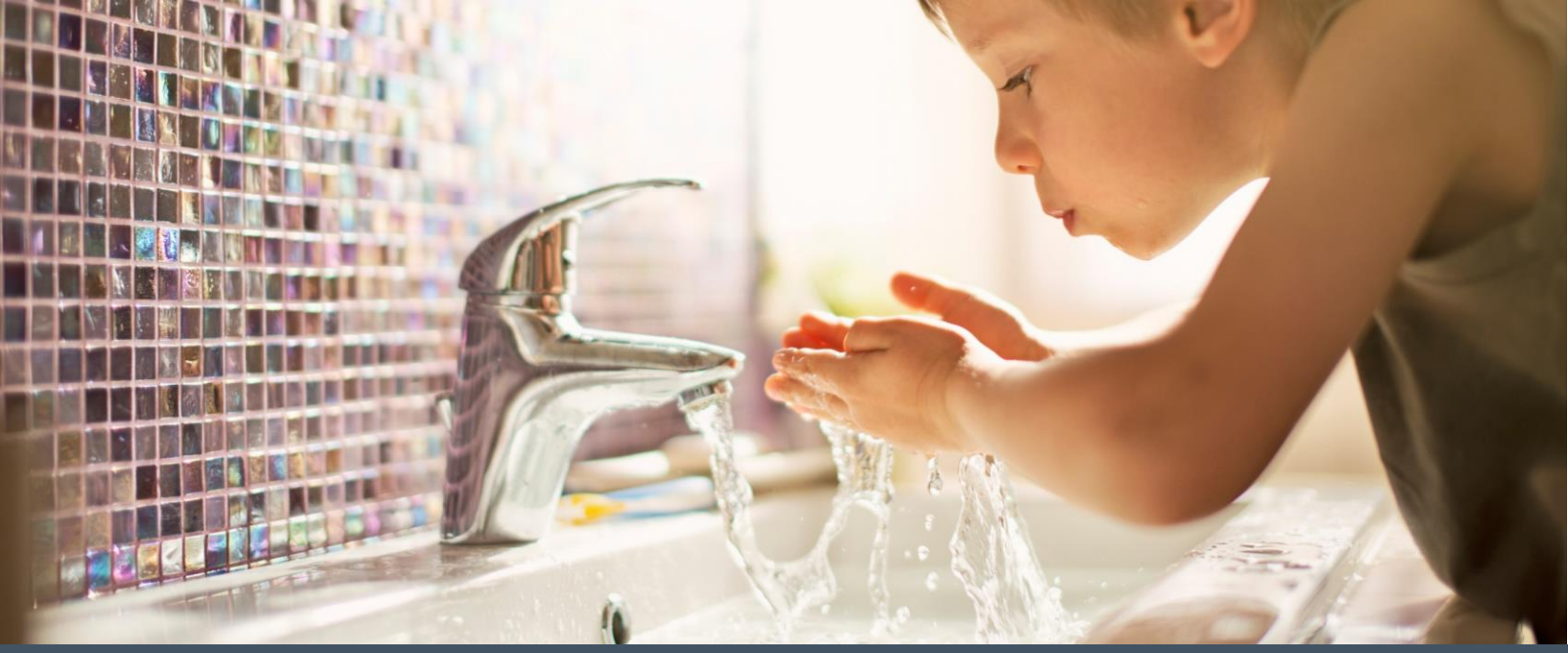


Water and Wastewater Rate Study

City of Kenora

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

July 2, 2025

Table of Contents

Table of Contents (Cont'd)

Page

List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
C.P.I.	Consumer Price Index
D.C.	Development Charges
O. Reg.	Ontario Regulation

Report

Chapter 1
Introduction

1. Introduction

1.1 Background

The City of Kenora (City) operates and maintains a municipal water supply system that currently services approximately 6,000 5/8" meter equivalent customers and a wastewater collection system that currently services approximately 5,880 5/8" meter equivalent customers. Additionally, the City provides a water delivery service areas for properties that are not connected to the City's water distribution system. The City's water supply system comprises a network of distribution mains, a water treatment facility, booster pumping stations, and related vehicles and equipment. The City's wastewater system comprises a network of collection mains, pumping stations, a wastewater treatment facility, and related equipment.

The City recovers all costs related to operating, maintaining, and rehabilitating these systems through user fees. Billing is done monthly and comprises monthly base charges (varied by meter size[1]) and a consumptive charge based on metered water consumption. For water delivery customers, the charge is based on the volume of water delivered. An additional fee is applied for after-hours and same-day delivery. A summary of the water and wastewater rates that are currently in effect is provided in Table 1-1 to Table 1-3.

[1] Customer accounts in multi-unit buildings get charged 50% of the monthly base charge applicable to a 5/8" meter.

Table 1-1
City of Kenora
2025 Water and Wastewater Rates – Base Charges

Service Type	Monthly Base Charge (water & wastewater combined)
5/8” meter	$111.56
3/4” meter	$122.71
1” meter	$156.18
1 1/2” meter	$200.80
2” meter	$323.51
3” meter	$1,227.12
4” meter	$1,561.79
6” meter	$2,342.68
8” meter	$4,462.25

Table 1-2
City of Kenora
2025 Water and Wastewater Rates – Consumptive Charge

Service Type	Consumptive Charge (water & wastewater combined)
General Service (per m^3)	$3.81

Table 1-3
City of Kenora
2025 Water Delivery Rates

Service Type	Service Charge
Water delivery 1-500 gal	$85.15
Water delivery 501-1,000 gal	$93.67
Water delivery 1,001-1,500 gal	$102.18

1.2 Study Process

The City retained Watson & Associates Economists Ltd. (Watson) to undertake a water and wastewater rate study. The objectives of the study and the steps involved in carrying out this assignment are summarized below:

- Update water and wastewater service demand assumptions based on analysis of the current customer profile, historical consumption, and recent trends;
- Estimate future consumption levels by applying revised demand assumptions to forecast growth;
- Identify all current and future water and wastewater system capital needs to assess the immediate and longer-term implications;
- Build a capital program that blends lifecycle needs arising from the City's capital budget, Asset Management Plan, and specific needs identified by staff;
- Identify potential methods of cost recovery with respect to the capital needs listing. These recovery methods may include other statutory authorities (e.g., *Development Charges Act, 1997*, *Municipal Act*, etc.) as an offset to recovery through the water and wastewater rates;
- Forecast annual operating costs and rate-based funding requirements;
- Develop a long-term water and wastewater rate forecast;
- Provide an impact assessment on the rate payers;
- Develop a water financial plan based on the findings of the study; and
- Present findings to staff and Council for their consideration.

In approaching this study, the following analysis in provided:

Chapter 2 – Forecast Growth and Service Demands
Chapter 3 – Capital Infrastructure Needs
Chapter 4 – Capital Cost Financing Options
Chapter 5 – Operating Expenditure Forecast
Chapter 6 – Forecast Water and Wastewater Rates

1.3 Legislative Context

Resulting from the water crisis in Walkerton, significant regulatory changes have been made in Ontario. These changes arose as a result of the Walkerton Commission and

the 93 recommendations made by the Walkerton Inquiry Part II report. Areas of recommendation included:

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

The following sections describe significant applicable regulatory areas.

1.3.1 Sustainable Water and Sewage Systems Act

The *Sustainable Water and Sewage Systems Act* 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. In total, there were 40 areas within the Act to which the Minister may make regulations; however regulations were never issued. On December 31, 2012, the *Sustainable Water and Sewage Systems Act* was repealed.

1.3.2 Safe Drinking Water Act

The *Safe Drinking Water Act* was passed in December 2002. The *Safe Drinking Water Act* provides for 50 of the 93 Walkerton Part II recommendations. It focuses on the administrative and operational aspects of the provision of water.

The purposes of the *Safe Drinking Water Act* are to "recognize that the people of Ontario are entitled to expect their drinking water to be safe and to provide for the protection of human health and the prevention of drinking water health hazards through the control and regulation of drinking water systems and drinking water testing. 2002, c. 32, s. 1."

The following is a brief summary of the key elements included in the *Safe Drinking Water Act*:

- Mandatory licensing and accreditation of testing laboratories;
- New standards for treatment, distribution quality and testing;

- Mandatory operator training and certification;
- Mandatory licensing of municipal water providers;
- Stronger enforcement and compliance provisions; and
- "Standard of care" requirements for municipalities.

This legislation impacts the costs of operating a water system with the need for higher skilled operators including increased training costs, increased reporting protocols and requirements, continuing enhancements to quality standards, and the costs to license each water system.

1.3.3 Financial Plans Regulation

On August 16, 2007, the Ministry of Environment introduced Ontario Regulation (O. Reg.) 453/07 which requires the preparation of financial plans for water systems (and municipalities are encouraged to prepare plans for wastewater systems). The Ministry of Environment has also provided a Financial Plan Guideline to assist municipalities with 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 to obtain a Drinking Water Licence.
- The plan is to be completed, approved by Council Resolution, and submitted to the Ministry of Municipal Affairs and Housing as part of the application for receiving approval of a 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*, the preparation of the plan is mandatory for water services and encouraged for wastewater services.
- The plan is considered a living document (i.e., it can be updated if there are significant changes to budgets) but an update will need to be undertaken at a minimum every five years.
- The plans generally require the forecasting of capital, operating and reserve fund positions, and providing detailed capital inventories. In addition, Public Sector Accounting Board full accrual 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, net debt, etc.).

- The financial plans must be made available to the public (at no charge) upon request and be available on the City's web site. The availability of this information must also be advertised.

In general, the financial principles of this regulation follow the intent of the *Sustainable Water and Sewage Systems Act*, *2002* to move municipalities towards financial sustainability for water services. 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-Water and Wastewater Systems") has been developed to assist municipalities in understanding the Province's direction and provides 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 storm water 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.

1.3.4 Water Opportunities Act

The *Water Opportunities Act* received Royal Assent on November 29, 2010. The Act provides for the following elements:

- Foster innovative water, wastewater, and stormwater technologies, services, and practices in the private and public sectors;
- Prepare water conservation plans to achieve water conservation targets established by the regulations; and
- Prepare 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 plan and requires a more detailed review of the water financial plan, and requires a full plan for wastewater and stormwater services; and
- Regulations (when issued) 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;
- Financial Plan;
- For water, a water conservation plan;
- 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 that:

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

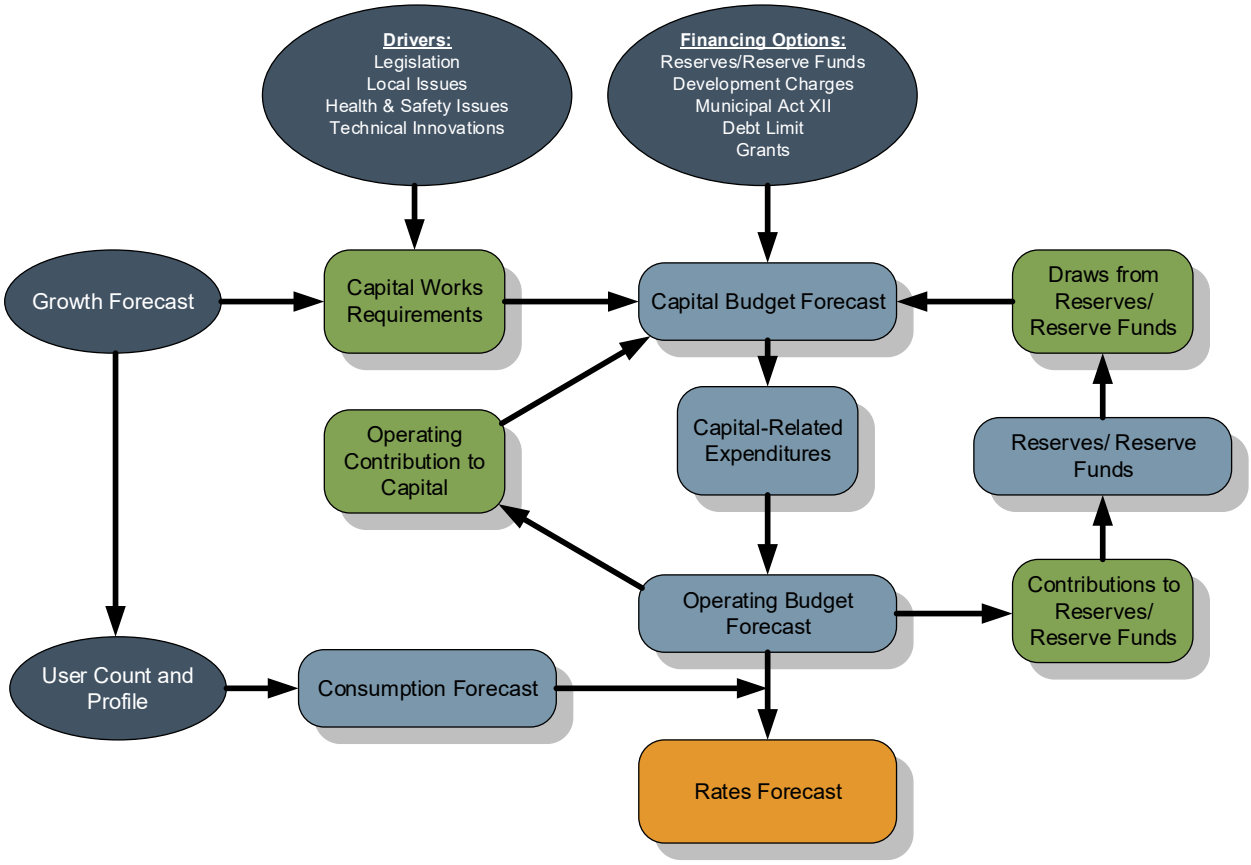
Regulations will prescribe:

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

1.4 Water and Wastewater Rate Calculation Methodology

Figure 1-1 illustrates the general methodology used in determining the full cost recovery water and wastewater rate forecast.

Figure 1-1
Water and Wastewater Rate Calculation Methodology



The methodology employed generally consists of five major elements:

1.4.1 Customer Demands and Consumption Forecast

As noted in Section 1.1, the City employs a rate structure consisting of a monthly base charge in addition to a consumptive rate. The monthly base charge is based on customer type and water meter size with higher charges imposed on larger meters, generally reflective of higher capital infrastructure demands. Customer accounts in multi-unit buildings are each charged 50% of the monthly base charge applicable to the smallest meter size (i.e., a 5/8" meter). The consumptive rate is imposed at a constant rate based on metered water consumption.

This first step in the analysis is important as it produces the current base revenue by source and assumptions for forecasting purposes. The monthly base charge revenues

are forecast with customer growth. The customer profile forecast is modeled based on historical customer growth witnessed in the City over the 2020 to 2023 period.

The water consumption forecast is prepared by applying average annual consumption estimates to the number of residential units expected to connect to the water and wastewater systems in each year of the forecast period. Average annual consumption estimates are based on average consumption levels observed in the City's 2024 billing data.

1.4.2 Capital Needs Forecast

The capital needs forecast is developed to measure program/service level adjustments, lifecycle requirements, and growth-related needs. Analysis conducted by the City's staff identified capital projects that form the basis for the capital forecast.

Capital expenditures are forecast with inflationary adjustments based on capital cost indexes (i.e., the Statistics Canada Building Construction Price Index for non-residential buildings).

1.4.3 Capital Funding Plan

The capital funding plan considers the potential funding sources available to address the capital needs forecast. The sources of capital funding include rate-based support, reserves/reserve funds, grant funding, development charge revenues, and debt for program/service level improvements. The use of rate-based funding is measured against the revenue projections and affordability impacts. The reserve/reserve fund sources are measured against the sustainability of these funds, relative to lifecycle demands, revenue projections, and affordability impacts. Debt financing is considered for significant capital expenditures where funding is required beyond long-term lifecycle needs or to facilitate rate transition policies. Debt financing is measured against annual repayment limits to ensure a practical and sustainable funding mix.

1.4.4 Operating Budget Forecast

The operating budget forecast considers adjustments to the City's base budget reflecting program/service level changes, operating fund impacts associated with infrastructure, and financing for capital needs. The operating expenditures are forecast with inflationary adjustments and growth in service demand, based on fixed and variable cost characteristics. The operating budget forecast ties the capital funding plan and

reserve/reserve fund continuity forecast to the rate-based revenue projections. This ensures sufficient funding for both the ongoing annual operation and maintenance of the water and wastewater systems, as well as the capital cost requirements to ensure service sustainability. Operating revenues are projected to identify the billing revenues net of anticipated operating revenues.

1.4.5 Rate Forecast and Structure

The rate forecast and structure component of the analysis considers various rate structures to recover the forecast rate-based revenue from the projected customer demands. At this stage in the analysis, the full costs of service are measured against the customer growth and consumption demands to determine full cost recovery rates. The analysis may consider alternative structures, consistent with municipal policies/strategies, industry practice, and customer affordability. Providing context to the rate forecast, the results are quantified to measure the impacts on a range of customer types and in relation to other municipalities.

Chapter 2
Forecast Growth and Service Demands

2. Forecast Growth and Service Demands

2.1 Current Service Demands

In preparing the demand forecast for water and wastewater services, detailed billing records were analyzed. These records were used to develop a profile of existing customers. Based on analysis of this information, as of the last quarter of 2024, the City was providing service to approximately 6,001 5/8" meter equivalent water customers, and 5,877 5/8" meter equivalent wastewater customers.

As noted earlier, under the City's current rate structure, residential customers in multi-unit buildings are each charged half of the monthly base charge applicable to the smallest meter size (i.e., 5/8" meter). Therefore, it is important to understand the number of individual units that base charges apply to (billing units). The number of 5/8" meter equivalent customers identified in the previous paragraph accounts for all billing units (e.g., a residential customer in a multi-unit building is counted as half a 5/8" meter equivalent customer).

2.2 Forecast Service Demands

Over the next ten years (i.e., to 2034), the number of water and wastewater billing units is anticipated to increase by 60. This is based on the customer growth witnessed in City over the 2020 to 2023 period. Table 2-1 provides the detailed billing unit forecast for the period 2025 to 2034, showing the number of billing units for water and wastewater.

Consumption records from 2024 were utilized to develop a forecast of water demands for the period from 2025 to 2034. Annual consumption levels were analyzed and utilized to calculate an annual average per billing unit. Average annual water consumption per billing unit was approximately 160 m^3. Applying this estimate to the forecast of new water customers results in an estimated increase in total metered water consumption from approximately 1,200,331 m^3 in 2024 to 1,210,441 m^3 by 2034. For wastewater customers, total metered water consumption is estimated to increase from approximately 1,185,677 m^3 in 2024 to 1,195,757 m^3 by 2034.

Table 2-2 presents the forecast of annual water consumption for water and wastewater customers.

Table 2-1
City of Kenora
Water and Wastewater Customer Forecast (Billing Units)

Water Customer Forecast	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing (5/8" meter equivalents)	6,060	6,060	6,060	6,060	6,060	6,060	6,060	6,060	6,060	6,060
New - Growth	9	15	21	27	33	39	45	51	57	63
Total	**6,069**	**6,075**	**6,081**	**6,087**	**6,093**	**6,099**	**6,105**	**6,111**	**6,117**	**6,123**

Wastewater Customer Forecast	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing (5/8" meter equivalents)	5,936	5,936	5,936	5,936	5,936	5,936	5,936	5,936	5,936	5,936
New - Growth	9	15	21	27	33	39	45	51	57	63
Total	**5,945**	**5,951**	**5,957**	**5,963**	**5,969**	**5,975**	**5,981**	**5,987**	**5,993**	**5,999**

Table 2-2
City of Kenora
Water Consumption Forecast (m^3) – Water and Wastewater Customers

Water Volume Forecast (m^3)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing	1,200,331	1,200,331	1,200,331	1,200,331	1,200,331	1,200,331	1,200,331	1,200,331	1,200,331	1,200,331
New	1,440	2,400	3,360	4,320	5,280	6,240	7,200	8,160	9,120	10,080
Total	**1,201,771**	**1,202,731**	**1,203,691**	**1,204,651**	**1,205,611**	**1,206,571**	**1,207,531**	**1,208,491**	**1,209,451**	**1,210,411**

Wastewater Flows Forecast (m^3)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing	1,185,677	1,185,677	1,185,677	1,185,677	1,185,677	1,185,677	1,185,677	1,185,677	1,185,677	1,185,677
New	1,440	2,400	3,360	4,320	5,280	6,240	7,200	8,160	9,120	10,080
Total	**1,187,117**	**1,188,077**	**1,189,037**	**1,189,997**	**1,190,957**	**1,191,917**	**1,192,877**	**1,193,837**	**1,194,797**	**1,195,757**

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

Chapter 3
Capital Infrastructure Needs

3. Capital Infrastructure Needs

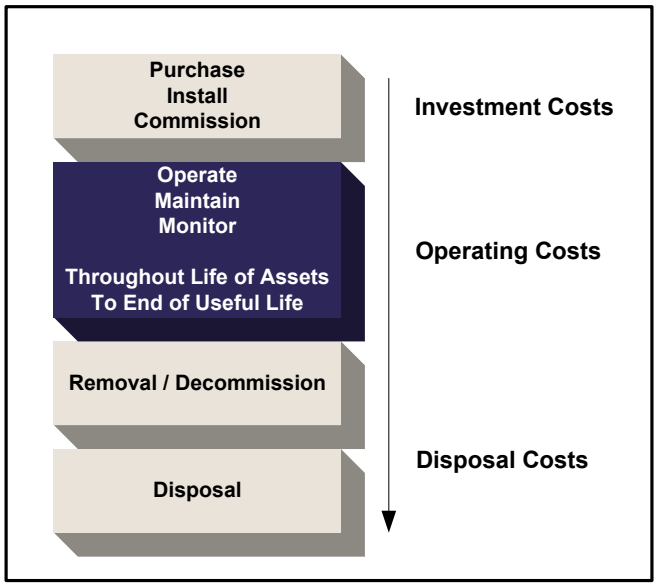
3.1 Overview of Lifecycle Costing

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.

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 that the asset goes through in its lifecycle are specification, design, manufacture (or build), installation, commissioning, operation, maintenance, and disposal. Figure 3-1 depicts these stages in a schematic form.

Figure 3-1
Lifecycle Costing



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 City. Over the past few decades, new financing techniques such as Development Charges (D.C.s) have been employed, based on the underlying principle of having tax/rate payers who benefit directly from the service, pay 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, the most common being operating budget contributions, D.C.s, reserves, developer contributions and debentures.

New construction related to growth could produce D.C.s 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 City 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 D.C.s or developer contributions to assist in financing these works. Hence, a City 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.

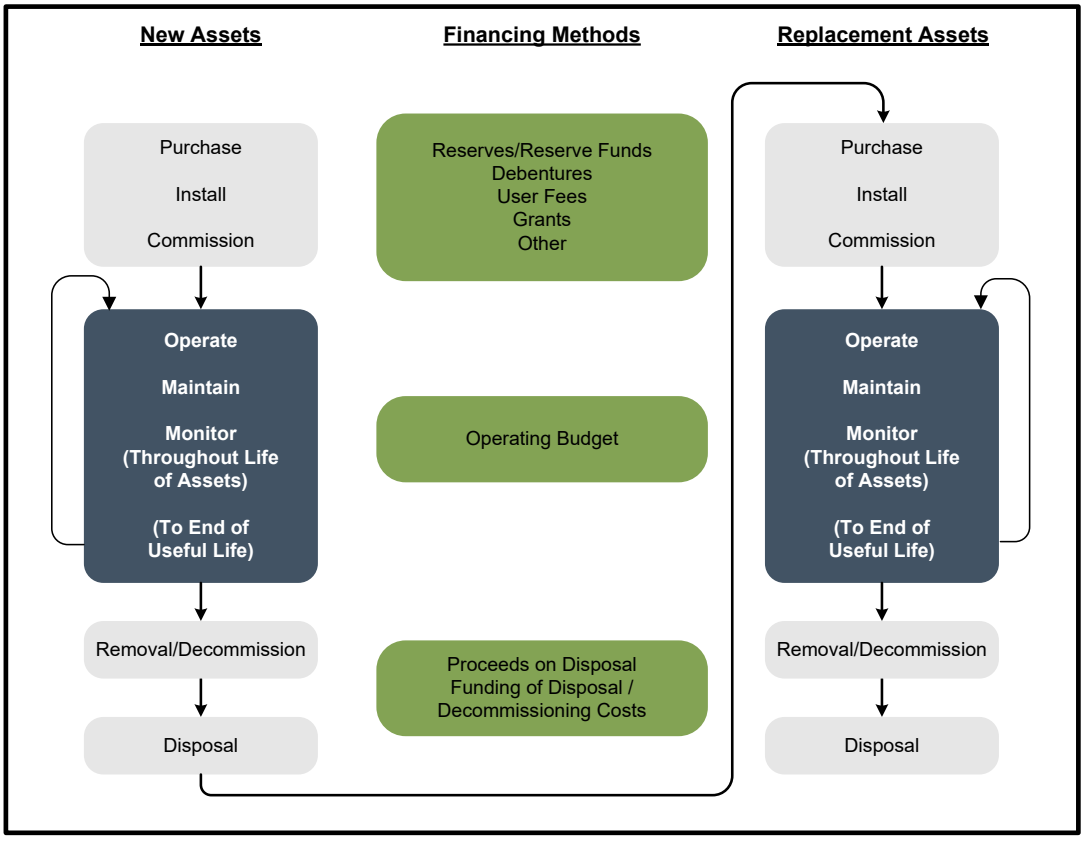
As referred to earlier, growth-related financing methods such as D.C.s and developer contributions could be utilized to finance the growth-related component of the new asset. These revenues are collected (indirectly) from the new homeowner who benefits directly from the installation of this asset. Other financing methods may be used as well

to finance the non-growth-related component of this project: reserves which have been collected from past tax/rate payers, operating budget contributions which are collected from existing tax/rate payers, and debt financing 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 debt financing 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 amortization 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 amortization. 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

A method 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 was utilized. Based on the City's asset management inventory, each asset's estimated useful life and total replacement cost was utilized to calculate an average annual lifecycle cost for all water and wastewater assets.

3.1.4 Asset Inventory

Water and wastewater capital asset inventory information was compiled from the City's asset management inventory and indexed to today's dollars using the Statistics Canada Building Construction Price Index for non-residential buildings.

Lifecycle contribution amounts for each piece of infrastructure have also been included. These calculations determine the level of capital investment to be included in the full

cost assessment and rate forecast. Table 3-1 summarizes the asset replacement value and long-run average annual lifecycle contribution amounts in today's dollars (2025$).

Table 3-1
City of Kenora
Replacement Costs and Average Annual Lifecycle Costs of Water and Wastewater Infrastructure

Asset Class/Type	Replacement Cost (2025$)	Average Annual Lifecycle Cost (2025$)
Water		
Water Treatment Plant	$ 65,249,800	$ 1,270,700
Water Standpipes & Booster Stations	$ 14,337,400	$ 194,400
Water Mains	$ 259,369,000	$ 4,036,800
Hydrants	$ 9,990,200	$ 134,800
Water Valves	$ 16,364,700	$ 218,400
Valve Chambers	$ 271,700	$ 3,100
Total Water	**$ 365,582,800**	**$ 5,858,200**
Wastewater		
Wastewater Treatment Plant	$ 69,858,300	$ 1,114,000
Pumping/Lift Stations	$ 52,197,800	$ 806,700
Sanitary Manholes	$ 23,376,700	$ 465,000
Wastewater Mains	$ 174,535,900	$ 2,495,500
Total Wastewater	**$ 319,968,700**	**$ 4,881,200**
Shared Infrastructure		
Water Meters	$ 4,681,600	$ 246,600
Equipment	$ 1,055,500	$ 26,100
Fleet	$ 4,451,700	$ 321,900
Trails & Walkways	$ 961,400	$ 38,700
Total Shared Infrastructure	**$ 11,150,200**	**$ 633,300**
Total	**$ 696,701,700**	**$ 11,372,700**

3.2 Capital Needs Forecast

Ten-year capital forecasts are generally consistent with the City's 2025-2034 capital plan, but have been expanded to include a water meter replacement program based on consultation with the City's staff.

Some of the most significant works identified for the forecast period include the following:

- Watermain Renewal Program ($13.6 million, 2025-2033);
- Wastewater Collection Piping System Renewal Program ($13.6 million, 2025-2033);
- Sewage Treatment Plant Capital Upgrades ($11.5 million, 2026-2033);
- Water Treatment Plant Capital Upgrades ($11.1 million, 2027-2034);
- Norman/Keewatin Water & Sewer Redundancy ($17.2 million, 2028-2029)

The total capital forecast—in current dollars—includes approximately $91.1 million in capital needs, with approximately 51% of that related to the water system and the remaining 49% related to the wastewater system.

The average annual value of the capital program is approximately $9.1 million in today's dollars (i.e., 2025$). This level of expenditure is lower than the forecasted annual lifecycle costs identified in Section 3.1.4. This suggests that the 10-year forecast of infrastructure renewal and replacement needs identified in this study are lower than the longer-term capital funding requirements.

The listing of water and wastewater capital needs is presented in Table 3-2 and Table 3-3, respectively. For rate determination purposes, the capital needs forecast has been indexed at 4.5% annually, as described in Section 1.4.2. This is reflective of the average annual capital cost inflation witnessed in the Statistics Canada Building Construction Price Index over the past 20 years. It is noted that this is higher than the 2.5% index used by the City in its capital forecast.

Table 3-2
City of Kenora
Water Capital Budget Forecast (Uninflated $)[1]

Description	Total	Forecast									
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures											
Waterworks											
Hospital Servicing - Watermain	1,800,210	-	-	-	32,501	-	1,767,709	-	-	-	-
Norman/Keewatin Water Redundancy	8,609,136	-	-	-	106,789	8,502,347	-	-	-	-	-
Watermain Renewal Program	13,587,393	1,495,500	746,341	1,570,494	835,739	1,877,229	1,831,443	1,786,774	1,743,194	1,700,677	-
Coney Island Watermain Replacement	418,210	-	146,341	-	139,290	-	132,578	-	-	-	-
DTR Matheson & First St S-Construction	682,927	-	682,927	-	-	-	-	-	-	-	-
DTR Matheson, Main and 3rd St	3,417,986	-	-	-	-	95,125	123,740	3,199,121	-	-	-
Standpipe & Booster											
Replacement of Norman Booster Station MCC/PLC	292,683	-	292,683	-	-	-	-	-	-	-	-
Standpipe and Booster Station Water Review & Improvements	-	-	-	-	-	-	-	-	-	-	-
Water Treatment Plant											
WTP Pump Replacement	3,129,318	900,000	-	1,142,177	-	1,087,141	-	-	-	-	-
WTP Capital Upgrades	11,131,319	-	-	285,544	3,714,398	1,540,116	-	-	294,443	3,775,434	1,521,384
Engineering Environmental Compliance Regulatory Changes	62,500	62,500	-	-	-	-	-	-	-	-	-
W&S Vehicles & Equipment (50% Water Share)											
Fleet - Water and Wastewater Vehicles	1,225,107	-	290,512	59,822	78,560	164,883	158,563	65,535	79,500	34,266	293,467
Water Meter Replacement	1,955,689	-	-	-	-	-	989,917	965,772	-	-	-
Total Capital Expenditures	**46,312,476**	**2,458,000**	**2,158,805**	**3,058,037**	**4,907,276**	**13,266,841**	**5,003,950**	**6,017,202**	**2,117,137**	**5,510,378**	**1,814,851**

[1] Figures are different from the capital forecast presented in the City's 2025 Budget document due to inflationary adjustments (i.e., Table 3-2 is presented in real, uninflated dollars) and inclusion of the Water Meter Replacement program.

Table 3-3
City of Kenora
Wastewater Capital Budget Forecast (Uninflated $)[1]

Description	Total	Forecast									
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures											
Sanitary System											
Hospital Servicing - Wastewater Collection	1,800,210	-	-	-	32,501	-	1,767,709	-	-	-	-
Norman/Keewatin Sewer Redundancy	8,609,136	-	-	-	106,789	8,502,347	-	-	-	-	-
Wastewater Collection Piping System Renewal	13,587,401	1,495,500	746,341	1,570,494	835,739	1,877,231	1,831,445	1,786,776	1,743,196	1,700,679	-
Wastewater Piping System Relining	577,135	-	-	-	-	-	176,771	-	-	-	400,364
DTR Matheson & First St S-Construction	551,220	-	551,220	-	-	-	-	-	-	-	-
Sewer Lift Station											
Pumping Station Roof Replacement	80,000	80,000	-	-	-	-	-	-	-	-	-
Replacement of Liftstation Pumps	787,972	78,800	78,780	78,763	78,792	78,818	78,796	78,814	78,827	78,792	78,792
Electrical Transformer Delta/Wye Conversion for Lift Stations	698,740	65,000	82,927	68,531	68,716	68,852	68,941	68,984	68,984	68,943	68,863
Lift Station Renewal Program	1,762,896	133,000	133,659	199,881	185,720	185,720	185,609	185,394	185,078	184,668	184,168
Sewage Treatment Plant											
Replace MCC at the WWTP Headworks (Bldg 100)	300,000	300,000	-	-	-	-	-	-	-	-	-
WWTP - Aeration Tank Piping Repair and Replacement.	200,000	200,000	-	-	-	-	-	-	-	-	-
Replace MCC at the WWTP Digestor Building (Bldg 400)	414,872	-	34,146	380,726	-	-	-	-	-	-	-
WWTP - Replace Scum Box East Clarifier	23,795	-	-	23,795	-	-	-	-	-	-	-
WWTP SCADA Upgrade Design and Costin	50,000	50,000	-	-	-	-	-	-	-	-	-
WWTP - Replace Sluice Gates and Valve Stems	195,610	20,000	175,610	-	-	-	-	-	-	-	-
WWTP - Replace Screw Pump Electric Generator	489,024	50,000	439,024	-	-	-	-	-	-	-	-
WWTP Capital Upgrades	11,488,053	-	292,683	5,425,342	-	-	-	301,804	5,468,224	-	-
W&S Vehicles & Equipment (50% Wastewater Share)											
Fleet - Water and Wastewater Vehicles	1,225,107	-	290,512	59,822	78,560	164,883	158,563	65,535	79,500	34,266	293,467
Water Meter Replacement	1,955,689	-	-	-	-	-	989,917	965,772	-	-	-
Total Capital Expenditures	**44,796,860**	**2,472,300**	**2,824,902**	**7,807,353**	**1,386,817**	**10,877,851**	**5,257,750**	**3,453,078**	**7,623,808**	**2,067,347**	**1,025,653**

[1] Figures are different from the capital forecast presented in the City's 2025 Budget document due to inflationary adjustments (i.e., Table 3-3 is presented in real, uninflated dollars) and inclusion of the Water Meter Replacement program.

Chapter 4
Capital Cost Financing Options

4. Capital Cost Financing Options

Historically, the powers that municipalities have had to raise alternative revenues to taxation to fund capital services have been restrictive. Over the past number of years, legislative reforms have been introduced. Some of these have expanded municipal powers (e.g., Bill 130 providing for natural person powers for fees and charges by-laws); while others appear to restrict them (Bill 98 in 1997 providing amendments to the *Development Charges Act*).

The most recent *Municipal Act* came into force on January 1, 2003, with significant amendments in 2006 through the *Municipal Statute Law Amendment Act*. Part XII of the Act and O. Reg. 584/06 govern a City's ability to impose fees and charges. This Act provides municipalities with broadly defined powers and provides the ability to impose fees for both operating and capital purposes. Under s. 484 of the *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*.

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

Recovery Methods	Section Reference
Development Charges Act, *1997*	4.1
Municipal Act, *2001*	
○ Fees and Charges	4.2
○ Local Improvements	
Grant Funding	4.3
Reserves/Reserve Funds	4.4
Debenture Financing	4.5

4.1 Development Charges Act, 1997

The *Development Charges Act* received Royal Assent on December 8, 1997, replacing the previous Act, which had been in-force since November 23, 1989.

The Province's stated intentions were to "create new construction jobs and make home ownership more affordable" by reducing the charges and to "make municipal Council decisions more accountable and more cost effective." The basis for this Act is to allow municipalities to recover the growth-related capital cost of infrastructure necessary to accommodate new growth within the City. The *Development Charges Act, 1997* as amended, provides for limitations and ceilings on services that can be included in the charges.

The City does not currently impose D.C.s on new development as a source of funding for anticipated growth-related capital needs.

4.2 Municipal Act

The *Municipal Act, 2001*, came into force on January 1, 2003. Part XII Fees and Charges, gives municipalities the statutory authority to recover the costs of services, including capital costs, through by-law. Municipalities have used these types of charges to recover infrastructure costs associated with the extension of municipal services to private service users, to recover capital improvement costs from existing developments, and to recover growth-related costs of service extensions. These by-laws are typically used where D.C.s would not be applicable (e.g., recovery from existing developments) or where existing and growth-related cost recovery would be simplified under the administration of one by-law.

The City does not recover capital costs through capital charges imposed under the *Municipal Act*.

4.3 Grant Funding Availability

No grant funding has been shown as an expected funding source over the forecast period. To the extent that the City is successful in securing grant funding for future infrastructure needs and the financial impacts are material, the rate forecast may be revisited.

4.4 Existing Reserves/Reserve Funds

The City has established reserves and reserve funds for water and wastewater capital costs. These reserves have been used in the capital funding forecast for rate-based needs. The following table summarizes the water and wastewater reserves utilized in this analysis and the estimated December 31, 2024 closing balances.

Table 4-1
City of Kenora
Water and Wastewater Reserve/Reserve Fund Balances

Reserve/Reserve Fund	Estimated Balance (as of Dec. 31, 2024)
Water Reserve	$1,312,663
Wastewater Reserve	$578,782

4.5 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 and Housing regulates the level of debt incurred by Ontario municipalities through its powers established under the *Municipal Act*. O. Reg. 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-source revenue may be allotted for servicing the debt (i.e., debt charges).

The City has outstanding external debt for water and wastewater services. With respect to water services, the City had approximately $1.2 million of principal outstanding at the end of 2024, which is scheduled to be fully repaid by 2044. With respect to wastewater services, the City had approximately $850,600 of principal outstanding at the end of 2024, which is scheduled to be fully repaid by 2049.

The capital forecast proposes additional debt financing for the water system totaling $15.9 million over the forecast period and totaling $25.7 million for the wastewater system.

4.6 Recommended Approach

The following table summarizes the capital funding sources for the capital needs forecast, for consideration by the City.

Table 4-2
City of Kenora
2025 to 2034 Water and Wastewater Capital Funding Plan (Inflated $)

Description	Water	Wastewater	Total
Debt Financing	$15,904,832	$25,693,602	$41,598,434
Capital Reserves	$41,055,368	$28,698,798	$69,754,166
Total Capital Financing	**$56,960,200**	**$54,392,400**	**$111,352,600**

Table 4-3 and Table 4-4 provide the full 10-year capital expenditure and funding program for Water and Wastewater, respectively. These capital funding plans are provided in inflated dollars.

Table 4-3
City of Kenora
Water Service Capital Budget Forecast (Inflated $)

Description	Total	Forecast									
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures											
Waterworks											
Hospital Servicing - Watermain	2,240,000	-	-	-	37,100	-	2,202,900	-	-	-	-
Norman/Keewatin Water Redundancy	10,261,100	-	-	-	121,900	10,139,200	-	-	-	-	-
Watermain Renewal Program	16,582,500	1,495,500	779,900	1,715,000	953,700	2,238,600	2,282,300	2,326,800	2,372,200	2,418,500	-
Coney Island Watermain Replacement	477,100	-	152,900	-	159,000	-	165,200	-	-	-	-
DTR Matheson & First St S-Construction	713,700	-	713,700	-	-	-	-	-	-	-	-
DTR Matheson, Main and 3rd St	4,433,700	-	-	-	-	113,400	154,200	4,166,100	-	-	-
Standpipe & Booster											
Replacement of Norman Booster Station MCC/PLC	305,900	-	305,900	-	-	-	-	-	-	-	-
Standpipe and Booster Station Water Review & Improvements	-	-	-	-	-	-	-	-	-	-	-
Water Treatment Plant											
WTP Pump Replacement	3,443,700	900,000	-	1,247,300	-	1,296,400	-	-	-	-	-
WTP Capital Upgrades	14,417,700	-	-	311,800	4,238,700	1,836,600	-	-	400,700	5,369,000	2,260,900
Engineering Environmental Compliance Regulatory Changes	62,500	62,500	-	-	-	-	-	-	-	-	-
W&S Vehicles & Equipment (50% Water Share)											
Fleet - Water and Wastewater Vehicles	1,531,000	-	303,600	65,300	89,600	196,600	197,600	85,300	108,200	48,700	436,100
Water Meter Replacement	2,491,300	-	-	-	-	-	1,233,600	1,257,700	-	-	-
Total Capital Expenditures	**56,960,200**	**2,458,000**	**2,256,000**	**3,339,400**	**5,600,000**	**15,820,800**	**6,235,800**	**7,835,900**	**2,881,100**	**7,836,200**	**2,697,000**
Capital Financing											
Non-Growth Related Debenture Requirements	15,904,832	-	-	-	48,798	11,275,903	1,824,169	2,755,962	-	-	-
Water Reserve	41,055,368	2,458,000	2,256,000	3,339,400	5,551,202	4,544,897	4,411,631	5,079,938	2,881,100	7,836,200	2,697,000
Total Capital Financing	**56,960,200**	**2,458,000**	**2,256,000**	**3,339,400**	**5,600,000**	**15,820,800**	**6,235,800**	**7,835,900**	**2,881,100**	**7,836,200**	**2,697,000**

Table 4-4
City of Kenora
Wastewater Service Capital Budget Forecast (Inflated $)

Description	Total	Forecast									
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures											
Sanitary System											
Hospital Servicing - Wastewater Collection	2,240,000	-	-	-	37,100	-	2,202,900	-	-	-	-
Norman/Keewatin Sewer Redundancy	10,261,100	-	-	-	121,900	10,139,200	-	-	-	-	-
Wastewater Collection Piping System Renewal	16,582,500	1,495,500	779,900	1,715,000	953,700	2,238,600	2,282,300	2,326,800	2,372,200	2,418,500	-
Wastewater Piping System Relining	815,300	-	-	-	-	-	220,300	-	-	-	595,000
DTR Matheson & First St S-Construction	576,000	-	576,000	-	-	-	-	-	-	-	-
Sewer Lift Station											
Pumping Station Roof Replacement	80,000	80,000	-	-	-	-	-	-	-	-	-
Replacement of Liftstation Pumps	968,200	78,800	82,300	86,000	89,900	94,000	98,200	102,600	107,300	112,000	117,100
Electrical Transformer Delta/Wye Conversion for Lift Stations	856,900	65,000	86,700	74,800	78,400	82,100	85,900	89,800	93,900	98,000	102,300
Lift Station Renewal Program	2,185,300	133,000	139,700	218,300	211,900	221,500	231,300	241,400	251,900	262,600	273,700
Sewage Treatment Plant											
Replace MCC at the WWTP Headworks (Bldg 100)	300,000	300,000	-	-	-	-	-	-	-	-	-
WWTP - Aeration Tank Piping Repair and Replacement.	200,000	200,000	-	-	-	-	-	-	-	-	-
Replace MCC at the WWTP Digestor Building (Bldg 400)	451,500	-	35,700	415,800	-	-	-	-	-	-	-
WWTP - Replace Scum Box East Clarifier	26,000	-	-	26,000	-	-	-	-	-	-	-
WWTP SCADA Upgrade Design and Costin	50,000	50,000	-	-	-	-	-	-	-	-	-
WWTP - Replace Sluice Gates and Valve Stems	203,500	20,000	183,500	-	-	-	-	-	-	-	-
WWTP - Replace Screw Pump Electric Generator	508,800	50,000	458,800	-	-	-	-	-	-	-	-
WWTP Capital Upgrades	14,065,000	-	305,900	5,924,600	-	-	-	393,000	7,441,500	-	-
W&S Vehicles & Equipment (50% Wastewater Share)											
Fleet - Water and Wastewater Vehicles	1,531,000	-	303,600	65,300	89,600	196,600	197,600	85,300	108,200	48,700	436,100
Water Meter Replacement	2,491,300	-	-	-	-	-	1,233,600	1,257,700	-	-	-
Total Capital Expenditures	**54,392,400**	**2,472,300**	**2,952,100**	**8,525,800**	**1,582,500**	**12,972,000**	**6,552,100**	**4,496,600**	**10,375,000**	**2,939,800**	**1,524,200**
Capital Financing											
Non-Growth Related Debenture Requirements	25,693,602	241,461	754,522	5,917,215	-	8,624,817	3,326,883	828,093	6,000,612	-	-
Wastewater Reserve	28,698,798	2,230,839	2,197,578	2,608,585	1,582,500	4,347,183	3,225,217	3,668,507	4,374,388	2,939,800	1,524,200
Total Capital Financing	**54,392,400**	**2,472,300**	**2,952,100**	**8,525,800**	**1,582,500**	**12,972,000**	**6,552,100**	**4,496,600**	**10,375,000**	**2,939,800**	**1,524,200**

Chapter 5
Operating Expenditure Forecast

5. Operating Expenditure Forecast

5.1 Operating Expenditures

The City's 2025-2027 Operating Budget formed the basis for the water and wastewater services operating expenditure forecast. For the period 2028-2034, operating expenditures were generally inflated at 2.5% from the 2027 estimates.

The operating budget forecast generally includes two components – operating expenditures and capital-related expenditures. The former is based on the City's projected annual spending for ongoing operations and maintenance, while the latter is based on the capital funding plan decisions (i.e., transfers to reserve funds, debt repayment, and capital fund transfers) presented earlier.

Capital-related expenditures in the forecast include annual debt repayments and contributions to reserves and reserve funds to finance the capital forecast and fund future infrastructure lifecycle renewal and replacement needs. While operating aspects identified above generally increase with inflation and service demands over the period, the capital-related aspects tend to increase more specifically with the increase in capital funding requirements.

As a result, gross operating expenditures for water services are projected to increase from approximately $4.1 million in 2025 to $5.2 million by 2034. Similarly, gross operating expenditures for wastewater services are projected to increase from approximately $4.6 million in 2025 to $5.6 million by 2034.

5.2 Operating Revenues

The City has operating revenue sources such as water delivery charges, vehicle expense recoveries, and miscellaneous revenues (e.g., on/off charges, new account setup, etc.) that offset some of the annual operating costs related to water and wastewater services. The water delivery and miscellaneous revenues have been forecasted to grow at the same annual rate of increase as the consumptive charges, while the vehicle expense recoveries have been maintained over the forecast period with general inflation of 2.5% annually.

The ongoing, annual operating revenues are forecast to increase from approximately $185,700 in 2025 to $306,700 by 2034 for the water system, and from $95,400 in 2025 to approximately $113,300 in 2034 for the wastewater system.

Table 5-1 and Table 5-2 provide the operating budget forecasts for water and wastewater systems, respectively. The operating budget forecasts are presented in inflated dollars.

Table 5-1
City of Kenora
Water Service Operating Budget Forecast (Inflated $)

Description	Forecast									
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures										
Operating Costs										
Waterworks	2,167,434	2,086,379	2,344,693	2,403,300	2,463,400	2,525,000	2,588,100	2,652,800	2,719,100	2,787,100
Standpipe & Booster	191,820	199,840	208,238	213,400	218,800	224,200	229,900	235,600	241,500	247,500
Water Treatment Plant	1,599,113	1,845,140	1,698,684	1,741,200	1,784,700	1,829,300	1,875,000	1,921,900	1,970,000	2,019,200
Water & Sewer Vehicles (50% Water Share)	125,287	122,965	130,737	134,000	137,400	140,800	144,300	147,900	151,600	155,400
Sub-total Operating Costs	**4,083,654**	**4,254,324**	**4,382,351**	**4,491,900**	**4,604,300**	**4,719,300**	**4,837,300**	**4,958,200**	**5,082,200**	**5,209,200**
Capital-Related Costs										
Existing Debt (Principal) - Non-Growth Related	98,237	101,214	104,192	77,295	110,414	113,663	116,942	110,418	27,183	27,926
Existing Debt (Interest) - Non-Growth Related	36,155	33,179	30,201	27,098	23,979	20,729	17,450	13,975	10,372	9,629
New Non-Growth Related Debt (Principal)	-	-	-	-	1,556	361,058	435,453	542,898	567,328	592,858
New Non-Growth Related Debt (Interest)	-	-	-	-	2,196	509,542	575,382	679,804	655,374	629,844
Transfer to Capital Reserve	2,336,173	2,760,220	3,281,699	3,913,847	4,544,897	4,411,631	5,079,938	5,769,058	6,836,782	7,916,239
Sub-total Capital Related Costs	**2,470,565**	**2,894,613**	**3,416,092**	**4,018,240**	**4,683,041**	**5,416,623**	**6,225,164**	**7,116,153**	**8,097,039**	**9,176,496**
Total Expenditures	**6,554,219**	**7,148,936**	**7,798,443**	**8,510,140**	**9,287,341**	**10,135,923**	**11,062,464**	**12,074,353**	**13,179,239**	**14,385,696**
Revenues										
Operating Revenues										
Water Delivery	58,853	64,042	69,688	75,832	82,518	89,793	97,709	106,323	115,697	125,897
Miscellaneous (ON/OFF charges, new account setup)	31,535	34,315	37,341	40,633	44,215	48,113	52,355	56,971	61,993	67,459
Vehicle Expense Recovery (50% Water Share)	95,350	95,350	95,350	97,700	100,200	102,700	105,200	107,900	110,600	113,300
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Sub-total Operating Revenues	**185,738**	**193,707**	**202,379**	**214,165**	**226,932**	**240,606**	**255,264**	**271,194**	**288,290**	**306,656**
Billing Revenues										
Base Charge	4,093,044	4,477,205	4,897,419	5,357,066	5,859,848	6,409,812	7,011,385	7,669,410	8,389,182	9,176,496
Consumptive Charge	2,275,437	2,478,024	2,698,646	2,938,909	3,200,561	3,485,505	3,795,815	4,133,749	4,501,766	4,902,544
Sub-total Billing Revenues	**6,368,480**	**6,955,229**	**7,596,065**	**8,295,975**	**9,060,409**	**9,895,317**	**10,807,200**	**11,803,159**	**12,890,948**	**14,079,040**
Total Revenues	**6,554,219**	**7,148,936**	**7,798,443**	**8,510,140**	**9,287,341**	**10,135,923**	**11,062,464**	**12,074,353**	**13,179,239**	**14,385,696**

Table 5-2
City of Kenora
Wastewater Service Operating Budget Forecast (Inflated $)

Description	Forecast									
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures										
Operating Costs										
Sanitary System	2,345,103	2,379,041	2,412,242	2,472,500	2,534,400	2,597,700	2,662,700	2,729,200	2,797,500	2,867,400
General Sewer Lift Stations	536,973	582,327	560,844	574,900	589,200	604,000	619,100	634,500	650,400	666,700
Sewage Treatment Plant	1,599,711	1,497,357	1,595,074	1,635,000	1,675,800	1,717,700	1,760,700	1,804,700	1,849,800	1,896,000
Water & Sewer Vehicles (50% Wastewater Share)	125,287	122,965	130,737	134,000	137,400	140,800	144,300	147,900	151,600	155,400
Sub-total Operating Costs	**4,607,073**	**4,581,689**	**4,698,897**	**4,816,400**	**4,936,800**	**5,060,200**	**5,186,800**	**5,316,300**	**5,449,300**	**5,585,500**
Capital-Related										
Existing Debt (Principal) - Non-Growth Related	24,944	25,921	26,868	27,886	28,883	29,956	31,021	32,215	33,482	34,752
Existing Debt (Interest) - Non-Growth Related	35,597	34,619	33,673	32,655	31,658	30,585	29,520	28,326	27,059	25,789
New Non-Growth Related Debt (Principal)	-	7,697	32,094	222,157	232,154	517,527	646,863	702,369	925,252	966,888
New Non-Growth Related Debt (Interest)	-	10,866	44,473	309,303	299,306	676,976	803,397	811,552	1,049,973	1,008,337
Transfer to Capital Reserve	1,652,057	2,197,578	2,608,585	2,676,554	3,253,129	3,225,217	3,668,507	4,374,388	4,758,955	5,688,704
Sub-total Capital Related Costs	**1,712,598**	**2,276,682**	**2,745,694**	**3,268,555**	**3,845,130**	**4,480,260**	**5,179,309**	**5,948,850**	**6,794,721**	**7,724,470**
Total Expenditures	**6,319,671**	**6,858,371**	**7,444,590**	**8,084,955**	**8,781,930**	**9,540,460**	**10,366,109**	**11,265,150**	**12,244,021**	**13,309,970**
Revenues										
Operating Revenues										
Miscellaneous Charges	-	-	-	-	-	-	-	-	-	-
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Vehicle Expense Recovery (50% Wastewater Share)	95,350	95,350	95,350	97,700	100,200	102,700	105,200	107,900	110,600	113,300
Sub-total Operating Revenues	**95,350**	**95,350**	**95,350**	**97,700**	**100,200**	**102,700**	**105,200**	**107,900**	**110,600**	**113,300**
Billing Revenues										
Base Charge	3,949,015	4,254,672	4,583,983	4,938,777	5,321,026	5,732,854	6,176,551	6,654,580	7,169,600	7,724,470
Wastewater Billing Recovery - Total	2,275,306	2,508,348	2,765,258	3,048,478	3,360,704	3,704,906	4,084,358	4,502,670	4,963,822	5,472,200
Sub-total Billing Revenues	**6,224,321**	**6,763,021**	**7,349,240**	**7,987,255**	**8,681,730**	**9,437,760**	**10,260,909**	**11,157,250**	**12,133,421**	**13,196,670**
Total Revenues	**6,319,671**	**6,858,371**	**7,444,590**	**8,084,955**	**8,781,930**	**9,540,460**	**10,366,109**	**11,265,150**	**12,244,021**	**13,309,970**

Chapter 6
Forecast Water and Wastewater Rates

6. Forecast Water and Wastewater Rates

To summarize the analysis presented thus far, Chapter 2 summarized the growth expected to occur within the serviced areas of the City, Chapter 3 reviewed capital-related needs of the water and wastewater systems and responds to the lifecycle needs of the City's infrastructure. Chapter 4 provided a review of capital financing options of which internal sources (i.e., reserve fund transfers) and external sources (i.e., debt) will be the predominant basis for financing future capital needs. Chapter 5 established the 10-year operating expenditure forecast for the City's water and wastewater systems. This chapter presents the calculated rates for the next 10-year period. These calculations are based on the net operating expenditures identified in Chapter 5 and the customer counts and metered water consumption identified in Chapter 2.

The calculated rate forecast is provided to address full costs of the water and wastewater systems, including annual operating and capital expenditures from a lifecycle perspective. The rate forecast is presented in Table 6-1 below. The detailed financial forecast and rate calculations for water and wastewater services are provided in Appendices A and B to this report, respectively.

6.1 Water and Wastewater Rates

The rate forecast was developed to ensure that base charge revenues cover capital and capital-related expenditures (i.e., transfers to capital reserves and debt payments). This approach provides a level of revenue stability and predictability, ensuring that fixed costs are recovered regardless of the volume of water used by customers in any particular year. Consumptive rates are designed to recover net operating expenditures.

As noted earlier in Chapter 2, the City's current rate structure consists of monthly base charges varied by meter size and a consumptive charge based on metered water consumption. Customer accounts in multi-unit buildings get charged 50% of the monthly base charge applicable to a 5/8" meter.

The rate forecast for 2025 and 2026 was developed based on the City's existing rate structure. The remainder of the rate forecast (i.e., 2027 and onwards) was developed with the following adjustments to the rate structure:

1. Starting in 2027, customer accounts in multi-unit buildings would no longer be charged a monthly base charge equivalent to half of the 5/8" meter charge but instead would be charged a proportionate share (based on number of units in the building) of the monthly base charge applicable to the meter size servicing the building.

2. Starting in 2027, the City would transition from the meter equivalency ratios currently in effect to those published by the American Water Works Association[1].

[1] *Principles of Water Rates Fees and Charges, Seventh Edition* by American Water Works Association

Table 6-1
City of Kenora
Water and Wastewater Rate Forecast

Description	2025 (Current)	2026	2027	2028	2029	2030	2031	2032	2033	2034
WATER RATES										
Monthly Base Charge ($/meter)										
5/8" meter	$ 56.20	$ 61.41	$ 63.76	$ 69.68	$ 76.15	$ 83.22	$ 90.95	$ 99.39	$ 108.61	$ 118.70
3/4" meter	$ 61.82	$ 67.55	$ 95.65	$ 104.52	$ 114.23	$ 124.83	$ 136.42	$ 149.08	$ 162.92	$ 178.05
1" meter	$ 78.68	$ 85.98	$ 159.41	$ 174.21	$ 190.38	$ 208.05	$ 227.36	$ 248.47	$ 271.54	$ 296.74
1 1/2" meter	$ 101.16	$ 110.54	$ 318.82	$ 348.41	$ 380.76	$ 416.10	$ 454.73	$ 496.94	$ 543.07	$ 593.49
2" meter	$ 162.98	$ 178.10	$ 510.11	$ 557.46	$ 609.21	$ 665.76	$ 727.57	$ 795.11	$ 868.92	$ 949.58
3" meter	$ 618.19	$ 675.54	$ 1,020.22	$ 1,114.92	$ 1,218.42	$ 1,331.53	$ 1,455.13	$ 1,590.22	$ 1,737.84	$ 1,899.16
4" meter	$ 786.78	$ 859.78	$ 1,594.09	$ 1,742.07	$ 1,903.78	$ 2,080.51	$ 2,273.65	$ 2,484.71	$ 2,715.37	$ 2,967.44
6" meter	$ 1,180.17	$ 1,289.67	$ 3,188.17	$ 3,484.13	$ 3,807.57	$ 4,161.03	$ 4,547.30	$ 4,969.42	$ 5,430.73	$ 5,934.87
8" meter	$ 2,247.95	$ 2,456.51	$ 5,101.08	$ 5,574.62	$ 6,092.11	$ 6,657.64	$ 7,275.67	$ 7,951.08	$ 8,689.18	$ 9,495.79
Annual Percentage Change - Monthly Base Charge		9.3%	varies by meter size	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
Consumptive Rates ($/m^3)										
General Service	$ 1.89	$ 2.06	$ 2.24	$ 2.44	$ 2.65	$ 2.89	$ 3.14	$ 3.42	$ 3.72	$ 4.05
Annual Percentage Change - Consumptive Rates		8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%
Water Delivery Charge										
Water delivery 1-500 gal	$ 85.15	$ 92.66	$ 100.82	$ 109.71	$ 119.39	$ 129.91	$ 141.37	$ 153.83	$ 167.39	$ 182.15
Water delivery 501-1,000 gal	$ 93.67	$ 101.93	$ 110.91	$ 120.69	$ 131.33	$ 142.91	$ 155.51	$ 169.22	$ 184.14	$ 200.37
Water delivery 1,001-1,500 gal	$ 102.18	$ 111.19	$ 120.99	$ 131.66	$ 143.26	$ 155.89	$ 169.64	$ 184.59	$ 200.87	$ 218.58
Annual Percentage Change - Water Delivery Charge		8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%
WASTEWATER RATES										
Monthly Base Charge ($/meter)										
5/8" meter	$ 55.35	$ 59.58	$ 60.97	$ 65.62	$ 70.64	$ 76.03	$ 81.84	$ 88.09	$ 94.81	$ 102.05
3/4" meter	$ 60.89	$ 65.54	$ 91.45	$ 98.44	$ 105.95	$ 114.05	$ 122.76	$ 132.13	$ 142.22	$ 153.08
1" meter	$ 77.50	$ 83.41	$ 152.42	$ 164.06	$ 176.59	$ 190.08	$ 204.59	$ 220.22	$ 237.03	$ 255.14
1 1/2" meter	$ 99.64	$ 107.24	$ 304.84	$ 328.12	$ 353.18	$ 380.15	$ 409.18	$ 440.43	$ 474.07	$ 510.27
2" meter	$ 160.53	$ 172.78	$ 487.75	$ 525.00	$ 565.09	$ 608.24	$ 654.69	$ 704.69	$ 758.51	$ 816.43
3" meter	$ 608.90	$ 655.37	$ 975.50	$ 1,049.99	$ 1,130.18	$ 1,216.49	$ 1,309.39	$ 1,409.38	$ 1,517.01	$ 1,632.86
4" meter	$ 774.97	$ 834.11	$ 1,524.21	$ 1,640.62	$ 1,765.91	$ 1,900.76	$ 2,045.92	$ 2,202.16	$ 2,370.33	$ 2,551.35
6" meter	$ 1,162.45	$ 1,251.16	$ 3,048.43	$ 3,281.23	$ 3,531.81	$ 3,801.53	$ 4,091.84	$ 4,404.32	$ 4,740.67	$ 5,102.70
8" meter	$ 2,214.19	$ 2,383.17	$ 4,877.49	$ 5,249.97	$ 5,650.90	$ 6,082.44	$ 6,546.94	$ 7,046.92	$ 7,585.07	$ 8,164.32
Annual Percentage Change - Monthly Base Charge		7.6%	varies by meter size	7.6%	7.6%	7.6%	7.6%	7.6%	7.6%	7.6%
Consumptive Rates ($/m^3)										
General Service	$ 1.92	$ 2.11	$ 2.33	$ 2.56	$ 2.82	$ 3.11	$ 3.42	$ 3.77	$ 4.15	$ 4.58
Annual Percentage Change - Consumptive Rates		10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%

6.2 Customer Impacts

Table 6-2 summarizes the impact of the calculated rates on annual water and wastewater bills for several types of customers.

For an average residential customer on a 5/8" meter consuming 170 m^3 of water annually, the total water and wastewater bill in 2025 with current rates would be approximately $1,986. Based on the rate forecast, the annual water and wastewater bill for this customer would change as follows over the forecast period:

- Increase by approximately $175 (8.8%) in 2026
- Increase by approximately $112 (5.2%) in 2027. The smaller increase is due to the rate structure changes proposed for 2027 (as noted above).
- Increase by approximately 8.8% to 8.9% per year from 2028 to 2034.

For a large commercial customer on a 2" meter consuming 2,500 m^3 of water annually, the total water and wastewater bill in 2025 with current rates would be approximately $13,407. Based on the rate forecast, the annual water and wastewater bill for this customer would change as follows over the forecast period:

- Increase by approximately $1,232 (9.2%) in 2026
- Increase by approximately $8,754 (59.8%) in 2027. The larger increase is due to the rate structure changes proposed for 2027 (as noted above).
- Increase by approximately 9.0% per year from 2028 to 2034.

For a residential customer in a 33-unit residential building on a 2" meter consuming 72 m^3 of water annually, the total water and wastewater bill in 2025 with current rates would be approximately $944. Based on the rate forecast, the annual water and wastewater bill for this customer would change as follows over the forecast period:

- Increase by approximately $83 (8.8%) in 2026
- Decrease by approximately $335 (32.6%) in 2027. The reduction is due to the rate structure changes proposed for 2027 (as noted above).
- Increase by approximately 9.0% per year from 2028 to 2034.

Table 6-2
City of Kenora
Annual Water and Wastewater Bill Impacts

Customer Type	Bill Component	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Residential - single-detached (170 m³ annual consumption, 5/8" meter)	Water	$ 996	$ 1,087	$ 1,146	$ 1,251	$ 1,365	$ 1,490	$ 1,626	$ 1,774	$ 1,936	$ 2,113
	Wastewater	$ 990	$ 1,074	$ 1,127	$ 1,223	$ 1,327	$ 1,441	$ 1,564	$ 1,698	$ 1,844	$ 2,003
	Total	$ 1,986	$ 2,161	$ 2,273	$ 2,474	$ 2,692	$ 2,931	$ 3,190	$ 3,472	$ 3,780	$ 4,116
	% change	*8.8%*	*8.8%*	*5.2%*	*8.8%*	*8.8%*	*8.8%*	*8.8%*	*8.9%*	*8.9%*	*8.9%*
Large Commercial (2,500 m³ annual consumption, 2" meter)	Water	$ 6,689	$ 7,288	$ 11,726	$ 12,789	$ 13,947	$ 15,211	$ 16,589	$ 18,093	$ 19,732	$ 21,521
	Wastewater	$ 6,718	$ 7,352	$ 11,667	$ 12,704	$ 13,836	$ 15,070	$ 16,416	$ 17,885	$ 19,488	$ 21,238
	Total	$ 13,407	$ 14,640	$ 23,393	$ 25,493	$ 27,783	$ 30,281	$ 33,006	$ 35,978	$ 39,221	$ 42,759
	% change	*9.2%*	*9.2%*	*59.8%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*
Multi-residential Building (33 residential accounts, 2,376 m³ total annual consumption, 2" meter)	Water	$ 15,627	$ 17,056	$ 11,448	$ 12,486	$ 13,618	$ 14,853	$ 16,200	$ 17,669	$ 19,271	$ 21,018
	Wastewater	$ 15,514	$ 16,813	$ 11,379	$ 12,387	$ 13,486	$ 14,684	$ 15,992	$ 17,418	$ 18,973	$ 20,671
	Total	$ 31,141	$ 33,869	$ 22,827	$ 24,873	$ 27,104	$ 29,537	$ 32,191	$ 35,086	$ 38,244	$ 41,689
	% change	*8.8%*	*8.8%*	*-32.6%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*
Multi-residential Unit (72 m³ annual consumption)	Water	$ 474	$ 517	$ 347	$ 378	$ 413	$ 450	$ 491	$ 535	$ 584	$ 637
	Wastewater	$ 470	$ 509	$ 345	$ 375	$ 409	$ 445	$ 485	$ 528	$ 575	$ 626
	Total	$ 944	$ 1,026	$ 692	$ 754	$ 821	$ 895	$ 975	$ 1,063	$ 1,159	$ 1,263
	% change	*8.8%*	*8.8%*	*-32.6%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*	*9.0%*

Chapter 7
Recommendations

7. Recommendations

Based upon the analysis in this report, the following recommendations are provided for Council's consideration:

1. That Council provide for the recovery of all water and wastewater costs through full cost recovery rates and maintain reserve funds for water and wastewater services;

2. That Council consider the rate forecast presented in Chapter 6 as part of the annual budget process;

3. That Council approve the Rate Study;

4. That Council direct staff to undertake a review of the key assumptions underlying the Rate Study (e.g., asset costing and lifecycle funding requirements, operating cost escalation, customer growth and consumptions patterns, etc.) every two to three years and update the Rate Study as needed.

Appendices

Appendix A
Water Service

Table A-1
City of Kenora
Water Service
Capital Budget Forecast
Inflated $

Description	Total	Forecast									
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures											
Waterworks											
Hospital Servicing - Watermain	2,240,000	-	-	-	37,100	-	2,202,900	-	-	-	-
Norman/Keewatin Water Redundancy	10,261,100	-	-	-	121,900	10,139,200	-	-	-	-	-
Watermain Renewal Program	16,582,500	1,495,500	779,900	1,715,000	953,700	2,238,600	2,282,300	2,326,800	2,372,200	2,418,500	-
Coney Island Watermain Replacement	477,100	-	152,900	-	159,000	-	165,200	-	-	-	-
DTR Matheson & First St S-Construction	713,700	-	713,700	-	-	-	-	-	-	-	-
DTR Matheson, Main and 3rd St	4,433,700	-	-	-	-	113,400	154,200	4,166,100	-	-	-
Standpipe & Booster											
Replacement of Norman Booster Station MCC/PLC	305,900	-	305,900	-	-	-	-	-	-	-	-
Standpipe and Booster Station Water Review & Improvements	-	-	-	-	-	-	-	-	-	-	-
Water Treatment Plant											
WTP Pump Replacement	3,443,700	900,000	-	1,247,300	-	1,296,400	-	-	-	-	-
WTP Capital Upgrades	14,417,700	-	-	311,800	4,238,700	1,836,600	-	-	400,700	5,369,000	2,260,900
Engineering Environmental Compliance Regulatory Changes	62,500	62,500	-	-	-	-	-	-	-	-	-
W&S Vehicles & Equipment (50% Water Share)											
Fleet - Water and Wastewater Vehicles	1,531,000	-	303,600	65,300	89,600	196,600	197,600	85,300	108,200	48,700	436,100
Water Meter Replacement	2,491,300	-	-	-	-	-	1,233,600	1,257,700	-	-	-
Total Capital Expenditures	**56,960,200**	**2,458,000**	**2,256,000**	**3,339,400**	**5,600,000**	**15,820,800**	**6,235,800**	**7,835,900**	**2,881,100**	**7,836,200**	**2,697,000**
Capital Financing											
Non-Growth Related Debenture Requirements	15,904,832	-	-	-	48,798	11,275,903	1,824,169	2,755,962	-	-	-
Water Reserve	41,055,368	2,458,000	2,256,000	3,339,400	5,551,202	4,544,897	4,411,631	5,079,938	2,881,100	7,836,200	2,697,000
Total Capital Financing	**56,960,200**	**2,458,000**	**2,256,000**	**3,339,400**	**5,600,000**	**15,820,800**	**6,235,800**	**7,835,900**	**2,881,100**	**7,836,200**	**2,697,000**

Table A-2
City of Kenora
Water Service
Schedule of Non-Growth Related Debenture Repayments
Inflated $

Debenture Year	Principal (Inflated)	Forecast									
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2025	-		-	-	-	-	-	-	-	-	-
2026	-			-	-	-	-	-	-	-	-
2027	-				-	-	-	-	-	-	-
2028	48,798					3,751	3,751	3,751	3,751	3,751	3,751
2029	11,275,903						866,848	866,848	866,848	866,848	866,848
2030	1,824,169							140,235	140,235	140,235	140,235
2031	2,755,962								211,868	211,868	211,868
2032	-									-	-
2033	-										-
2034	-										
Total Annual Debt Charges	**15,904,832**	-	-	-	-	3,751	870,599	1,010,834	1,222,702	1,222,702	1,222,702

Table A-3
City of Kenora
Water Service
Water Reserves/ Reserve Funds Continuity
Inflated $

Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	1,312,663	1,190,836	1,695,055	1,637,355	-	-	-	-	2,887,958	1,888,539
Transfer from Operating	2,336,173	2,760,220	3,281,699	3,913,847	4,544,897	4,411,631	5,079,938	5,769,058	6,836,782	7,916,239
Transfer to Capital	2,458,000	2,256,000	3,339,400	5,551,202	4,544,897	4,411,631	5,079,938	2,881,100	7,836,200	2,697,000
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**1,190,836**	**1,695,055**	**1,637,355**	**-**	**-**	**-**	**-**	**2,887,958**	**1,888,539**	**7,107,778**

Table A-4
City of Kenora
Water Services
Operating Budget Forecast
Inflated $

Description	Forecast									
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures										
Operating Costs										
Waterworks	2,167,434	2,086,379	2,344,693	2,403,300	2,463,400	2,525,000	2,588,100	2,652,800	2,719,100	2,787,100
Standpipe & Booster	191,820	199,840	208,238	213,400	218,800	224,200	229,900	235,600	241,500	247,500
Water Treatment Plant	1,599,113	1,845,140	1,698,684	1,741,200	1,784,700	1,829,300	1,875,000	1,921,900	1,970,000	2,019,200
Water & Sewer Vehicles (50% Water Share)	125,287	122,965	130,737	134,000	137,400	140,800	144,300	147,900	151,600	155,400
Sub-total Operating Costs	**4,083,654**	**4,254,324**	**4,382,351**	**4,491,900**	**4,604,300**	**4,719,300**	**4,837,300**	**4,958,200**	**5,082,200**	**5,209,200**
Capital-Related Costs										
Existing Debt (Principal) - Non-Growth Related	98,237	101,214	104,192	77,295	110,414	113,663	116,942	110,418	27,183	27,926
Existing Debt (Interest) - Non-Growth Related	36,155	33,179	30,201	27,098	23,979	20,729	17,450	13,975	10,372	9,629
New Non-Growth Related Debt (Principal)	-	-	-	-	1,556	361,058	435,453	542,898	567,328	592,858
New Non-Growth Related Debt (Interest)	-	-	-	-	2,196	509,542	575,382	679,804	655,374	629,844
Transfer to Capital Reserve	2,336,173	2,760,220	3,281,699	3,913,847	4,544,897	4,411,631	5,079,938	5,769,058	6,836,782	7,916,239
Sub-total Capital Related Costs	**2,470,565**	**2,894,613**	**3,416,092**	**4,018,240**	**4,683,041**	**5,416,623**	**6,225,164**	**7,116,153**	**8,097,039**	**9,176,496**
Total Expenditures	**6,554,219**	**7,148,936**	**7,798,443**	**8,510,140**	**9,287,341**	**10,135,923**	**11,062,464**	**12,074,353**	**13,179,239**	**14,385,696**
Revenues										
Operating Revenues										
Water Delivery	58,853	64,042	69,688	75,832	82,518	89,793	97,709	106,323	115,697	125,897
Miscellaneous (ON/OFF charges, new account setup)	31,535	34,315	37,341	40,633	44,215	48,113	52,355	56,971	61,993	67,459
Vehicle Expense Recovery (50% Water Share)	95,350	95,350	95,350	97,700	100,200	102,700	105,200	107,900	110,600	113,300
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Sub-total Operating Revenues	**185,738**	**193,707**	**202,379**	**214,165**	**226,932**	**240,606**	**255,264**	**271,194**	**288,290**	**306,656**
Billing Revenues										
Base Charge	4,093,044	4,477,205	4,897,419	5,357,066	5,859,848	6,409,812	7,011,385	7,669,410	8,389,182	9,176,496
Consumptive Charge	2,275,437	2,478,024	2,698,646	2,938,909	3,200,561	3,485,505	3,795,815	4,133,749	4,501,766	4,902,544
Sub-total Billing Revenues	**6,368,480**	**6,955,229**	**7,596,065**	**8,295,975**	**9,060,409**	**9,895,317**	**10,807,200**	**11,803,159**	**12,890,948**	**14,079,040**
Total Revenues	**6,554,219**	**7,148,936**	**7,798,443**	**8,510,140**	**9,287,341**	**10,135,923**	**11,062,464**	**12,074,353**	**13,179,239**	**14,385,696**

Table A-5
City of Kenora
Water Services
Water Rate Forecast
Inflated $

Description	2025 (Current)	2026	2027	2028	2029	2030	2031	2032	2033	2034
Monthly Base Charge ($/meter)										
5/8" meter	$ 56.20	$ 61.41	$ 63.76	$ 69.68	$ 76.15	$ 83.22	$ 90.95	$ 99.39	$ 108.61	$ 118.70
3/4" meter	$ 61.82	$ 67.55	$ 95.65	$ 104.52	$ 114.23	$ 124.83	$ 136.42	$ 149.08	$ 162.92	$ 178.05
1" meter	$ 78.68	$ 85.98	$ 159.41	$ 174.21	$ 190.38	$ 208.05	$ 227.36	$ 248.47	$ 271.54	$ 296.74
1 1/2" meter	$ 101.16	$ 110.54	$ 318.82	$ 348.41	$ 380.76	$ 416.10	$ 454.73	$ 496.94	$ 543.07	$ 593.49
2" meter	$ 162.98	$ 178.10	$ 510.11	$ 557.46	$ 609.21	$ 665.76	$ 727.57	$ 795.11	$ 868.92	$ 949.58
3" meter	$ 618.19	$ 675.54	$ 1,020.22	$ 1,114.92	$ 1,218.42	$ 1,331.53	$ 1,455.13	$ 1,590.22	$ 1,737.84	$ 1,899.16
4" meter	$ 786.78	$ 859.78	$ 1,594.09	$ 1,742.07	$ 1,903.78	$ 2,080.51	$ 2,273.65	$ 2,484.71	$ 2,715.37	$ 2,967.44
6" meter	$ 1,180.17	$ 1,289.67	$ 3,188.17	$ 3,484.13	$ 3,807.57	$ 4,161.03	$ 4,547.30	$ 4,969.42	$ 5,430.73	$ 5,934.87
8" meter	$ 2,247.95	$ 2,456.51	$ 5,101.08	$ 5,574.62	$ 6,092.11	$ 6,657.64	$ 7,275.67	$ 7,951.08	$ 8,689.18	$ 9,495.79
Annual Percentage Change - Monthly Base Charge		9.3%	varies by meter size	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
Consumptive Rates ($/m^3)										
General Service	$ 1.89	$ 2.06	$ 2.24	$ 2.44	$ 2.65	$ 2.89	$ 3.14	$ 3.42	$ 3.72	$ 4.05
Annual Percentage Change - Consumptive Rates		8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%
Water Delivery Charge										
Water delivery 1-500 gal	$ 85.15	$ 92.66	$ 100.82	$ 109.71	$ 119.39	$ 129.91	$ 141.37	$ 153.83	$ 167.39	$ 182.15
Water delivery 501-1,000 gal	$ 93.67	$ 101.93	$ 110.91	$ 120.69	$ 131.33	$ 142.91	$ 155.51	$ 169.22	$ 184.14	$ 200.37
Water delivery 1,001-1,500 gal	$ 102.18	$ 111.19	$ 120.99	$ 131.66	$ 143.26	$ 155.89	$ 169.64	$ 184.59	$ 200.87	$ 218.58
Annual Percentage Change - Water Delivery Charge		8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%

Appendix B
Wastewater Service

Table B-1
City of Kenora
Wastewater Service
Capital Budget Forecast
Inflated $

Description	Total	Forecast									
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures											
Sanitary System											
Hospital Servicing - Wastewater Collection	2,240,000	-	-	-	37,100	-	2,202,900	-	-	-	-
Norman/Keewatin Sewer Redundancy	10,261,100	-	-	-	121,900	10,139,200	-	-	-	-	-
Wastewater Collection Piping System Renewal	16,582,500	1,495,500	779,900	1,715,000	953,700	2,238,600	2,282,300	2,326,800	2,372,200	2,418,500	-
Wastewater Piping System Relining	815,300	-	-	-	-	-	220,300	-	-	-	595,000
DTR Matheson & First St S-Construction	576,000	-	576,000	-	-	-	-	-	-	-	-
Sewer Lift Station											
Pumping Station Roof Replacement	80,000	80,000	-	-	-	-	-	-	-	-	-
Replacement of Liftstation Pumps	968,200	78,800	82,300	86,000	89,900	94,000	98,200	102,600	107,300	112,000	117,100
Electrical Transformer Delta/Wye Conversion for Lift Stations	856,900	65,000	86,700	74,800	78,400	82,100	85,900	89,800	93,900	98,000	102,300
Lift Station Renewal Program	2,185,300	133,000	139,700	218,300	211,900	221,500	231,300	241,400	251,900	262,600	273,700
Sewage Treatment Plant											
Replace MCC at the WWTP Headworks (Bldg 100)	300,000	300,000	-	-	-	-	-	-	-	-	-
WWTP - Aeration Tank Piping Repair and Replacement.	200,000	200,000	-	-	-	-	-	-	-	-	-
Replace MCC at the WWTP Digestor Building (Bldg 400)	451,500	-	35,700	415,800	-	-	-	-	-	-	-
WWTP - Replace Scum Box East Clarifier	26,000	-	-	26,000	-	-	-	-	-	-	-
WWTP SCADA Upgrade Design and Costin	50,000	50,000	-	-	-	-	-	-	-	-	-
WWTP - Replace Sluice Gates and Valve Stems	203,500	20,000	183,500	-	-	-	-	-	-	-	-
WWTP - Replace Screw Pump Electric Generator	508,800	50,000	458,800	-	-	-	-	-	-	-	-
WWTP Capital Upgrades	14,065,000	-	305,900	5,924,600	-	-	-	393,000	7,441,500	-	-
W&S Vehicles & Equipment (50% Wastewater Share)											
Fleet - Water and Wastewater Vehicles	1,531,000	-	303,600	65,300	89,600	196,600	197,600	85,300	108,200	48,700	436,100
Water Meter Replacement	2,491,300	-	-	-	-	-	1,233,600	1,257,700	-	-	-
Total Capital Expenditures	**54,392,400**	**2,472,300**	**2,952,100**	**8,525,800**	**1,582,500**	**12,972,000**	**6,552,100**	**4,496,600**	**10,375,000**	**2,939,800**	**1,524,200**
Capital Financing											
Non-Growth Related Debenture Requirements	25,693,602	241,461	754,522	5,917,215	-	8,624,817	3,326,883	828,093	6,000,612	-	-
Wastewater Reserve	28,698,798	2,230,839	2,197,578	2,608,585	1,582,500	4,347,183	3,225,217	3,668,507	4,374,388	2,939,800	1,524,200
Total Capital Financing	**54,392,400**	**2,472,300**	**2,952,100**	**8,525,800**	**1,582,500**	**12,972,000**	**6,552,100**	**4,496,600**	**10,375,000**	**2,939,800**	**1,524,200**

Table B-2
City of Kenora
Wastewater Service
Schedule of Non-Growth Related Debenture Repayments
Inflated $

Debenture Year	Principal (Inflated)	Forecast									
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2025	241,461		18,563	18,563	18,563	18,563	18,563	18,563	18,563	18,563	18,563
2026	754,522			58,005	58,005	58,005	58,005	58,005	58,005	58,005	58,005
2027	5,917,215				454,893	454,893	454,893	454,893	454,893	454,893	454,893
2028	-					-	-	-	-	-	-
2029	8,624,817						663,043	663,043	663,043	663,043	663,043
2030	3,326,883							255,758	255,758	255,758	255,758
2031	828,093								63,661	63,661	63,661
2032	6,000,612									461,304	461,304
2033	-										-
2034	-										
Total Annual Debt Charges	**25,693,602**	-	18,563	76,567	531,460	531,460	1,194,503	1,450,261	1,513,921	1,975,225	1,975,225

Table B-3
City of Kenora
Wastewater Service
Wastewater Reserves/ Reserve Funds Continuity
Inflated $

Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	578,782	-	-	-	1,094,054	-	-	-	-	1,819,155
Transfer from Operating	1,652,057	2,197,578	2,608,585	2,676,554	3,253,129	3,225,217	3,668,507	4,374,388	4,758,955	5,688,704
Transfer to Capital	2,230,839	2,197,578	2,608,585	1,582,500	4,347,183	3,225,217	3,668,507	4,374,388	2,939,800	1,524,200
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**-**	**-**	**-**	**1,094,054**	**-**	**-**	**-**	**-**	**1,819,155**	**5,983,660**

Table B-4
City of Kenora
Wastewater Services
Operating Budget Forecast
Inflated $

Description	Forecast									
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures										
Operating Costs										
Sanitary System	2,345,103	2,379,041	2,412,242	2,472,500	2,534,400	2,597,700	2,662,700	2,729,200	2,797,500	2,867,400
General Sewer Lift Stations	536,973	582,327	560,844	574,900	589,200	604,000	619,100	634,500	650,400	666,700
Sewage Treatment Plant	1,599,711	1,497,357	1,595,074	1,635,000	1,675,800	1,717,700	1,760,700	1,804,700	1,849,800	1,896,000
Water & Sewer Vehicles (50% Wastewater Share)	125,287	122,965	130,737	134,000	137,400	140,800	144,300	147,900	151,600	155,400
Sub-total Operating Costs	**4,607,073**	**4,581,689**	**4,698,897**	**4,816,400**	**4,936,800**	**5,060,200**	**5,186,800**	**5,316,300**	**5,449,300**	**5,585,500**
Capital-Related										
Existing Debt (Principal) - Non-Growth Related	24,944	25,921	26,868	27,886	28,883	29,956	31,021	32,215	33,482	34,752
Existing Debt (Interest) - Non-Growth Related	35,597	34,619	33,673	32,655	31,658	30,585	29,520	28,326	27,059	25,789
New Non-Growth Related Debt (Principal)	-	7,697	32,094	222,157	232,154	517,527	646,863	702,369	925,252	966,888
New Non-Growth Related Debt (Interest)	-	10,866	44,473	309,303	299,306	676,976	803,397	811,552	1,049,973	1,008,337
Transfer to Capital Reserve	1,652,057	2,197,578	2,608,585	2,676,554	3,253,129	3,225,217	3,668,507	4,374,388	4,758,955	5,688,704
Sub-total Capital Related Costs	**1,712,598**	**2,276,682**	**2,745,694**	**3,268,555**	**3,845,130**	**4,480,260**	**5,179,309**	**5,948,850**	**6,794,721**	**7,724,470**
Total Expenditures	**6,319,671**	**6,858,371**	**7,444,590**	**8,084,955**	**8,781,930**	**9,540,460**	**10,366,109**	**11,265,150**	**12,244,021**	**13,309,970**
Revenues										
Operating Revenues										
Miscellaneous Charges	-	-	-	-	-	-	-	-	-	-
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Vehicle Expense Recovery (50% Wastewater Share)	95,350	95,350	95,350	97,700	100,200	102,700	105,200	107,900	110,600	113,300
Sub-total Operating Revenues	**95,350**	**95,350**	**95,350**	**97,700**	**100,200**	**102,700**	**105,200**	**107,900**	**110,600**	**113,300**
Billing Revenues										
Base Charge	3,949,015	4,254,672	4,583,983	4,938,777	5,321,026	5,732,854	6,176,551	6,654,580	7,169,600	7,724,470
Wastewater Billing Recovery - Total	2,275,306	2,508,348	2,765,258	3,048,478	3,360,704	3,704,906	4,084,358	4,502,670	4,963,822	5,472,200
Sub-total Billing Revenues	**6,224,321**	**6,763,021**	**7,349,240**	**7,987,255**	**8,681,730**	**9,437,760**	**10,260,909**	**11,157,250**	**12,133,421**	**13,196,670**
Total Revenues	**6,319,671**	**6,858,371**	**7,444,590**	**8,084,955**	**8,781,930**	**9,540,460**	**10,366,109**	**11,265,150**	**12,244,021**	**13,309,970**

Table B-5
City of Kenora
Wastewater Services
Wastewater Rate Forecast
Inflated $

Description	2025 (Current)	2026	2027	2028	2029	2030	2031	2032	2033	2034
Monthly Base Charge ($/meter)										
5/8" meter	$ 55.35	$ 59.58	$ 60.97	$ 65.62	$ 70.64	$ 76.03	$ 81.84	$ 88.09	$ 94.81	$ 102.05
3/4" meter	$ 60.89	$ 65.54	$ 91.45	$ 98.44	$ 105.95	$ 114.05	$ 122.76	$ 132.13	$ 142.22	$ 153.08
1" meter	$ 77.50	$ 83.41	$ 152.42	$ 164.06	$ 176.59	$ 190.08	$ 204.59	$ 220.22	$ 237.03	$ 255.14
1 1/2" meter	$ 99.64	$ 107.24	$ 304.84	$ 328.12	$ 353.18	$ 380.15	$ 409.18	$ 440.43	$ 474.07	$ 510.27
2" meter	$ 160.53	$ 172.78	$ 487.75	$ 525.00	$ 565.09	$ 608.24	$ 654.69	$ 704.69	$ 758.51	$ 816.43
3" meter	$ 608.90	$ 655.37	$ 975.50	$ 1,049.99	$ 1,130.18	$ 1,216.49	$ 1,309.39	$ 1,409.38	$ 1,517.01	$ 1,632.86
4" meter	$ 774.97	$ 834.11	$ 1,524.21	$ 1,640.62	$ 1,765.91	$ 1,900.76	$ 2,045.92	$ 2,202.16	$ 2,370.33	$ 2,551.35
6" meter	$ 1,162.45	$ 1,251.16	$ 3,048.43	$ 3,281.23	$ 3,531.81	$ 3,801.53	$ 4,091.84	$ 4,404.32	$ 4,740.67	$ 5,102.70
8" meter	$ 2,214.19	$ 2,383.17	$ 4,877.49	$ 5,249.97	$ 5,650.90	$ 6,082.44	$ 6,546.94	$ 7,046.92	$ 7,585.07	$ 8,164.32
Annual Percentage Change - Monthly Base Charge		7.6%	varies by meter size	7.6%	7.6%	7.6%	7.6%	7.6%	7.6%	7.6%
Consumptive Rates ($/m^3)										
General Service	$ 1.92	$ 2.11	$ 2.33	$ 2.56	$ 2.82	$ 3.11	$ 3.42	$ 3.77	$ 4.15	$ 4.58
Annual Percentage Change - Consumptive Rates		10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%