599,945**

Table A-6
Town of Kingsville
Water Development Charges Reserve Continuity (Inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	1,411,298	786,289	621,547	(142,881)	(913,943)	(1,856,883)	(2,644,487)	(3,438,648)	(4,239,336)	(5,046,504)	(5,804,491)
Development Charge Proceeds	407,074	415,223	423,541	432,026	440,636	449,417	458,430	467,603	476,951	540,993	551,848
Transfer to Capital	1,047,500	153,000	-	-	162,000	-	-	-	-	-	-
Transfer to Operating	-	439,152	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167
Closing Balance	**770,872**	**609,360**	**(140,080)**	**(896,022)**	**(1,820,474)**	**(2,592,634)**	**(3,371,224)**	**(4,156,212)**	**(4,947,552)**	**(5,690,678)**	**(6,437,810)**
Interest	15,417	12,187	(2,802)	(17,920)	(36,409)	(51,853)	(67,424)	(83,124)	(98,951)	(113,814)	(128,756)
Required from Development Ch	1,047,500	10,027,500	-	-	162,000	-	-	-	-	-	-

Table A-7
Town of Kingsville
Water Lifecycle Reserve (Inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	1,596,043	2,788,043	2,296,543	2,818,543	2,246,543	2,579,543	2,473,543	2,463,543	2,239,543	2,108,543	1,815,543
Transfer from Operating	1,192,000	-	1,300,000	1,350,000	1,400,000	1,450,000	1,504,000	1,504,000	1,504,000	1,504,000	1,504,000
Transfer to Capital	-	491,500	778,000	1,922,000	1,067,000	1,556,000	1,514,000	1,728,000	1,635,000	1,797,000	1,833,000
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-
Closing Balance	**2,788,043**	**2,296,543**	**2,818,543**	**2,246,543**	**2,579,543**	**2,473,543**	**2,463,543**	**2,239,543**	**2,108,543**	**1,815,543**	**1,486,543**

Table A-8
Town of Kingsville
Water Meter Changeout Reserve (Inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	200,000	-	-	-	-	-	-	-	-	-	-
Transfer from Operating	-										
Transfer to Capital	200,000	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-
Closing Balance	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Table A-9
Town of Kingsville
Water MOE Reserve – GS Water (Inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	59,278	-	-	-	-	-	-	-	-	-	-
Transfer from Operating	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	59,278	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-
Closing Balance	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Table A-10
Town of Kingsville
Water Equipment Reserve (Inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	125,706	95,706	88,706	168,706	163,706	140,706	125,706	35,706	125,706	88,706	178,706
Transfer from Operating	70,000	80,000	80,000	80,000	80,000	90,000	90,000	90,000	90,000	90,000	90,000
Transfer to Capital	100,000	87,000	-	85,000	103,000	105,000	180,000	-	127,000	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-
Closing Balance	**95,706**	**88,706**	**168,706**	**163,706**	**140,706**	**125,706**	**35,706**	**125,706**	**88,706**	**178,706**	**268,706**

Table A-11
Town of Kingsville
Operating Budget Forecast
(Inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Operating Costs											
Salaries - Full Time	923,371	1,043,571	1,074,878	1,107,124	1,140,338	1,174,548	1,209,785	1,246,100	1,283,500	1,322,000	1,361,700
Engineering Tech	-	-	-	-	-	-	-	-	-	-	-
Water & Wastewater Billing Supervisor	-	-	-	-	-	-	-	-	-	-	-
New Staff - Office Support (25%) - 2023	-	-	-	-	-	-	-	-	-	-	-
New Staff - Full-time - 2023	-	-	-	-	-	-	-	-	-	-	-
Salaries - Overtime	20,804	21,428	22,071	22,733	23,415	24,118	24,841	25,600	26,400	27,200	28,000
Salaries - Student	14,227	14,654	15,093	15,546	16,013	16,493	16,988	17,500	18,000	18,500	19,100
Committee Honorarium	-	-	-	-	-	-	-	-	-	-	-
Salaries - contract	-	-	-	-	-	-	-	-	-	-	-
Benefits - EI	16,394	16,886	17,392	17,914	18,452	19,005	19,575	20,200	20,800	21,400	22,000
Benefits - CPP	44,701	46,042	47,423	48,846	50,311	51,821	53,375	55,000	56,700	58,400	60,200
Benefits - EHT	18,689	19,250	19,827	20,422	21,035	21,666	22,316	23,000	23,700	24,400	25,100
Benefits - OMERS	94,570	97,407	100,329	103,339	106,439	109,633	112,922	116,300	119,800	123,400	127,100
Benefits - Health Coverage	102,429	105,502	108,667	111,927	115,285	118,743	122,306	126,000	129,800	133,700	137,700
Benefits - WSIB	27,277	28,095	28,938	29,806	30,701	31,622	32,570	33,500	34,500	35,500	36,600
Benefits - Uniforms	5,100	5,253	5,411	5,573	5,740	5,912	6,090	6,300	6,500	6,700	6,900
Benefits - Meal Allowance	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,200	1,200	1,200	1,200
Benefits - Eyeglasses	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,100	3,200	3,300	3,400
Benefits - Ortho	4,000	4,120	4,244	4,371	4,502	4,637	4,776	4,900	5,000	5,200	5,400
New Staff - Water Compliance Technician	120,200	-	-	-	-	-	-	-	-	-	-
Training & Development	20,000	20,600	21,218	21,855	22,510	23,185	23,881	24,600	25,300	26,100	26,900
Office Supplies	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,700	3,800	3,900	4,000
Computer Supplies	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,200	1,200	1,200	1,200
Postage Supplies	35,000	36,050	37,132	38,245	39,393	40,575	41,792	43,000	44,300	45,600	47,000
Courier & Express	500	515	530	546	563	580	597	600	600	600	600
Advertising	500	515	530	546	563	580	597	600	600	600	600
Computer Maintenance	-	-	-	-	-	-	-	-	-	-	-
Computer Consultants	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,200	1,200	1,200	1,200
General Insurance	92,972	95,761	98,634	101,593	104,641	107,780	111,013	114,300	117,700	121,200	124,800
Utilities	100	103	106	109	113	116	119	100	100	100	100
Facility Maintenance	7,500	7,725	7,957	8,195	8,441	8,695	8,955	9,200	9,500	9,800	10,100
Equipment Repair	18,000	18,540	19,096	19,669	20,259	20,867	21,493	22,100	22,800	23,500	24,200
Miscellaneous	500	515	530	546	563	580	597	600	600	600	600
Equipment Rental	500	515	530	546	563	580	597	600	600	600	600
Professional Svc (Legal Audits)	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,100	6,300	6,500	6,700
Membership & Subscription	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,100	3,200	3,300	3,400
Write offs	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,500	2,600	2,700	2,800
Professional Fees (Engineering)	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,100	6,300	6,500	6,700
Communication	7,500	7,725	7,957	8,195	8,441	8,695	8,955	9,200	9,500	9,800	10,100
Shop Supplies	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,700	3,800	3,900	4,000

Table A-11 (Cont'd)
Town of Kingsville
Operating Budget Forecast
(Inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Fuel & Oil	25,000	25,750	26,523	27,318	28,138	28,982	29,851	31,300	32,900	34,500	36,200
Licences & Permits	5,200	5,356	5,517	5,682	5,853	6,028	6,209	6,400	6,600	6,800	7,000
Safety Supplies	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,700	3,800	3,900	4,000
Small Tools	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,100	6,300	6,500	6,700
Mileage	500	515	530	546	563	580	597	600	600	600	600
Curb Stop Repairs	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,400	19,000	19,600	20,200
Back Flow Program	30,000	30,900	31,827	32,782	33,765	34,778	35,822	36,900	38,000	39,100	40,300
Road Repair / Restoration	35,000	36,050	37,132	38,245	39,393	40,575	41,792	43,000	44,300	45,600	47,000
Meter Reading Expense	3,500	3,605	3,713	3,825	3,939	4,057	4,179	4,300	4,400	4,500	4,600
Water Purchases - Kingsville	-	-	-	-	-	-	-	-	-	-	-
Water Purchases - Gosfield S.	-	-	-	-	-	-	-	-	-	-	-
Water Purchases - Gosfield N.	-	-	-	-	-	-	-	-	-	-	-
Water Loss	325,225	-	-	-	-	-	-	-	-	-	-
Water Meters	50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,500	63,300	65,200	67,200
Water Meter Maintenance	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,400	19,000	19,600	20,200
Water Locates	17,500	68,025	70,066	72,168	74,333	76,563	78,860	81,200	83,600	86,100	88,700
Water Service Connections	-	-	-	-	-	-	-	-	-	-	-
Watermain Line Breaks	90,000	92,700	95,481	98,345	101,296	104,335	107,465	110,700	114,000	117,400	120,900
Water Line Maintenance	30,000	30,900	31,827	32,782	33,765	34,778	35,822	36,900	38,000	39,100	40,300
Hydrant Maintenance	45,000	46,350	47,741	49,173	50,648	52,167	53,732	55,300	57,000	58,700	60,500
Source Water Protection	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,100	6,300	6,500	6,700
Property Taxes	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,100	3,200	3,300	3,400
Program Support Costs	425,000	437,750	450,883	464,409	478,341	492,691	507,472	522,700	538,400	554,600	571,200
Sub Total Operating	**2,728,259**	**2,493,818**	**2,568,632**	**2,645,691**	**2,725,062**	**2,806,814**	**2,891,018**	**2,977,800**	**3,067,800**	**3,160,200**	**3,255,700**
Capital-Related											
Existing Debt (Principal) - Growth Related		165,512	173,787	182,477	191,601	201,181	211,240	221,802	232,892	244,536	256,763
Existing Debt (Interest) - Growth Related		273,640	265,365	256,675	247,552	237,972	227,913	217,351	206,260	194,616	182,389
New Growth Related Debt (Principal)		-	321,411	335,232	349,647	364,682	380,363	396,719	413,778	431,570	450,128
New Growth Related Debt (Interest)		-	424,604	410,783	396,368	381,333	365,652	349,296	332,237	314,445	295,887
Existing Debt (Principal) - Non-Growth Related											
Existing Debt (Interest) - Non-Growth Related		-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Principal)		-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)		-	-	-	-	-	-	-	-	-	-
Transfer to Capital	65,722	-	-	-	-	-	-	-	-	-	-
Transfer to Working Capital Reserve	508,775	2,146,985	933,244	973,042	1,016,405	1,052,690	1,098,860	1,203,186	1,310,761	1,422,298	1,537,987
Transfer to Lifecycle Reserve	1,192,000		1,300,000	1,350,000	1,400,000	1,450,000	1,504,000	1,504,000	1,504,000	1,504,000	1,504,000
Transfer to Water Equipment Reserve	70,000	80,000	80,000	80,000	80,000	90,000	90,000	90,000	90,000	90,000	90,000
Sub Total Capital Related	**1,836,497**	**2,666,137**	**3,498,411**	**3,588,209**	**3,681,572**	**3,777,857**	**3,878,027**	**3,982,353**	**4,089,929**	**4,201,466**	**4,317,154**
Total Expenditures	**4,564,755**	**5,159,955**	**6,067,044**	**6,233,900**	**6,406,634**	**6,584,671**	**6,769,045**	**6,960,153**	**7,157,729**	**7,361,666**	**7,572,854**

Table A-11 (Cont'd)
Town of Kingsville
Operating Budget Forecast
(Inflated $)

Description	Budget	Forecast									
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total Expenditures	**4,564,755**	**5,159,955**	**6,067,044**	**6,233,900**	**6,406,634**	**6,584,671**	**6,769,045**	**6,960,153**	**7,157,729**	**7,361,666**	**7,572,854**
Revenues											
Base Charge	1,177,940	1,226,164	1,276,220	1,328,176	1,382,101	1,438,067	1,496,307	1,556,748	1,619,469	1,684,552	1,752,082
Other Revenue			-	-	-	-	-	-	-	-	-
Service Connection and Commissioning Fee	7,500	7,650	7,803	7,959	8,118	8,281	8,446	8,600	8,800	9,000	9,200
Meter Installation/ Maintenance	3,500	3,570	3,641	3,714	3,789	3,864	3,942	4,000	4,100	4,200	4,300
Extra Charges	4,200	4,284	4,370	4,457	4,546	4,637	4,730	4,800	4,900	5,000	5,100
Recovered Wages	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,100	1,100	1,100	1,100
Account Set-up Fees	15,200	15,504	15,814	16,130	16,453	16,782	17,118	17,500	17,900	18,300	18,700
Water Meter Sales	48,500	49,470	50,459	51,469	52,498	53,548	54,619	55,700	56,800	57,900	59,100
Miscellaneous Revenue	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,700	5,800	5,900	6,000
Penalties & Interest	13,500	13,770	14,045	14,326	14,613	14,905	15,203	15,500	15,800	16,100	16,400
Investment Income	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Contributions from Development Charges Reserve Fund	-	439,152	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167	1,185,167
Total Operating Revenue	**1,316,340**	**1,805,684**	**2,603,763**	**2,657,766**	**2,713,780**	**2,771,875**	**2,832,289**	**2,894,815**	**2,959,836**	**3,027,219**	**3,097,149**
Water Billing Recovery - Total	**3,248,415**	**3,354,271**	**3,463,281**	**3,576,134**	**3,692,854**	**3,812,796**	**3,936,757**	**4,065,337**	**4,197,892**	**4,334,447**	**4,475,705**

Table A-12
Town of Kingsville
Water Volume Rate Forecast
(Inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total Water Billing Recovery	3,248,415	3,354,271	3,463,281	3,576,134	3,692,854	3,812,796	3,936,757	4,065,337	4,197,892	4,334,447	4,475,705
Total Volume (cu.m)	6,629,418	6,646,068	6,662,718	6,679,368	6,696,018	6,712,668	6,729,498	6,746,328	6,763,158	6,779,988	6,796,818
Constant Rate (per cu.m)	**$ 0.49**	**$ 0.50**	**$ 0.52**	**$ 0.54**	**$ 0.55**	**$ 0.57**	**$ 0.59**	**$ 0.60**	**$ 0.62**	**$ 0.64**	**$ 0.66**
Annual Dollar Change		**$ 0.01**	**$ 0.02**	**$ 0.02**	**$ 0.02**	**$ 0.02**	**$ 0.02**	**$ 0.02**	**$ 0.02**	**$ 0.02**	**$ 0.02**

Table A-13
Town of Kingsville
Water Capital Surcharge Rate Forecast
Inflated $

Capital Surcharge	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Surcharge (Quarterly)	$33.81	$34.82	$35.87	$36.95	$38.05	$39.20	$40.37	$41.58	$42.83	$44.11	$45.44
Capital Surcharge (Annually)	$135.24	$139.30	$143.48	$147.78	$152.21	$156.78	$161.48	$166.33	$171.32	$176.46	$181.75
Annual Dollar Change		**$ 4.06**	**$ 4.18**	**$ 4.30**	**$ 4.43**	**$ 4.57**	**$ 4.70**	**$ 4.84**	**$ 4.99**	**$ 5.14**	**$ 5.29**