



 **Watson
& Associates**
ECONOMISTS LTD.

Water and Wastewater Asset Management Plan and Rate Study

Municipality of Mississippi Mills

FINAL

June 16, 2025

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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 Overview

The Municipality of Mississippi Mills (Municipality) retained Watson & Associates Economists Ltd. (Watson) to:

- Update the water and wastewater components of the Municipality's 2022 Asset Management Plan for core infrastructure assets; and
- Prepare a water and wastewater rate study.

To that end, this report incorporates these traditionally separate documents under one cover in order to provide a comprehensive view of the long-term asset management planning decisions and any resultant financial impacts. The following sections detail the overall purpose and objectives of both components.

1.1.1 Asset Management Plan Overview

The main purpose of this update is to update the water and wastewater components of the Municipality's asset management plan, in order to bring the Municipality into compliance with the July 1, 2025 requirements of Ontario Regulation (O. Reg.) 588/17. This asset management plan update provides updated replacement cost valuations, updated information on current levels of service, identifies proposed levels of service, and includes a detailed financial strategy.

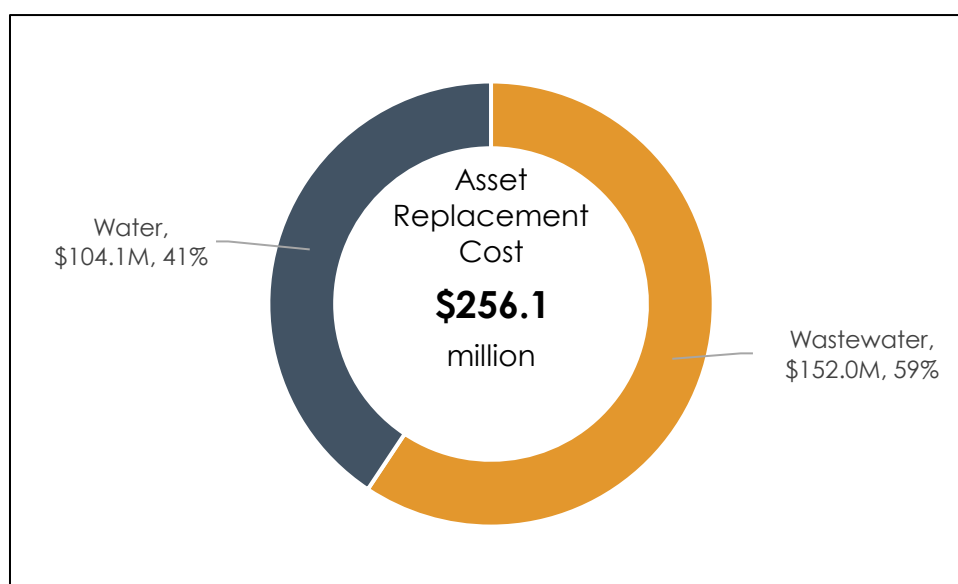
The Municipality's water supply system comprises a network of distribution mains, wells, water storage, a water tower, and water meters. The Municipality's wastewater system comprises a network of collection mains, pumping stations, and a wastewater treatment facility. The estimated current replacement cost for the Municipality's water and wastewater infrastructure is approximately \$256.1 million. Wastewater assets represent the larger share of this replacement cost at approximately \$152.0 million (59%), followed by water assets at approximately \$104.1 million (41%). The distribution of replacement cost by asset class is provided in Table 1-1 and is presented graphically in Figure 1-1.



Table 1-1
Distribution of Replacement Cost by Asset Class

Asset Class	Current Replacement Cost	Percentage of Total
Wastewater	\$151,950,000	59%
Water	\$104,117,000	41%
Total	\$256,067,000	100%

Figure 1-1
Distribution of Replacement Cost by Asset Category



1.1.2 Rate Study Overview

The Municipality operates and maintains a municipal water supply system that currently services approximately 3,275 customers and a wastewater collection system that currently services approximately 3,266 customers.

The Municipality recovers all costs related to operating, maintaining, and rehabilitating its water and wastewater systems through user fees. All customers are billed a combined annual base charge for both water and wastewater. Additionally, a combined consumptive charge applied to metered water consumption is billed for both water and wastewater. A summary of the water and wastewater rates that are currently in effect is provided in Table 1-2.



Table 1-2
Municipality of Mississippi Mills
2025 Water and Wastewater Rates

2025 - Water & Wastewater Billing Rates	
Annual Base Charge	\$ 663.59
Consumptive Charge per 1,000 gallons	\$ 14.42

The objectives of the rate 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 identified in the Municipality's Development Charge Background Study;
- 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 Municipality'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; and
- Present findings to staff and Council for their consideration.

1.2 Legislative Context

1.2.1 Legislative Context for Asset Management Plans

Asset management planning in Ontario has evolved significantly over the past decade.



Prior to 2009, it was common municipal practice to expense capital assets in the year of their acquisition or construction. Consequently, this meant that many municipalities did not have comprehensive tracking of their capital assets, especially as it related to any changes that capital assets may have undergone throughout their lifecycles (i.e. betterments, disposals, etc.). Furthermore, this also meant that many municipalities had not yet established inventories of their capital assets, both in their accounting structures and financial statements. As a result of revisions to *Section 3150 – Tangible Capital Assets of the Public Sector Accounting Board* (PSAB) handbook, which came into effect for the 2009 fiscal year, municipalities were forced to change this long-standing practice and capitalize their tangible capital assets over the term of the asset's expected useful service life. In order to comply with this revision, municipalities needed to establish asset inventories, if none previously existed.

In 2012, the Province launched the Municipal Infrastructure Strategy, which required municipalities and local service boards seeking provincial funding to demonstrate how any proposed project fits within a broader asset management plan. In addition, asset management plans encompassing all municipal assets needed to be prepared by the end of 2016 to meet Federal Gas Tax (now the Canada Community-Building Fund) agreement requirements. To help define the components of municipal asset management plans, the Province produced a document *entitled Building Together: Guide for Municipal Asset Management Plans*. This document outlined the information and analyses that were required to be included in municipal asset management plans under this initiative.

The *Province's Infrastructure for Jobs and Prosperity Act, 2015* (IJPA) was proclaimed on May 1, 2016. This legislation detailed principles for evidence-based and sustainable long-term infrastructure planning. The IJPA also gave the Province the authority to guide municipal asset management planning by way of regulation. In late 2017, the Province introduced O. Reg. 588/17 under the IJPA. The intent of O. Reg. 588/17 is to establish standard content for municipal asset management plans. Specifically, the regulation requires that asset management plans be developed that define levels of service, identify the lifecycle activities that will be undertaken to achieve those levels of service, and provide a financial strategy to support the levels of service and lifecycle activities.



1.2.2 Legislative Context for Water and Wastewater

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.

1.2.2.1 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.

1.2.2.2 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.

1.2.2.3 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 municipality'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.

1.2.2.4 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.

1.3 Asset Management Plan Development

The development of this asset management plan was guided by asset management strategies identified through discussions with the Municipality's asset managers, information gleaned through reviews of long-term planning documents and studies, service-level objectives and their impacts on the management of assets identified through engagements with Council and staff, and detailed analyses of the Municipality's capital asset and financial data. The key steps in the development process of this asset management plan are summarized below:



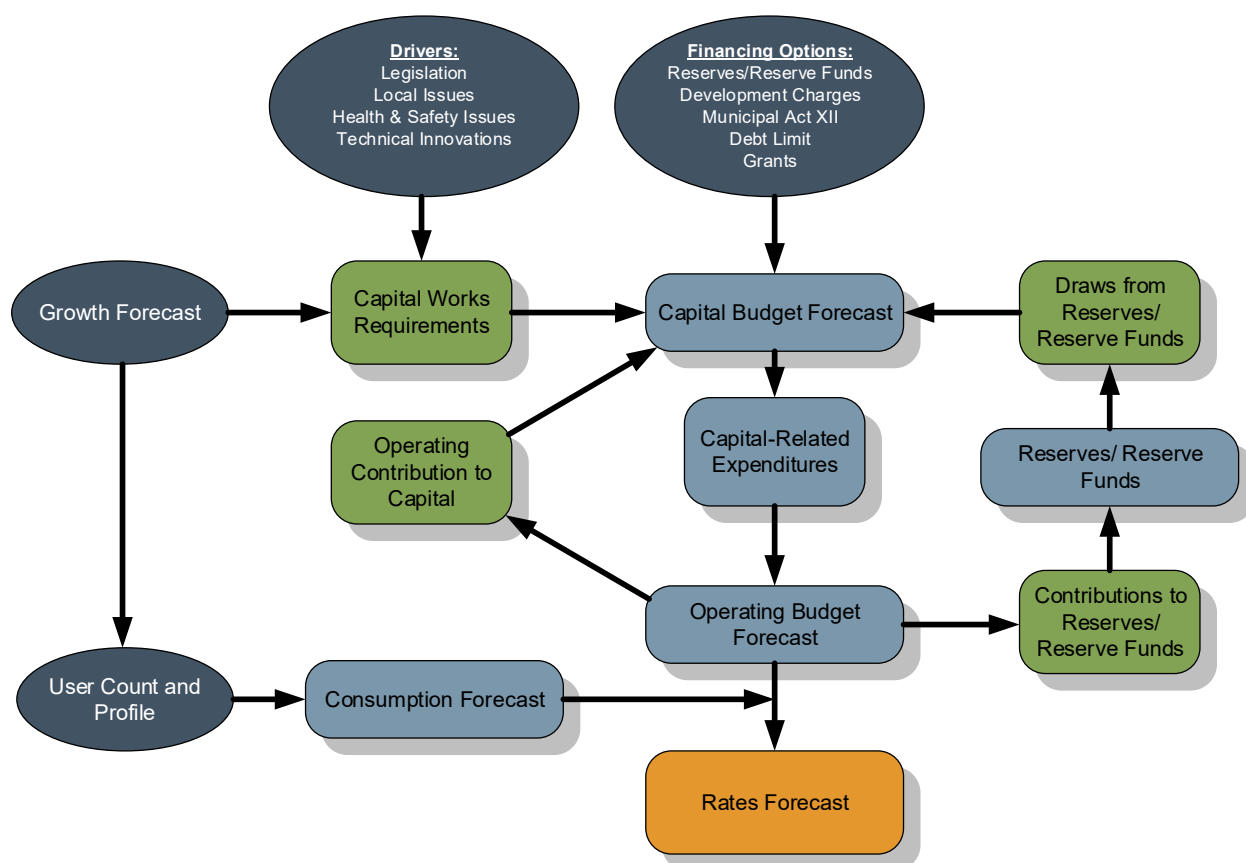
1. Update underlying asset data such as quantities, ages, condition ratings, useful service life expectations, replacement cost valuations, lifecycle activity costing, etc.
2. Define and assess the current condition of assets using a combination of staff input, existing background reports and studies, and age-based condition analysis.
3. Update current levels of service based on analyses of available data and review of various background reports and identify proposed levels of service through discussions with the Municipality's staff.
4. Compile a lifecycle expenditure forecast to address known capital needs across the water and wastewater systems to inform the financial strategy considered as part of the rate study.
5. Document the asset management plan in a formal report to inform future decision-making and to communicate planning to the public.

1.4 Water and Wastewater Rate Calculation Methodology

Figure 1-2 illustrates the general methodology used in determining the full cost recovery water and wastewater rate forecast.



Figure 1-2
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 1.1.2, the Municipality employs a rate structure consisting of an annual base charge in addition to a consumptive rate. 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 annual base charge revenues are forecast with customer growth. The customer profile forecast is modeled based on anticipated residential development identified in the Municipality's 2025 Development Charges Background Study.

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 Municipality'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. Various sources of information were considered in developing the capital needs forecast, as discussed in further detail within section 3.2.

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 Municipality'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 year-end 2024, the Municipality was providing service to approximately 3,275 water customers and 3,266 wastewater customers.

Under the Municipality's current rate structure, the base charge is imposed on each individual unit. Therefore, it is important to understand the number of individual units that base charges apply to (billing units). As of year-end 2024, there were a total of 3,883 water billing units (including individual units in residential/mixed-use buildings and non-residential buildings) and 3,874 wastewater billing units.

2.2 Forecast Service Demands

Over the next ten years (i.e., to 2035), the number of water and wastewater billing units is anticipated to increase by 1,354. This is based on the number of additional dwelling units and non-residential growth forecasted in the Municipality's 2025 Development Charges Background Study for the 2025-2035 period. Table 2-1 provides the detailed billing unit forecast for the 2025 to 2035 period, showing the number of billing units for water and wastewater.

Consumption records from 2024 were used to develop a forecast of water demands for the period from 2025 to 2035. Annual consumption levels were analyzed from these consumption records and utilized to calculate an annual average per billing unit.

Average annual water consumption per residential billing unit was approximately 130 m³ (28,596 gallons). Furthermore, average annual water consumption per non-residential billing unit was approximately 342 m³ (75,229 gallons).

Applying these estimates to the forecast of new customers results in an estimated increase in total metered water consumption (for water customers) from approximately 127.7 million gallons in 2024 to 168.1 million gallons by 2035. The annual water consumption associated with wastewater customers is approximately 391,600 gallons



lower in each year. Table 2-2 presents the forecast of annual water consumption for water and wastewater customers.



Table 2-1
Municipality of Mississippi Mills
Water and Wastewater Customer Forecast (Billing Units)

Water Customer Forecast	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	3,871	3,871	3,871	3,871	3,871	3,871	3,871	3,871	3,871	3,871	3,871
Existing - Water Only	12	12	12	12	12	12	12	12	12	12	12
New - Residential	58	174	290	407	523	639	755	871	987	1,103	1,220
New - Non-Residential	4	11	18	25	32	39	46	53	60	67	73
Total	3,945	4,068	4,191	4,315	4,438	4,561	4,684	4,807	4,930	5,053	5,176

Wastewater Customer Forecast	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	3,871	3,871	3,871	3,871	3,871	3,871	3,871	3,871	3,871	3,871	3,871
Existing - Sewer Only	3	3	3	3	3	3	3	3	3	3	3
New - Growth	58	174	290	406	523	639	755	871	987	1,103	1,220
New - Non-Residential	4	11	18	25	32	39	46	53	60	67	73
Total	3,936	4,059	4,182	4,305	4,429	4,552	4,675	4,798	4,921	5,044	5,167



Table 2-2
Municipality of Mississippi Mills
Water Consumption Forecast (gallons) – Water and Wastewater Customers

Water Volume Forecast (gallons)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	127,742,598	127,742,598	127,742,598	127,742,598	127,742,598	127,742,598	127,742,598	127,742,598	127,742,598	127,742,598	127,742,598
New	1,959,484	5,803,223	9,646,962	13,519,297	17,363,036	21,206,775	25,050,514	28,894,253	32,737,992	36,581,731	40,378,837
Total	129,702,082	133,545,821	137,389,560	141,261,895	145,105,634	148,949,373	152,793,112	156,636,851	160,480,590	164,324,329	168,121,435

Wastewater Flows Forecast (gallons)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing	127,351,042	127,351,042	127,351,042	127,351,042	127,351,042	127,351,042	127,351,042	127,351,042	127,351,042	127,351,042	127,351,042
New	1,959,484	5,803,223	9,646,962	13,490,701	17,363,036	21,206,775	25,050,514	28,894,253	32,737,992	36,581,731	40,378,837
Total	129,310,526	133,154,265	136,998,004	140,841,743	144,714,078	148,557,817	152,401,556	156,245,295	160,089,034	163,932,773	167,729,879

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



Chapter 3

Capital Infrastructure Needs



3. Capital Infrastructure Asset Management

3.1 State of Local Infrastructure and Levels of Service

3.1.1 Wastewater

3.1.1.1 State of Local Infrastructure

The Municipality owns and manages a wastewater system servicing customers in Almonte. A spatial illustration of the extent of the Municipality's wastewater collection system is provided in Map 3-1. The Municipality's wastewater infrastructure comprises approximately 43.7 kilometres of wastewater mains, 5.7 kilometres of forcemains, 1.1 kilometres of lagoon outfalls, and several facilities including a wastewater treatment plant and eight pumping stations. The combined replacement cost of this infrastructure is estimated at \$152.0 million. Table 3-1 provides summary information for the Municipality's wastewater infrastructure, including quantities, average ages, and replacement costs by asset category. This information is presented graphically in Figure 3-1.

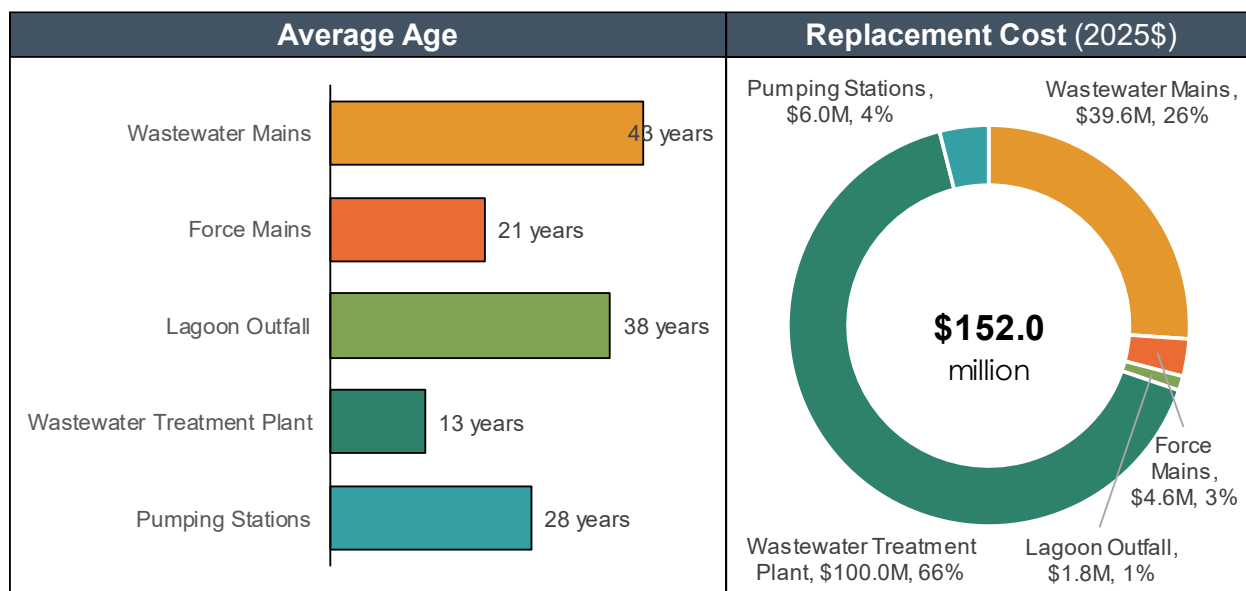
Table 3-1
Wastewater Infrastructure – Summary of Quantity, Age, and Replacement Cost by Asset Category

Asset Category	Quantity	Average Age ^[1]	Replacement Cost (2025\$)
Wastewater Mains	43.7 km	43 years	\$39,607,000
Force Mains	5.7 km	21 years	\$4,580,000
Lagoon Outfall	1.1 km	38 years	\$1,763,000
Wastewater Treatment Plant	1	13 years	\$100,000,000
Pumping Stations	8	28 years	\$6,000,000
Total			\$151,950,000

^[1] Average age for linear assets weighted based upon length of pipe segments.

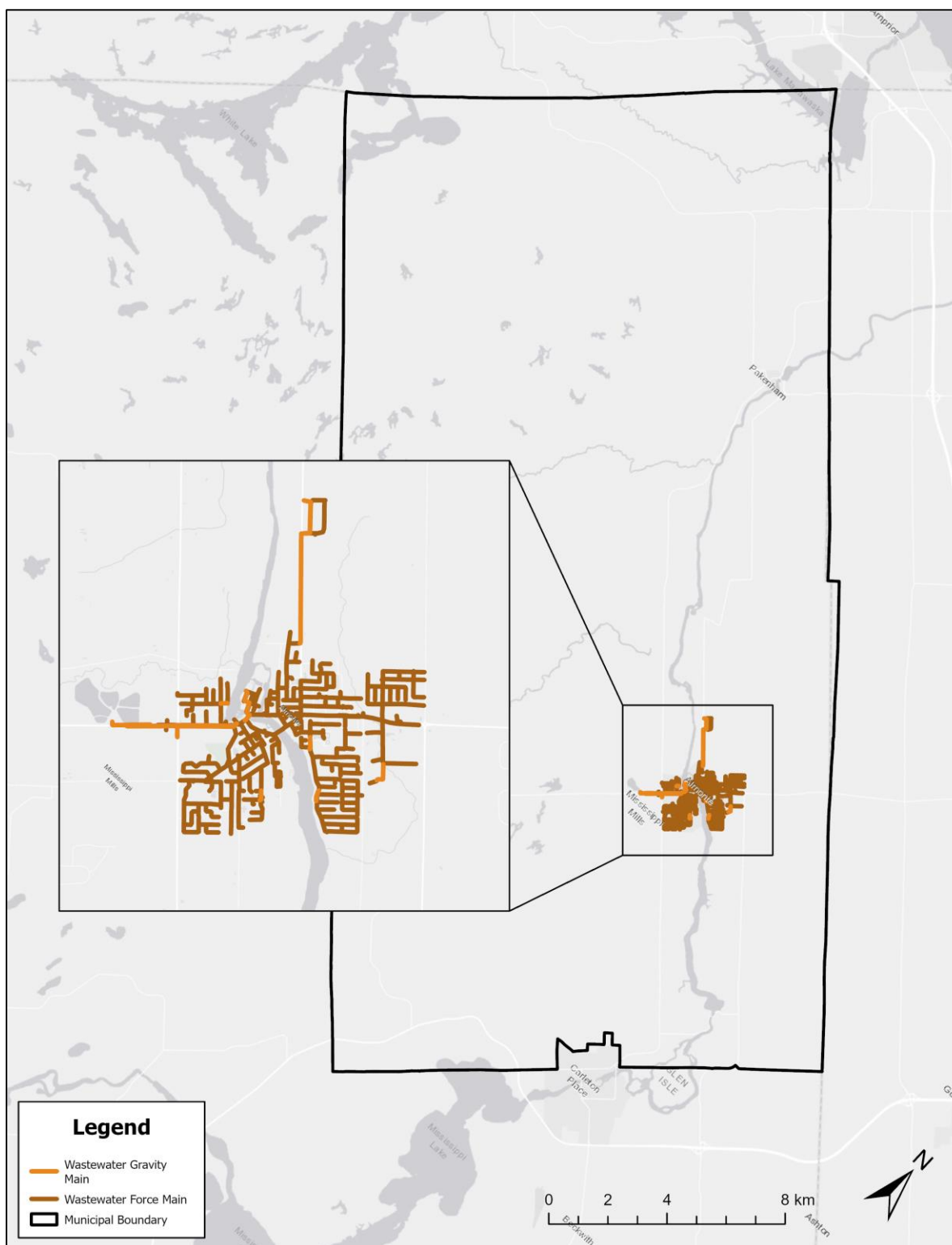


Figure 3-1
Summary Information – Wastewater





Map 3-1
Wastewater Service Area





3.1.1.2 Condition

The condition of the Municipality's wastewater assets—other than wastewater mains—has not been directly assessed through a physical condition assessment. For wastewater mains, the Municipality uses condition grades assigned to individual pipe segments based on closed-circuit television (C.C.T.V.) inspections. Condition grades are assigned for two defect categories – structural and operation and maintenance (O&M). Table 3-2 provides information on how the condition grading (zero to five) correlates with qualitative condition states (from Excellent to Very Poor).

Table 3-2
Wastewater Mains Overall Condition Ratings and Corresponding Condition States

Condition Grade	Condition State
0	No Defects
1	Excellent
2	Good
3	Fair
4	Poor
5	Very Poor

Figure 3-2 and Figure 3-3 show the distribution of wastewater main length by O&M condition grade and structural condition grade, respectively. On average, the Municipality's wastewater mains are in the Very Good condition state



Figure 3-2
Distribution of Wastewater Mains by O&M Condition Grade

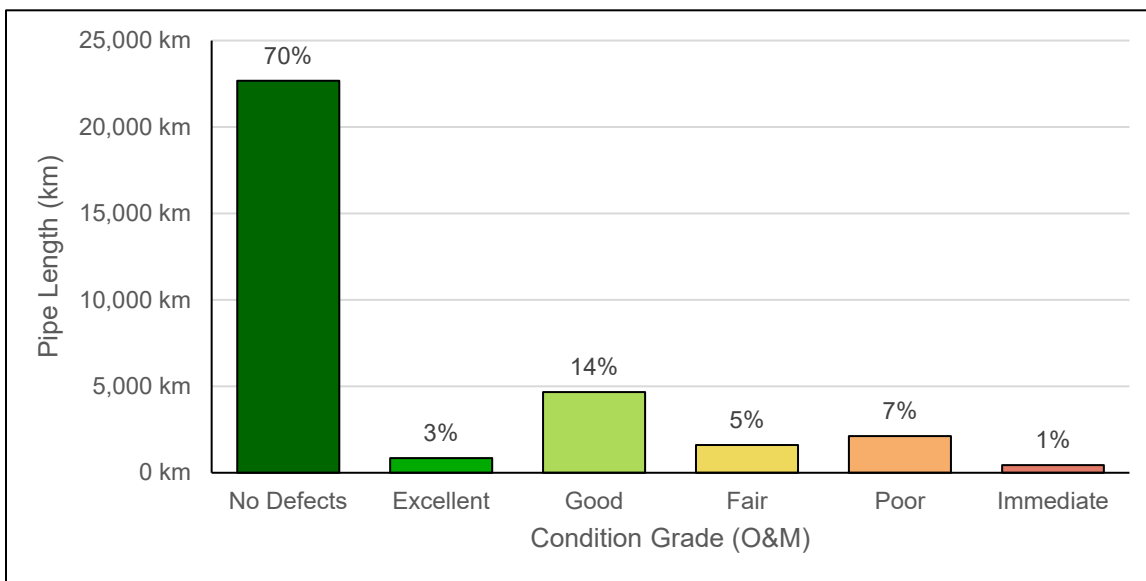
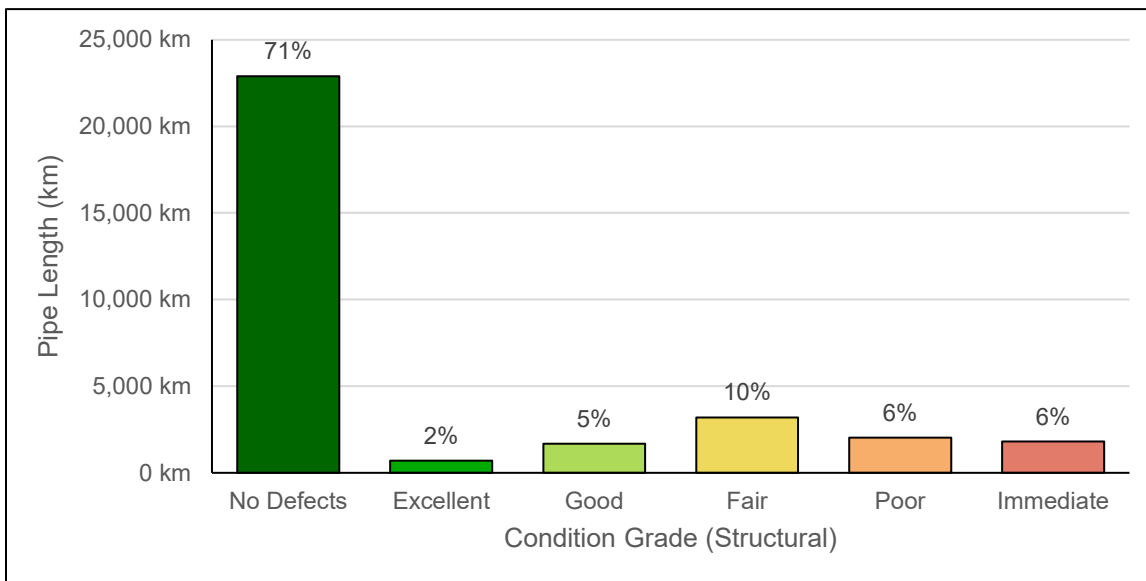


Figure 3-3
Distribution of Wastewater Mains by Structural Condition Grade





3.1.1.3 *Levels of Service*

The levels of service currently provided by the Municipality's wastewater infrastructure are, in part, a result of the state of local infrastructure identified above. The levels of service framework presented in this subsection identifies both the levels of service that assets are currently providing as well as the proposed levels of service (target performance) that the Municipality is striving for.

The levels of service framework is presented as follows:

- The Service Attribute headings and columns indicate the high-level attribute being addressed;
- The Community Levels of Service column in Table 3-3 explains the Municipality's intent in plain language and provides additional information about the service being provided;
- The Performance Measure column in Table 3-4 describes the performance measure(s) connected to the identified service attribute;
- The Current Performance column in Table 3-4 identifies the current level of service with respect to each performance measure based on the best available data; and
- The Target Performance column in Table 3-4 identifies the proposed level of service with respect to each performance measure.



Table 3-3
Community Levels of Service – Wastewater

Service Attribute	Community Levels of Service
Scope	Wastewater service is provided to customers in the Almonte Ward, as illustrated in Map 3-1. Furthermore, disposal of septage materials from private septic systems is available to residents of Pakenham and Ramsay.
Reliability	The Municipality does not have combined sewers (sewers designed to carry both sanitary and storm water in a single pipe). Despite this, stormwater can enter the wastewater system through numerous sources (e.g., openings on maintenance hole covers, cracks, holes, failed joints, and incorrect or faulty connections). As part of its asset management efforts, the Municipality has budgeted for sewer lining to reduce inflow and infiltration.
	The Municipality's facilities are operated in accordance with Environmental Compliance Approvals (E.C.A.) as issued by the Ministry of Environment, Conservation and Parks. A description of the effluent that is discharged from the wastewater treatment facility is provided in the E.C.A. No. 1637-AC8NT7, dated August 8, 2016.



Table 3-4
Technical Levels of Service – Wastewater

Service Attribute	Performance Measure	2025 Performance	Proposed Performance
Scope	Percentage of properties connected to the Municipality's wastewater system.	43.4%	N/A ^[1]
Reliability	The number of connection-days per year lost due to wastewater backups compared to the total number of properties connected to the Municipality's wastewater system.	0.0024	Minimize
	The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the Municipality's wastewater system.	0	0
	Number of Bypass/Overflow events	2	0
	Percentage of wastewater mains that have been inspected at least once in past 5 years (measured by length)	100%	100%
	Percentage of wastewater mains that are in condition state Good or better (measured by length)	83%	Maximize
	Number of Community Complaints	16	0

^[1] The Municipality is not setting an explicit target for this performance measure. The number of properties connected to the Municipality's wastewater system is expected to increase as development occurs and existing properties get subdivided.



3.1.2 Water

3.1.2.1 State of Local Infrastructure

The Municipality owns and manages a water system servicing customers in Almonte. A spatial illustration of the extent of the Municipality's water collection system is provided in Map 3-2. The Municipality's water infrastructure comprises approximately 48.9 kilometres of water mains (including appurtenances such as valves, service connections, and fire hydrants), five pressure reducing valve access points, five wells, one water storage facility, one water tower, and approximately 3,275 water meters. The combined replacement cost of this infrastructure is estimated at \$104.1 million. Table 3-5 provides summary information for the Municipality's water infrastructure, including quantities, average ages, and replacement costs by asset category. This information is presented graphically in Figure 3-4.

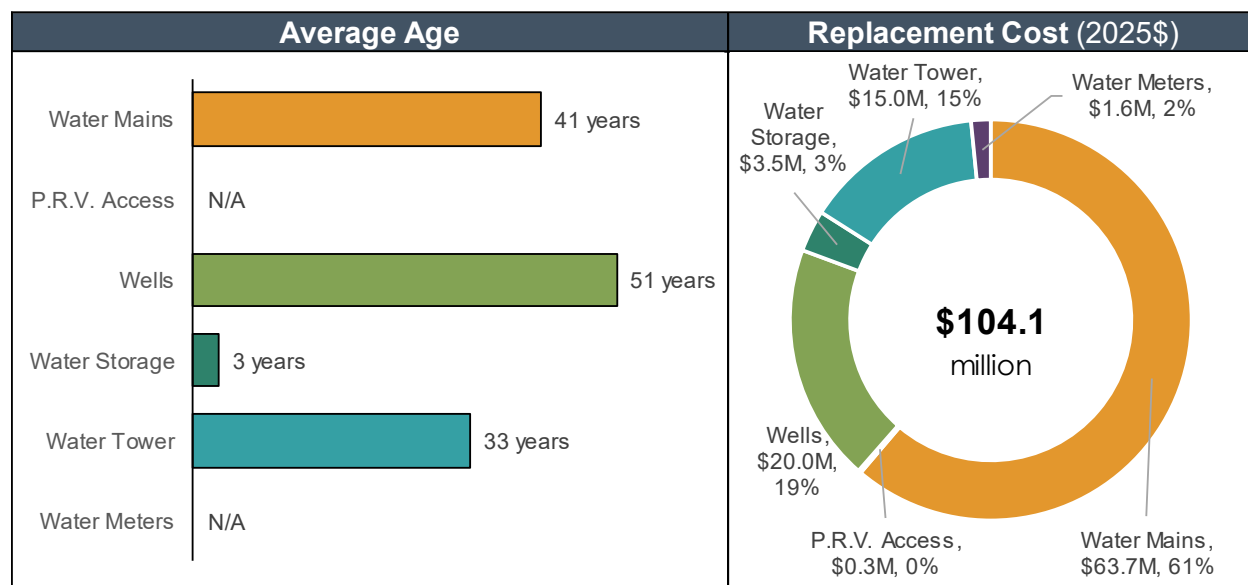
Table 3-5
Water Infrastructure – Summary of Quantity, Age, and Replacement Cost by Asset Category

Asset Category	Quantity	Average Age ^[1]	Replacement Cost (2025\$)
Water Mains	48.9 km	41 years	\$63,730,000
P.R.V. Access	5	N/A	\$250,000
Wells	5	51 years	\$20,000,000
Water Storage	1	3 years	\$3,500,000
Water Tower	1	33 years	\$15,000,000
Water Meters	3,275	N/A	\$1,638,000
Total			\$104,118,000

^[1] Average age for linear assets weighted based upon length of pipe segments.

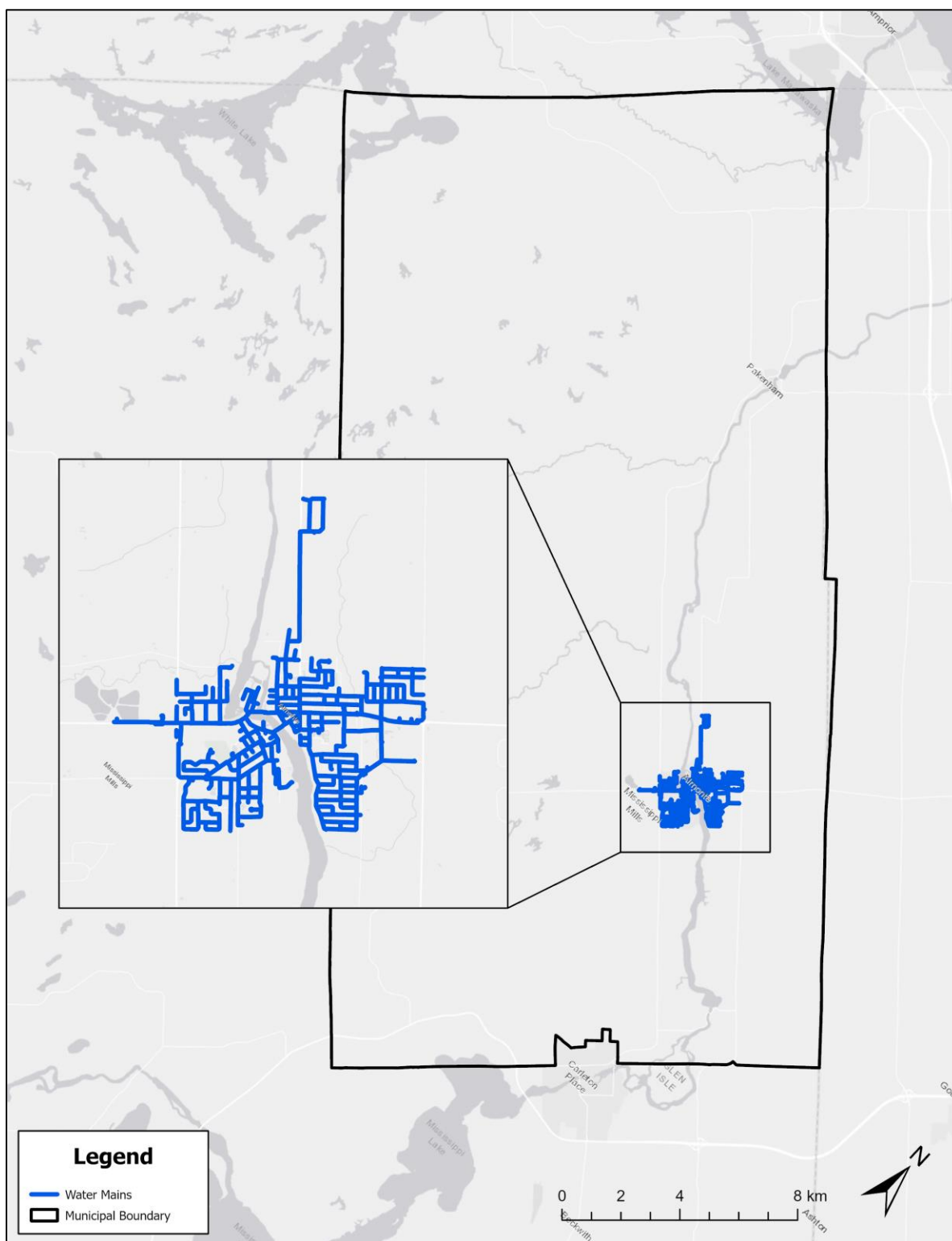


Figure 3-4
Summary Information – Water





Map 3-2
Water Service Area





3.1.2.2 Condition

The condition of the Municipality's water assets has not been directly assessed through a physical condition assessment. For the purposes of this asset management plan, the condition of water mains has been evaluated based on age relative to the expected useful life (i.e., based on the percentage of useful life consumed (U.L.C.%)). A brand-new asset would have a U.L.C.% of 0%, indicating that zero percent of the asset's life expectancy has been utilized. Conversely, an asset that has reached its life expectancy would have a U.L.C.% of 100%. It is possible for assets to have a U.L.C.% greater than 100%, which occurs if an asset has exceeded its typical life expectancy but continues to be in service. This is not necessarily a cause for concern; however, it must be recognized that assets that are near or beyond their typical life expectancy are likely to require replacement or rehabilitation in the near term.

To better communicate the condition of the age-based condition ratings, the U.L.C.% ratings have been segmented into qualitative condition states as summarized in **Error! Reference source not found.** The scale is set to show that if assets are replaced around the expected useful life, they would be in the Fair condition state. The Fair condition state extends to 100% of expected useful life. Beyond 100% of useful life, the probability of failure is assumed to have increased to a point where performance would be characterized as Poor or Very Poor.

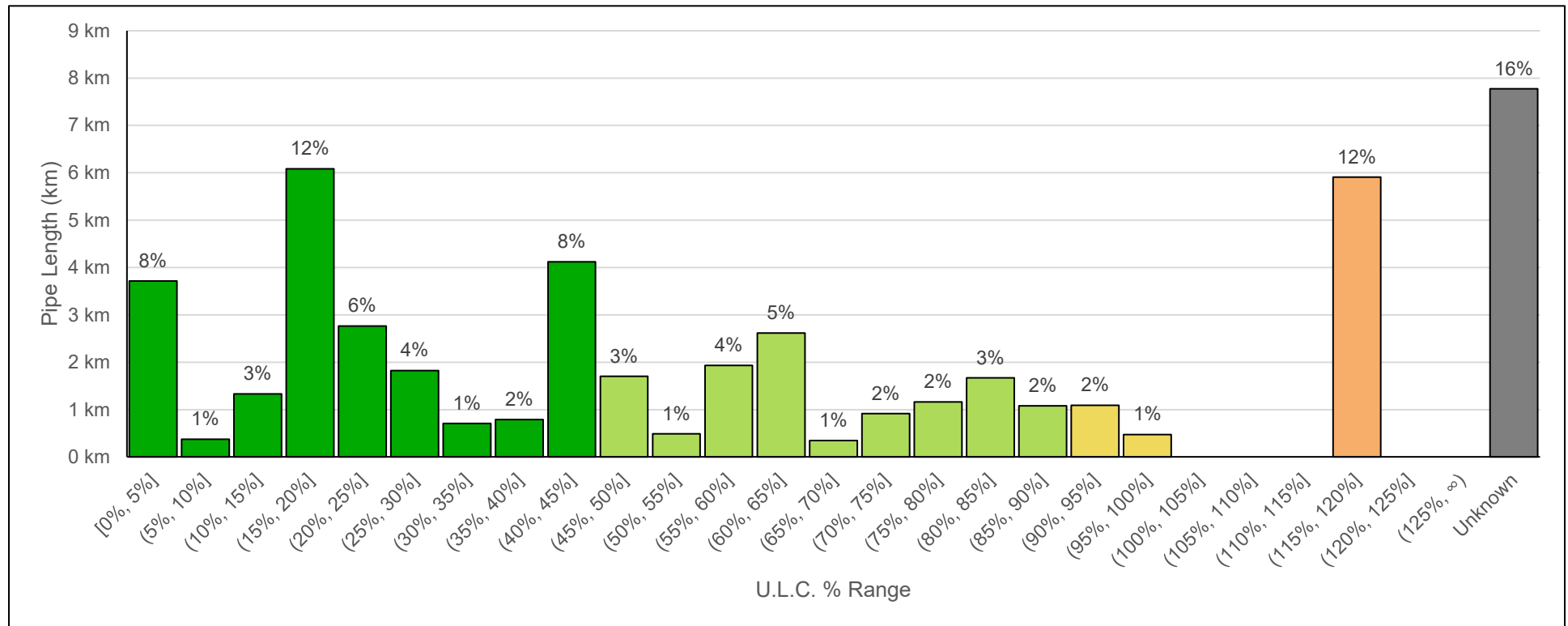
Table 3-6
Condition States Defined with Respect to U.L.C.% – Wastewater Assets

Condition State	U.L.C.%
Very Good	$0\% \leq \text{U.L.C.\%} \leq 45\%$
Good	$45\% < \text{U.L.C.\%} \leq 90\%$
Fair	$90\% < \text{U.L.C.\%} \leq 100\%$
Poor	$100\% < \text{U.L.C.\%} \leq 125\%$
Very Poor	$125\% < \text{U.L.C.\%}$

Figure 3-5 shows the distribution of water main length by condition (U.L.C.%). On average, the Municipality's water mains are in the Good condition state.



Figure 3-5
Distribution of Water Mains by Condition





3.1.2.3 Levels of Service

This section provides an overview of the Municipality's level of service framework for water services. Table 3-7 presents the Service Attributes and Community Levels of Service while Table 3-8 presents the Technical Levels of Service (i.e., performance measures), including current and target performance. Please refer to subsection 3.1.1.3 for further details on the Municipality's levels of service framework.

Table 3-7
Community Levels of Service – Water

Service Attribute	Community Levels of Service
Scope	Water service is provided to customers in the Almonte Ward, as illustrated in Map 3-2. All areas that are connected to the water system have fire flow available.
Reliability	<p>The Municipality has developed and implements a Drinking Water Quality Management System (DWQMS) to enhance the management and operation of its drinking water system, ensuring a continual supply of safe drinking water to all consumers.</p> <p>Boil water advisories can be caused by adverse water quality test results or problems in the water treatment and distribution system. Service interruptions can occur as a result of routine water system maintenance or asset failure. Both boil water advisories and service interruptions are handled in accordance with the Municipality's DWQMS.</p>



Table 3-8
Technical Levels of Service – Water

Service Attribute	Performance Measure	2025 Performance	Proposed Performance
Scope	Percentage of properties connected to the Municipality's water system.	43.5%	N/A ^[1]
	Percentage of properties where fire flow is available.	43.5%	N/A ^[1]
Reliability	The number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the Municipality's water system.	0	0
	The number of connection-days per year lost due to water main breaks compared to the total number of properties connected to the Municipality's water system.	0.0019	Minimize

3.2 Lifecycle Management Strategy

The lifecycle management strategies in this asset management plan identify the lifecycle activities that would need to be undertaken to provide the proposed levels of service presented above. Within the context of this asset management plan, lifecycle activities are the specific actions that need to be performed on an asset in order to ensure it is performing as expected and/or to prolong its remaining service life. These actions can be carried out on a planned schedule in a prescriptive manner or through a dynamic approach where the lifecycle activities are only carried out when specified conditions are met. In accordance with O. Reg. 588/17, the lifecycle activities and associated costs presented in this chapter consider the full lifecycle of assets. In general terms, an asset's lifecycle starts with its initial planning and acquisition (or construction), includes both the capital and significant operating/maintenance activities the asset is expected to undergo throughout its life, and ends with its eventual disposal.

^[1] The Municipality is not setting an explicit target for this performance measure. The number of properties connected to the Municipality's water system is expected to increase as development occurs and existing properties get subdivided.



Additionally, O. Reg. 588/17 requires that all potential lifecycle activity options be assessed, with the aim of identifying the set of lifecycle activities that can be undertaken at the lowest cost to provide the proposed levels of service. Asset management plans must include a ten-year capital forecast, identifying the lifecycle activities resulting from the lifecycle management strategy. The 10-year lifecycle expenditure forecasts are estimates developed using the best available information at a point in time. The Municipality should plan to regularly update the underlying data informing the forecasts presented in this chapter to ensure continual alignment with the Municipality's evolving asset management environment.

3.2.1 Lifecycle Funding Requirements

An annual lifecycle funding target represents the level of funding that would be required annually to fully finance a lifecycle management strategy over the long term. By planning to achieve this annual funding level, the Municipality would theoretically be able to fully fund capital works as they arise. In practice, however, capital expenditures often fluctuate year-to-year based on the specific lifecycle activities being undertaken in a given year. By planning to achieve the lifecycle funding target over the long term, the periods of relatively low capital needs would allow for the building up of lifecycle reserve funds that could be drawn upon in times of relatively high capital needs.

Table 3-9 summarizes the annual lifecycle funding targets for the Municipality's water and wastewater infrastructure portfolio as of today (in 2025\$) and expected by the end of the forecast period (in 2035\$). The 2035 estimates reflect inflationary adjustments based on capital cost indexes (see Section 1.4.2 for more detail) and include new/expanded assets that the Municipality will acquire over the 10-year forecast (e.g., expansion of the wastewater treatment system, expanded sewage pumping stations, water main network expansion, etc.).

The annual lifecycle funding targets for most assets have been estimated using annual reinvestment rates identified in the 2016 Canadian Infrastructure Report Card¹ (2016 C.I.R.C.). Because the C.I.R.C provides a range of annual reinvestment rates for each infrastructure category, the midpoint of the applicable range was used to calculate the annual lifecycle funding target. For water meters and wastewater mains, the annual

¹ Canadian Infrastructure Report Card: Informing the Future. (The Canadian Council for Public-Private Partnerships, 2016). Accessed from https://www.pppcouncil.ca/web/pdf/infra_report_card_2016.pdf



reinvestment rates have been based upon on each asset category's estimated useful lives.

Table 3-9
Annual Lifecycle Funding Targets by Asset Category

Asset Category	Annual Lifecycle Funding Target (2025\$)	Annual Lifecycle Funding Target (2035\$)
Water		
Water Mains	\$797,000	\$1,839,000
P.R.V. Access	\$3,000	\$5,000
Wells	\$420,000	\$985,000
Water Storage	\$74,000	\$113,000
Water Tower	\$315,000	\$754,000
Water Meters	\$82,000	\$126,000
Total Water	\$1,691,000	\$3,822,000
Wastewater		
Wastewater Mains	\$429,000	\$660,000
Force Mains	\$57,000	\$88,000
Lagoon Outfall	\$22,000	\$34,000
Wastewater Treatment Plant	\$2,100,000	\$6,460,000
Pumping Stations	\$126,000	\$485,000
Total Wastewater	\$2,734,000	\$7,727,000
Total	\$4,425,000	\$11,549,000

3.2.2 Capital Expenditure Forecast

Ten-year capital forecasts were developed to address known capital needs across the water and wastewater systems. The forecast was informed by the Municipality's Water and Wastewater Infrastructure Master Plan, and includes projects identified in the 2025 D.C. Background Study, projects required to achieve the proposed levels of service presented in Sections 3.1.1.3 and 3.1.2.3, and projects identified through consultation with the Municipality's staff.

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

- Watermain and wastewater main network upgrades and rehabilitation (2025-2035);
- Extensions of watermains on County Road 29 (2025-2026; 2033);



- Increased capacity of Wells 7 & 8 (2027);
- Upgrade of Gemmill's Bay sewage pumping station (2028-2029);
- Third River watermain crossing (2029-2030);
- Wastewater Treatment Plant expansion (2030-2031);
- New Well(s) (2032-2033);
- Fourth River watermain crossing (2035); and
- Increased capacity of Elevated Tank (2035).

The total capital forecast—in current dollars—includes approximately \$228.3 million in capital needs, with approximately 37% of that related to the water system and the remaining 63% related to the wastewater system.

The average annual value of the capital program is approximately \$20.8 million in today's dollars (i.e., 2025\$). This level of expenditure is greater than the forecasted annual lifecycle costs identified in Section 3.2.1 after adjusting the 2035 target to 2025\$ (\$7.5 million). This suggests that the 10-year forecast of infrastructure renewal and replacement needs identified in this study are greater than the longer-term capital funding requirements.

The listing of water and wastewater capital needs is presented in Table 3-10. For rate determination purposes, the capital needs forecast has been indexed 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.



Table 3-10
Municipality of Mississippi Mills
Water & Wastewater Capital Budget Forecast (Uninflated \$)

Description	Total	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Water Lifecycle												
Union Street North Water (Main St. to Carss)	750,000	750,000	-	-	-	-	-	-	-	-	-	-
Computurized Operations And Asset Mangement System	20,000	10,000	10,000	-	-	-	-	-	-	-	-	-
Engineering Design and Approvals (Various Projects)	437,500	37,500	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Radio Frequency Meter Conversion	247,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500
Treatment Maintenance Projects	457,586	41,599	41,599	41,599	41,599	41,599	41,599	41,599	41,599	41,599	41,599	41,599
Treatment Minor Capital Projects	525,250	108,500	22,000	39,000	25,000	28,000	64,000	47,750	47,750	47,750	47,750	47,750
Water Tower repairs (Landmark Report)	35,000	-	35,000	-	-	-	-	-	-	-	-	-
Well 3 Pump Overhaul/Inspection	22,000	-	-	-	-	22,000	-	-	-	-	-	-
Well 5 Pump Overhaul/Inspection	50,000	-	-	50,000	-	-	-	-	-	-	-	-
Well 6 Pump Overhaul/Inspection	60,000	-	-	-	60,000	-	-	-	-	-	-	-
Well 7 Pump Overhaul/Replacement	70,000	-	70,000	-	-	-	-	-	-	-	-	-
Well 8 Pump Overhaul/Inspection	50,000	-	-	-	-	50,000	-	-	-	-	-	-
Well 6 electrical/control panel upgrades	50,000	-	-	50,000	-	-	-	-	-	-	-	-
Well 5 electrical/control panel upgrades	50,000	-	-	-	50,000	-	-	-	-	-	-	-
Well 3 electrical/control panel upgrades	50,000	-	-	-	-	-	50,000	-	-	-	-	-
Optimize Pressure Zones and Install New PRVs	300,000	-	100,000	-	-	-	-	100,000	-	-	-	100,000
Water Distribution Watermain Condition Upgrades	19,604,000	304,000	500,000	2,960,000	2,960,000	2,960,000	2,960,000	2,960,000	1,000,000	1,000,000	1,000,000	1,000,000
Growth-related												
Third River Crossing	6,500,000	-	-	-	-	3,250,000	3,250,000	-	-	-	-	-
Geotechnical feasibility study/EA for the Third Crossing	200,000	-	-	-	200,000	-	-	-	-	-	-	-
County Road 29 Extension North	4,014,439	1,651,831	2,362,608	-	-	-	-	-	-	-	-	-
Connection between Third River Crossing and County Road 29 (oversizing portion only)	371,347	371,347	-	-	-	-	-	-	-	-	-	-
Upgrade watermain along Florence Street	952,034	-	-	-	-	-	952,034	-	-	-	-	-
Fourth River Crossing	17,000,000	-	-	-	-	-	-	-	-	-	-	17,000,000
Schedule 'B' Class EA for the Fourth Crossing	300,000	-	-	-	-	-	-	-	-	-	300,000	-
Country Road 29 Extension South	2,950,859	-	-	-	-	-	-	-	-	2,950,859	-	-
Connecting Existing Reservoir to County Road 29	325,000	325,000	-	-	-	-	-	-	-	-	-	-
Increase Capacity of Wells 7 & 8 (New Well)	2,500,000	-	-	2,500,000	-	-	-	-	-	-	-	-
Schedule 'B' Class EA to increase the water supply at Wells 7 & 8	250,000	250,000	-	-	-	-	-	-	-	-	-	-
Well site selection and well testing	500,000	-	-	-	-	-	-	500,000	-	-	-	-
Schedule 'B' Class EA to establish a new well location	300,000	-	-	-	-	-	-	300,000	-	-	-	-



Table 3-10 (continued)
Municipality of Mississippi Mills
Water & Wastewater Capital Budget Forecast (Uninflated \$)

Description	Total	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
New Well(s) installation and expansion	8,000,000	-	-	-	-	-	-	-	4,000,000	4,000,000	-	-
Increase Capacity of Elevated Tank	15,000,000	-	-	-	-	-	-	-	-	-	-	15,000,000
Schedule 'B' Class EA for a new elevated water storage tank	200,000	-	-	-	-	-	-	-	-	-	200,000	-
Create Pressure Zone 3	190,400	-	-	-	-	-	190,400	-	-	-	-	-
Carss Street, from Union Street North to Mississippi River	761,300	761,300	-	-	-	-	-	-	-	-	-	-
Appleton Side Road Looping	1,464,000	-	-	-	-	-	1,464,000	-	-	-	-	-
Water Master Plan Update	100,000	-	-	-	-	-	-	100,000	-	-	-	-
Sub-total Water	84,658,215	4,633,577	3,203,707	5,703,099	3,399,099	6,414,099	9,034,532	4,111,849	5,151,849	8,102,708	1,651,849	33,251,849
Wastewater Lifecycle												
Union Street North Sanitary (Main St. to Carss)	750,000	750,000	-	-	-	-	-	-	-	-	-	-
Computurized Operations And Asset Mangement System	20,000	10,000	10,000	-	-	-	-	-	-	-	-	-
Engineering Design and Approvals (Various Projects)	437,500	37,500	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Radio Frequency Meter Conversion	247,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500
Treatment Maintenance Projects	1,310,694	119,154	119,154	119,154	119,154	119,154	119,154	119,154	119,154	119,154	119,154	119,154
Treatment Minor Capital Projects	718,650	63,000	60,000	65,000	77,000	69,000	58,000	65,330	65,330	65,330	65,330	65,330
Filter A Media replacement and refurbishment	30,000	30,000	-	-	-	-	-	-	-	-	-	-
Secondary Clarifier(s) Chain Replacement	100,000	-	50,000	50,000	-	-	-	-	-	-	-	-
Sewage Pumping Stations Maintenance Projects	534,920	48,629	48,629	48,629	48,629	48,629	48,629	48,629	48,629	48,629	48,629	48,629
Sewage Pumping Stations Minor Capital Projects	380,400	27,000	58,000	48,000	10,000	44,500	20,000	34,580	34,580	34,580	34,580	34,580
Island St. SPS pump replacements	85,000	-	-	40,000	45,000	-	-	-	-	-	-	-
Condition Assessments of six minor SPSs	120,000	-	120,000	-	-	-	-	-	-	-	-	-
Sewer condition upgrades	14,919,000	419,000	500,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	1,000,000	1,000,000	1,000,000	1,000,000



Table 3-10 (continued)
Municipality of Mississippi Mills
Water & Wastewater Capital Budget Forecast (Uninflated \$)

Description	Total	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Growth-related												
Martin St. N Upgrade	1,347,016	-	1,347,016	-	-	-	-	-	-	-	-	-
Gemmill's Bay SPS Upgrade	15,000,000	-	-	-	7,500,000	7,500,000	-	-	-	-	-	-
Schedule 'B' Class EA for the Gemmill's Bay SPS Expansion	250,000	250,000	-	-	-	-	-	-	-	-	-	-
Upsizing Hilan Village Pump Station (oversizing only)	21,573	-	-	21,573	-	-	-	-	-	-	-	-
Wastewater Treatment Plant Expansion	100,000,000	-	-	-	-	-	50,000,000	50,000,000	-	-	-	-
Schedule 'C' Class EA for the WWTP Expansion	350,000	350,000	-	-	-	-	-	-	-	-	-	-
Industrial Dr., Houston Dr., Paterson St., Ottawa St., and St. James Upgrades	5,813,803	-	-	-	5,813,803	-	-	-	-	-	-	-
Stormwater and Drainage Master Plan	200,000	200,000	-	-	-	-	-	-	-	-	-	-
Upgrade wastewater main along Florence Street	952,034	-	-	952,034	-	-	-	-	-	-	-	-
Wastewater Master Plan Update	100,000	-	-	-	-	-	-	100,000	-	-	-	-
Sub-total Wastewater	143,688,090	2,326,783	2,375,299	3,406,890	15,676,086	9,843,783	52,308,283	52,430,193	1,330,193	1,330,193	1,330,193	1,330,193
Total Capital Expenditures	228,346,305	6,960,360	5,579,006	9,109,989	19,075,185	16,257,882	61,342,815	56,542,042	6,482,042	9,432,901	2,982,042	34,582,042



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 municipality'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
<i>Development Charges Act, 1997</i>	4.1
<i>Municipal Act, 2001</i>	
○ 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

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, as amended, municipalities may pass by-laws to impose charges to recover the capital costs associated with development and redevelopment. The rate forecast includes development charge funding for water and wastewater services, as identified in the Municipality's 2025 Development Charges Background Study.

4.2 Municipal Act

Part XII of the *Municipal Act*, 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 Municipality does not recover capital costs through capital charges imposed under the *Municipal Act*.

4.3 Grant Funding Availability

Capital grant funding of \$30.0 million has been identified as a funding source for the Municipality's Wastewater Treatment System expansion. To the extent that the Municipality is successful in securing additional 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 Municipality 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 December 31, 2024 closing balances.

Table 4-1
Municipality of Mississippi Mills
Water and Wastewater Reserve/Reserve Fund Balances

Reserve	Dec. 31 2024
Water & Wastewater Capital Reserve Fund	\$ 2,568,467
Wastewater Development Charges Reserve Fund	\$ 462,174
Water Development Charges Reserve Fund	\$ 3,530,689

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.

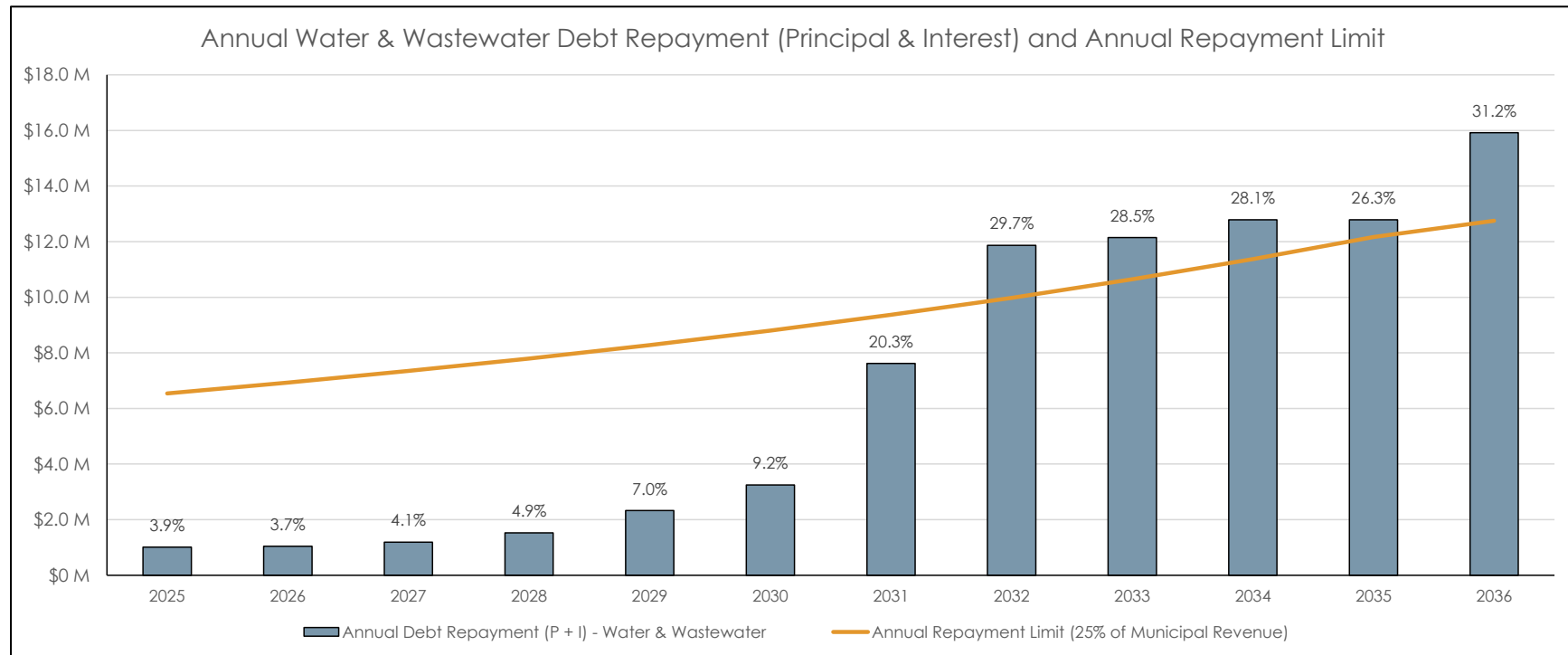
The Ministry of Municipal Affairs and Housing regulates the level of debt incurred by Ontario municipalities through its powers established under the *Municipal Act*. O. Reg. 403/02 provides the current rules respecting municipal debt and financial obligations. Through the rules established under these 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 Municipality has outstanding external debt for water and wastewater services. The existing debt has a current total outstanding principal balance of \$13.3 million, which is scheduled to be fully repaid by 2049.

The capital forecast proposes additional debt financing for the water and wastewater systems totaling \$190.3 million over the forecast period (of which approximately 22% would be rate-funded and 78% development charge-funded). It is noted that the annual debt servicing costs associated with this amount of debt would put the Municipality in exceedance of the provincially mandated limit noted above. This suggests that the Municipality will need to do more work over the short term to manage this constraint (e.g., by deferring capital, securing additional grant funding, and/or entering into front-ending agreements with developers). Figure 4-1 presents the debt load forecast for the Municipality over the 10-year forecast horizon. Please note that this forecast does not include any additional tax-supported debt financing.



Figure 4-1
Debt Servicing Costs and Annual Repayment Limit Forecast





4.6 Recommended Approach

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

Table 4-2
Municipality of Mississippi Mills
2025 to 2035 Water and Wastewater Capital Funding Program (Inflated \$)

Funding Source	Total Funding Amount (2025-2035)
Provincial/Federal Grants	\$30,000,000
Development Charges Reserve Fund	\$31,149,168
Growth-related Debt	\$148,593,315
Capital Reserve	\$41,201,261
Non-growth-related Debt	\$41,742,615
Total	\$292,686,360

Table 4-3 provides the full 10-year capital expenditure and funding program for Water and Wastewater. The capital funding plan is provided in inflated dollars.



Table 4-3
Municipality of Mississippi Mills
Water and Wastewater Service Capital Budget Forecast (Inflated \$)

Description	Total	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Water Lifecycle												
Union Street North Water (Main St. to Carss)	750,000	750,000	-	-	-	-	-	-	-	-	-	-
Computurized Operations And Asset Mangement System	20,000	10,000	10,000	-	-	-	-	-	-	-	-	-
Engineering Design and Approvals (Various Projects)	550,500	37,500	42,000	44,000	46,000	48,000	50,000	52,000	54,000	56,000	59,000	62,000
Radio Frequency Meter Conversion	310,500	22,500	23,000	25,000	26,000	27,000	28,000	29,000	30,000	32,000	33,000	35,000
Treatment Maintenance Projects	571,599	41,599	43,000	45,000	47,000	49,000	52,000	54,000	56,000	59,000	61,000	64,000
Treatment Minor Capital Projects	651,500	108,500	23,000	43,000	28,000	33,000	79,000	62,000	65,000	67,000	70,000	73,000
Water Tower repairs (Landmark Report)	37,000	-	37,000	-	-	-	-	-	-	-	-	-
Well 3 Pump Overhaul/Inspection	26,000	-	-	-	-	26,000	-	-	-	-	-	-
Well 5 Pump Overhaul/Inspection	54,000	-	-	54,000	-	-	-	-	-	-	-	-
Well 6 Pump Overhaul/Inspection	68,000	-	-	-	68,000	-	-	-	-	-	-	-
Well 7 Pump Overhaul/Replacement	73,000	-	73,000	-	-	-	-	-	-	-	-	-
Well 8 Pump Overhaul/Inspection	59,000	-	-	-	-	59,000	-	-	-	-	-	-
Well 6 electrical/control panel upgrades	54,000	-	-	54,000	-	-	-	-	-	-	-	-
Well 5 electrical/control panel upgrades	57,000	-	-	-	57,000	-	-	-	-	-	-	-
Well 3 electrical/control panel upgrades	62,000	-	-	-	-	-	62,000	-	-	-	-	-
Optimize Pressure Zones and Install New PRVs	387,000	-	104,000	-	-	-	-	129,000	-	-	-	154,000
Water Distribution Watermain Condition Upgrades	24,214,000	304,000	522,000	3,226,000	3,368,000	3,516,000	3,671,000	3,833,000	1,352,000	1,411,000	1,473,000	1,538,000
Growth-related												
Third River Crossing	7,892,000	-	-	-	-	3,861,000	4,031,000	-	-	-	-	-
Geotechnical feasibility study/EA for the Third Crossing	228,000	-	-	-	228,000	-	-	-	-	-	-	-
County Road 29 Extension North	4,118,831	1,651,831	2,467,000	-	-	-	-	-	-	-	-	-
Connection between Third River Crossing and County Road 29 (oversizing portion only)	371,347	371,347	-	-	-	-	-	-	-	-	-	-
Upgrade watermain along Florence Street	1,181,000	-	-	-	-	-	1,181,000	-	-	-	-	-
Fourth River Crossing	26,149,000	-	-	-	-	-	-	-	-	-	-	26,149,000
Schedule 'B' Class EA for the Fourth Crossing	442,000	-	-	-	-	-	-	-	-	-	442,000	-
Country Road 29 Extension South	4,164,000	-	-	-	-	-	-	-	-	4,164,000	-	-
Connecting Existing Reservoir to County Road 29	325,000	325,000	-	-	-	-	-	-	-	-	-	-
Increase Capacity of Wells 7 & 8 (New Well)	2,725,000	-	-	2,725,000	-	-	-	-	-	-	-	-
Schedule 'B' Class EA to increase the water supply at Wells 7 & 8	250,000	250,000	-	-	-	-	-	-	-	-	-	-
Well site selection and well testing	647,000	-	-	-	-	-	-	647,000	-	-	-	-
Schedule 'B' Class EA to establish a new well location	388,000	-	-	-	-	-	-	388,000	-	-	-	-



Table 4-3 (continued)
Municipality of Brighton
Water Service Capital Budget Forecast (Inflated \$)

Description	Total	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
New Well(s) installation and expansion	11,052,000	-	-	-	-	-	-	-	5,407,000	5,645,000	-	-
Increase Capacity of Elevated Tank	23,073,000	-	-	-	-	-	-	-	-	-	-	23,073,000
Schedule 'B' Class EA for a new elevated water storage tank	295,000	-	-	-	-	-	-	-	-	-	295,000	-
Create Pressure Zone 3	236,000	-	-	-	-	-	236,000	-	-	-	-	-
Carss Street, from Union Street North to Mississippi River	761,300	761,300	-	-	-	-	-	-	-	-	-	-
Appleton Side Road Looping	1,816,000	-	-	-	-	-	1,816,000	-	-	-	-	-
Water Master Plan Update	129,000	-	-	-	-	-	-	129,000	-	-	-	-
Sub-total Water	114,188,577	4,633,577	3,344,000	6,216,000	3,868,000	7,619,000	11,206,000	5,323,000	6,964,000	11,434,000	2,433,000	51,148,000
Wastewater Lifecycle												
Union Street North Sanitary (Main St. to Carss)	750,000	750,000	-	-	-	-	-	-	-	-	-	-
Computerized Operations And Asset Mangement System	20,000	10,000	10,000	-	-	-	-	-	-	-	-	-
Engineering Design and Approvals (Various Projects)	550,500	37,500	42,000	44,000	46,000	48,000	50,000	52,000	54,000	56,000	59,000	62,000
Radio Frequency Meter Conversion	310,500	22,500	23,000	25,000	26,000	27,000	28,000	29,000	30,000	32,000	33,000	35,000
Treatment Maintenance Projects	1,641,154	119,154	124,000	130,000	136,000	142,000	148,000	154,000	161,000	168,000	176,000	183,000
Treatment Minor Capital Projects	900,000	63,000	63,000	71,000	88,000	82,000	72,000	85,000	88,000	92,000	96,000	100,000
Filter A Media replacement and refurbishment	30,000	30,000	-	-	-	-	-	-	-	-	-	-
Secondary Clarifier(s) Chain Replacement	106,000	-	52,000	54,000	-	-	-	-	-	-	-	-
Sewage Pumping Stations Maintenance Projects	670,629	48,629	51,000	53,000	55,000	58,000	60,000	63,000	66,000	69,000	72,000	75,000
Sewage Pumping Stations Minor Capital Projects	474,000	27,000	61,000	52,000	11,000	53,000	25,000	45,000	47,000	49,000	51,000	53,000
Island St. SPS pump replacements	95,000	-	-	44,000	51,000	-	-	-	-	-	-	-
Condition Assessments of six minor SPSs	125,000	-	125,000	-	-	-	-	-	-	-	-	-
Sewer condition upgrades	18,617,000	419,000	522,000	2,180,000	2,276,000	2,376,000	2,480,000	2,590,000	1,352,000	1,411,000	1,473,000	1,538,000
Growth-related												
Martin St. N Upgrade	1,406,000	-	1,406,000	-	-	-	-	-	-	-	-	-
Gemmill's Bay SPS Upgrade	17,444,000	-	-	-	8,534,000	8,910,000	-	-	-	-	-	-
Schedule 'B' Class EA for the Gemmill's Bay SPS Expansion	250,000	250,000	-	-	-	-	-	-	-	-	-	-
Upsizing Hilan Village Pump Station (oversizing only)	24,000	-	-	24,000	-	-	-	-	-	-	-	-
Wastewater Treatment Plant Expansion	126,752,000	-	-	-	-	-	62,012,000	64,740,000	-	-	-	-
Schedule 'C' Class EA for the WWTP Expansion	350,000	350,000	-	-	-	-	-	-	-	-	-	-
Industrial Dr., Houston Dr., Paterson St., Ottawa St., and St. James Upgrades	6,615,000	-	-	-	6,615,000	-	-	-	-	-	-	-



Table 4-3 (continued)
Municipality of Brighton
Water Service Capital Budget Forecast (Inflated \$)

Description	Total	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Stormwater and Drainage Master Plan	200,000	200,000	-	-	-	-	-	-	-	-	-	-
Upgrade wastewater main along Florence Street	1,038,000	-	-	1,038,000	-	-	-	-	-	-	-	-
Wastewater Master Plan Update	129,000	-	-	-	-	-	-	129,000	-	-	-	-
Sub-total Wastewater	178,497,783	2,326,783	2,479,000	3,715,000	17,838,000	11,696,000	64,875,000	67,887,000	1,798,000	1,877,000	1,960,000	2,046,000
Total Capital Expenditures	292,686,360	6,960,360	5,823,000	9,931,000	21,706,000	19,315,000	76,081,000	73,210,000	8,762,000	13,311,000	4,393,000	53,194,000
Capital Financing												
Provincial/Federal Grants	30,000,000	-	-	-	-	-	15,000,000	15,000,000	-	-	-	-
Water Development Charges Reserve Fund	16,656,033	2,185,389	1,233,500	2,725,000	114,000	1,930,500	2,858,791	1,131,750	1,790,000	1,292,647	692,800	701,656
Wastewater Development Charges Reserve Fund	14,493,135	660,000	703,000	854,400	9,006,505	3,172,480	-	96,750	-	-	-	-
Non-Growth Related Debenture Requirements	41,742,615	411,427	2,218,413	4,299,068	8,331,912	10,446,746	7,387,088	4,383,457	-	-	-	4,264,504
Growth Related Debenture Requirements - Water	48,683,300	-	-	-	-	-	1,287,464	-	3,617,000	8,099,953	-	35,678,884
Growth Related Debenture Requirements - Wastewater	99,910,015	-	-	-	1,875,495	1,282,520	47,012,000	49,740,000	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Capital Reserve	41,201,261	3,703,544	1,668,087	2,052,532	2,378,088	2,482,754	2,535,657	2,858,043	3,355,000	3,918,400	3,700,200	12,548,957
Total Capital Financing	292,686,360	6,960,360	5,823,000	9,931,000	21,706,000	19,315,000	76,081,000	73,210,000	8,762,000	13,311,000	4,393,000	53,194,000



Chapter 5

Operating Expenditure Forecast



5. Operating Expenditure Forecast

5.1 Operating Expenditures

The Municipality provided its 2025 Operating Budget, which formed the basis for the water and wastewater services operating expenditure forecast. The operating expenditure estimates were generally inflated at 2.2% annually, reflecting historical Consumer Price Index (C.P.I.) rates. Additionally, specific operating expenditures were indexed at rates higher than 2.2% to account for growth and expansion of the Municipality's water and wastewater systems and operations, based on discussions with the Municipality's staff, as follows:

- Ontario One Call costs indexed by an additional 1.5 percentage points, beginning in 2026;
- Annual Cleaning and C.C.T.V. Program costs indexed by an additional 2.0 percentage points, beginning in 2026;
- General Expenses, Sanitary Collection, and Water Distribution costs indexed by an additional 0.5 percentage points, beginning in 2027; and
- Maintenance & Repairs and Valve Inspection & Maintenance Labour costs indexed by an additional 0.25 percentage points, beginning in 2030.

Furthermore, costs related to the contract with the Ontario Clean Water Agency (OCWA) have been indexed as follows:

- Water Treatment: Operations (3.7%) and Hydro (3.7%) beginning in 2031; and
- Wastewater: Operations (4.8%) and Hydro (3.7%) beginning in 2031.

The operating budget forecast generally includes two components – operating expenditures and capital-related expenditures. The former is based on the Municipality'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 annual expenditures in the forecast include annual debt repayments and contributions to reserves and reserve funds to support the forecast and future 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 and wastewater services are projected to increase from approximately \$3.2 million in 2025 to \$4.7 million by 2035. Capital-related costs (i.e., debt servicing costs and contributions to reserves), net of development charge funding, are projected to increase from \$1.6 million in 2025 to \$11.5 million by 2035.

5.2 Operating Revenues

The Municipality has operating revenue sources such as interest and dividends, connection charges, hydrant rentals, remote meters, and other miscellaneous revenues that offset some of the annual operating costs. These operating revenues have been maintained over the forecast period with general inflation of 2.2% annually. Additionally, transfers from D.C. reserve funds to offset the principal and interest payments for growth-related debentures have been included in the operating revenues.

The ongoing, annual operating revenues are forecast to increase from approximately \$909,100 in 2025 to \$9.8 million by 2035. It is noted that approximately 96% of the operating revenues by 2035 relate to transfers from D.C. reserve funds to cover the growth-related share of annual debt servicing costs.

Table 5-1 provides the operating budget forecast for the water and wastewater systems. The operating budget forecasts are presented in inflated dollars.



Table 5-1
Municipality of Mississippi Mills
Water and Wastewater Service Operating Budget Forecast (Inflated \$)

Description	Budget 2025	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Expenditures											
<u>Operating Costs</u>											
General Expenses	347,581	355,200	364,800	374,600	384,700	395,100	405,800	416,800	428,100	439,700	451,600
Sample Monitoring of Wells	17,948	18,300	18,700	19,100	19,500	19,900	20,300	20,700	21,200	21,700	22,200
Annual Cleaning and CCTV Program	90,000	93,800	97,700	101,800	106,100	110,600	115,200	120,000	125,000	130,300	135,800
Vehicles & Equipment	37,876	38,700	39,600	40,500	41,400	42,300	43,200	44,200	45,200	46,200	47,200
Sanitary Collection	76,823	78,500	80,600	82,800	85,000	87,300	89,700	92,100	94,600	97,200	99,800
Water Distribution	13,461	13,800	14,200	14,600	15,000	15,400	15,800	16,200	16,600	17,000	17,500
Maintenance & Repairs	228,471	233,500	238,600	243,800	249,200	255,300	261,600	268,000	274,600	281,300	288,200
Valve Inspection & Maint. Labour	29,043	29,700	30,400	31,100	31,800	32,600	33,400	34,200	35,000	35,900	36,800
Meter Install, Maint. & Replacement	54,714	55,900	57,100	58,400	59,700	61,000	62,300	63,700	65,100	66,500	68,000
Meter Reading & Billing	18,031	18,400	18,800	19,200	19,600	20,000	20,400	20,800	21,300	21,800	22,300
Pump Houses, Lift Stns.	86,609	88,500	90,400	92,400	94,400	96,500	98,600	100,800	103,000	105,300	107,600
OCWA Contract - Water Treatment	476,900	494,700	513,200	532,400	552,300	572,900	594,300	616,500	639,500	663,400	688,200
OCWA Contract - Wastewater	1,362,400	1,424,000	1,488,400	1,555,700	1,626,000	1,699,500	1,878,800	1,963,700	2,052,500	2,145,300	2,242,300
OCWA Contract - Sewage Pump Stations	285,700	325,700	367,300	375,400	383,700	392,100	400,700	409,500	418,500	427,700	437,100
Ontario One Call	27,172	28,200	29,200	30,300	31,400	32,600	33,800	35,100	36,400	37,700	39,100
Sub-total Operating Costs	3,152,728	3,296,900	3,449,000	3,572,100	3,699,800	3,833,100	4,073,900	4,222,300	4,376,600	4,537,000	4,703,700
<u>Capital-Related Costs</u>											
Existing Debt (Principal) - Growth Related	308,291	319,888	331,931	344,440	357,432	370,926	384,942	399,501	414,624	430,333	446,652
Existing Debt (Interest) - Growth Related	310,181	298,584	286,540	274,032	261,040	247,546	233,530	218,971	203,848	188,139	171,820
New Growth Related Debt (Principal)	-	-	-	-	66,985	118,138	2,016,213	4,153,079	4,505,410	5,083,643	5,324,608
New Growth Related Debt (Interest)	-	-	-	-	80,210	129,713	2,022,332	3,789,218	3,720,761	3,778,237	3,537,273
Existing Debt (Principal) - Non-Growth Related	182,289	188,048	171,879	173,913	180,389	187,000	194,081	201,368	208,993	216,974	225,331
Existing Debt (Interest) - Non-Growth Related	206,729	200,450	194,158	188,147	181,671	175,114	168,044	160,757	153,132	145,151	136,794
New Non-Growth Related Debt (Principal)	-	12,788	85,618	236,273	545,055	961,693	1,296,719	1,538,077	1,610,982	1,687,343	1,767,323
New Non-Growth Related Debt (Interest)	-	19,502	120,780	307,529	652,662	1,055,918	1,300,654	1,403,323	1,330,418	1,254,058	1,174,078
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital Reserve	1,235,077	1,666,087	2,050,532	2,376,088	2,480,754	2,533,657	2,856,043	3,662,393	4,984,704	6,503,460	8,245,798
Sub-total Capital-Related Costs	2,242,566	2,705,347	3,241,439	3,900,422	4,806,198	5,779,705	10,472,558	15,526,687	17,132,872	19,287,338	21,029,675
Total Expenditures	5,395,294	6,002,247	6,690,439	7,472,522	8,505,998	9,612,805	14,546,458	19,748,987	21,509,472	23,824,338	25,733,375



Table 5-1 (continued)
Municipality of Mississippi Mills
Water and Wastewater Service Operating Budget Forecast (Inflated \$)

Description	Budget 2025	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Revenues											
<u>Operating Revenues</u>											
Interest & Dividends-ORPC	28,300	28,900	29,500	30,100	30,800	31,500	32,200	32,900	33,600	34,300	35,100
Interest and Dividends-MRPC	147,216	150,500	153,800	157,200	160,700	164,200	167,800	171,500	175,300	179,200	183,100
Waterworks-Remote meters	47,000	48,000	49,100	50,200	51,300	52,400	53,600	54,800	56,000	57,200	58,500
Waterworks-W&S Connections	10,000	10,200	10,400	10,600	10,800	11,000	11,200	11,400	11,700	12,000	12,300
Waterworks-Hydrant Rental	3,800	3,900	4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800
Waterworks-Other Fees & S/C	4,630	4,700	4,800	4,900	5,000	5,100	5,200	5,300	5,400	5,500	5,600
Interest on overdue water accounts	21,700	22,200	22,700	23,200	23,700	24,200	24,700	25,200	25,800	26,400	27,000
Interest Income	28,000	28,600	29,200	29,800	30,500	31,200	31,900	32,600	33,300	34,000	34,700
Contributions from Development Charges Reserve Funds	618,472	618,472	618,472	618,472	765,667	866,323	4,657,017	8,560,769	8,844,642	9,480,352	9,480,352
Contributions from Capital Reserve Fund	-	-	-	-	-	-	-	-	-	-	-
Sub-total Operating Revenues	909,118	915,472	921,972	928,572	1,082,667	1,190,223	4,988,017	8,898,969	9,190,342	9,833,652	9,841,452
<u>Billing Revenues</u>											
Base Charge	2,615,872	3,045,452	3,542,333	4,117,682	4,781,445	5,547,934	6,432,607	7,453,200	8,630,059	9,986,516	11,549,323
Consumptive Charge	1,870,304	2,041,323	2,226,134	2,426,268	2,641,886	2,874,648	3,125,834	3,396,818	3,689,071	4,004,170	4,342,600
Sub-total Billing Revenues	4,486,176	5,086,775	5,768,467	6,543,950	7,423,331	8,422,582	9,558,441	10,850,018	12,319,130	13,990,686	15,891,923
Total Revenues	5,395,294	6,002,247	6,690,439	7,472,522	8,505,998	9,612,805	14,546,458	19,748,987	21,509,472	23,824,338	25,733,375



Chapter 6

Forecast Water and Wastewater Rates



6. Forecast Water and Wastewater Rates

To summarize the analysis presented thus far, Chapter 3 reviewed capital-related needs for all customers within the water and wastewater systems and responds to the lifecycle needs of the Municipality'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 Municipality'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 Appendix A to this report.

6.1 Forecast Water and Wastewater Rate Impacts

Table 6-2 summarizes the impacts of the calculated rates on an average residential customer. For an average residential customer using 130 m³ of water annually, the total water and wastewater bill in 2025 with current rates would be approximately \$1,076. The proposed 2026 rates would result in a bill of \$1,186, which represents a \$110 (10.3%) increase relative to what the bill would be at current rates, followed thereafter by annual increases ranging from 10.4% to 11.1%.

Table 6-3 summarizes the impacts of the calculated rates on an average non-residential customer. For an average residential customer using 342 m³ of water annually, the total water and wastewater bill in 2025 with current rates would be approximately \$1,748. The proposed 2026 rates would result in a bill of \$1,899, which represents a \$151 (8.6%) increase relative to what the bill would be at current rates, followed thereafter by annual increases ranging from 8.7% to 9.6%.



Table 6-1
Municipality of Mississippi Mills
Water and Wastewater Rate Forecast

Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Consumptive Rates (\$/1,000 gallons)	\$ 14.42	\$ 15.29	\$ 16.20	\$ 17.18	\$ 18.21	\$ 19.30	\$ 20.46	\$ 21.69	\$ 22.99	\$ 24.37	\$ 25.83
Annual Percentage Change - Consumptive Rates		6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Annual Base Charge	\$ 663.59	\$ 749.19	\$ 845.83	\$ 954.94	\$ 1,078.12	\$ 1,217.19	\$ 1,374.19	\$ 1,551.46	\$ 1,751.58	\$ 1,977.53	\$ 2,232.62
Annual Percentage Change - Consumptive Rates		12.9%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%

Table 6-2
Municipality of Mississippi Mills
Annual Water and Wastewater Bill Impact
Average Residential Customer (130 m³ Annually)

Bill Component	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Annual Base Charge	\$ 664	\$ 749	\$ 846	\$ 955	\$ 1,078	\$ 1,217	\$ 1,374	\$ 1,551	\$ 1,752	\$ 1,978	\$ 2,233
Consumptive Rate	\$ 412	\$ 437	\$ 463	\$ 491	\$ 521	\$ 552	\$ 585	\$ 620	\$ 657	\$ 697	\$ 739
Total	\$ 1,076	\$ 1,186	\$ 1,309	\$ 1,446	\$ 1,599	\$ 1,769	\$ 1,959	\$ 2,172	\$ 2,409	\$ 2,674	\$ 2,971
Annual Percentage Change		10.3%	10.4%	10.5%	10.6%	10.7%	10.7%	10.8%	10.9%	11.0%	11.1%

Table 6-3
Municipality of Mississippi Mills
Annual Water and Wastewater Bill Impact
Average Non-Residential Customer (342 m³ Annually)

Bill Component	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Annual Base Charge	\$ 664	\$ 749	\$ 846	\$ 955	\$ 1,078	\$ 1,217	\$ 1,374	\$ 1,551	\$ 1,752	\$ 1,978	\$ 2,233
Consumptive Rate	\$ 1,085	\$ 1,150	\$ 1,219	\$ 1,292	\$ 1,370	\$ 1,452	\$ 1,539	\$ 1,631	\$ 1,729	\$ 1,833	\$ 1,943
Total	\$ 1,748	\$ 1,899	\$ 2,065	\$ 2,247	\$ 2,448	\$ 2,669	\$ 2,913	\$ 3,183	\$ 3,481	\$ 3,811	\$ 4,176
Annual Percentage Change		8.6%	8.7%	8.8%	8.9%	9.0%	9.1%	9.3%	9.4%	9.5%	9.6%



Chapter 7

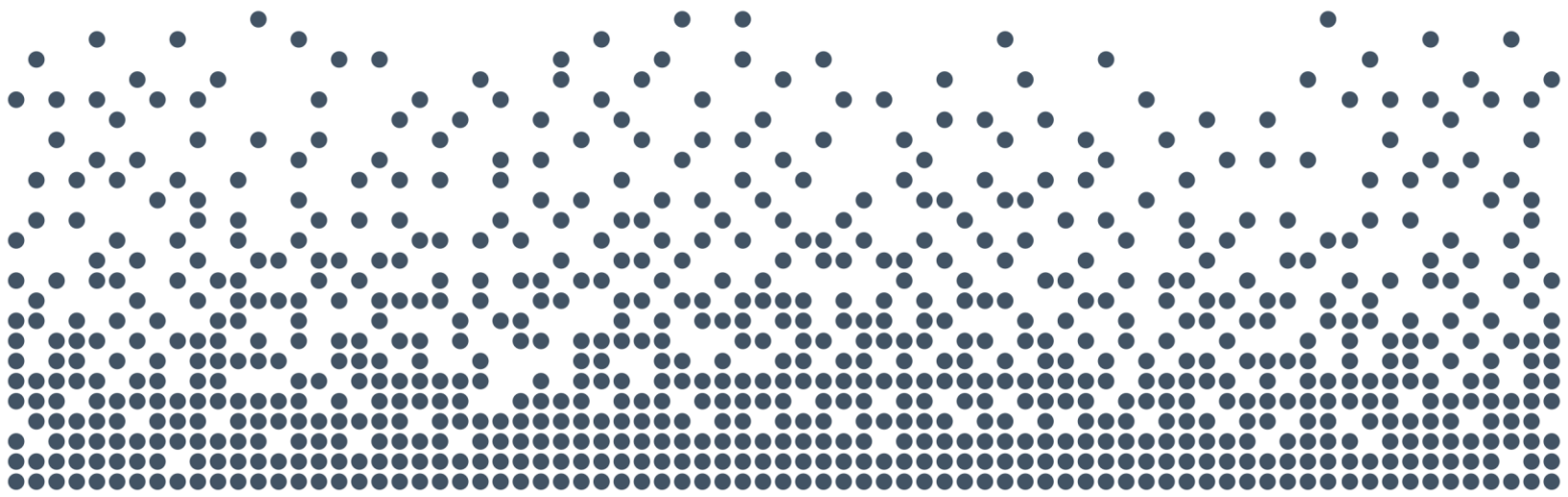
Recommendations



7. Recommendations

The following recommendations are provided for the Municipality's consideration:

- That the Municipality of Mississippi Mills Water and Wastewater Asset Management Plan and Rate Study be received and approved by Council;
- That consideration be made as part of the annual budgeting process to ensure sufficient capital funding is available to implement the asset management plan; and
- That Council consider the 2026 and 2027 water and wastewater rates as shown in Chapter 6, and direct staff to update the rate study and rate forecast in 2027.



Appendices



Appendix A

Water and Wastewater Service



Table A-1
Municipality of Mississippi Mills
Water & Wastewater Service
Capital Budget Forecast
 Inflated \$

Description	Total	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Water Lifecycle												
Union Street North Water (Main St. to Carss)	750,000	750,000	-	-	-	-	-	-	-	-	-	-
Computurized Operations And Asset Mangement System	20,000	10,000	10,000	-	-	-	-	-	-	-	-	-
Engineering Design and Approvals (Various Projects)	550,500	37,500	42,000	44,000	46,000	48,000	50,000	52,000	54,000	56,000	59,000	62,000
Radio Frequency Meter Conversion	310,500	22,500	23,000	25,000	26,000	27,000	28,000	29,000	30,000	32,000	33,000	35,000
Treatment Maintenance Projects	571,599	41,599	43,000	45,000	47,000	49,000	52,000	54,000	56,000	59,000	61,000	64,000
Treatment Minor Capital Projects	651,500	108,500	23,000	43,000	28,000	33,000	79,000	62,000	65,000	67,000	70,000	73,000
Water Tower repairs (Landmark Report)	37,000	-	37,000	-	-	-	-	-	-	-	-	-
Well 3 Pump Overhaul/Inspection	26,000	-	-	-	-	26,000	-	-	-	-	-	-
Well 5 Pump Overhaul/Inspection	54,000	-	-	54,000	-	-	-	-	-	-	-	-
Well 6 Pump Overhaul/Inspection	68,000	-	-	-	68,000	-	-	-	-	-	-	-
Well 7 Pump Overhaul/Replacement	73,000	-	73,000	-	-	-	-	-	-	-	-	-
Well 8 Pump Overhaul/Inspection	59,000	-	-	-	-	59,000	-	-	-	-	-	-
Well 6 electrical/control panel upgrades	54,000	-	-	54,000	-	-	-	-	-	-	-	-
Well 5 electrical/control panel upgrades	57,000	-	-	-	57,000	-	-	-	-	-	-	-
Well 3 electrical/control panel upgrades	62,000	-	-	-	-	-	62,000	-	-	-	-	-
Optimize Pressure Zones and Install New PRVs	387,000	-	104,000	-	-	-	-	129,000	-	-	-	154,000
Water Distribution Watermain Condition Upgrades	24,214,000	304,000	522,000	3,226,000	3,368,000	3,516,000	3,671,000	3,833,000	1,352,000	1,411,000	1,473,000	1,538,000
Growth-related												
Third River Crossing	7,892,000	-	-	-	-	3,861,000	4,031,000	-	-	-	-	-
Geotechnical feasibility study/EA for the Third Crossing	228,000	-	-	-	228,000	-	-	-	-	-	-	-
County Road 29 Extension North	4,118,831	1,651,831	2,467,000	-	-	-	-	-	-	-	-	-
Connection between Third River Crossing and County Road 29 (oversizing portion only)	371,347	371,347	-	-	-	-	-	-	-	-	-	-
Upgrade watermain along Florence Street	1,181,000	-	-	-	-	-	1,181,000	-	-	-	-	-
Fourth River Crossing	26,149,000	-	-	-	-	-	-	-	-	-	-	26,149,000
Schedule 'B' Class EA for the Fourth Crossing	442,000	-	-	-	-	-	-	-	-	-	442,000	-
Country Road 29 Extension South	4,164,000	-	-	-	-	-	-	-	-	4,164,000	-	-
Connecting Existing Reservoir to County Road 29	325,000	325,000	-	-	-	-	-	-	-	-	-	-
Increase Capacity of Wells 7 & 8 (New Well)	2,725,000	-	-	2,725,000	-	-	-	-	-	-	-	-
Schedule 'B' Class EA to increase the water supply at Wells 7 & 8	250,000	250,000	-	-	-	-	-	-	-	-	-	-
Well site selection and well testing	647,000	-	-	-	-	-	-	647,000	-	-	-	-
Schedule 'B' Class EA to establish a new well location	388,000	-	-	-	-	-	-	388,000	-	-	-	-
New Well(s) installation and expansion	11,052,000	-	-	-	-	-	-	-	5,407,000	5,645,000	-	-
Increase Capacity of Elevated Tank	23,073,000	-	-	-	-	-	-	-	-	-	-	23,073,000



Table A-1
Municipality of Mississippi Mills
Water & Wastewater Service
Capital Budget Forecast
 Inflated \$

Description	Total	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Schedule 'B' Class EA for a new elevated water storage tank	295,000	-	-	-	-	-	-	-	-	-	295,000	-
Create Pressure Zone 3	236,000	-	-	-	-	-	236,000	-	-	-	-	-
Carss Street, from Union Street North to Mississippi River	761,300	761,300	-	-	-	-	-	-	-	-	-	-
Appleton Side Road Looping	1,816,000	-	-	-	-	-	1,816,000	-	-	-	-	-
Water Master Plan Update	129,000	-	-	-	-	-	-	129,000	-	-	-	-
Sub-total Water	114,188,577	4,633,577	3,344,000	6,216,000	3,868,000	7,619,000	11,206,000	5,323,000	6,964,000	11,434,000	2,433,000	51,148,000
Wastewater Lifecycle												
Union Street North Sanitary (Main St. to Carss)	750,000	750,000	-	-	-	-	-	-	-	-	-	-
Computurized Operations And Asset Mangement System	20,000	10,000	10,000	-	-	-	-	-	-	-	-	-
Engineering Design and Approvals (Various Projects)	550,500	37,500	42,000	44,000	46,000	48,000	50,000	52,000	54,000	56,000	59,000	62,000
Radio Frequency Meter Conversion	310,500	22,500	23,000	25,000	26,000	27,000	28,000	29,000	30,000	32,000	33,000	35,000
Treatment Maintenance Projects	1,641,154	119,154	124,000	130,000	136,000	142,000	148,000	154,000	161,000	168,000	176,000	183,000
Treatment Minor Capital Projects	900,000	63,000	63,000	71,000	88,000	82,000	72,000	85,000	88,000	92,000	96,000	100,000
Filter A Media replacement and refurbishment	30,000	30,000	-	-	-	-	-	-	-	-	-	-
Secondary Clarifier(s) Chain Replacement	106,000	-	52,000	54,000	-	-	-	-	-	-	-	-
Sewage Pumping Stations Maintenance Projects	670,629	48,629	51,000	53,000	55,000	58,000	60,000	63,000	66,000	69,000	72,000	75,000
Sewage Pumping Stations Minor Capital Projects	474,000	27,000	61,000	52,000	11,000	53,000	25,000	45,000	47,000	49,000	51,000	53,000
Island St. SPS pump replacements	95,000	-	-	44,000	51,000	-	-	-	-	-	-	-
Condition Assessments of six minor SPSs	125,000	-	125,000	-	-	-	-	-	-	-	-	-
Sewer condition upgrades	18,617,000	419,000	522,000	2,180,000	2,276,000	2,376,000	2,480,000	2,590,000	1,352,000	1,411,000	1,473,000	1,538,000
Growth-related												
Martin St. N Upgrade	1,406,000	-	1,406,000	-	-	-	-	-	-	-	-	-
Gemmill's Bay SPS Upgrade	17,444,000	-	-	-	8,534,000	8,910,000	-	-	-	-	-	-
Schedule 'B' Class EA for the Gemmill's Bay SPS Expansion	250,000	250,000	-	-	-	-	-	-	-	-	-	-
Upsizing Hilan Village Pump Station (oversizing only)	24,000	-	-	24,000	-	-	-	-	-	-	-	-
Wastewater Treatment Plant Expansion	126,752,000	-	-	-	-	-	62,012,000	64,740,000	-	-	-	-
Schedule 'C' Class EA for the WWTP Expansion	350,000	350,000	-	-	-	-	-	-	-	-	-	-
Industrial Dr., Houston Dr., Paterson St., Ottawa St., and St. James Upgrades	6,615,000	-	-	-	6,615,000	-	-	-	-	-	-	-
Stormwater and Drainage Master Plan	200,000	200,000	-	-	-	-	-	-	-	-	-	-
Upgrade wastewater main along Florence Street	1,038,000	-	-	1,038,000	-	-	-	-	-	-	-	-
Wastewater Master Plan Update	129,000	-	-	-	-	-	-	129,000	-	-	-	-
Sub-total Wastewater	178,497,783	2,326,783	2,479,000	3,715,000	17,838,000	11,696,000	64,875,000	67,887,000	1,798,000	1,877,000	1,960,000	2,046,000



Table A-1
Municipality of Mississippi Mills
Water & Wastewater Service
Capital Budget Forecast
 Inflated \$

Description	Total	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Total Capital Expenditures	292,686,360	6,960,360	5,823,000	9,931,000	21,706,000	19,315,000	76,081,000	73,210,000	8,762,000	13,311,000	4,393,000	53,194,000
Capital Financing												
Provincial/Federal Grants	30,000,000	-	-	-	-	-	15,000,000	15,000,000	-	-	-	-
Water Development Charges Reserve Fund	16,656,033	2,185,389	1,233,500	2,725,000	114,000	1,930,500	2,858,791	1,131,750	1,790,000	1,292,647	692,800	701,656
Wastewater Development Charges Reserve Fund	14,493,135	660,000	703,000	854,400	9,006,505	3,172,480	-	96,750	-	-	-	-
Non-Growth Related Debenture Requirements	41,742,615	411,427	2,218,413	4,299,068	8,331,912	10,446,746	7,387,088	4,383,457	-	-	-	4,264,504
Growth Related Debenture Requirements - Water	48,683,300	-	-	-	-	-	1,287,464	-	3,617,000	8,099,953	-	35,678,884
Growth Related Debenture Requirements - Wastewater	99,910,015	-	-	-	1,875,495	1,282,520	47,012,000	49,740,000	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Capital Reserve	41,201,261	3,703,544	1,668,087	2,052,532	2,378,088	2,482,754	2,535,657	2,858,043	3,355,000	3,918,400	3,700,200	12,548,957
Total Capital Financing	292,686,360	6,960,360	5,823,000	9,931,000	21,706,000	19,315,000	76,081,000	73,210,000	8,762,000	13,311,000	4,393,000	53,194,000

Table A-2
Municipality of Mississippi Mills
Water & Wastewater Service
Schedule of Non-Growth Related Debenture Repayments
 Inflated \$

Debenture Year	Principal (Inflated)	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2025	411,427		32,290	32,290	32,290	32,290	32,290	32,290	32,290	32,290	32,290	32,290
2026	2,218,413			174,108	174,108	174,108	174,108	174,108	174,108	174,108	174,108	174,108
2027	4,299,068				337,404	337,404	337,404	337,404	337,404	337,404	337,404	337,404
2028	8,331,912					653,915	653,915	653,915	653,915	653,915	653,915	653,915
2029	10,446,746						819,894	819,894	819,894	819,894	819,894	819,894
2030	7,387,088							579,762	579,762	579,762	579,762	579,762
2031	4,383,457								344,028	344,028	344,028	344,028
2032	-									-	-	-
2033	-										-	-
2034	-											-
2035	4,264,504											
Total Annual Debt Charges	41,742,615	-	32,290	206,398	543,803	1,197,717	2,017,611	2,597,373	2,941,400	2,941,400	2,941,400	2,941,400



Table A-3
Municipality of Mississippi Mills
Water & Wastewater Service
Schedule of Growth Related Debenture Repayments - Water
 Inflated \$

Debenture Year	Principal (Inflated)	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2025	-		-	-	-	-	-	-	-	-	-	-
2026	-			-	-	-	-	-	-	-	-	-
2027	-				-	-	-	-	-	-	-	-
2028	-					-	-	-	-	-	-	-
2029	-						-	-	-	-	-	-
2030	1,287,464							101,044	101,044	101,044	101,044	101,044
2031	-								-	-	-	-
2032	3,617,000									283,874	283,874	283,874
2033	8,099,953										635,710	635,710
2034	-											-
2035	35,678,884											
Total Annual Debt Charges	48,683,300	-	-	-	-	-	-	101,044	101,044	384,918	1,020,628	1,020,628

Table A-4
Municipality of Mississippi Mills
Water & Wastewater Service
Schedule of Growth Related Debenture Repayments - Wastewater
 Inflated \$

Debenture Year	Principal (Inflated)	Budget 2025	Forecast									
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2025	-		-	-	-	-	-	-	-	-	-	-
2026	-			-	-	-	-	-	-	-	-	-
2027	-				-	-	-	-	-	-	-	-
2028	1,875,495					147,195	147,195	147,195	147,195	147,195	147,195	147,195
2029	1,282,520						100,656	100,656	100,656	100,656	100,656	100,656
2030	47,012,000							3,689,650	3,689,650	3,689,650	3,689,650	3,689,650
2031	49,740,000								3,903,752	3,903,752	3,903,752	3,903,752
2032	-									-	-	-
2033	-										-	-
2034	-											-
2035	-											
Total Annual Debt Charges	99,910,015	-	-	-	-	147,195	247,851	3,937,501	7,841,253	7,841,253	7,841,253	7,841,253



Table A-5
Municipality of Mississippi Mills
Water & Wastewater Service
Water & Wastewater Capital Reserve Fund Continuity
 Inflated \$

Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	2,568,467	102,000	102,000	102,000	102,000	102,000	102,000	102,000	417,580	1,513,562	4,403,159
Transfer from Operating	1,235,077	1,666,087	2,050,532	2,376,088	2,480,754	2,533,657	2,856,043	3,662,393	4,984,704	6,503,460	8,245,798
Transfer to Capital	3,703,544	1,668,087	2,052,532	2,378,088	2,482,754	2,535,657	2,858,043	3,355,000	3,918,400	3,700,200	12,548,957
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-
Closing Balance	100,000	100,000	100,000	100,000	100,000	100,000	100,000	409,393	1,483,885	4,316,823	100,000
Interest	2,000	2,000	2,000	2,000	2,000	2,000	2,000	8,188	29,678	86,336	2,000

Table A-6
Municipality of Mississippi Mills
Water & Wastewater Service
Water Development Charges Reserve Fund Continuity
 Inflated \$

Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	3,530,689	2,130,749	2,134,386	681,441	1,932,307	1,415,637	-	304,889	13,092	7,003	51,609
Development Charge Proceeds	901,595	1,353,212	1,416,619	1,484,904	1,543,997	1,601,080	1,689,630	1,756,916	1,829,264	1,914,947	1,833,212
Transfer to Capital	2,185,389	1,233,500	2,725,000	114,000	1,930,500	2,858,791	1,131,750	1,790,000	1,292,647	692,800	701,656
Transfer to Operating	157,926	157,926	157,926	157,926	157,926	157,926	258,970	258,970	542,843	1,178,553	1,178,553
Closing Balance	2,088,969	2,092,535	668,079	1,894,419	1,387,879	-	298,910	12,835	6,865	50,597	4,613
Interest	41,779	41,851	13,362	37,888	27,758	-	5,978	257	137	1,012	92
Required from Development Charges	2,185,389	1,233,500	2,725,000	114,000	1,930,500	4,146,255	1,131,750	5,407,000	9,392,600	692,800	36,380,539

Table A-7
Municipality of Mississippi Mills
Water & Wastewater Service
Wastewater Development Charges Reserve Fund Continuity
 Inflated \$

Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	462,174	1,349,261	3,568,882	5,836,747	5,284	5,389	3,281,276	2,981,687	(1,039,017)	(4,959,473)	(8,744,363)
Development Charge Proceeds	1,981,178	3,313,189	3,468,365	3,635,484	3,780,221	3,919,945	4,136,744	4,301,468	4,478,588	4,688,367	4,488,398
Transfer to Capital	660,000	703,000	854,400	9,006,505	3,172,480	-	96,750	-	-	-	-
Transfer to Operating	460,546	460,546	460,546	460,546	607,741	708,397	4,398,047	8,301,799	8,301,799	8,301,799	8,301,799
Closing Balance	1,322,805	3,498,904	5,722,301	5,180	5,284	3,216,937	2,923,223	(1,018,644)	(4,862,228)	(8,572,905)	(12,557,764)
Interest	26,456	69,978	114,446	104	106	64,339	58,464	(20,373)	(97,245)	(171,458)	(251,155)
Required from Development Charges	660,000	703,000	854,400	10,882,000	4,455,000	47,012,000	49,836,750	-	-	-	-



Table A-8
Municipality of Mississippi Mills
Water & Wastewater Service
Operating Budget Forecast
 Inflated \$

Description	Budget 2025	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Expenditures											
<u>Operating Costs</u>											
General Expenses	347,581	355,200	364,800	374,600	384,700	395,100	405,800	416,800	428,100	439,700	451,600
Sample Monitoring of Wells	17,948	18,300	18,700	19,100	19,500	19,900	20,300	20,700	21,200	21,700	22,200
Annual Cleaning and CCTV Program	90,000	93,800	97,700	101,800	106,100	110,600	115,200	120,000	125,000	130,300	135,800
Vehicles & Equipment	37,876	38,700	39,600	40,500	41,400	42,300	43,200	44,200	45,200	46,200	47,200
Sanitary Collection	76,823	78,500	80,600	82,800	85,000	87,300	89,700	92,100	94,600	97,200	99,800
Water Distribution	13,461	13,800	14,200	14,600	15,000	15,400	15,800	16,200	16,600	17,000	17,500
Maintenance & Repairs	228,471	233,500	238,600	243,800	249,200	255,300	261,600	268,000	274,600	281,300	288,200
Valve Inspection & Maint. Labour	29,043	29,700	30,400	31,100	31,800	32,600	33,400	34,200	35,000	35,900	36,800
Meter Install, Maint. & Replacement	54,714	55,900	57,100	58,400	59,700	61,000	62,300	63,700	65,100	66,500	68,000
Meter Reading & Billing	18,031	18,400	18,800	19,200	19,600	20,000	20,400	20,800	21,300	21,800	22,300
Pump Houses, Lift Stns.	86,609	88,500	90,400	92,400	94,400	96,500	98,600	100,800	103,000	105,300	107,600
OCWA Contract - Water Treatment	476,900	494,700	513,200	532,400	552,300	572,900	594,300	616,500	639,500	663,400	688,200
OCWA Contract - Wastewater	1,362,400	1,424,000	1,488,400	1,555,700	1,626,000	1,699,500	1,878,800	1,963,700	2,052,500	2,145,300	2,242,300
OCWA Contract - Sewage Pump Stations	285,700	325,700	367,300	375,400	383,700	392,100	400,700	409,500	418,500	427,700	437,100
Ontario One Call	27,172	28,200	29,200	30,300	31,400	32,600	33,800	35,100	36,400	37,700	39,100
Sub-total Operating Costs	3,152,728	3,296,900	3,449,000	3,572,100	3,699,800	3,833,100	4,073,900	4,222,300	4,376,600	4,537,000	4,703,700
<u>Capital-Related Costs</u>											
Existing Debt (Principal) - Growth Related	308,291	319,888	331,931	344,440	357,432	370,926	384,942	399,501	414,624	430,333	446,652
Existing Debt (Interest) - Growth Related	310,181	298,584	286,540	274,032	261,040	247,546	233,530	218,971	203,848	188,139	171,820
New Growth Related Debt (Principal)	-	-	-	-	66,985	118,138	2,016,213	4,153,079	4,505,410	5,083,643	5,324,608
New Growth Related Debt (Interest)	-	-	-	-	80,210	129,713	2,022,332	3,789,218	3,720,761	3,778,237	3,537,273
Existing Debt (Principal) - Non-Growth Related	182,289	188,048	171,879	173,913	180,389	187,000	194,081	201,368	208,993	216,974	225,331
Existing Debt (Interest) - Non-Growth Related	206,729	200,450	194,158	188,147	181,671	175,114	168,044	160,757	153,132	145,151	136,794
New Non-Growth Related Debt (Principal)	-	12,788	85,618	236,273	545,055	961,693	1,296,719	1,538,077	1,610,982	1,687,343	1,767,323
New Non-Growth Related Debt (Interest)	-	19,502	120,780	307,529	652,662	1,055,918	1,300,654	1,403,323	1,330,418	1,254,058	1,174,078
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital Reserve	1,235,077	1,666,087	2,050,532	2,376,088	2,480,754	2,533,657	2,856,043	3,662,393	4,984,704	6,503,460	8,245,798
Sub-total Capital-Related Costs	2,242,566	2,705,347	3,241,439	3,900,422	4,806,198	5,779,705	10,472,558	15,526,687	17,132,872	19,287,338	21,029,675
Total Expenditures	5,395,294	6,002,247	6,690,439	7,472,522	8,505,998	9,612,805	14,546,458	19,748,987	21,509,472	23,824,338	25,733,375



Table A-8
Municipality of Mississippi Mills
Water & Wastewater Service
Operating Budget Forecast
 Inflated \$

Description	Budget 2025	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Revenues											
<u>Operating Revenues</u>											
Interest & Dividends-ORPC	28,300	28,900	29,500	30,100	30,800	31,500	32,200	32,900	33,600	34,300	35,100
Interest and Dividends-MRPC	147,216	150,500	153,800	157,200	160,700	164,200	167,800	171,500	175,300	179,200	183,100
Waterworks-Remote meters	47,000	48,000	49,100	50,200	51,300	52,400	53,600	54,800	56,000	57,200	58,500
Waterworks-W&S Connections	10,000	10,200	10,400	10,600	10,800	11,000	11,200	11,400	11,700	12,000	12,300
Waterworks-Hydrant Rental	3,800	3,900	4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800
Waterworks-Other Fees & S/C	4,630	4,700	4,800	4,900	5,000	5,100	5,200	5,300	5,400	5,500	5,600
Interest on overdue water accounts	21,700	22,200	22,700	23,200	23,700	24,200	24,700	25,200	25,800	26,400	27,000
Interest Income	28,000	28,600	29,200	29,800	30,500	31,200	31,900	32,600	33,300	34,000	34,700
Contributions from Development Charges Reserve Funds	618,472	618,472	618,472	618,472	765,667	866,323	4,657,017	8,560,769	8,844,642	9,480,352	9,480,352
Contributions from Capital Reserve Fund	-	-	-	-	-	-	-	-	-	-	-
Sub-total Operating Revenues	909,118	915,472	921,972	928,572	1,082,667	1,190,223	4,988,017	8,898,969	9,190,342	9,833,652	9,841,452
<u>Billing Revenues</u>											
Base Charge	2,615,872	3,045,452	3,542,333	4,117,682	4,781,445	5,547,934	6,432,607	7,453,200	8,630,059	9,986,516	11,549,323
Consumptive Charge	1,870,304	2,041,323	2,226,134	2,426,268	2,641,886	2,874,648	3,125,834	3,396,818	3,689,071	4,004,170	4,342,600
Sub-total Billing Revenues	4,486,176	5,086,775	5,768,467	6,543,950	7,423,331	8,422,582	9,558,441	10,850,018	12,319,130	13,990,686	15,891,923
Total Revenues	5,395,294	6,002,247	6,690,439	7,472,522	8,505,998	9,612,805	14,546,458	19,748,987	21,509,472	23,824,338	25,733,375

Table A-9
Municipality of Mississippi Mills
Water & Wastewater Service
Water & Wastewater Rate Forecast
 Inflated \$

Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Annual Base Charge	\$ 663.59	\$ 749.19	\$ 845.83	\$ 954.94	\$ 1,078.12	\$ 1,217.19	\$ 1,374.19	\$ 1,551.46	\$ 1,751.58	\$ 1,977.53	\$ 2,232.62
Annual % Change		12.9%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%
Consumptive Charge per 1,000 gallons	\$ 14.42	\$ 15.29	\$ 16.20	\$ 17.18	\$ 18.21	\$ 19.30	\$ 20.46	\$ 21.69	\$ 22.99	\$ 24.37	\$ 25.83
Annual % Change		6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%