2024 Water and Wastewater Rate Study

Town of Orangeville

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List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
C.C.B.F.	Canada Community-Building Fund
D.C.A.	*Development Charges Act, 1997*, as amended
D.C.	Development Charges
E.C.A.	Environmental Compliance Approval
G.F.A.	Gross Floor Area
H.E.W.S.F.	Housing-Enabling Water Systems Fund
I.J.P.A.	*Infrastructure for Jobs and Prosperity Act*, 2015
I.O.	Infrastructure Ontario
O.C.I.F.	Ontario Community Infrastructure Fund
OLT	Ontario Land Tribunal
O. Reg.	Ontario Regulation
O.S.I.F.A.	Ontario Strategic Infrastructure Financing Authority
sq.ft.	Square Feet
S.W.S.S.A.	*Sustainable Water and Sewage Systems Act, 2002*

Executive Summary

Executive Summary

The Town of Orangeville (Town) retained Watson & Associates Economists Ltd. (Watson) to undertake a water and wastewater rate study. This study provides an analysis of the Town's water and wastewater rates based on forecast demands and costs of the services. This includes an assessment of capital and operating expenditure forecasts, costing for lifecycle replacement requirements, current and projected water volumes, and customer demands. The results of this analysis provide updated water and wastewater rates for the Town, comprising base charges and volumetric rates for water consumption. The rate analysis contained herein continues to provide fiscally responsible practices that are in line with current provincial legislation.

The Town provides water services to 9,971 customers and wastewater services to 9,949 customers. The number of customers within the Town is expected to increase to 10,812 for water and 10,790 for wastewater by 2034. Also, the Town has a municipal service agreement with the Township of Amaranth to provide water services to a new development within the municipality. The forecast consumption and associated revenues under that servicing agreement have been considered in this analysis.

The analysis presented herein provides the following:

- The capital spending programs were developed based on the Town's Draft 2025 Capital Budget and Forecast, 2024 Development Charges (D.C.) Background Study, and a review of the capital asset lifecycle needs.
- The 2025 to 2034 capital spending program for water totals approximately $124.61 million (inflated$). This includes capital expenditures for infrastructure replacement/lifecycle requirements, and future development within the Town.
- The 2025 to 2034 capital spending program for wastewater totals approximately $42.90 million (inflated$) and includes similar infrastructure needs as for Town water services.
- The net operating expenditure forecast for 2025 to 2029 is based on the Town's Draft 2025 Budget and Forecast. Building on the Town's forecast, projections for 2030 to 2034 are assumed to increase by:
    - 2.5% annually for staff salaries/wages;
    - 4% annually for employee benefits;
    - 10% annually for utilities, fuels, chemicals, materials and supplies, and insurance;

- 3.5% annually for contributions to Credit Valley Conservation;
- No increases are anticipated for costs related to rebate or pardon programs; and
- All other expenditures are assumed to increase at a rate of 2.0% annually from 2030 to 2034.
- Operating expenditures, excluding capital-related expenditures, are projected to increase from $6.59 million in 2024 to 9.49 million in 2034 for water services and $5.18 million in 2024 to 8.16 million in in 2034 for wastewater services.
- Capital-related operating expenditures which consist of transfers to reserves/reserve funds and non-growth-related debt repayments are projects to from $1.86 million in 2024 to $6.30 million in 2034 for water services and from $1.66 million in 2024 to $5.79 million in 2034 for wastewater services.

The Town imposes fees to recover the costs of water and wastewater services. The structure of these fees includes a fixed monthly base charge and a volumetric charge for the amount of water consumed by the customer. The volumetric charge is referred to as an increasing block rate structure, as the rate increases with the amount of water consumed at defined limits. This rate structure incentives water conservation. The Town imposes separate volumetric rates for residential and non-residential customers. The existing rate structure (i.e. monthly base charge and an increasing block rate that varies by use) continues to be utilized in this Study's rate forecasts.

Unmetered customers are charged a flat fee. Non-compliant customers (owner elects not to install a meter) are charged three times the charge for compliant customers (Town is unable to install a meter) to encourage compliance with the Town's metering policies and support conservation efforts. This rate structure continues to be utilized for this Study's forecast with the assumption that all customers will be metered by 2026.

Tables ES-1 to ES-2 provide the 2025-2034 forecast water and wastewater rates based on analysis of service needs and full cost recovery. The proposed rate increases will allow the Town to reduce the amount of debt incurred to finance capital and transition to financing to annual lifecycle contribution amount by the end of the forecast.

- Water and wastewater base charges are proposed to increase 15% each year during the forecast period.

- Volumetric rates for water services are projected to increase as follows: 10% in 2025, 5% annually in 2026 and 2027, 4% in 2028, 3% annually in 2029 and 2030, and 2% annually for the final four years of the forecast.

- Volumetric rates for wastewater services are projected to increase as follows: 5% in 2025 and 2026, 4% in 2027, and 3% 2028-2034.

- Flat rates for unmetered water customers are projected to increase as follows: 23% in 2025, 7% in 2026 to 2028, 6% for the remainder of the forecast period.

- Flat rates for unmetered wastewater customers are projected to increase as follows: 18% in 2025, 7% in 2026 to 2027, 6% in 2028, 7% in 2029 to 2033, and 8% in 2034.

Table ES-1
Town of Orangeville
Water Rate Forecast

Desription	Monthly Block 1 Volume (m^3)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Metered Customers												
Base Charge by Meter Size												
5/8" to 3/4"	<= 20	$12.81	$14.73	$16.94	$19.48	$22.40	$25.77	$29.63	$34.07	$39.19	$45.06	$51.82
1"	<= 100	$17.08	$19.64	$22.59	$25.98	$29.87	$34.35	$39.51	$45.43	$52.25	$60.09	$69.10
1 ½"	<= 500	$25.62	$29.46	$33.88	$38.96	$44.81	$51.53	$59.26	$68.15	$78.37	$90.13	$103.65
2"	<= 1,000	$38.44	$44.21	$50.84	$58.46	$67.23	$77.32	$88.91	$102.25	$117.59	$135.23	$155.51
3"	<= 3,000	$44.84	$51.57	$59.30	$68.20	$78.43	$90.19	$103.72	$119.28	$137.17	$157.74	$181.40
4" and Larger	<= 6,000	$64.06	$73.67	$84.72	$97.43	$112.04	$128.85	$148.17	$170.40	$195.96	$225.36	$259.16
Volumetric Rate (per m^3)												
Residential												
Block 1		$2.13	$2.34	$2.46	$2.58	$2.69	$2.77	$2.85	$2.91	$2.97	$3.02	$3.09
Block 2		$2.88	$3.16	$3.32	$3.49	$3.63	$3.74	$3.85	$3.92	$4.00	$4.08	$4.16
Non-Residential												
Block 1		$2.23	$2.45	$2.58	$2.70	$2.81	$2.90	$2.98	$3.04	$3.10	$3.17	$3.23
Block 2		$3.01	$3.31	$3.48	$3.65	$3.80	$3.91	$4.03	$4.11	$4.19	$4.27	$4.36
Unmetered Customers												
Compliant		$672.16	$826.49	$885.49	$950.10	$1,013.82	$1,076.50	$1,145.89	$1,215.03	$1,292.49	$1,379.47	$1,477.36
Non-Compliant		$2,016.49	$2,479.48	$2,656.48	$2,850.30	$3,041.46	$3,229.49	$3,437.68	$3,645.10	$3,877.48	$4,138.42	$4,432.09

Table ES-2
Town of Orangeville
Wastewater Rate Forecast

Meter Size	Monthly Block 1 Volume (m3)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Metered Customers												
Base Charge by Meter Size												
5/8" to 3/4"	<= 20	$12.51	$14.39	$16.54	$19.03	$21.88	$25.16	$28.94	$33.28	$38.27	$44.01	$50.61
1"	<= 100	$16.69	$19.19	$22.07	$25.38	$29.19	$33.57	$38.60	$44.40	$51.06	$58.71	$67.52
1 ½"	<= 500	$25.03	$28.78	$33.10	$38.07	$43.78	$50.34	$57.90	$66.58	$76.57	$88.05	$101.26
2"	<= 1,000	$37.54	$43.17	$49.65	$57.09	$65.66	$75.51	$86.83	$99.86	$114.84	$132.06	$151.87
3"	<= 3,000	$43.80	$50.37	$57.93	$66.61	$76.61	$88.10	$101.31	$116.51	$133.99	$154.08	$177.20
4" and Larger	<= 6,000	$62.57	$71.96	$82.75	$95.16	$109.44	$125.85	$144.73	$166.44	$191.40	$220.11	$253.13
Volumetric Rate (per m^3)												
Residential												
Block 1		$1.90	$2.00	$2.09	$2.18	$2.24	$2.31	$2.38	$2.45	$2.53	$2.60	$2.68
Block 2		$2.57	$2.69	$2.83	$2.94	$3.03	$3.12	$3.21	$3.31	$3.41	$3.51	$3.62
Non-Residential												
Block 1		$1.99	$2.09	$2.19	$2.28	$2.35	$2.42	$2.49	$2.57	$2.65	$2.72	$2.81
Block 2		$2.69	$2.82	$2.96	$3.08	$3.17	$3.27	$3.37	$3.47	$3.57	$3.68	$3.79
Unmetered Customers												
Compliant		$612.58	$725.85	$779.41	$832.42	$884.79	$942.84	$1,007.36	$1,079.25	$1,159.55	$1,249.44	$1,350.30
Non-Compliant		$1,837.74	$2,177.55	$2,338.22	$2,497.27	$2,654.38	$2,828.53	$3,022.09	$3,237.76	$3,478.65	$3,748.32	$4,050.89

Table ES-3 summarizes the forecast annual water and wastewater bill for the average residential customer consuming 180 cubic metres of water per year. The total annual bill for water and wastewater services is projected to increase by 10% in 2025 from approximately $1,080 to $1,185. The daily cost for water and services would increase from $2.96 in 2024 to $3.25 in 2025. Over the 10-year period, the total bill will increase annually by 8% on average to $2,339 annually or $6.41 per day.

Table ES-3
Town of Orangeville
Annual Residential Customer Water and Wastewater Bill – Based on 5/8" water meter and 180 m3 of Volume

Annual Customer Water Bill

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Monthly Base Rate	$12.81	$14.73	$16.94	$19.48	$22.40	$25.77	$29.63	$34.07	$39.19	$45.06	$51.82
Block 1 Rate	$2.13	$2.34	$2.46	$2.58	$2.69	$2.77	$2.85	$2.91	$2.97	$3.02	$3.09
Block 2 Rate	$2.88	$3.16	$3.32	$3.49	$3.63	$3.74	$3.85	$3.92	$4.00	$4.08	$4.16
Annual Base Rate Bill	**$153.72**	**$176.78**	**$203.29**	**$233.79**	**$268.86**	**$309.19**	**$355.56**	**$408.90**	**$470.23**	**$540.77**	**$621.88**
Block 1 Volume	145	145	145	145	145	145	145	145	145	145	145
Block 2 Volume	35	35	35	35	35	35	35	35	35	35	35
Annual Volume Bill	**$409.87**	**$450.86**	**$473.40**	**$497.07**	**$516.95**	**$532.46**	**$548.44**	**$559.40**	**$570.59**	**$582.00**	**$593.64**
Total Annual Bill	**$563.59**	**$627.64**	**$676.70**	**$730.86**	**$785.81**	**$841.65**	**$904.00**	**$968.30**	**$1,040.83**	**$1,122.77**	**$1,215.53**
% Increase - Base Rate		15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
% Increase - Volume Rate		10.0%	5.0%	5.0%	4.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%
% Increase - Total Annual Bill		11.4%	7.8%	8.0%	7.5%	7.1%	7.4%	7.1%	7.5%	7.9%	8.3%

Annual Customer Wastewater Bill

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Monthly Base Rate	$12.51	$14.39	$16.54	$19.03	$21.88	$25.16	$28.94	$33.28	$38.27	$44.01	$50.61
Block 1 Rate	$1.90	$2.00	$2.09	$2.18	$2.24	$2.31	$2.38	$2.45	$2.53	$2.60	$2.68
Block 2 Rate	$2.57	$2.69	$2.83	$2.94	$3.03	$3.12	$3.21	$3.31	$3.41	$3.51	$3.62
Annual Base Rate Bill	**$150.12**	**$172.64**	**$198.53**	**$228.31**	**$262.56**	**$301.94**	**$347.24**	**$399.32**	**$459.22**	**$528.10**	**$607.32**
Block 1 Volume	145	145	145	145	145	145	145	145	145	145	145
Block 2 Volume	35	35	35	35	35	35	35	35	35	35	35
Annual Volume Bill	**$365.61**	**$383.89**	**$403.09**	**$419.21**	**$431.79**	**$444.74**	**$458.08**	**$471.83**	**$485.98**	**$500.56**	**$515.58**
Total Annual Bill	**$515.73**	**$556.53**	**$601.62**	**$647.53**	**$694.35**	**$746.69**	**$805.32**	**$871.15**	**$945.20**	**$1,028.66**	**$1,122.90**
% Increase - Base Rate		15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
% Increase - Volume Rate		5.0%	5.0%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
% Increase - Total Annual Bill		7.9%	8.1%	7.6%	7.2%	7.5%	7.9%	8.2%	8.5%	8.8%	9.2%

Annual Combined Residential Water and Wastewater Bill

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total Combined Bill (rounded)	**$1,080**	**$1,185**	**$1,279**	**$1,379**	**$1,480**	**$1,589**	**$1,709**	**$1,839**	**$1,986**	**$2,152**	**$2,339**
Overall Annual Increase (%)		10%	8%	8%	7%	7%	8%	8%	8%	8%	9%

Cost per Day

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Cost per Day	**$2.96**	**$3.25**	**$3.50**	**$3.78**	**$4.05**	**$4.35**	**$4.68**	**$5.04**	**$5.44**	**$5.90**	**$6.41**

Report

Chapter 1
Introduction

1. Introduction

1.1 Background

The Town of Orangeville (Town) has a current population of approximately 31,230 people and approximately 14,500 jobs. There are approximately 9,971 water customers and 9,949 wastewater customers using the Town's municipal water and wastewater systems. The treatment, storage, and distribution/collection of water and wastewater are the responsibility of the Town.

Metered customers are currently charged a monthly base charge and a volumetric rate for water consumption. These fees are imposed independently for water and wastewater services. The Town imposes an increasing block rate structure (i.e., a consumptive rate that increases with monthly consumption within defined thresholds) for consumption and the consumption blocks vary by meter size and use/development type (i.e., residential or non-residential).

Unmetered customers are charged a flat fee, which varies based on whether they are compliant (the Town is unable to install a meter) or non-compliant (the owner elects not to install a meter). Non-compliant customers are charged three times the charge for compliant customers to encourage compliance with the Town's metering policies and support conservation efforts. Furthermore, the Town is actively reducing water flows to non-compliant customers.

The water and wastewater rates currently imposed are provided in Table 1-1.

Table 1-1
Town of Orangeville
2024 Water and Wastewater Rates for Metered Customers

Description		Water	Wastewater
Metered Customers			
Base Charge			
Meter Size	**Monthly Block 1 Volume (m^3)**	**Monthly Base Charge**	**Monthly Base Charge**
5/8" to 3/4"	<= 20	$12.81	$12.51
1"	<= 100	$17.08	$16.69
1 ½"	<= 500	$25.62	$25.03
2"	<= 1,000	$38.44	$37.54
3"	<= 3,000	$44.84	$43.80
4" and Larger	<= 6,000	$64.06	$62.57
Volumetric Rates (per m^3)			
Residential			
Block 1		$2.13	$1.90
Block 2		$2.88	$2.57
Non-Residential			
Block 1		$2.23	$1.99
Block 2		$3.01	$2.69
Unmetered Customers			
Compliant		$56.01	$51.05
Non-Compliant		$168.04	$153.15

1.2 Study Process

The Town retained Watson undertake a water and wastewater rate study to update its 2020 Water and Wastewater Rate Study. Municipalities periodically undertake water and wastewater studies to ensure rates are reflective of the costs being incurred.

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

- Update water and wastewater service demand assumptions based on analysis of historical consumption and recent trends;
- Estimate future consumption levels by applying demand assumptions to forecast growth identified in the Town's 2024 Development Charges (D.C.) Background Study report and adjusted to reflect the actual historical growth experienced in recent years;

- 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 and specific needs identified by staff;
- Identify potential methods of cost recovery from the capital needs listing. These recovery methods may include other statutory authorities (e.g., *Development Charges Act, 1997* (D.C.A.), *Municipal Act*, etc.) as an offset to recovery through the water and wastewater rates;
- Forecast annual operating costs and rate-based funding requirements;
- Develop a long-term water and wastewater rate forecast;
- Provide an impact assessment on rate payers; and
- Present findings to staff and Council for their consideration.

The following analysis is provided in this report:

- Chapter 2 – Forecast Growth and Service Demands
- Chapter 3 – Capital Infrastructure Needs
- Chapter 4 – Lifecycle Costing
- Chapter 5 – Capital Cost Financing Options
- Chapter 6 – Operating Expenditure and Revenue Forecast
- Chapter 7 – Forecast Water and Wastewater Rates
- Chapter 8 – Pricing Structures
- Chapter 9 – Recommendations

1.3 Legislative Context

Significant regulatory changes have taken place in Ontario since the water crisis in Walkerton. These changes result from the Walkerton Commission and the 93 recommendations made in the Walkerton Inquiry Part II report. Areas of recommendation include:

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

- sustainable asset management; and
- lifecycle costing.

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

The following sections describe these various resulting changes.

1.3.1 Safe Drinking Water Act

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

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

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

- Mandatory licensing and accreditation of testing laboratories;
- New standards for treatment, distribution quality and testing;
- Mandatory operator training and certification;
- Mandatory licensing of municipal water providers;
- Stronger enforcement and compliance provisions; and
- "Standard of care" requirements for municipalities.

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

1.3.2 Financial Plans Regulation

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

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

In general, the financial principles of the draft regulations follow the intent of S.W.S.S.A. to move municipalities towards financial sustainability. Many of the prescriptive

requirements, however, have been removed (e.g., preparation of two separate documents for provincial approval, auditor opinions, engineer certifications, etc.).

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

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

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

It is noted that this rate study does not include a water or wastewater financial plan, however, it will provide the basis to undertake the required financial plan(s).

1.3.3 Water Opportunities Act, 2010

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

The Act provides for the following elements:

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

Regarding the sustainability plans:

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

The financial plan shall include:

- An asset management plan for the physical infrastructure;
- A financial plan;
- For water, a water conservation plan;

- An assessment of risks that may interfere with the future delivery of the municipal service, including, if required by the regulations, the risks posed by climate change and a plan to deal with those risks; and
- Strategies for maintaining and improving the municipal service, including strategies to ensure the municipal service can satisfy future demand, consider technologies, services and practices that promote the efficient use of water and reduce negative impacts on Ontario's water resources, and increase co-operation with other municipal service providers.

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

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

Regulations will prescribe:

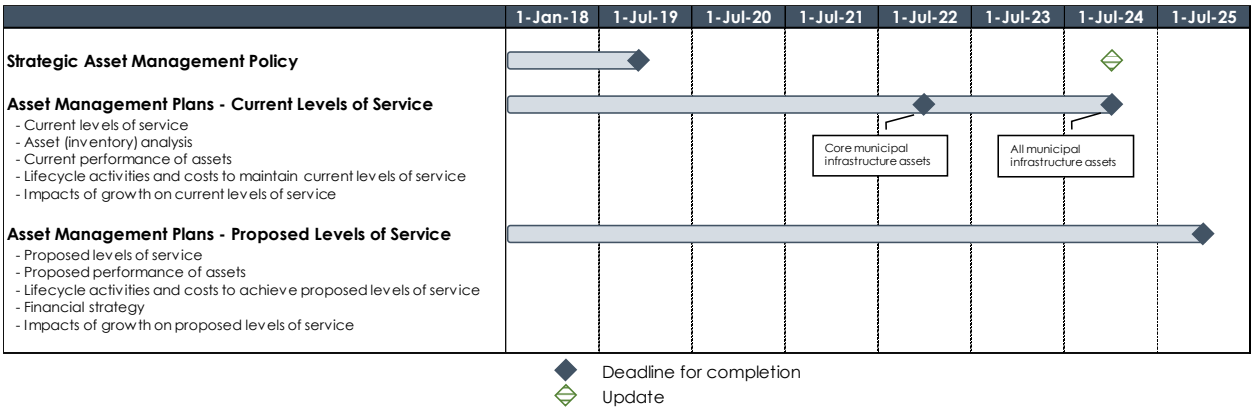
- Timing;
- Contents of the plans;
- Which identified portions of the plan will require certification;
- Public consultation process; and
- Limitations, updates, refinements, etc.

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

1.3.4 Infrastructure for Jobs and Prosperity Act, 2015

On June 4, 2015, the Province passed the *Infrastructure for Jobs and Prosperity Act*, *2015* (I.J.P.A.) which, over time, will require municipalities to undertake and implement asset management plans for all infrastructure they own. On December 27, 2017, the Province of Ontario released Ontario Regulation (O. Reg.) 588/17 under I.J.P.A. which has three phases that municipalities must meet. The timelines associated with the three phases were later extended by O. Reg. 193/21 which was filed on March 15, 2021. The timelines are presented in Figure 1-1 below.

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



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

- Phase 1 – Asset Management Plan (by July 1, 2022) for core assets, municipalities must have the following:
    - Inventory of assets;
    - Current levels of service, including some prescribed measures; and
    - Lifecycle management strategies and associated costs to maintain current levels of service.
- Phase 2 – Asset Management Plan (by July 1, 2024):
    - Same steps as Phase 1, but for all assets.
- Phase 3 – Asset Management Plan (by July 1, 2025) builds on Phases 1 and 2, adding:
    - Proposed levels of service; and
    - Financial strategy that supports achieving proposed levels of service.

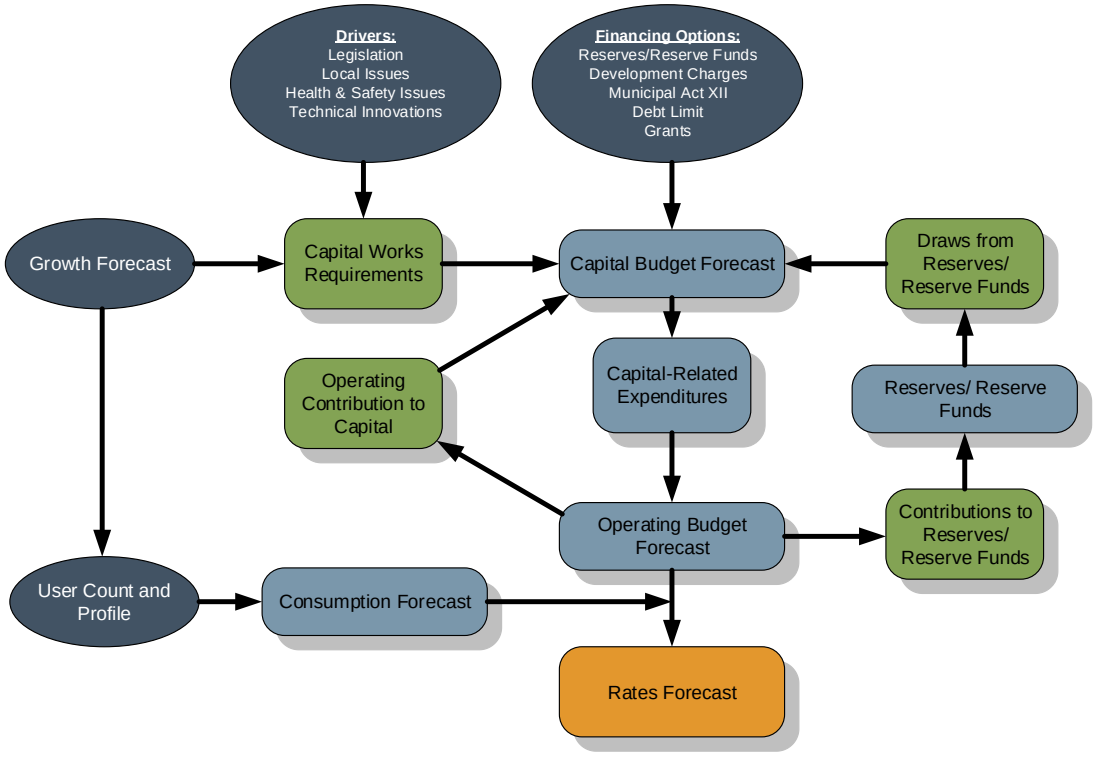
In relation to water and wastewater services (which are considered core assets), municipalities were required to have an asset management plan that addressed the related infrastructure by July 1, 2022 (Phase 1). O. Reg. 588/17 specifies that the Town's asset management plan must include the following for each asset category:

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

1.3.5 Water and Wastewater Rate Calculation Methodology

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

Figure 1-2
Water and Wastewater Rate Calculation Methodology



The methodology employed generally consists of 5 major elements:

1. Customer Demands and Consumption Forecast

As noted in Section 1.1, the Town employs a rate structure consisting of a quarterly base charge and a consumptive rate.

This first step in the analysis is important as it produces the current base revenue by source and assumptions for forecasting purposes. The customer forecast is modelled for the water and wastewater systems independently to identify differences in service demands. The water and wastewater volume forecasts are prepared by applying average annual consumption/flow estimates to future development. Volume estimates were determined based on a review of historical average levels across the Town's water and wastewater systems.

2. Capital Needs Forecast

The capital needs forecasts are developed to measure program/service level adjustments, lifecycle requirements, and growth-related needs. The Town's asset management plan, lifecycle analysis of tangible capital assets, and specific needs identified by Town staff provided the base capital forecast. The capital forecast includes the growth-related needs forecast based on the Town's D.C. Background Study. This is in line with the water and wastewater customer growth forecast assumptions. Capital expenditures are forecast with inflationary adjustments based on capital cost indices.

3. Capital Funding Plan

The capital funding plans consider the potential funding sources available to address the capital needs forecast. The sources of capital funding include rate-based support, reserves/reserve funds, grants, and debt for program/service level improvements. Growth-related sources of funding include D.C.s, if imposed by a municipality, and debt. 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 the municipality's debt policies and annual repayment limits to ensure a practical and sustainable funding mix.

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 projects. 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 water and wastewater services, as well as the capital cost requirements to ensure service sustainability. Operating revenues are projected to identify the base charge and volume rate parts, net of other operating revenues. Other operating revenues include water meter fees, rental fees, revenue expected from other municipalities that buy services from the municipality (where applicable), and other miscellaneous revenues.

5. Rate Forecast and Structure

The rate forecast and rate structure components 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 volume demands to determine full cost recovery rates. The analysis may consider alternative structures, including amalgamating individual systems within a municipality, consistent with municipal policies/strategies, industry practice, and customer affordability. The rate forecasts are applied against a range of customer types, and in relation to other municipalities, to measure the annual water and wastewater bill impacts.

Chapter 2
Forecast Growth and Servicing Requirements

2. Forecast Growth and Servicing Requirements

As previously mentioned, the Town provides water services to 9,971 customers, consisting of 9,941 metered customers and 30 unmetered customers. Additionally, there are a total of 9,949 wastewater customers with 9,921 that are metered customers and 28 that are unmetered customers. Table 2-1 provides the breakdown of customers by service and meter size, as well as the number of unmetered compliant and non-compliant customers. Town staff provided information on the existing number of customers and existing billable volumes.

Table 2-1
Town of Orangeville
Existing Customer Profile

Metered	Water	Wastewater
5/8" to 3/4"	9,626	9,606
1"	124	124
1 ½"	120	120
2"	49	49
3"	17	17
4" and Larger	5	5
Total	**9,941**	**9,921**

Non-Metered	Water	Wastewater
Compliant	19	19
Non-Compliant	11	9
Total	**30**	**28**

Grand Total	**9,971**	**9,949**

Water and wastewater customer growth for 2024-2034 period is based on the Town's 2024 D.C. Background Study, dated August 8, 2024, as amended on September 12, 2024 (2024 D.C. Background Study). The number of water customers is expected to increase by 871 new residential customers over the 10-year period to 2034. The majority (i.e., 841) of these new customers are from new growth in the Town. The additional 30 customers over the forecast period reflect all unmetered customers (both compliant and non-compliant) will have meters installed and be converted to the metered service over 2025 and 2026.

With respect to wastewater service, the number of metered residential wastewater customers will increase by 869 over the 10-year forecast period. It is expected that all

new growth (841) will be fully serviced, i.e., will receive both water and wastewater services from the Town. Since all water customers will have meters installed by 2026, the existing 28 unmetered customers will be converted to metered service.

The Town's 2024 D.C. Background Study also provides a forecast of non-residential gross floor area (G.F.A.). It is difficult to accurately determine the amount of water and wastewater new non-residential buildings use each year based on the amount of building space they occupy. Two different users with the same amount of building space can use different amounts of water and wastewater. Therefore, to be conservative, the growth in the non-residential sector has not been included in the forecast of new customers or additional anticipated volumes. Where non-residential customers are added to the system, a surplus would be generated from the rates. This surplus would be used to mitigate other fluctuations in costs and/or to assist in building reserves for future asset management needs.

The Town provided Watson with water consumption records for 2023 and the first eight months of 2024. This data was analyzed to develop a forecast of water demand for the period 2025-2034. Total consumption for 2024 was estimated to be similar to 2023. For 2023, the average residential consumption was 180 m^3 of which 145 m^3 was in the first block. The 2023 average annual first block consumption level (145 m^3) for residential users was applied to the Town's growth projections to forecast future service demands. Based on the data and discussions regarding the increased efficiency of new appliances, all new consumption was estimated to fall into the first block volume rate. In addition, a provision for further water conservation, 1.4% annually, was applied to the forecast consistent with the previous rate study based on discussions with Town staff.

The Town has an agreement to provide water services to some properties that will be developed in the neighbouring Township of Amaranth. The agreement terms, anticipated growth, and associated consumption have been included in this analysis as they affect the rate calculation. The number of customers and amount of water assumed under the Amaranth Servicing Agreement are presented separately in Table 2-1 from that of the Town's residents and businesses. It is projected that 87 customers from Amaranth will be added to the Town's system by 2034, with their billable water consumption expected to be approximately 12,650 m^3.

Overall, billable water consumption is expected to increase by approximately 17,800 cubic metres (m^3) from 2.44 million m^3 to 2.46 million m^3 in 2034. Approximately 12,650

m^3 of the increase is associated with the Amaranth Servicing Agreement and 5,150 m^3 is associated with the new water customers in the Town. Billable wastewater flows, which are based on water consumption by customers with wastewater servicing, are forecasted to increase by approximately 4,900 m^3 over the forecast period.

Tables 2-1 and 2-2 provide the customer forecasts along with the detailed water consumption and wastewater flows forecasts, by volume block, for the 10-year period to 2034.

Table 2-1
Town of Orangeville
Water System Forecast

Water Customer Forecast	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941	9,941
Conversions (Non-compliant)	-	6	11	11	11	11	11	11	11	11	11
Conversions (Compliant)	-	10	19	19	19	19	19	19	19	19	19
New - Growth	10	63	149	236	322	409	495	582	668	755	841
Total	**9,951**	**10,020**	**10,120**	**10,207**	**10,293**	**10,380**	**10,466**	**10,553**	**10,639**	**10,726**	**10,812**
Amaranth Servicing Agreement	**-**	**5**	**14**	**23**	**32**	**41**	**50**	**59**	**68**	**77**	**87**

Water Volume Forecast (m^3)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Block 1											
Existing Residential	1,352,298	1,352,298	1,333,096	1,313,893	1,294,963	1,276,306	1,257,917	1,239,794	1,221,931	1,204,326	1,186,975
Existing Non-Residential	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132
Adjustment for Conservation		(19,203)	(19,203)	(18,930)	(18,657)	(18,388)	(18,124)	(17,862)	(17,605)	(17,351)	(17,101)
Conversions	-	2,327	4,362	4,362	4,362	4,362	4,362	4,362	4,362	4,362	4,362
New - Low & Medium Density Residential	1,454	9,153	21,724	34,295	46,865	59,436	72,006	84,577	97,147	109,718	122,288
New - High Density Residential	727	4,697	11,187	17,677	24,167	30,657	37,147	43,637	50,127	56,617	63,107
Subtotal Block 1	**1,873,612**	**1,868,405**	**1,870,298**	**1,870,429**	**1,870,832**	**1,871,504**	**1,872,441**	**1,873,640**	**1,875,095**	**1,876,804**	**1,878,764**
Block 2											
Existing Residential	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003
Existing Non-Residential	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825
Subtotal Block 2	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**
Amaranth Servicing Agreement	**-**	**727**	**2,036**	**3,344**	**4,653**	**5,962**	**7,270**	**8,579**	**9,888**	**11,196**	**12,651**
Total	**2,438,440**	**2,433,960**	**2,437,163**	**2,438,602**	**2,440,314**	**2,442,295**	**2,444,540**	**2,447,047**	**2,449,812**	**2,452,829**	**2,456,243**

Table 2-2
Town of Orangeville
Wastewater Customer Forecast

Wastewater Customer Forecast	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921
Conversions (Non-compliant)	-	5	9	9	9	9	9	9	9	9	9
Conversions (Compliant)	-	10	19	19	19	19	19	19	19	19	19
New - Growth	10	63	149	236	322	409	495	582	668	755	841
Total	**9,931**	**9,998**	**10,098**	**10,185**	**10,271**	**10,358**	**10,444**	**10,531**	**10,617**	**10,704**	**10,790**

Wastewater Flows Forecast (m^3)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Block 1											
Existing Residential	1,349,390	1,349,390	1,330,188	1,310,985	1,292,055	1,273,398	1,255,009	1,236,886	1,219,023	1,201,418	1,184,067
Existing Non-Residential	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132
Adjustment for Conservation	-	(19,203)	(19,203)	(18,930)	(18,657)	(18,388)	(18,124)	(17,862)	(17,605)	(17,351)	(17,101)
Conversions	-	2,108	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071	4,071
New - Low & Medium Density Residential	1,454	9,153	21,724	34,295	46,865	59,436	72,006	84,577	97,147	109,718	122,288
New - High Density Residential	727	4,697	11,187	17,677	24,167	30,657	37,147	43,637	50,127	56,617	63,107
Subtotal Block 1	**1,870,703**	**1,865,278**	**1,867,099**	**1,867,230**	**1,867,633**	**1,868,305**	**1,869,242**	**1,870,441**	**1,871,896**	**1,873,605**	**1,875,565**
Block 2											
Existing Residential	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003
Existing Non-Residential	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825
Subtotal Block 2	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**	**564,829**
Total	**2,435,532**	**2,430,107**	**2,431,928**	**2,432,058**	**2,432,462**	**2,433,134**	**2,434,071**	**2,435,269**	**2,436,725**	**2,438,434**	**2,440,393**

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

Chapter 3
Capital Infrastructure Needs

3. Capital Infrastructure Needs

3.1 Capital Forecast

Capital forecasts have been provided for the water and wastewater systems. These forecasts are presented in Table 3-1 and Tables 3-2 respectively. The capital forecasts are based on the Town's Draft 2025 Capital Budget and 10-year Forecast. These forecasts include lifecycle capital needs, major maintenance, and level of service/capacity improvements. The timing for capital expenditures was adjusted to reflect the anticipated cash out flows based on discussions with Town staff. The capital forecasts also include projects identified in the Town's 2024 D.C. Background Study. A summary of the capital works related to the water and wastewater services is provided in Tables 3-1 and 3-2.

Table 3-1
Town of Orangeville
Water Services - 2024 Capital Budget and 2025 to 2034 Capital Forecast Summary
(Uninflated $)

Description	Budget 2024	Total 2025-2034	Timing 2025-2034
Capital Expenditures			
13961.0000 CF - Water Meter & Billing Upg	299,991	5,635,502	2025-2026
Town Wells Eavestrough Installation	-	60,000	2025
20417.3905 CF - Variable Frequency DriveWell 5	26,967	-	
26046.0000 Wtrmn & Valve Replace:Rotary	325,700	-	
33304.0000 Supply & Instal Replce NTU&CL2	440,000	-	
33305.0000 Watermain Rehabilitation Program	217,500	8,570,300	2028-2029, 2032-2034
B1293.0000 Watermain and Valve Replacement: Third Street and Fourth Avenue	-	1,040,000	2028, 2031
B1305.0000 Watermain and Valve Replacement: Zehrs Backlane Easement	-	827,000	2028, 2031
B1366.0000 WSR Water Shut Off Valve	-	75,000	2025
B1419.0000 Replacement of Enclosed Water Works Trailer	-	35,000	2034
B1491.0000 Trench Box Replacement	-	56,000	2025, 2034
1070 Water Treatment Facility	-	-	
26047.1070 Portable GeneratorWater Treatment Facility	157,329	-	
3910 Well 10	-	-	
3950 Reservoirs	-	-	
B1313.3950 Reservoir Cleaning and Inspections	-	444,000	2027-2028, 2030-2033
4036 Parks Landscape Trailer	-	-	
21001.4813 Large EquipWA Landscaping Trailer	28,000	-	
33306.0000 Valve Turner Replacement	130,000	135,000	2034
B1345.4036 Trenchbox Trailer Replacement	-	11,500	
4801 WA Truck 7	-	-	2026
B1347.4000 Truck 7 Replacement	-	187,000	2031
4802 WA Truck 12	-	-	
B1348.4000 Truck 12 Replacement	-	182,000	2030
4804 WA Truck 20	-	-	
B1349.4000 Truck 20 Replacement	-	110,000	2029
4805 WA Backhoe #3	-	-	
B1350.4805 Backhoe 3 Replacement	-	281,000	2029
4810 WA Backhoe #1	-	-	
21000.4810 VehiclesWA Backhoe #1	220,000	-	
4812 WA Mini Excavator - 27D	-	-	
B1083.4812 Equipment Replacement - Mini Excavator	-	-	
11813.0000 Engineering Standards Update	-	75,000	2025, 2030
13986.0000 CF - Climate Change	-	12,500	2025
21000.4810 -- Backhoe #1		250,000	2034

Table 3-1 (continued)
Town of Orangeville
Water Services - 2024 Capital Budget and 2025 to 2034 Capital Forecast Summary
(Uninflated $)

Description	Budget 2024	Total 2025-2034	Timing 2025-2034
Capital Expenditures			
26048.0000 Shed	-	60,000	2028
31115.0000 CF - Reconn - Centennial	200,000	-	
31116.0000 CF - Recon Church St	610,000	-	
31119.0000 Recon - Victoria St - Ontario to John	-	516,000	2025-2026
31120.0000 Recon - Ontario St. Vic to Pri	-	250,000	2025-2026
31121.0000 Recon - Cardwell St, Townline	17,337	256,663	2026-2027
31122.0000 Recon - Cardwell St, Dufferin	-	502,626	2031-2032
31123.0000 Recon - Dufferin St, John to O	-	676,000	2026-2027
31124.0000 Recon - Third Ave, 1st St to 2nd St	-	302,000	2026-2027
31125.0000 Recon - Third Ave, 2nd St to 3rd St.	-	323,000	2027-2028
31126.0000 Recon - Steven St	-	280,000	2027-2028
31127.0000 Recon - Andrew St	-	391,000	2027-2028
31128.0000 Bythia Street (Court) Reconstruction	-	342,000	2028-2029
B0982.0000 Recon - Carlton Dr - Madison to Lawrence	-	730,000	2028-2030
B1004.0000 Recon - Erindale, Dufferin to Princess St	-	687,000	2028-2029
B1009.0000 Recon - Zina St, First St to Louisa	-	737,000	2033-2034
B1014.0000 Recon - Amanda, Townline to Parsons	-	566,000	2032-2033
B1015.0000 Recon - Amanda, Parsons to Front	-	418,000	2032-2033
B1195.0000 Recon of Edelwild Century to Parkview	-	845,000	2026-2028
B1273.0000 Recon Bythia St Townline to Church	-	778,000	2032-2033
B1278.0000 Reconstruction of Dufferin Street - Erindale to Ontario	-	545,000	2028-2029
B1331.0000 C-Line Reconstruction Century to Town Line	-	700,000	2033-2034
B1332.0000 John Street Reconstruction Townline to Corp Limits	-	571,000	2028-2029
B1359.0000 Caledonia Road Reconstruction	-	342,000	2030-2032
B1360.0000 Hillside Drive Reconstruction	-	212,500	2033-2034
B1414.4000 Fleet Management Plan	-	10,800	
B1467.4824 Vehicle 34 Purchase	-	145,000	2025
B1490.4392 Vehicle 53 Replacement	-	33,500	2025, 2032
B1497.0000 Recon/Widening - Fourth Ave: Third St to Hwy #10	-	870,000	2031-2034
B1503.0000 Hybrid Recon - Hillsdale, Goldgate and Darsam	-	885,000	2030-2032
B1504.0000 Recon - Church St: John to Bythia	-	280,000	2033-2034
B1505.0000 Recon - Bythia: Church to Hillside	-	280,710	2028-2030
B1548.0000 Hybrid Reconstruction of Avonmore and Johanna	-	550,000	2026-2027
B1463.4800 Vehicle 18 Replacement	-	78,000	2028
B1456.4803 Vehicle 14 Replacement	-	175,000	2027, 2034
B1469.4804 Vehicle 20 Replacement	-	120,000	2029
B1452.4807 Vehicle 17 Replacement	-	150,500	2026, 2033
B1454.4808 Vehicle 22 Replacement	-	150,500	2026, 2033
B1457.4809 Vehicle 23 Replacement	-	155,000	2027, 2034
B1458.4815 Vehicle 24 Replacement	-	155,000	2027, 2034
B1461.4817 Vehicle 28 Replacement	-	155,000	2027, 2034
B1464.4819 Vehicle 29 Replacement	-	78,000	2028
B1473.4820 Vehicle 31 Replacement	-	86,000	2030
B1565.0000 Dayforce Optimization and Enhancement Initiative	-	36,000	2025
20389.0000 CRM System Upgrade	-	15,000	2025
B1407.0000 Website Updates	-	33,000	2025, 2030
Lifecycle:			
Water Facilities	-	10,000,000	2032-2034
Studies:			
Town Wells Building Condition Assessment	-	220,000	2028, 2033
Growth Related:			
Town-Wide			
11721.0000 Water Optimization Study	-	350,000	2025
11824.0000 Water and Wastewater Rate Study	60,000	-	
11824.0000 Water and Wastewater Rate Study	-	114,000	2029, 2034
B0925.0000 Elevated Water Storage Facility (Northwest Sector	-	15,000,000	2028-2031

Table 3-1 (continued)
Town of Orangeville
Water Services - 2024 Capital Budget and 2025 to 2034 Capital Forecast Summary
(Uninflated $)

Description	Budget 2024	Total 2025-2034	Timing 2025-2034
Capital Expenditures			
13950.0000 CF - Water Supply	-	11,150,000	2025-2028
33088.0000 Well 6 and 11 Treatment Analysis	-	1,791,000	2029
33099.0000 CF - Well Treatment - GUDI Upg	1,355,985	6,888,015	2025-2027
B0927.0000 Well 9A & 9B Treatment Upgrades	-	3,000,000	2026-2027
B1067.0000 District Water Metering	-	2,850,000	2031-2033
26043.0000 Dawson Rd watermain ext	686,400	-	
B0058.0000 Zone 3B PRV/PSV Zone Valves	-	622,000	2031-2032
SCADA Projects			
11803.0000 CF - SCADA Master Plan	150,000	-	
B1423.0000 SCADA Upgrade	-	1,970,000	2025-2028
20330.0000 CF - SCADA Systems	-	581,968	2025-2026
Projects with Growth-Related SCADA Component		-	
21181.1070 CF - Electrical & Mechanical Water Treatment Facility	-	2,273,000	2030-2034
26044.0000 High Lift Pump Rehabilitation	-	1,634,211	2026, 2028-2029
26045.0000 South Sector Generator Re	-	708,000	2028
33075.0000 CF - Well Bldg and Dra-Well 5	-	455,000	2026
33081.0000 Disinfection - UV Replacements	-	1,617,000	2028-2031
33082.3910 Well 10 Pump House GeneratorWell 10	-	704,000	2025-2026
33084.0000 Filter Media Rehabilitation	22,588	645,006	2025
33089.0000 Well Rehab and Pump Replacement Program	150,000	1,323,000	2025-2034
33100.0000 CF - Reservoir - West Sector	17,063	4,632,444	2025-2027
33200.0000 CF - United Lands Flowing Well	-	50,000	2026
33300.0000 Filter PLC Project	-	375,000	2025-2026
33302.0000 Dudgeon Generator Replacement	-	783,000	2025-2026
33303.0000 PRV Replacement Program	-	90,000	2029
B1413.0000 Acoustic Leak Detection	-	425,000	2026-2029
B1492.0000 Carbon Monoxide Sensors	-	120,000	2026-2027
11805.1070 CF - Rehabilitation & Optimiza Water Treatment Facility	-	1,369,000	2025-2026
33090.3910 Well 10 WTP Clear Baff CurtainWell 10	17,852	224,138	2025-2026
26005.3950 CF - GeneratorReservoirs	-	650,959	2025-2026, 2028-2029
33101.3950 South Sector Reservoir Inspection and Upgrades	80,000	390,000	2027-2029
B1428.0000 Water and Wastewater System Modelling	-	225,000	2031-2032
B1424.1060 Truck Fill Station	-	45,000	2025
IT Projects with Growth-Related SCADA Component	-	404,855	2025-2034
20300.0000 Phone System Upgrades	-	23,250	
20320.0000 Computer Hardware	-	264,852	
21168.0000 Security and Data Integrity	-	98,753	
B1559.0000 Migration of GIS applications	-	10,800	
B1562.0000 Data Orangeville Migration to ArcGIS Hub	-	7,200	
Area-Specific			
Additional Pump at Dudgeon Reservoir - Variable Speed	-	970,000	2027-2028
Trunk Watermain (300 mm Dia.) on Hansen Blvd. between Blind Line and County Road 16	-	900,000	2025-2026
Watermain on County Road 109, County Road 16 to Montgomery Blvd. East of Riddell	-	1,366,200	2026-2027
Watermain on B-Line, West Sector Reservoir to Lots at B-Line and County Road 109	-	100,000	2029
Total Capital Expenditures	**5,212,712**	**110,476,397**	

Table 3-2
Town of Orangeville
Wastewater Services - 2024 Capital Budget and 2025 to 2034 Capital Forecast
Summary (Uninflated $)

Description	Budget 2024	Total 2025-2034	Timing 2025-2034
Capital Expenditures			
11803.0000 CF - SCADA Master Plan	150,000	-	
26018.0000 CF - Clarifier 3 Centre Unit R	1,420,000	-	
26059.0000 Sewage Sampler & Assoc Works	20,000	79,000	2028, 2030-2031, 2034
33701.0000 Sewage Pump Stn - Spare Pump	-	44,000	2029
26019.0000 Mixer # 6 Replacement	-	34,000	2025, 2029
26022.1060 Mixer #4 Replacement -- Water Pollution Control Plant	-	17,000	2027
26025.1060 CF - Sump Pump Replacements -- Water Pollution Control Plant	-	10,000	2031
20419.1060 CF - Detritor Centre Unit Repl -- Water Pollution Control Plant	944,744	-	
26027.1060 Mixer # 5 Replacement -- Water Pollution Control Plant	-	17,000	2027
26034.1060 Headworks - Pumping Equipment -- Water Pollution Control Plant	16,000	-	
26036.1060 Elevated Walkway -- Water Pollution Control Plant	-	77,000	2025
26058.0000 New Plant - Mixers #1, #2 & #3 - Replacements	54,000	54,000	2030
B0948.1060 Old Plant - Mixers 7,8,9&10 - Replacement	-	40,000	2025
B1362.1060 Tractor	-	160,000	2025
B1428.0000 Water and Wastewater System Modelling	-	225,000	2031-2032
B1424.1060 Truck Fill Station	-	30,000	2025
11813.0000 Engineering Standards Update	-	58,000	2025, 2030
13986.0000 CF - Climate Change	-	12,500	2025
21206.1060 WPCP Roof Projects	67,723	438,669	2025-2029
WPCP Exterior Doors	-	20,000	2025
26048.0000 Shed	-	30,000	2028
26050.0000 Operations Equipment	9,599	-	
31115.0000 CF - Reconn - Centennial	200,000	-	
31116.0000 CF - Recon Church St	423,000	-	
31119.0000 Recon - Victoria St - Ontario to John	-	353,000	2025-2026
31120.0000 Recon - Ontario St. Vic to Pri	-	242,000	2025-2026
31121.0000 Recon - Cardwell St, Townline	-	242,000	2026
31122.0000 Recon - Cardwell St, Dufferin	-	1,022,000	2028, 2031-2035
31123.0000 Recon - Dufferin St, John to O	-	616,000	2025-2026
31124.0000 Recon - Third Ave, 1st St to 2nd St	-	302,000	2025-2026
31125.0000 Recon - Third Ave, 2nd St to 3rd St.	-	268,000	2025-2026
31126.0000 Recon - Steven St	-	261,000	2025-2026
31127.0000 Recon - Andrew St	-	439,000	2025-2026
31128.0000 Bythia Street (Court) Reconstruction	-	275,000	2025-2026
B0982.0000 Recon - Carlton Dr - Madison to Lawrence	-	616,000	2025-2026
B1004.0000 Recon - Erindale, Dufferin to Princess St	-	641,000	2026
B1009.0000 Recon - Zina St, First St to Louisa	-	583,000	2032-2033
B1014.0000 Recon - Amanda, Townline to Parsons	-	471,000	2030-2031
B1015.0000 Recon - Amanda, Parsons to Front	-	269,000	2030-2031
B1195.0000 Recon of Edelwild Century to Parkview	-	636,500	2026
B1273.0000 Recon Bythia St Townline to Church	-	595,000	2029-2030
B1278.0000 Reconstruction of Dufferin Street - Erindale to Ontario	-	530,000	2026
B1331.0000 C-Line Reconstruction Century to Town Line	-	570,000	2030-2031
B1332.0000 John Street Reconstruction Townline to Corp Limits	-	323,000	2027-2028
B1359.0000 Caledonia Road Reconstruction	-	296,000	2026-2028
B1360.0000 Hillside Drive Reconstruction	-	198,500	2032-2034
B1414.4000 Fleet Management Plan	-	2,500	2025
B1490.4392 Vehicle 53 Replacement	-	16,750	2031
B1497.0000 Recon/Widening - Fourth Ave: Third St to Hwy #10	-	535,000	2029, 2031-2032
B1503.0000 Hybrid Recon - Hillsdale, Goldgate and Darsam	-	220,000	2027-2029
B1504.0000 Recon - Church St: John to Bythia	-	280,000	2032-2034
B1505.0000 Recon - Bythia: Church to Hillside	-	386,800	2028-2030
B1548.0000 Hybrid Reconstruction of Avonmore and Johanna	-	45,000	2026
B1440.4442 Vehicle 21 Replacement	-	125,000	2025, 2032
B1438.4701 Vehicle 27 Replacement	-	165,000	2025, 2032
B1475.4822 Vehicle 33 Replacement	-	86,000	2030

Table 3-2 (continued)
Town of Orangeville
Wastewater Services - 2024 Capital Budget and 2025 to 2034 Capital Forecast
Summary (Uninflated $)

Description	Budget 2024	Total 2025-2034	Timing 2025-2034
Capital Expenditures			
B1565.0000 Dayforce Optimization and Enhancement Initiative	-	4,800	2025
20389.0000 CRM System Upgrade	-	24,000	2025
B1407.0000 Website Updates	-	10,000	2025
Studies:			
WPCP Building Condition Assessment	-	180,000	2026-2031
Growth Related:			
Town-Wide			
11824.0000 Water and Wastewater Rate Study	30,000	-	
11824.0000 Water and Wastewater Rate Study	-	114,000	2029, 2034
11788.1060 CF - Inflow and Infiltrtn Stn -- Water Pollution Control Plant	160,910	-	
11788.1060 CF - Inflow and Infiltrtn Stn -- Water Pollution Control Plant	-	170,000	2030
33703.0000 Sanitary Sewer Rehabilitation (I&I)	-	5,000,000	2029-2034
26049.1060 Flood Mitigation at the WPCP Water Pollution Control Plant	26,321	473,679	2025
Sanitary Servicing Assessment		125,000	2026
SCADA Projects			
B1423.0000 SCADA Upgrade	-	2,000,000	2025-2028
20362.0000 CF - SCADA Server Replacement	-	402,163	2025
Projects with Growth-Related SCADA Component			
26039.0000 Thickening Tank Centre Unit	-	520,000	2026
33702.0000 Sewage Pumping Station - Pumpi --	47,000	384,000	2025-2026, 2031-2032
B1427.0000 Sewage Pump Station Level Indicator Replacements	-	60,000	2025
21182.1060 CF - Digestor No 2 Refurb -- Water Pollution Control Plant	2,621,169	1,684,796	2025
26040.1060 Sludge Storage Tank Rehabilitation	-	750,000	2025-2026
26042.1060 MLR Pump Replacement Program -- Water Pollution Control Plant	-	205,000	2025, 2027, 2029, 2031, 2033
33087.1060 Sludge Transfer Well Rehab -- Water Pollution Control Plant	-	22,000	2025
B0952.1060 Tertiary Treatment-Travelling Bridge Replacement incl. Pumps	-	624,000	2028-2030
B0953.1060 Chlorine, Alum and SBS Tank Replacements - Chemical Building	-	122,000	2028
B1086.1060 Sludge Loading Pump Replacements	-	116,000	2028
B1296.1060 Chemical Storage Building Rehabilitation	-	905,000	2027-2028
B1298.1060 Digester 1 Cleanout and Assessment	-	472,000	2031
B1314.0000 Flare Stack Replacement	-	67,000	2026
B1315.1060 Admin Building Transformer Replacement	-	300,000	2030
B1316.1060 Grit Removal System - New Plant	-	300,000	2025-2026
B1317.1060 Aeration Diffuser Piping	-	42,000	2028
B1325.1060 Turbo Blower Replacements	-	257,000	2032
B1326.1060 WAS Pump Replacement (Old Plant)	-	22,000	2032
B1327.1060 Flo-Dar Unit Replacements	-	48,000	2030
B1330.1060 Inlet VFD Replacments	-	96,000	2027, 2030
B1493.1060 Digester Feed Grinder	-	190,000	2026
B1494.1060 Conversion to Ultraviolet (UV) Disinfection	-	9,010,000	2026-2027
B1496.1060 Membrane Aerated Biofilm Reactors	-	1,218,000	2026
B1509.1060 Grit Removal System - Old Plant	-	2,710,000	2029-2030
Capital IT Projects with Growth-Related SCADA Upgrade Component	-	287,103	2025-2034
Area-Specific			
Hansen Boulevard Trunk Sanitary Sewer	-	554,400	2026
B0082.0000 Trunk Sewer Capacity Increase (Bredin Pkwy, Third St at Fourth Ave)	-	475,000	2030
Total Capital Expenditures	**6,190,466**	**42,902,160**	

Chapter 4
Lifecycle Costing

4. Lifecycle Costing

4.1 Overview of Lifecycle Costing

4.1.1 Definition

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

Lifecycle costs include all of the costs which are incurred during the service life of a physical asset. This service life spans the period, from the time its acquisition is first considered to the time it is taken out of service for disposal or redeployment. The asset goes through several stages in its lifecycle. These include specification, design, manufacture (or build), install, commission, operate, maintain, and disposal. Figure 4-1 depicts these stages in schematic form.

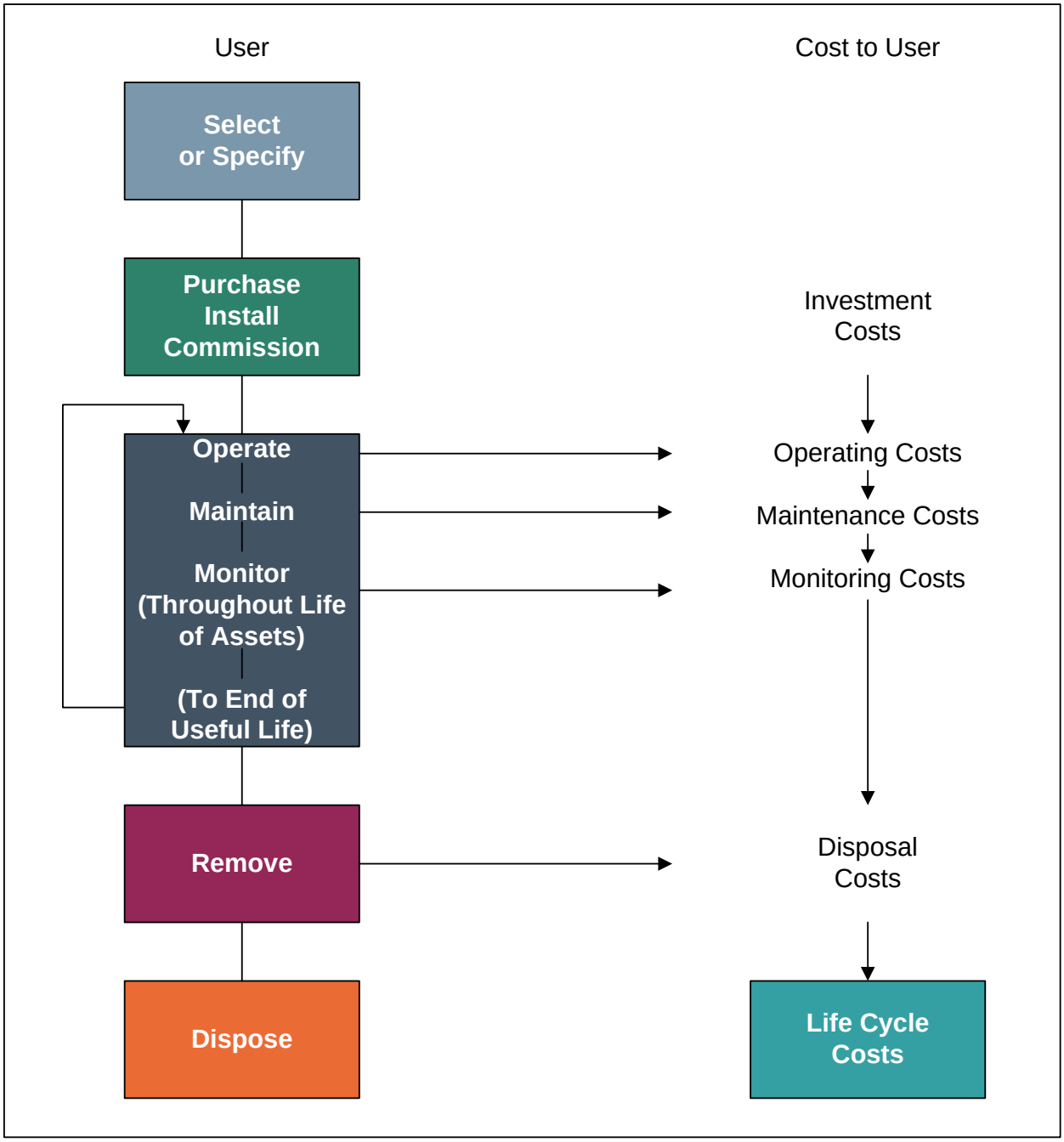
4.1.2 Financing Costs

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

In a municipal context, services are provided to benefit rate payers. Acquisition of assets is normally timed in relation to direct needs within the community. At times, economies of scale or technical efficiencies will lead to oversizing an asset to accommodate future growth within the Town. Over the past few decades, new financing techniques such as D.C.s have been employed based on the underlying principle of having those that require and directly benefit from expansionary needs, to pay for those needs, vs. having the costs spread amongst existing rate payers (i.e., growth paying for growth needs). Operating costs, which reflect the cost of the service for that year, are charged directly to all existing rate payers who have received the benefit. Operating costs are normally charged through the tax base or user rates.

Capital expenditures are recouped through several methods, with operating budget contributions, D.C.s, connection charges, reserves, developer contributions, grants, and debentures being the most common.

Figure 4-1
Lifecycle Costing



Construction related to growth could produce D.C.s and developer contributions (e.g., works internal to a subdivision which are the responsibility of the developer to construct) to fund a significant portion of projects, where new assets are being acquired to allow growth within the municipality to continue. As well, debentures could be used to fund

such works, with the debt charge carrying costs recouped from growth and/or rate payers in the future.

Capital construction to replace existing infrastructure, however, is largely not growth-related and will therefore not yield D.C.s or developer contributions to assist in financing these works. Hence, a municipality is typically dependent upon debentures, reserves, and contributions from the operating budget to fund these works.

Figure 4-2 depicts the costs of an asset from its initial conception through to replacement. It then follows the costs through to the next replacement.

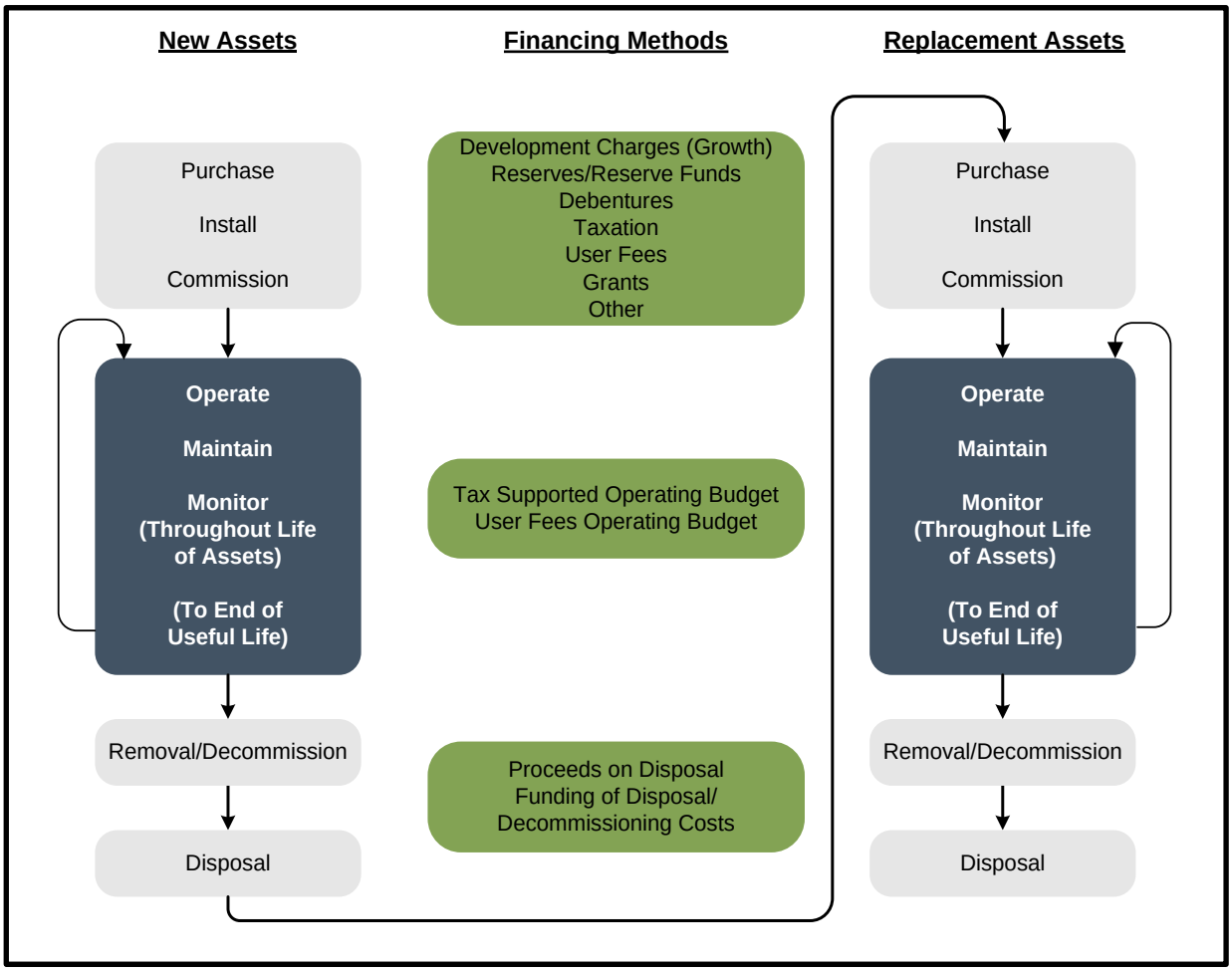
As referred to earlier, growth-related financing methods such as D.C.s and developer contributions could be used to finance the growth-related component of the new asset. These revenues are collected (indirectly) from the new homeowner who benefits directly from the installation of this asset. Other financing methods may be used to address the non-growth-related component of this project. These methods include reserves which have been collected from past rate payers, operating budget contributions collected from existing rate payers, and debentures which future rate payers will carry. Ongoing costs for monitoring, operating, and maintaining the asset will be charged annually to the existing rate payer.

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

Charging for the cost of using up an asset is the basic concept behind depreciation methods utilized by the private sector. This concept allows for expending the asset as it is used up in the production process. The tracking of these costs form part of the product's selling price and, hence, end-users are charged for the asset's depreciation. The same concept can be applied in a municipal setting to charge existing users for the

asset's use and set those funds aside in a reserve to finance the cost of replacing the asset in the future.

Figure 4-2
Financing Lifecycle Costs



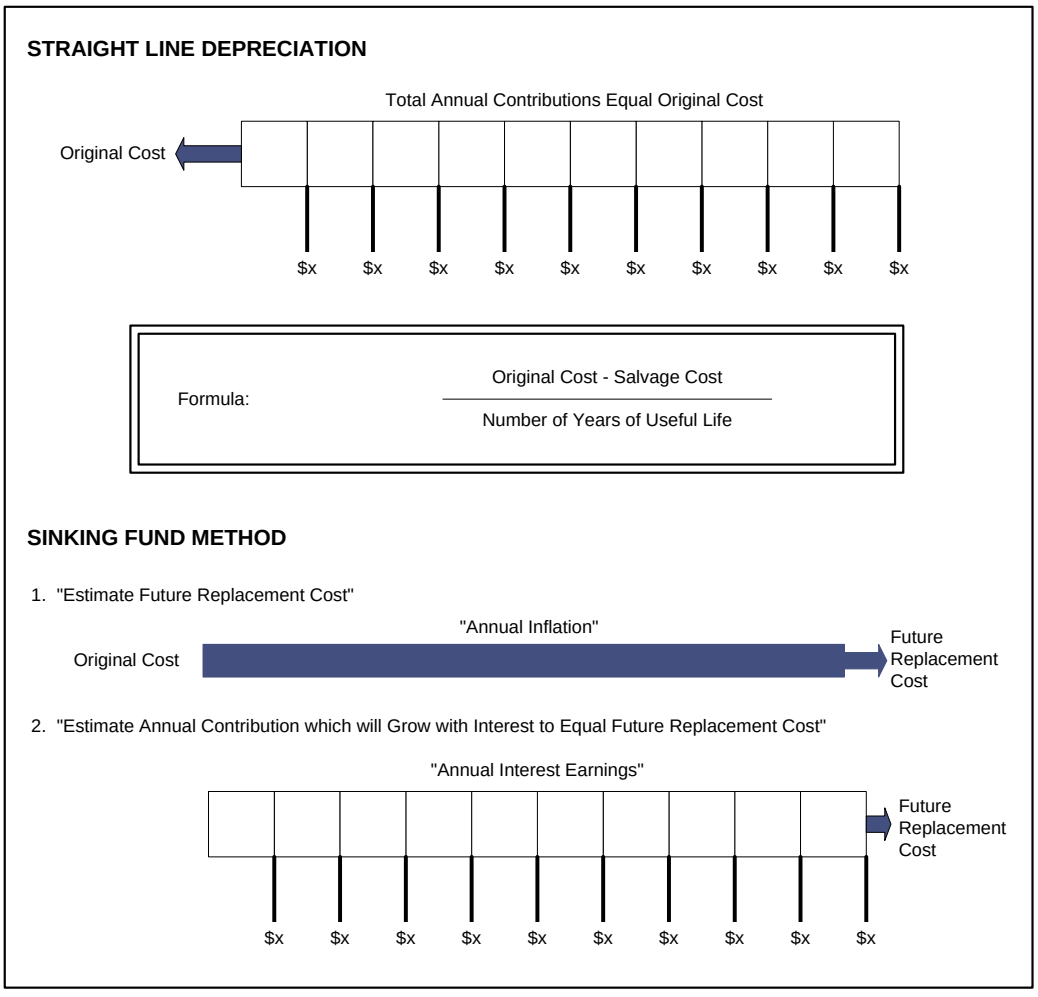
4.1.3 Costing Methods

There are two basic methods of calculating the cost of the usage of an asset and for the provision of the revenue required when the time comes to retire and replace it. The first method is the Depreciation Method. This method recognizes the reduction in the value of the asset through wear and tear and aging. There are two commonly used forms of depreciation: the straight-line method and the reducing balance method (shown graphically in Figure 4-3).

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

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

Figure 4-3



4.2 Impacts on Budgets

Detailed water and wastewater system inventory information was obtained from the Town. The total replacement value of existing water infrastructure across the Town is approximately $267.77 million, which translates to an investment of $26,855 per customer based the existing number of customers. For wastewater, the total replacement value of existing infrastructure is $263.47 million, equating to an investment of $26,482 per customer.

The lifecycle "sinking fund" contribution amounts for each piece of infrastructure have also been calculated. These calculations determine the level of investment the Town may wish to consider as part of its budgeting practices and are summarized in Table 4-1 below.

Of the $267.77 million in current water assets, there is a need to undertake an estimated $79.22 million of capital asset replacement over the 10-year forecast. However, based on other factors, such as condition, timing of growth needs, etc., the Town is anticipating that $74.61 million will be required over the 10-year forecast period. The breakdown of this amount by asset category and year is provided in Table 4-2. Capital expenditures in the 10-year capital plan for water facilities and mains are less than the forecasted needs based on asset age and useful life. For assets requiring capital replacement or major maintenance beyond the 10-year forecast period, the annual lifecycle replacement need is approximately $8.15 million. In theory, if the Town were to transfer this amount of funding to reserves annually and invest the funds, the funds would be available to finance the capital expenditures when the infrastructure needs as they come due.

With respect to wastewater assets, of the $263.47 million in current assets, there is a need to undertake a minimum of $66.34 million of capital asset replacement over the 10-year forecast based on asset age and useful life. However, based on other factors, such as condition, timing of growth needs, etc., the Town is anticipating that $41.43 million will be required over the 10-year forecast period. The breakdown of this amount by asset category and year is provided in Table 4-2. Capital expenditures in the 10-year capital plan for sanitary sewers are less than the forecasted needs based on asset age and useful life. For assets requiring capital replacement or major maintenance beyond the 10-year forecast period, the annual lifecycle replacement need is approximately $7.69 million. If the Town were to transfer this amount of funding to

reserves annually and invest the funds, the funds would be available to finance the capital expenditures when the infrastructure needs as they come due.

Table 4-1
Town of Orangeville
Summary of Water and Wastewater Infrastructure

Description	Total Replacement Value	Suggested amount to be included in 10-year forecast based on estimated life	Amount included in 10-year forecast	Additional Amount to Consider in 10-year Forecast	Net Replacement for Future Lifecycle	Annual Lifecycle Replacement
Water						
Water Facilities	29,563,710	23,012,130	38,609,940	5,505,610	6,551,580	318,687
Water Reservoirs and Lifts	53,461,050	21,103,420			32,357,630	1,759,411
Watermains	179,961,150	30,352,120	25,794,804	4,557,316	149,609,030	6,073,012
Water Meters	2,821,900	2,790,320	7,360,493	(4,570,173)	31,580	3,182
Water Fleet	1,967,180	1,967,180	2,842,000	(874,820)	-	-
Total Water	**267,774,990**	**79,225,170**	**74,607,237**	**4,617,933**	**188,549,820**	**8,154,291**
Wastewater						
Wastewater Facilities	51,114,040	10,008,020	29,517,644	(16,535,384)	41,106,020	1,557,802
Wastewater Pumping Stations	22,877,930	2,974,240			19,903,690	985,982
Sanitary Sewers	189,481,390	53,360,590	11,910,520	41,450,070	136,120,800	5,145,412
Wastewater Fleet	271,560	271,560	562,349	(290,789)	-	-
Total Wastewater	**263,473,360**	**66,342,850**	**41,428,164**	**24,914,686**	**197,130,510**	**7,689,196**
Total	**531,248,350**	**145,568,020**	**116,035,401**	**29,532,619**	**385,680,330**	**15,843,487**

Investment per customer is $26,855 for water and $26,482 for wastewater

A capital replacement forecast for water and wastewater has been developed based on the estimated useful lives of the assets. Table 4-1 provides the 2024 to 2034 capital replacement forecast and backlog for water and wastewater services, by asset type.

Table 4-1
Town of Orangeville
Capital Replacement Forecast Based on Asset Age and Useful Life (Uninflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Water											
Water Facilities	10,232,590	766,390	1,125,310	1,310,710	34,720	3,913,660	-	45,690	5,215,290	367,770	-
Water Reservoirs and Lifts	17,933,690	397,890	-	-	-	867,240	-	-	1,904,600	-	-
Watermains	26,323,550	-	-	387,930	101,710	-	471,450	1,099,720	244,370	1,203,760	519,630
Water Meters	2,236,680	61,780	48,720	56,510	47,580	45,760	69,770	39,990	77,390	77,540	28,600
Water Fleet	242,860	-	92,730	88,310	242,860	192,080	81,690	181,040	125,850	710,930	8,830
Total Water	**56,969,370**	**1,226,060**	**1,266,760**	**1,843,460**	**426,870**	**5,018,740**	**622,910**	**1,366,440**	**7,567,500**	**2,360,000**	**557,060**
Wastewater											
Wastewater Facilities	8,645,200	278,970	37,620	282,150	167,360	189,430	53,060	33,220	58,480	138,070	124,460
Wastewater Pumping Stations	1,639,150	-	-	-	43,800	-	881,590	-	409,700	-	-
Sanitary Sewers	45,421,440	239,230	-	2,437,580	-	1,174,490	3,209,260	380,350	-	498,240	-
Wastewater Fleet	-	-	-	-	-	-	-	-	-	176,620	94,940
Total Wastewater	**55,705,790**	**518,200**	**37,620**	**2,719,730**	**211,160**	**1,363,920**	**4,143,910**	**413,570**	**468,180**	**636,310**	**124,460**
Total	**112,675,160**	**1,744,260**	**1,304,380**	**4,563,190**	**638,030**	**6,382,660**	**4,766,820**	**1,780,010**	**8,035,680**	**2,996,310**	**681,520**

For this rate study analysis, the below capital forecasts provided above were reviewed and compared to the Town's draft capital budget and 10-year forecast. A provision to

replace aging facilities was added to the water capital plan following a detailed review and discussions with Town staff. Costs added to the forecast based on this replacement needs analysis are listed under the lifecycle heading in the 10-year capital forecast presented and discussed in Chapter 5. The actual projects to be undertaken will be determined through the Town's future annual capital budget process.

Chapter 5
Capital Costs Financing

5. Capital Cost Financing Options

5.1 Summary of Capital Cost Financing Alternatives

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

The current *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 legislation provides municipalities with broadly defined powers and the ability to impose fees for both operating and capital purposes. Under s.484 of *Municipal Act, 2001*, the *Local Improvement Act* was repealed with the in-force date of the *Municipal Act* (January 1, 2003). The municipal powers granted under the *Local Improvement Act* now fall under the jurisdiction of the *Municipal Act*.

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

Recovery Methods	Section Reference
• *Development Charges Act, 1997*, as amended	5.2
• *Municipal Act*	5.3
○ Fees and Charges	
○ Stormwater Area Charges	
○ Connection Fees	
○ Local Improvements	
• Grant Funding Availability	5.4
• Existing Reserves/Reserve Funds	5.5
• Debenture Financing	5.6
• Recommended Capital Financing Approach	5.7

5.2 Development Charges Act, 1997

D.C.s 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 D.C.A., as amended (D.C.A.), municipalities may pass by-laws to impose charges to recover the capital costs associated with development and redevelopment. The Town imposes D.C.s on new development, and the capital funding plan incorporates D.C.s as a funding source for anticipated capital needs. The forecast in this study includes $19.88 million for water services and $4.57 million for wastewater services in D.C. funded capital.

5.3 Municipal Act

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

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

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

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

- A variety of different means could be used to establish the rate and recovery of the costs;

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

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

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

Under the previous *Local Improvement Act*:

- A variety of different types of works could be undertaken, such as watermain, storm and sanitary sewer projects, supply of electrical light or power, bridge construction, sidewalks, road widening, and paving;

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

5.4 Grant Funding Availability

Federal Infrastructure Funding

The Government of Canada has provided funding to assist municipalities with their water and wastewater systems, including repair and rehabilitation projects. Some funding programs are time-limited, for example the Clean Water and Wastewater Fund and the Investing in Canada Infrastructure Program.

Other programs are ongoing and provide a permanent source of funding. For example, the Canada Community-Building Fund (formerly know as the Federal Gas Tax Fund). The Canada Community-Building Fund provides over $2 billion each year to communities across Canada. Each municipality then chooses how to use the money. They can make strategic investments in 18 different projects, including water and wastewater services.

Ontario Government

The Province has taken steps to increase municipal infrastructure funding. The Ontario Community Infrastructure Fund (O.C.I.F.) was launched in 2014 and currently provides $400 million in formula-based funding to help eligible communities renew and rehabilitate their infrastructure. The Ontario government also provides funding through the Connecting Links program ($30 million in 2023-2024) to help pay for the construction and repair costs of municipal roads that connect communities to provincial

highways. This is on top of the Building Ontario Up investment of $130 billion in public infrastructure over 10 years starting in 2015.

Additionally, in the 2023 budget, the Province announced it was providing $825 million over three years through the Housing-Enabling Water Systems Fund (H.E.W.S.F.). Funding through the H.E.W.S.F. would help municipalities repair, rehabilitate, and expand drinking water, wastewater, and stormwater infrastructure needed to build more homes. Since the original announcement, the Province has increased the total available funding through the H.E.W.S.F. to over $1.0 billion. The Town is actively seeking grant funding opportunities. Specifically, it is preparing to submit an application for the second intake of the H.E.W.S.F. grant.

The rate calculations provided in subsequent chapters assume $3.07 million in grant funding from the federal and provincial governments, including O.C.I.F. and C.C.B.F., will be allocated to water projects as outlined in the Town's draft 2025 capital budget and forecast. The rate calculations also assume $6.27 million of the grant funding received from the higher levels of government will be allocated to water projects as outlined in the Town's draft 2025 capital budget and forecast.

The Town is encouraged to continue to pursue funding opportunities as they are announced or made available to assist with funding its water and wastewater infrastructure.

5.5 Existing Reserves/Reserve Funds

The Town 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. D.C. reserve funds for water and wastewater have been used for growth-related capital purposes. The following table shows the water and wastewater reserves used in this analysis and their balances as of December 31, 2023.

Table 5-1
Town of Orangeville
Uncommitted Reserve/Reserve Fund Balances as at December 31, 2023

Reserve/Reserve Fund	Dec. 31 2023
Water	
Water Reserve Fund	16,319,243
Town-Wide Development Charges Reserve Fund	8,425,225
Area-Specific Development Charges Reserve Fund	882,934
Wastewater	
Wastewater Reserve Fund	9,523,793
Town-Wide Development Charges Reserve Fund	2,375,971
Area-Specific Development Charges Reserve Fund	63,836

5.6 Debenture Financing

Although it is not a direct way to reduce the overall cost to ratepayers, municipalities use debentures to help them pay for large capital expenditures. In addition, debenture financing can promote inter-generational equity whereby future tax and rate payers who will benefit from the infrastructure pay for the cost of the infrastructure.

The Ministry of Municipal Affairs and Housing controls the amount of debt Ontario municipalities can incur. This is done through its powers under the *Municipal Act*. O. Reg. 403/02 provides the current rules respecting municipal debt and financial obligations. Under these rules, a municipality's debt capacity is capped at 25% of the municipality's own purpose revenue. That is, only 25% of these revenues may be allotted for servicing debt (i.e., debt charges). The Town's 2024 Annual Repayment Limit is $12.46 million based on calculations by the Ministry of Municipal Affairs and Housing. The schedule from the Ministry of Municipal Affairs and Housing notes that the available debt for the Town is approximately $155.33 million based on 20-year financing at an assumed rate of 5%.

It should be noted, however, that the issuance of debt should be managed at levels sustainable by the municipality. Issuance of large amounts of debt in any one year can have dramatic impacts on taxes and rates. Hence, proper management of capital spending and the level of debt issued annually must be monitored and evaluated over the longer-term period.

Within the context of the Town's 10-year water and wastewater capital program, projections show that additional debt financing totaling approximately $78.50 million would be required over the forecast period. Of the total debt projected over the 10-year forecast period, $24.8 million is for growth-related capital works and would be funded by D.C.s.

5.6.1 Infrastructure Ontario

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

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

To be eligible to receive these loans, municipalities must submit a formal application along with pertinent financial information. Allotments are prioritized and distributed based upon the Province's assessment of need. The analysis provided herein assumes that the Town will not provide debt financing for the capital projects identified.

5.6.2 Ontario Investment Bank

The Province, through the *Building Ontario Fund Act, 2024* established funding through a new Ontario Infrastructure Bank. This arms-length, board-governed agency will assist investors and institutions in participating in large-scale infrastructure projects. The bank is newly established and currently in the process of being operationalized.

5.7 Recommended Capital Financing Approach

Tables 5-2 and 5-3 provide for the full capital expenditures (inflated $) for water and wastewater services as discussed in Chapter 2. These tables also include various funding alternatives recommended for further consideration by the Town.

Table 5-2
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Water

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
13961.0000 CF - Water Meter & Billing Upg	299,991	5,669,000	4,508,000	1,161,000	-	-	-	-	-	-	-	-
Town Wells Eavestrough Installation	-	60,000	60,000	-	-	-	-	-	-	-	-	-
20417.3905 CF - Variable Frequency DriveWell 5	26,967	-	-	-	-	-	-	-	-	-	-	-
26046.0000 Wtrmn & Valve Replace:Rotary	325,700	-	-	-	-	-	-	-	-	-	-	-
33304.0000 Supply & Instal Replce NTU&CL2	440,000	-	-	-	-	-	-	-	-	-	-	-
33305.0000 Watermain Rehabilitation Program	217,500	10,317,000	-	-	-	1,873,000	1,929,000	-	-	2,108,000	2,171,000	2,236,000
B1293.0000 Watermain and Valve Replacement: Third Street and Fourth Avenue	-	1,230,000	-	-	-	131,000	-	-	1,099,000	-	-	-
B1305.0000 Watermain and Valve Replacement: Zehrs Backlane Easement	-	978,000	-	-	-	105,000	-	-	873,000	-	-	-
B1366.0000 WSR Water Shut Off Valve	-	75,000	75,000	-	-	-	-	-	-	-	-	-
B1419.0000 Replacement of Enclosed Water Works Trailer	-	46,000	-	-	-	-	-	-	-	-	-	46,000
B1491.0000 Trench Box Replacement	-	65,000	26,000	-	-	-	-	-	-	-	-	39,000
26047.1070 Portable GeneratorWater Treatment Facility	157,329	-	-	-	-	-	-	-	-	-	-	-
B1313.3950 Reservoir Cleaning and Inspections	-	520,000	-	-	74,000	76,000	-	28,000	167,000	86,000	89,000	-
21001.4813 Large EquipWA Landscaping Trailer	28,000	-	-	-	-	-	-	-	-	-	-	-
33306.0000 Valve Turner Replacement	130,000	176,000	-	-	-	-	-	-	-	-	-	176,000
B1345.4036 Trenchbox Trailer Replacement	-	12,000	-	12,000	-	-	-	-	-	-	-	-
B1347.4000 Truck 7 Replacement	-	223,000	-	-	-	-	-	-	223,000	-	-	-
B1348.4000 Truck 12 Replacement	-	211,000	-	-	-	-	-	211,000	-	-	-	-
B1349.4000 Truck 20 Replacement	-	124,000	-	-	-	-	124,000	-	-	-	-	-
B1350.4805 Backhoe 3 Replacement	-	316,000	-	-	-	-	316,000	-	-	-	-	-
21000.4810 VehiclesWA Backhoe #1	220,000	-	-	-	-	-	-	-	-	-	-	-
11813.0000 Engineering Standards Update	-	83,000	25,000	-	-	-	-	58,000	-	-	-	-
13986.0000 CF - Climate Change	-	13,000	13,000	-	-	-	-	-	-	-	-	-
21000.4810 -- Backhoe #1	-	326,000	-	-	-	-	-	-	-	-	-	326,000
26048.0000 Shed	-	66,000	-	-	-	66,000	-	-	-	-	-	-
31115.0000 CF - Reconn - Centennial	200,000	-	-	-	-	-	-	-	-	-	-	-
31116.0000 CF - Recon Church St	610,000	-	-	-	-	-	-	-	-	-	-	-
31119.0000 Recon - Victoria St - Ontario to John	-	519,000	439,000	80,000	-	-	-	-	-	-	-	-
31120.0000 Recon - Ontario St. Vic to Pri	-	252,000	213,000	39,000	-	-	-	-	-	-	-	-
31121.0000 Recon - Cardwell St, Townline	17,337	266,000	-	225,000	41,000	-	-	-	-	-	-	-
31122.0000 Recon - Cardwell St, Dufferin	-	603,000	-	-	-	-	-	-	510,000	93,000	-	-
31123.0000 Recon - Dufferin St, John to O	-	700,000	-	592,000	108,000	-	-	-	-	-	-	-
31124.0000 Recon - Third Ave, 1st St to 2nd St	-	312,000	-	264,000	48,000	-	-	-	-	-	-	-
31125.0000 Recon - Third Ave, 2nd St to 3rd St.	-	344,000	-	-	291,000	53,000	-	-	-	-	-	-
31126.0000 Recon - Steven St	-	298,000	-	-	252,000	46,000	-	-	-	-	-	-
31127.0000 Recon - Andrew St	-	417,000	-	-	353,000	64,000	-	-	-	-	-	-
31128.0000 Bythia Street (Court) Reconstruction	-	376,000	-	-	-	318,000	58,000	-	-	-	-	-
B0982.0000 Recon - Carlton Dr - Madison to Lawrence	-	822,000	-	-	-	109,000	603,000	110,000	-	-	-	-
B1004.0000 Recon - Erindale, Dufferin to Princess St	-	754,000	-	-	-	638,000	116,000	-	-	-	-	-
B1009.0000 Recon - Zina St, First St to Louisa	-	938,000	-	-	-	-	-	-	-	-	794,000	144,000
B1014.0000 Recon - Amanda, Townline to Parsons	-	700,000	-	-	-	-	-	-	-	592,000	108,000	-
B1015.0000 Recon - Amanda, Parsons to Front	-	516,000	-	-	-	-	-	-	-	437,000	79,000	-
B1195.0000 Recon of Edelwild Century to Parkview	-	897,000	-	103,000	672,000	122,000	-	-	-	-	-	-
B1273.0000 Recon Bythia St Townline to Church	-	961,000	-	-	-	-	-	-	-	813,000	148,000	-

Table 5-2 (continued)
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Water

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
B1278.0000 Reconstruction of Dufferin Street - Erindale to Ontario	-	598,000	-	-	-	506,000	92,000	-	-	-	-	-
B1331.0000 C-Line Reconstruction Century to Town Line	-	891,000	-	-	-	-	-	-	-	-	754,000	137,000
B1332.0000 John Street Reconstruction Townline to Corp Limits	-	626,000	-	-	-	530,000	96,000	-	-	-	-	-
B1359.0000 Caledonia Road Reconstruction	-	409,000	-	-	-	-	-	31,000	320,000	58,000	-	-
B1360.0000 Hillside Drive Reconstruction	-	277,000	-	-	-	-	-	-	-	-	30,000	247,000
B1414.4000 Fleet Management Plan	-	11,000	11,000	-	-	-	-	-	-	-	-	-
B1467.4824 Vehicle 34 Purchase	-	162,000	70,000	-	-	-	-	-	-	92,000	-	-
B1490.4392 Vehicle 53 Replacement	-	40,000	-	-	-	-	-	-	40,000	-	-	-
B1497.0000 Recon/Widening - Fourth Ave: Third St to Hwy #10	-	1,099,000	-	-	-	-	-	-	119,000	-	829,000	151,000
B1503.0000 Hybrid Recon - Hillsdale, Goldgate and Darsam	-	1,059,000	-	-	-	-	-	70,000	837,000	152,000	-	-
B1504.0000 Recon - Church St: John to Bythia	-	364,000	-	-	-	-	-	-	-	-	51,000	313,000
B1505.0000 Recon - Bythia: Church to Hillside	-	317,000	-	-	-	33,000	240,000	44,000	-	-	-	-
B1548.0000 Hybrid Reconstruction of Avonmore and Johanna	-	570,000	-	482,000	88,000	-	-	-	-	-	-	-
B1463.4800 Vehicle 18 Replacement	-	85,000	-	-	-	85,000	-	-	-	-	-	-
B1456.4803 Vehicle 14 Replacement	-	207,000	-	-	90,000	-	-	-	-	-	-	117,000
B1469.4804 Vehicle 20 Replacement	-	135,000	-	-	-	-	135,000	-	-	-	-	-
B1452.4807 Vehicle 17 Replacement	-	174,000	-	75,000	-	-	-	-	-	-	99,000	-
B1454.4808 Vehicle 22 Replacement	-	174,000	-	75,000	-	-	-	-	-	-	99,000	-
B1457.4809 Vehicle 23 Replacement	-	184,000	-	-	80,000	-	-	-	-	-	-	104,000
B1458.4815 Vehicle 24 Replacement	-	184,000	-	-	80,000	-	-	-	-	-	-	104,000
B1461.4817 Vehicle 28 Replacement	-	184,000	-	-	80,000	-	-	-	-	-	-	104,000
B1464.4819 Vehicle 29 Replacement	-	85,000	-	-	-	85,000	-	-	-	-	-	-
B1473.4820 Vehicle 31 Replacement	-	100,000	-	-	-	-	-	100,000	-	-	-	-
B1565.0000 Dayforce Optimization and Enhancement Initiative	-	36,000	36,000	-	-	-	-	-	-	-	-	-
20389.0000 CRM System Upgrade	-	15,000	15,000	-	-	-	-	-	-	-	-	-
B1407.0000 Website Updates	-	36,000	15,000	-	-	-	-	21,000	-	-	-	-
Water Facilities	-	12,691,000	-	-	-	-	-	-	-	3,690,000	4,434,000	4,567,000
Studies:												
Town Wells Building Condition Assessment	-	261,000	-	-	-	109,000	-	-	-	-	152,000	-
Growth Related:												
Town-Wide												
11721.0000 Water Optimization Study	-	350,000	350,000	-	-	-	-	-	-	-	-	-
11824.0000 Water and Wastewater Rate Study	60,000	-	-	-	-	-	-	-	-	-	-	-
11824.0000 Water and Wastewater Rate Study	-	139,000	-	-	-	-	61,000	-	-	-	-	78,000
B0925.0000 Elevated Water Storage Facility (Northwest Sector	-	17,539,000	-	-	-	656,000	1,351,000	7,651,000	7,881,000	-	-	-
13950.0000 CF - Water Supply	-	11,846,000	1,500,000	1,545,000	3,483,000	5,318,000	-	-	-	-	-	-
33088.0000 Well 6 and 11 Treatment Analysis	-	2,016,000	-	-	-	-	2,016,000	-	-	-	-	-
33099.0000 CF - Well Treatment - GUDI Upg	1,355,985	7,054,000	2,755,000	2,838,000	1,461,000	-	-	-	-	-	-	-
B0927.0000 Well 9A & 9B Treatment Upgrades	-	3,175,000	-	258,000	2,917,000	-	-	-	-	-	-	-
B1067.0000 District Water Metering	-	3,542,000	-	-	-	-	-	-	299,000	1,660,000	1,583,000	-
26043.0000 Dawson Rd watermain ext	686,400	-	-	-	-	-	-	-	-	-	-	-
B0058.0000 Zone 3B PRV/PSV Zone Valves	-	763,000	-	-	-	-	-	-	69,000	694,000	-	-
SCADA Projects												
11803.0000 CF - SCADA Master Plan	150,000	-	-	-	-	-	-	-	-	-	-	-
B1423.0000 SCADA Upgrade	-	2,084,000	150,000	206,000	1,406,000	322,000	-	-	-	-	-	-
20330.0000 CF - SCADA Systems	-	586,000	466,000	120,000	-	-	-	-	-	-	-	-
Projects with Growth-Related SCADA Component												
21181.1070 CF - Electrical & Mechanical Water Treatment Facility	-	2,770,000	-	-	-	-	-	671,000	591,000	528,000	835,000	145,000
26044.0000 High Lift Pump Rehabilitation	-	1,807,000	-	241,000	-	328,000	1,238,000	-	-	-	-	-

Table 5-2 (continued)
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Water

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
26045.0000 South Sector Generator Re	-	774,000	-	-	-	774,000	-	-	-	-	-	-
33075.0000 CF - Well Bldg and Dra-Well 5	-	469,000	-	469,000	-	-	-	-	-	-	-	-
33081.0000 Disinfection - UV Replacements	-	1,835,000	-	-	-	406,000	703,000	487,000	239,000	-	-	-
33082.3910 Well 10 Pump House GeneratorWell 10	-	708,000	563,000	145,000	-	-	-	-	-	-	-	-
33084.0000 Filter Media Rehabilitation	22,588	645,000	645,000	-	-	-	-	-	-	-	-	-
33089.0000 Well Rehab and Pump Replacement Program	150,000	1,547,000	143,000	40,000	30,000	146,000	295,000	173,000	19,000	180,000	312,000	209,000
33100.0000 CF - Reservoir - West Sector	17,063	4,814,000	632,000	2,060,000	2,122,000	-	-	-	-	-	-	-
33200.0000 CF - United Lands Flowing Well	-	52,000	-	52,000	-	-	-	-	-	-	-	-
33300.0000 Filter PLC Project	-	377,000	300,000	77,000	-	-	-	-	-	-	-	-
33302.0000 Dudgeon Generator Replacement	-	787,000	626,000	161,000	-	-	-	-	-	-	-	-
33303.0000 PRV Replacement Program	-	101,000	-	-	-	-	101,000	-	-	-	-	-
B1413.0000 Acoustic Leak Detection	-	459,000	-	103,000	106,000	109,000	141,000	-	-	-	-	-
B1492.0000 Carbon Monoxide Sensors	-	126,000	-	62,000	64,000	-	-	-	-	-	-	-
11805.1070 CF - Rehabilitation & Optimiza Water Treatment Facility	-	1,390,000	685,000	705,000	-	-	-	-	-	-	-	-
33090.3910 Well 10 WTP Clear Baff CurtainWell 10	17,852	225,000	179,000	46,000	-	-	-	-	-	-	-	-
26005.3950 CF - GeneratorReservoirs	-	688,000	241,000	62,000	-	306,000	79,000	-	-	-	-	-
33101.3950 South Sector Reservoir Inspection and Upgrades	80,000	425,000	-	-	95,000	262,000	68,000	-	-	-	-	-
B1428.0000 Water and Wastewater System Modelling	-	271,000	-	-	-	-	-	-	179,000	92,000	-	-
B1424.1060 Truck Fill Station	-	45,000	45,000	-	-	-	-	-	-	-	-	-
IT Projects with Growth-Related SCADA Component	-	443,000	162,000	25,000	21,000	37,000	29,000	49,000	37,000	22,000	38,000	23,000
Area-Specific												
Additional Pump at Dudgeon Reservoir - Variable Speed	-	1,066,000	-	-	848,000	218,000	-	-	-	-	-	-
Trunk Watermain (300 mm Dia.) on Hansen Blvd. between Blind Line and County Road 16	-	941,000	464,000	477,000	-	-	-	-	-	-	-	-
Watermain on County Road 109, County Road 16 to Montgomery Blvd. East of Riddell	-	1,471,000	-	725,000	746,000	-	-	-	-	-	-	-
Watermain on B-Line, West Sector Reservoir to Lots at B-Line and County Road 109	-	116,000	-	-	-	-	116,000	-	-	-	-	-
Total Capital Expenditures	**5,212,712**	**124,605,000**	**15,412,000**	**13,525,000**	**15,556,000**	**13,831,000**	**9,907,000**	**9,704,000**	**13,502,000**	**11,297,000**	**12,605,000**	**9,266,000**
Capital Financing												
Canada Community-Building Fund (CCBF)	686,400	1,088,000	1,088,000	-	-	-	-	-	-	-	-	-
Provincial Grants (OCIF)	-	1,300,000	-	800,000	-	500,000	-	-	-	-	-	-
Town-Wide Development Charges Reserve Fund	1,100,084	15,915,839	2,725,913	2,656,400	6,499,350	1,120,963	1,146,067	992,663	561,675	165,550	30,613	16,647
Area-Specific Development Charges Reserve Fund	-	2,864,633	464,000	989,112	1,138,345	157,176	116,000	-	-	-	-	-
Non-Growth Related Debenture Requirements	1,200,000	39,400,000	-	1,500,000	5,500,000	4,700,000	5,500,000	-	2,000,000	6,500,000	8,200,000	5,500,000
Growth Related Debenture Requirements	-	22,400,000	-	-	100,000	5,000,000	800,000	6,700,000	7,600,000	1,400,000	800,000	-
Water Reserve Fund	2,226,228	41,636,528	11,134,088	7,579,488	2,318,305	2,352,862	2,344,933	2,011,338	3,340,325	3,231,450	3,574,388	3,749,353
Total Capital Financing	**5,212,712**	**124,605,000**	**15,412,000**	**13,525,000**	**15,556,000**	**13,831,000**	**9,907,000**	**9,704,000**	**13,502,000**	**11,297,000**	**12,605,000**	**9,266,000**

Table 5-3
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Wastewater

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
11803.0000 CF - SCADA Master Plan	150,000	-	-	-	-	-	-	-	-	-	-	-
26018.0000 CF - Clarifier 3 Centre Unit R	1,420,000	-	-	-	-	-	-	-	-	-	-	-
26059.0000 Sewage Sampler & Assoc Works	20,000	95,000	-	-	-	16,000	-	17,000	18,000	-	-	44,000
33701.0000 Sewage Pump Stn - Spare Pump	-	50,000	-	-	-	-	50,000	-	-	-	-	-
26019.0000 Mixer # 6 Replacement	-	37,000	17,000	-	-	-	-	20,000	-	-	-	-
26022.1060 Mixer #4 Replacement -- Water Pollution Control Plant	-	18,000	-	-	18,000	-	-	-	-	-	-	-
26025.1060 CF - Sump Pump Replacements -- Water Pollution Control Plant	-	12,000	-	-	-	-	-	-	12,000	-	-	-
20419.1060 CF - Detritor Centre Unit Repl -- Water Pollution Control Plant	944,744	-	-	-	-	-	-	-	-	-	-	-
26027.1060 Mixer # 5 Replacement -- Water Pollution Control Plant	-	18,000	-	-	18,000	-	-	-	-	-	-	-
26034.1060 Headworks - Pumping Equipment -- Water Pollution Control Plant	16,000	-	-	-	-	-	-	-	-	-	-	-
26036.1060 Elevated Walkway -- Water Pollution Control Plant	-	77,000	77,000	-	-	-	-	-	-	-	-	-
26058.0000 New Plant - Mixers #1, #2 & #3 - Replacements	54,000	63,000	-	-	-	-	-	63,000	-	-	-	-
B0948.1060 Old Plant - Mixers 7,8,9&10 - Replacement	-	40,000	40,000	-	-	-	-	-	-	-	-	-
B1362.1060 Tractor	-	160,000	160,000	-	-	-	-	-	-	-	-	-
B1428.0000 Water and Wastewater System Modelling	-	271,000	-	-	-	-	-	-	179,000	92,000	-	-
B1424.1060 Truck Fill Station	-	30,000	30,000	-	-	-	-	-	-	-	-	-
11813.0000 Engineering Standards Update	-	63,000	25,000	-	-	-	-	38,000	-	-	-	-
13986.0000 CF - Climate Change	-	13,000	13,000	-	-	-	-	-	-	-	-	-
21206.1060 WPCP Roof Projects	67,723	459,000	131,000	100,000	97,000	83,000	48,000	-	-	-	-	-
WPCP Exterior Doors	-	20,000	20,000	-	-	-	-	-	-	-	-	-
26048.0000 Shed	-	33,000	-	-	-	33,000	-	-	-	-	-	-
26050.0000 Operations Equipment	9,599	-	-	-	-	-	-	-	-	-	-	-
31115.0000 CF - Reconn - Centennial	200,000	-	-	-	-	-	-	-	-	-	-	-
31116.0000 CF - Recon Church St	423,000	-	-	-	-	-	-	-	-	-	-	-
31119.0000 Recon - Victoria St - Ontario to John	-	355,000	300,000	55,000	-	-	-	-	-	-	-	-
31120.0000 Recon - Ontario St. Vic to Pri	-	243,000	206,000	37,000	-	-	-	-	-	-	-	-
31121.0000 Recon - Cardwell St, Townline	-	249,000	-	249,000	-	-	-	-	-	-	-	-
31122.0000 Recon - Cardwell St, Dufferin	-	1,171,000	-	-	-	558,000	-	-	519,000	94,000	-	-
31123.0000 Recon - Dufferin St, John to O	-	619,000	524,000	95,000	-	-	-	-	-	-	-	-
31124.0000 Recon - Third Ave, 1st St to 2nd St	-	304,000	257,000	47,000	-	-	-	-	-	-	-	-
31125.0000 Recon - Third Ave, 2nd St to 3rd St.	-	269,000	228,000	41,000	-	-	-	-	-	-	-	-
31126.0000 Recon - Steven St	-	262,000	222,000	40,000	-	-	-	-	-	-	-	-
31127.0000 Recon - Andrew St	-	441,000	373,000	68,000	-	-	-	-	-	-	-	-
31128.0000 Bythia Street (Court) Reconstruction	-	276,000	234,000	42,000	-	-	-	-	-	-	-	-
B0982.0000 Recon - Carlton Dr - Madison to Lawrence	-	619,000	524,000	95,000	-	-	-	-	-	-	-	-
B1004.0000 Recon - Erindale, Dufferin to Princess St	-	660,000	-	660,000	-	-	-	-	-	-	-	-
B1009.0000 Recon - Zina St, First St to Louisa	-	720,000	-	-	-	-	-	-	-	609,000	111,000	-
B1014.0000 Recon - Amanda, Townline to Parsons	-	548,000	-	-	-	-	-	464,000	84,000	-	-	-
B1015.0000 Recon - Amanda, Parsons to Front	-	313,000	-	-	-	-	-	265,000	48,000	-	-	-
B1195.0000 Recon of Edelwild Century to Parkview	-	656,000	-	656,000	-	-	-	-	-	-	-	-
B1273.0000 Recon Bythia St Townline to Church	-	672,000	-	-	-	-	569,000	103,000	-	-	-	-
B1278.0000 Reconstruction of Dufferin Street - Erindale to Ontario	-	546,000	-	546,000	-	-	-	-	-	-	-	-
B1331.0000 C-Line Reconstruction Century to Town Line	-	664,000	-	-	-	-	-	562,000	102,000	-	-	-
B1332.0000 John Street Reconstruction Townline to Corp Limits	-	344,000	-	-	291,000	53,000	-	-	-	-	-	-
B1359.0000 Caledonia Road Reconstruction	-	314,000	-	35,000	236,000	43,000	-	-	-	-	-	-
B1360.0000 Hillside Drive Reconstruction	-	251,000	-	-	-	-	-	-	-	40,000	179,000	32,000
B1414.4000 Fleet Management Plan	-	3,000	3,000	-	-	-	-	-	-	-	-	-

Table 5-3
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Wastewater

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
B1490.4392 Vehicle 53 Replacement	-	20,000	-	-	-	-	-	-	20,000	-	-	-
B1497.0000 Recon/Widening - Fourth Ave: Third St to Hwy #10	-	637,000	-	-	-	-	56,000	-	492,000	89,000	-	-
B1503.0000 Hybrid Recon - Hillsdale, Goldgate and Darsam	-	241,000	-	-	21,000	186,000	34,000	-	-	-	-	-
B1504.0000 Recon - Church St: John to Bythia	-	354,000	-	-	-	-	-	-	-	49,000	258,000	47,000
B1505.0000 Recon - Bythia: Church to Hillside	-	436,000	-	-	-	44,000	332,000	60,000	-	-	-	-
B1548.0000 Hybrid Reconstruction of Avonmore and Johanna	-	46,000	-	46,000	-	-	-	-	-	-	-	-
B1440.4442 Vehicle 21 Replacement	-	140,000	60,000	-	-	-	-	-	-	80,000	-	-
B1438.4701 Vehicle 27 Replacement	-	185,000	80,000	-	-	-	-	-	-	105,000	-	-
B1475.4822 Vehicle 33 Replacement	-	100,000	-	-	-	-	-	100,000	-	-	-	-
B1565.0000 Dayforce Optimization and Enhancement Initiative	-	5,000	5,000	-	-	-	-	-	-	-	-	-
20389.0000 CRM System Upgrade	-	24,000	24,000	-	-	-	-	-	-	-	-	-
B1407.0000 Website Updates	-	10,000	10,000	-	-	-	-	-	-	-	-	-
Studies:												
WPCP Building Condition Assessment	-	201,000	-	82,000	-	-	-	-	119,000	-	-	-
Growth Related:												
Town-Wide												
11824.0000 Water and Wastewater Rate Study	30,000	-	-	-	-	-	-	-	-	-	-	-
11824.0000 Water and Wastewater Rate Study	-	139,000	-	-	-	-	61,000	-	-	-	-	78,000
11788.1060 CF - Inflow and Infiltrtn Stn -- Water Pollution Control Plant	160,910	-	-	-	-	-	-	-	-	-	-	-
11788.1060 CF - Inflow and Infiltrtn Stn -- Water Pollution Control Plant	-	197,000	-	-	-	-	-	197,000	-	-	-	-
33703.0000 Sanitary Sewer Rehabilitation (I&I)	-	6,067,000	-	-	-	-	938,000	966,000	995,000	1,024,000	1,055,000	1,089,000
26049.1060 Flood Mitigation at the WPCP Water Pollution Control Plant	26,321	474,000	474,000	-	-	-	-	-	-	-	-	-
Sanitary Servicing Assessment	-	133,000	-	133,000	-	-	-	-	-	-	-	-
SCADA Projects												
B1423.0000 SCADA Upgrade	-	2,129,000	100,000	206,000	1,167,000	656,000	-	-	-	-	-	-
20362.0000 CF - SCADA Server Replacement	-	402,000	402,000	-	-	-	-	-	-	-	-	-
Projects with Growth-Related SCADA Component												
26039.0000 Thickening Tank Centre Unit	-	536,000	-	536,000	-	-	-	-	-	-	-	-
33702.0000 Sewage Pumping Station - Pumpi --	47,000	443,000	50,000	52,000	-	-	-	-	283,000	58,000	-	-
B1427.0000 Sewage Pump Station Level Indicator Replacements	-	60,000	60,000	-	-	-	-	-	-	-	-	-
21182.1060 CF - Digestor No 2 Refurb -- Water Pollution Control Plant	2,621,169	1,685,000	1,685,000	-	-	-	-	-	-	-	-	-
26040.1060 Sludge Storage Tank Rehabilitation	-	765,000	250,000	515,000	-	-	-	-	-	-	-	-
26042.1060 MLR Pump Replacement Program -- Water Pollution Control Plant	-	229,000	57,000	-	39,000	-	42,000	-	44,000	-	47,000	-
33087.1060 Sludge Transfer Well Rehab -- Water Pollution Control Plant	-	22,000	22,000	-	-	-	-	-	-	-	-	-
B0952.1060 Tertiary Treatment-Travelling Bridge Replacement incl. Pumps	-	702,000	-	-	-	227,000	234,000	241,000	-	-	-	-
B0953.1060 Chlorine, Alum and SBS Tank Replacements - Chemical Building	-	133,000	-	-	-	133,000	-	-	-	-	-	-
B1086.1060 Sludge Loading Pump Replacements	-	127,000	-	-	-	127,000	-	-	-	-	-	-
B1296.1060 Chemical Storage Building Rehabilitation	-	985,000	-	-	133,000	852,000	-	-	-	-	-	-
B1298.1060 Digester 1 Cleanout and Assessment	-	564,000	-	-	-	-	-	-	564,000	-	-	-
B1314.0000 Flare Stack Replacement	-	69,000	-	69,000	-	-	-	-	-	-	-	-
B1315.1060 Admin Building Transformer Replacement	-	348,000	-	-	-	-	-	348,000	-	-	-	-
B1316.1060 Grit Removal System - New Plant	-	308,000	50,000	258,000	-	-	-	-	-	-	-	-
B1317.1060 Aeration Diffuser Piping	-	46,000	-	-	-	46,000	-	-	-	-	-	-
B1325.1060 Turbo Blower Replacements	-	316,000	-	-	-	-	-	-	-	316,000	-	-

Table 5-3
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Wastewater

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
B1326.1060 WAS Pump Replacement (Old Plant)	-	27,000	-	-	-	-	-	-	-	27,000	-	-
B1327.1060 Flo-Dar Unit Replacements	-	56,000	-	-	-	-	-	56,000	-	-	-	-
B1330.1060 Inlet VFD Replacments	-	107,000	-	-	51,000	-	-	56,000	-	-	-	-
B1493.1060 Digester Feed Grinder	-	196,000	-	196,000	-	-	-	-	-	-	-	-
B1494.1060 Conversion to Ultraviolet (UV) Disinfection	-	9,555,000	-	124,000	9,431,000	-	-	-	-	-	-	-
B1496.1060 Membrane Aerated Biofilm Reactors	-	1,255,000	-	1,255,000	-	-	-	-	-	-	-	-
B1509.1060 Grit Removal System - Old Plant	-	3,096,000	-	-	-	-	1,525,000	1,571,000	-	-	-	-
Capital IT Projects with Growth-Related SCADA Upgrade Component	-	316,000	114,000	17,000	14,000	25,000	19,000	47,000	25,000	14,000	26,000	15,000
Area-Specific												
Hansen Boulevard Trunk Sanitary Sewer	-	588,000	-	588,000	-	-	-	-	-	-	-	-
B0082.0000 Trunk Sewer Capacity Increase (Bredin Pkwy, Third St at Fourth Ave)	-	567,000	-	-	-	-	-	567,000	-	-	-	-
Total Capital Expenditures	**6,190,466**	**46,999,000**	**6,827,000**	**6,843,000**	**11,516,000**	**3,082,000**	**3,908,000**	**5,741,000**	**3,504,000**	**2,597,000**	**1,676,000**	**1,305,000**
Capital Financing												
Canada Community-Building Fund (CCBF)	-	1,552,000	-	-	-	780,000	-	300,000	472,000	-	-	-
Provincial/Federal Grants	-	4,715,500			4,715,500							
Town-Wide Development Charges Reserve Fund	183,233	3,311,408	172,303	140,076	341,917	114,710	781,083	305,603	408,864	224,990	344,679	477,184
Area-Specific Development Charges Reserve Fund	-	1,074,315	-	548,738	-	-	-	525,576	-	-	-	-
Non-Growth Related Debenture Requirements	1,804,347	11,350,000	-	3,700,000	4,700,000	-	1,150,000	1,800,000	-	-	-	-
Growth Related Debenture Requirements	-	2,400,000	-	-	-	-	-	500,000	400,000	600,000	500,000	400,000
Wastewater Reserve	4,202,886	22,595,777	6,654,697	2,454,186	1,758,583	2,187,290	1,976,917	2,309,821	2,223,136	1,772,010	831,321	427,816
Total Capital Financing	**6,190,466**	**46,999,000**	**6,827,000**	**6,843,000**	**11,516,000**	**3,082,000**	**3,908,000**	**5,741,000**	**3,504,000**	**2,597,000**	**1,676,000**	**1,305,000**

Chapter 6
Operating Expenditures and Revenues

6. Operating Expenditures and Revenues

6.1 Operating Expenditures

The approved 2024 Operating Budget and Draft 2025 operating budget and forecast were provided by Town staff for use in this report. The operating budget forecast generally includes two components: the operating expenditures and capital-related expenditures. The former is based on the Town's projected annual spending for ongoing operations and maintenance. The latter is based on the capital funding plan decisions (i.e., transfers to reserve funds, debt repayment, and capital fund transfers) presented earlier.

Operating expenditures for 2025 to 2029 reflect the Town's draft forecast as well as specific adjustments identified for planned expansions or known future increases. The last five years of the forecast are based on the 2029 forecast with adjustments for inflation. The costs for each component of the operating budget have been reviewed with staff to establish forecast inflationary adjustments. The cost adjustments are summarized below.

- Expenditures related to utilities, fuels, chemicals, materials and supplies, and insurance are assumed to increase at a rate of 10% annually;
- Expenditures related to staffing, such as salaries/wages, have been adjusted to include the costs to support water services that were previously tax-funded in the 2024 budget and are inflated at 2.5% annually from 2030 to 2034. Costs for employee benefits are forecasted to increase at 5% annually for the latter years of the forecast;
- Contributions to Credit Valley Conservation Authority are assumed to increase by 3.5% annually;
- No increases are anticipated for costs related to rebate or pardon programs; and
- All other expenditures are assumed to increase at a rate of 2.0% annually from 2030 to 2034.

Capital-related annual expenditures in the forecast include annual debt repayments and contributions to reserves/reserve funds to support the forecast and future needs. Annual transfers to the capital reserve fund have been built into the operating expenditure forecasts to minimize the need for debt to finance the capital program. Compared to the annual lifecycle contribution discussed in Section 4-2 of this report, the

annual capital-related expenditures (non-growth capital only) for water services will total $6.30 million in 2034, which is $1.85 million lower than the calculated annual lifecycle contribution of $8.15 million identified in Table 4-1. Similarly, for wastewater services, capital-related expenditures (non-growth only) are projected to be $5.81 million in 2034, which is $1.88 million lower than the calculated annual lifecycle contribution of $7.69 million identified in Table 4-1.

Gross operating expenditures for water services are expected to increase from $8.45 million in 2024 to $17.47 million in 2034. Similarly, for wastewater services, annual gross expenditures are forecast to increase from $7.94 million to $14.95 million in 2034. Tables 6-1 and 6-2 provide operating expenditure forecasts for water and wastewater services.

6.2 Operating Revenues

The Town has revenue from base charges, municipal service agreements, and miscellaneous revenue sources to help contribute towards operating expenditures.

Base charge revenues from Town's customers and under the Amaranth Servicing Agreement have been forecasted based on the underlying system growth assumptions provided in Section 2 of this report. Furthermore, 15% annual increases to the water and wastewater base charges are forecast over the period to provide funding for the projected capital and operating expenditures.

The Town has miscellaneous revenues, including facility rental fees, water meter and conservation device sales, and other sales that help fund water services. These revenues are assumed to increase by 2% each year over the forecast period. Revenues from municipal agreements are expected to growth at 2.5% each year over the 2025 to 2029 forecast period and then 2.5% thereafter. No miscellaneous revenues have been identified to contribute towards operating expenditures for wastewater services.

Tables 6-1 and 6-2 provide for the operating revenues for water and wastewater services. The tables also provide the net operating expenditures to be recovered from the volumetric rates.

Table 6-1
Town of Orangeville
Operating Budget Forecast – Water (inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Operating Costs											
Salaries - FT	1,715,520	1,823,265	1,868,846	1,915,567	1,963,456	2,012,542	2,062,856	2,114,427	2,167,288	2,221,470	2,277,007
Salaries - PT	34,892	30,313	31,070	31,847	32,643	33,459	34,296	35,153	36,032	36,933	37,856
Standby Pay	12,525	16,037	16,037	16,037	16,037	16,037	16,438	16,849	17,270	17,702	18,144
OT - Salaries FT	113,000	116,164	122,402	128,975	135,901	143,199	146,779	150,448	154,209	158,065	162,016
Retiree Benefits and Salary Con	6,462	4,389	-	-	-	-	-	-	-	-	-
Emp Benefits - FT	548,958	630,573	679,635	720,677	766,049	813,806	854,496	897,221	942,082	989,186	1,038,645
Emp Benefits - PT	4,102	3,698	3,830	3,967	4,111	4,261	4,474	4,698	4,933	5,179	5,438
Memberships/Subscriptions	17,500	18,000	18,500	19,000	19,500	20,000	20,400	20,808	21,224	21,649	22,082
Professional Assoc Fees	1,650	2,650	2,750	2,750	2,750	2,750	2,805	2,861	2,918	2,977	3,036
Workshops/Training Courses	21,525	33,185	42,810	43,410	44,060	44,660	45,553	46,464	47,394	48,341	49,308
Conferences	8,800	19,200	19,880	19,880	19,880	19,880	20,278	20,683	21,097	21,519	21,949
Mileage	2,000	2,000	2,000	2,000	2,000	2,000	2,040	2,081	2,122	2,165	2,208
Office Equip	8,020	1,030	1,030	1,030	1,030	1,030	1,051	1,072	1,093	1,115	1,137
Office Supplies/Materials	2,040	2,040	2,060	2,060	2,060	2,060	2,101	2,143	2,186	2,230	2,274
Advertising & Promotion	11,200	11,800	11,800	11,800	11,800	11,800	12,036	12,277	12,522	12,773	13,028
Postage/Courier/Fax	500	500	500	500	500	500	510	520	531	541	552
Water and Sewer Reading / Billi	219,000	219,000	219,000	219,000	219,000	219,000	223,380	227,848	232,405	237,053	241,794
Prof Fees - Engineering	155,250	158,000	160,500	163,500	166,000	169,000	172,380	175,828	179,344	182,931	186,590
Prof Fees - Consulting	70,000	61,000	61,000	62,000	63,000	64,000	65,280	66,586	67,917	69,276	70,661
Prof Fees - Legal	5,000	5,500	5,500	6,000	6,000	6,500	6,630	6,763	6,898	7,036	7,177
Prof Fees - Other	137,800	148,900	149,200	155,100	166,100	161,300	164,526	167,817	171,173	174,596	178,088
Insurance	128,423	146,829	161,513	177,663	195,429	214,973	236,470	260,117	286,129	314,742	346,216
Insurance Deductibles/Claims	20,000	20,000	22,000	24,200	26,620	29,282	32,210	35,431	38,974	42,872	47,159
Video Production	12,000	12,000	12,000	12,000	12,000	12,000	12,240	12,485	12,734	12,989	13,249
Telephone/Communications	57,340	30,305	30,305	30,355	30,405	30,705	31,319	31,945	32,584	33,236	33,901
Computer Operation & Supplies	40,275	35,906	36,562	37,745	38,098	38,275	39,041	39,821	40,618	41,430	42,259
Inter-Departmental	488,405	488,405	498,173	508,137	518,299	528,665	539,239	550,023	561,024	572,244	583,689
Inter-Departmental - IT	179,257	184,282	187,968	191,727	195,562	199,473	203,462	207,531	211,682	215,916	220,234
Uniforms	10,000	12,450	12,699	15,450	15,759	16,074	16,396	16,724	17,058	17,399	17,747
Outside Srv	333,000	340,100	334,220	352,246	356,479	361,569	368,800	376,176	383,700	391,374	399,201
Outside Laboratory Srv	82,200	83,550	83,900	86,000	86,500	86,750	88,485	90,255	92,060	93,901	95,779
Outside Srv - Compliance	10,000	10,000	10,000	10,000	10,000	10,000	10,200	10,404	10,612	10,824	11,041
Outside Srv - Electrical Preven	26,250	26,750	27,000	27,250	27,500	27,750	28,305	28,871	29,449	30,037	30,638
Outside Srv - Mechanical Preven	200,000	202,000	204,000	206,000	208,000	210,000	214,200	218,484	222,854	227,311	231,857
Outside Srv - Instrumentation P	125,000	125,000	126,000	127,000	128,000	129,000	131,580	134,212	136,896	139,634	142,426
Outside Srv - Bldg, Reservoir &	75,000	76,500	78,000	79,500	81,000	82,500	84,150	85,833	87,550	89,301	91,087
SCADA Mtc	58,240	60,568	62,991	64,674	66,412	68,068	69,429	70,818	72,234	73,679	75,153

Table 6-1 (continued)
Town of Orangeville
Operating Budget Forecast – Water (inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Operating Costs											
Natural Gas	20,614	21,711	22,797	23,937	25,134	26,390	29,029	31,932	35,125	38,638	42,501
Hydro	442,199	508,529	559,382	615,320	676,852	744,537	818,991	900,890	990,979	1,090,077	1,199,084
Mtc Equip	34,850	35,800	40,600	41,400	41,400	41,450	42,279	43,125	43,987	44,867	45,764
Small Equip	76,900	78,950	80,000	82,050	83,100	84,150	85,833	87,550	89,301	91,087	92,908
After Hours Dispatch	7,150	7,150	7,293	7,439	7,588	7,739	7,894	8,052	8,213	8,377	8,545
Property Tax	23,290	23,290	24,222	25,190	26,198	27,246	28,336	29,469	30,648	31,874	33,149
Payment in-lieu of Tax	22,800	22,800	22,800	22,800	22,800	22,800	22,800	22,800	22,800	22,800	22,800
Chemicals	97,500	100,780	110,858	121,944	134,138	147,552	162,307	178,538	196,392	216,031	237,634
Materials & Supplies	229,000	231,000	233,000	236,000	238,000	245,000	249,900	254,898	259,996	265,196	270,500
Outside Srv - Planned Mtc	90,000	100,000	100,000	105,000	110,000	115,000	117,300	119,646	122,039	124,480	126,969
Outside Srv - Main Breaks	30,000	32,500	35,000	37,500	40,000	42,500	43,350	44,217	45,101	46,003	46,923
Pardon	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Toilet Rebate Program	8,500	8,000	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Rain Barrels	5,000	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Meter and Conservation Devices	25,000	25,000	25,000	30,000	30,000	30,000	30,600	31,212	31,836	32,473	33,122
Water Softner Rebate Program	25,000	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Prof Fees - One Call	6,000	6,000	6,120	6,242	6,367	6,495	6,624	6,757	6,892	7,030	7,171
Printing/Photocopy Costs	1,500	-	-	-	-	-	-	-	-	-	-
Software Support & Licences	7,500	7,500	7,650	7,803	7,959	8,118	8,281	8,446	8,615	8,787	8,963
Special Projects	-	3,000	3,060	3,121	3,184	3,247	3,312	3,378	3,446	3,515	3,585
Software Agreemts	120,680	98,180	105,680	110,680	112,894	115,151	117,455	119,804	122,200	124,644	127,137
Server Mtc	5,000	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975
Vehicle Mtc Costs/Parts	57,495	61,015	62,259	63,794	64,846	66,168	67,491	68,841	70,218	71,622	73,055
Fuel	43,102	44,395	45,727	47,099	48,512	49,967	50,966	51,986	53,025	54,086	55,168
Vehicle Licenses	4,900	5,300	5,406	5,514	5,624	5,736	5,851	5,968	6,087	6,209	6,333
Leased Vehicle Exp	127,577	115,473	117,784	120,139	60,403	31,392	32,020	32,660	33,313	33,980	34,659
Other Staffing Costs	126,484	133,276	136,608	140,023	143,524	233,238	239,069	245,045	251,172	257,451	263,887
Sub Total Operating	**6,586,675**	**6,854,037**	**7,087,028**	**7,358,245**	**7,556,769**	**7,877,157**	**8,164,043**	**8,467,521**	**8,788,925**	**9,129,708**	**9,491,462**

Table 6-1 (continued)
Town of Orangeville
Operating Budget Forecast – Water (inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital-Related											
New Growth Related Debt (Principal)		-	-	-	3,289	167,881	201,245	430,065	698,097	773,464	832,263
New Growth Related Debt (Interest)		-	-	-	4,200	214,062	240,611	513,559	814,696	844,176	845,290
Existing Debt (Principal) - Non-Growth Related	64,297	66,573	62,953	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Non-Growth Related	5,621	3,345	1,068	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Principal)		39,469	41,127	92,190	276,961	443,180	642,693	669,686	763,594	1,009,455	1,321,556
New Non-Growth Related Debt (Interest)		50,400	48,742	110,015	337,143	522,911	735,297	708,304	764,177	1,005,106	1,307,109
Transfer to Canada Community-Building Fund (Water Portion) Reserve Fund	686,400	1,088,000	-	-	-	-	-	-	-	-	-
Transfer to Capital (Provincial Grants)	-	-	800,000	-	500,000	-	-	-	-	-	-
Transfer to Capital Reserve Fund	1,107,004	1,497,323	1,896,144	2,261,584	2,337,253	2,354,959	2,425,938	2,908,432	3,325,608	3,504,456	3,672,024
Sub Total Capital Related	**1,863,322**	**2,745,110**	**2,850,034**	**2,463,789**	**3,458,847**	**3,702,993**	**4,245,784**	**5,230,046**	**6,366,172**	**7,136,658**	**7,978,243**
Total Expenditures	**8,449,997**	**9,599,147**	**9,937,061**	**9,822,035**	**11,015,615**	**11,580,150**	**12,409,826**	**13,697,567**	**15,155,097**	**16,266,366**	**17,469,704**
Revenues											
Base Charge	1,579,147	1,828,871	2,124,995	2,465,534	2,860,421	3,318,300	3,849,184	4,464,671	5,178,197	6,005,327	6,964,551
Facilities Rental	14,200	14,500	14,800	15,096	15,382	15,690	16,004	16,324	16,650	16,983	17,323
Municipal Agreements	347,000	353,900	361,000	368,220	375,584	383,096	392,673	402,490	412,552	422,866	433,438
Srv Charges Rev	11,100	11,300	11,500	14,000	14,252	14,509	14,799	15,095	15,397	15,705	16,019
Meter and Conservation Devices	21,600	22,000	22,400	22,803	23,213	23,631	24,104	24,586	25,077	25,579	26,091
Other Sales	21,600	22,000	22,400	22,803	23,213	23,631	24,104	24,586	25,077	25,579	26,091
Other Revenue	1,000	1,000	1,000	1,000	1,000	1,000	1,020	1,040	1,061	1,082	1,104
Amaranth Servicing Agreement	-	663	2,135	4,033	6,453	9,507	9,507	9,507	9,507	9,507	9,507
Provincial Grants	-	-	800,000	-	500,000	-	-	-	-	-	-
Canada Community-Building Fund (Water Portion) Receipts	686,400	1,088,000	-	-	-	-	-	-	-	-	-
Contributions from Development Charges Reserve Fund	-	-	-	-	7,489	381,943	441,855	943,623	1,512,793	1,617,640	1,677,553
Contributions from Reserves / Reserve Fund	69,918	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**2,751,965**	**3,342,234**	**3,360,230**	**2,913,488**	**3,827,007**	**4,171,308**	**4,773,251**	**5,901,923**	**7,196,314**	**8,140,269**	**9,171,677**
Water Billing Recovery - Total	**5,698,032**	**6,256,913**	**6,576,832**	**6,908,546**	**7,188,608**	**7,408,842**	**7,636,576**	**7,795,644**	**7,958,783**	**8,126,097**	**8,298,027**

Table 6-2
Town of Orangeville
Operating Budget Forecast – Wastewater (inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Operating Costs											
Salaries - FT	846,953	947,411	971,096	995,373	1,020,257	1,045,765	1,071,909	1,098,707	1,126,174	1,154,329	1,183,187
Salaries - PT	-	3,107	3,185	3,264	3,345	3,429	3,515	3,603	3,693	3,785	3,880
Standby Pay	12,525	16,037	16,037	16,037	16,037	16,037	16,438	16,849	17,270	17,702	18,144
OT - Salaries FT	43,000	44,204	44,204	44,204	44,204	44,204	45,309	46,442	47,603	48,793	50,013
Distributed Labour	4,200	4,318	4,318	4,318	4,318	4,318	4,426	4,536	4,650	4,766	4,885
Emp Benefits - FT	273,120	329,738	355,396	376,919	400,739	425,842	436,488	447,400	458,585	470,050	481,801
Emp Benefits - PT	-	390	403	417	432	448	459	471	483	495	507
Memberships/Subscriptions	800	800	800	800	800	800	816	832	849	866	883
Professional Assoc Fees	1,000	1,250	1,500	1,500	1,500	1,500	1,530	1,561	1,592	1,624	1,656
Workshops/Training Courses	15,010	27,130	27,500	28,100	28,700	29,300	29,886	30,484	31,093	31,715	32,350
Conferences	1,375	11,625	11,750	11,750	11,750	11,750	11,985	12,225	12,469	12,719	12,973
Mileage	500	900	900	900	900	900	918	936	955	974	994
Advertising & Promotion	200	200	200	200	200	200	204	208	212	216	221
Water and Sewer Reading / Billing	219,000	219,000	219,000	219,000	219,000	219,000	223,380	227,848	232,405	237,053	241,794
Prof Fees - Engineering	155,600	185,600	185,600	190,600	190,600	196,000	199,920	203,918	207,997	212,157	216,400
Prof Fees - Consulting	7,400	8,600	8,800	10,000	10,000	10,000	10,200	10,404	10,612	10,824	11,041
Prof Fees - Legal	7,500	7,500	7,500	10,000	10,000	10,000	10,200	10,404	10,612	10,824	11,041
Insurance	183,337	200,899	220,990	243,088	267,398	294,137	323,551	355,906	391,496	430,646	473,711
Video Production	1,500	1,500	1,500	1,500	1,500	1,500	1,530	1,561	1,592	1,624	1,656
Computer Operation & Supplies	27,182	27,569	27,972	28,390	28,826	29,279	29,865	30,462	31,071	31,693	32,326
After Hours Dispatch	7,150	7,150	7,150	7,150	7,150	7,150	7,293	7,439	7,588	7,739	7,894
Inter-Departmental	437,064	380,064	380,064	380,064	380,064	380,064	387,665	395,419	403,327	411,393	419,621
Inter-Departmental - IT	114,635	127,212	129,742	132,536	134,087	135,669	138,382	141,150	143,973	146,852	149,790
CVC Contribution	123,835	125,693	130,092	134,645	139,358	144,236	149,284	154,509	159,917	165,514	171,307
CVC Contribution - Special	29,252	68,007	70,387	72,851	75,401	78,040	80,771	83,598	86,524	89,552	92,687
Uniforms	5,300	5,550	6,800	6,800	6,800	6,800	6,936	7,075	7,216	7,361	7,508
Outside Srv	380,000	395,000	402,000	404,500	411,500	429,000	437,580	446,332	455,258	464,363	473,651
Outside Laboratory Srv	29,000	29,000	29,500	29,500	29,500	29,500	30,090	30,692	31,306	31,932	32,570
Telephone/Communications	5,020	7,920	7,920	7,920	7,920	7,920	8,712	9,583	10,542	11,596	12,755
Hydro	449,835	517,310	569,041	625,945	688,540	757,394	833,133	916,447	1,008,091	1,108,901	1,219,791
Mtc Equip	71,000	75,000	77,000	79,000	81,000	81,000	82,620	84,272	85,958	87,677	89,431
Materials & Supplies	41,000	42,000	43,000	43,500	43,500	44,000	44,880	45,778	46,693	47,627	48,580
Software Agreemts	120,680	113,180	120,680	125,680	125,680	125,680	128,194	130,757	133,373	136,040	138,761
Server Mtc	5,000	5,000	5,000	5,000	5,000	5,000	5,100	5,202	5,306	5,412	5,520
SCADA Mtc	51,168	53,214	55,342	57,553	59,854	60,964	62,183	63,427	64,695	65,989	67,309
Srv Agreemt/Equip Repair	2,200	2,200	2,200	2,200	2,200	2,200	2,244	2,289	2,335	2,381	2,429
Small Equip	46,000	47,000	48,000	49,000	50,000	51,000	52,020	53,060	54,122	55,204	56,308
Marsh Monitoring Survey	95,000	70,000	71,400	72,828	74,285	75,770	77,286	78,831	80,408	82,016	83,656
Biosolids Disposal	742,900	792,900	808,758	824,933	841,432	858,260	875,426	892,934	910,793	929,009	947,589
Chemicals	312,000	323,500	327,000	330,000	333,000	336,000	369,600	406,560	447,216	491,938	541,131

Table 6-2
Town of Orangeville
Operating Budget Forecast – Wastewater (inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Operating Costs											
Natural Gas	80,359	84,377	88,596	93,026	97,677	102,561	112,817	124,099	136,509	150,160	165,176
Mtc Facilities	5,000	6,000	6,000	6,000	6,000	6,000	6,120	6,242	6,367	6,495	6,624
Janitorial Srv	16,500	16,500	16,500	17,000	17,000	17,000	17,340	17,687	18,041	18,401	18,769
Payment in-lieu of Tax	35,993	35,993	35,993	35,993	35,993	35,993	36,713	37,447	38,196	38,960	39,739
Fuel	4,779	5,093	5,246	5,404	5,566	5,733	6,306	6,937	7,631	8,394	9,233
Vehicle Licenses	1,060	1,081	1,103	1,125	1,148	1,171	1,194	1,218	1,243	1,268	1,293
Leased Vehicle Exp	29,794	30,390	30,998	15,025	15,325	15,712	-	-	-	-	-
Vehicle Mtc Costs/Parts	8,323	8,429	8,547	8,668	9,042	9,242	9,427	9,615	9,808	10,004	10,204
Other Staffing Costs	126,484	256,441	262,852	269,423	276,159	495,233	507,614	520,304	533,312	546,645	560,311
Sub Total Operating	**5,176,533**	**5,668,981**	**5,855,562**	**6,029,630**	**6,220,685**	**6,648,701**	**6,899,459**	**7,183,659**	**7,487,158**	**7,811,675**	**8,159,098**
Capital-Related											
Existing Debt (Principal) - Growth Related	640,062	640,062	640,062	640,062	640,062	640,062	640,062	640,062	640,062	640,062	640,062
Existing Debt (Interest) - Growth Related	462,716	438,681	415,895	393,109	371,322	347,537	324,750	301,964	279,927	256,392	233,605
New Growth Related Debt (Principal)		-	-	-	-	-	-	16,445	30,292	51,299	69,899
New Growth Related Debt (Interest)		-	-	-	-	-	-	21,000	37,109	61,037	79,882
Existing Debt (Principal) - Non-Growth Related	151,578	153,854	150,234	87,281	87,281	87,281	87,281	87,281	87,281	87,281	87,281
Existing Debt (Interest) - Non-Growth Related	68,719	63,165	57,781	53,606	50,635	47,391	44,284	41,177	38,172	34,963	31,855
New Non-Growth Related Debt (Principal)		-	-	121,696	281,394	293,212	343,351	416,975	434,488	452,737	471,752
New Non-Growth Related Debt (Interest)		-	-	155,400	347,689	335,870	371,855	433,035	415,522	397,273	378,258
Transfer to Canada Community-Building Fund (Wastewater Portion) Reserve Fund	-	-	-	-	780,000	-	300,000	472,000	-	-	-
Transfer to Capital Reserve Fund	1,440,551	1,216,679	1,596,066	1,766,008	1,783,815	1,983,613	2,350,937	2,724,029	3,313,545	3,998,443	4,794,072
Sub Total Capital Related	**2,763,626**	**2,512,441**	**2,860,038**	**3,217,162**	**4,342,197**	**3,734,967**	**4,462,521**	**5,153,969**	**5,276,399**	**5,979,486**	**6,786,668**
Total Expenditures	**7,940,159**	**8,181,422**	**8,715,600**	**9,246,792**	**10,562,882**	**10,383,668**	**11,361,980**	**12,337,628**	**12,763,556**	**13,791,162**	**14,945,766**
Revenues											
Base Charge	1,539,195	1,781,718	2,068,820	2,398,880	2,781,411	3,224,725	3,738,453	4,333,742	5,023,503	5,822,683	6,748,588
Canada Community-Building Fund (Wastewater Portion) Receipts	-	-	-	-	780,000	-	300,000	472,000	-	-	-
Contributions from Development Charges Reserve Fund	1,102,778	1,078,743	1,055,957	1,033,171	1,011,384	987,599	964,812	979,472	987,391	1,008,790	1,023,449
Contributions from Reserves / Reserve Funds	220,297	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**2,862,270**	**2,860,462**	**3,124,777**	**3,432,051**	**4,572,794**	**4,212,324**	**5,003,265**	**5,785,214**	**6,010,894**	**6,831,473**	**7,772,037**
Wastewater Billing Recovery - Total	**5,077,889**	**5,320,960**	**5,590,823**	**5,814,740**	**5,990,088**	**6,171,344**	**6,358,715**	**6,552,414**	**6,752,663**	**6,959,689**	**7,173,728**

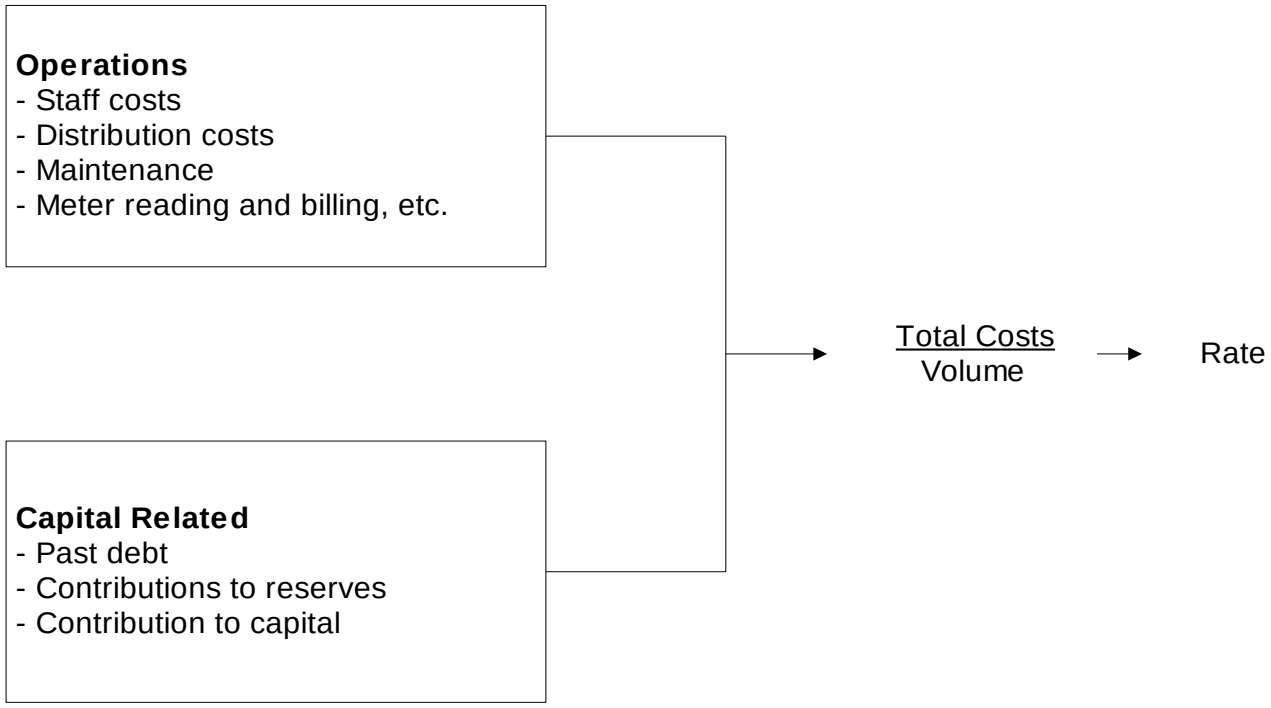
Chapter 7
Pricing Structures

7. Pricing Structures

7.1 Introduction

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

"Annual Costs"



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

Operations

- Inflation;
- Increased maintenance as the system ages; and

- Changes to provincial legislation.

Capital Related

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

7.2 Alternative Pricing Structures

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

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

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

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

Property Assessment: This method incorporates the total costs of providing water into the general requisition or the assessment base of the municipality. This form of collection is a "wealth tax," as payment increases directly with the value of property owned and bears no necessary relationship to actual consumption. This form is easy to administer as the costs to be recovered are incorporated into the calculation for all general services, normally collected through property taxes.

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

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

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

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

classification to establish rates at a level which does not over or under-collect from rate payers.

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

7.3 Assessment of Alternative Pricing Structures

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

Cost Recovery

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

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

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

Administration

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

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

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

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

The benefit derived from the installation of meters is that information on consumption patterns becomes available. This information provides benefit to administration in calculating rates, which will ensure revenue recovery. When planning what services are to be constructed in future years, the municipality or utility has documented consumption patterns distinctive to its own situation, which can be used to project sizing of growth-related works.

Equity

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

Revenue Stability

The objective of revenue stability is to limit the variability of annual variation in revenues due to fluctuation in consumption patterns. Variability is most often caused by weather conditions where in "wet" years, water usage is low and in "dry" years, water usage is high. To remove this variability entirely, a municipality would need to recover costs by either property taxes or by using the flat rates. Alternatively, a base charge provides for a fixed amount to be collected per period, which would at least guarantee a portion of the revenue stream.

Fixed vs. Variable Rates/Revenue

Often it is suggested that the rate structure be developed to reflect the fixed vs. variable expenditures so that revenues more closely match the expenditures being made. While this is a positive objective to advance, the reality is that most annual expenditures are generally fixed over periods of time and do not vary with consumption. The most variable costs would include hydro and chemicals, which generally increase or decrease with water production. Other costs, such as wages, benefits, insurance, vehicles/equipment, telecommunications, contracts, capital-related (i.e., debt, reserve transfers, current to capital transfers) are generally fixed. Variable costs for chemicals and hydro generally represent about 10% of the total water budget.

Conservation

Conservation of natural resources is increasingly being more highly valued. Conservation is also a concept which applies to a municipality facing physical limitations in the amount of water which can be supplied to an area. As well, financial constraints

can encourage conservation in a municipality where the cost of providing each additional unit is increasing.

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

The Declining Block Rate provides a decreasing incentive towards conservation. By creating awareness of volumes consumed, the consumer can reduce their total costs by restricting consumption; however, the incentive lessens as more water is consumed, because the marginal cost per unit declines as the consumer enters the next block pricing range. Similarly, those whose consumption level is at the top end of a block have less incentive to reduce consumption.

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

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

Figure 7-1 shows the different rate structures. Property tax is not shown for comparison because the proportion of taxes paid for the service varies directly with the property's value. The graphs on the left-hand side of the figure present the cost per unit for each additional amount of water consumed. The right-hand side of the figure presents the

impact on the customer's bill as the volume of water increases. Following the schematic is Figure 7-2, which summarizes each rate structure and the impacts on a customer's bill as volumes increase.

Figure 7-1
Water Rate Pricing Concepts

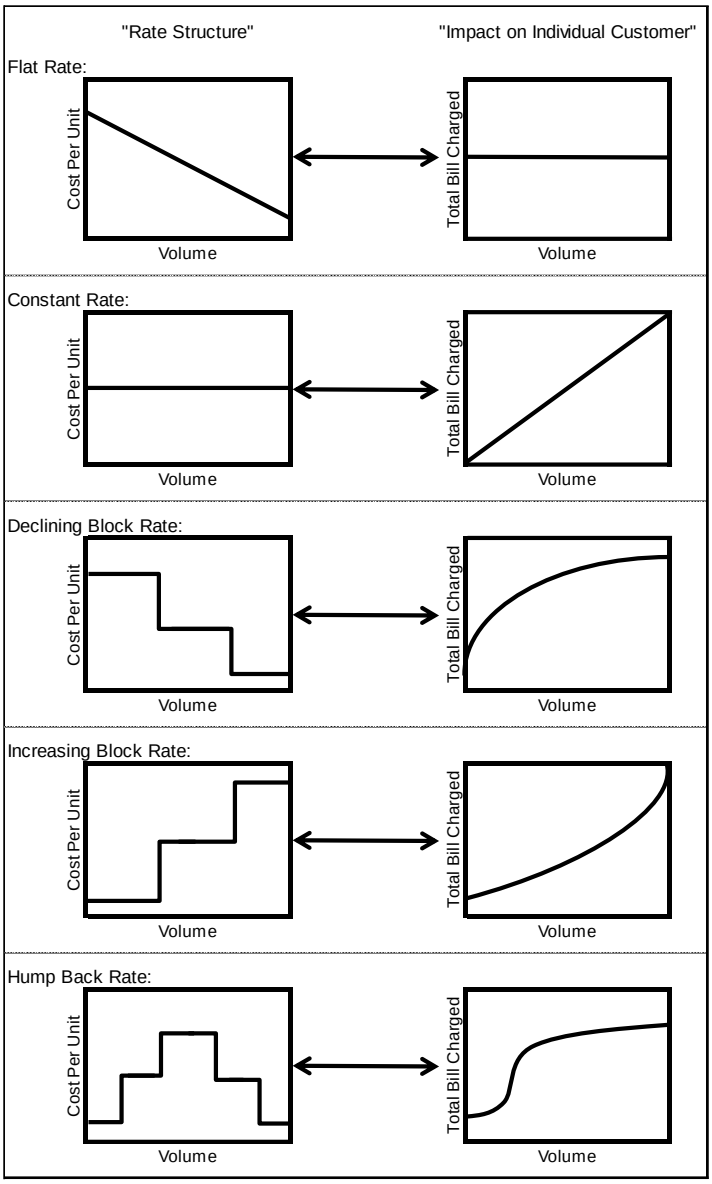


Figure 7-2
Summary of Various Rate Structures and their Impact on Customer Bills as Volume Usage Increases

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

7.4 Rate Structures in Ontario

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

Historically, the development of a base charge often reflected either the recovery of meter reading/billing/collection costs, plus administration or those costs plus certain fixed costs (such as capital contributions or reserve contributions). More recently, many municipalities have started to establish base charges based on ensuring a secure

portion of the revenue stream which does not vary with volumes/flows. Selection of the quantum of the base charge is a matter of policy selected by individual municipalities.

7.5 Recommended Rate Structures

Based on the analysis presented in this report, the water and wastewater systems require increased investment over the forecast period. Additional operating expenditures and the requirement for lifecycle capital expenditure will put pressure on the financial sustainability of these systems. Therefore, a 10-year annual average base charge increases of 15% for water and wastewater services is proposed.

Existing reserve/reserve fund balances can help fund capital works over the forecast period. However, due to the size of the planned capital program, the Town will need to borrow money to finance both growth and non-growth-related capital works. Debt payments for growth-related capital will be funded from D.C.s while those for non-growth-related capital will be funded from rates. To meet the needs for water and wastewater services, it is recommended that the volumetric rates be increased, in addition to the base charge increases discussed above. The forecasted base charges and volumetric rates are provided in Chapter 8.

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

Chapter 8
Analysis of Water and Wastewater Rates and Policy Matters

8. Analysis of Water and Wastewater Rates and Policy Matters

8.1 Introduction

To summarize the analysis undertaken thus far, Chapter 2 provided the growth and service demands for water and wastewater. Chapters 3 and 4 reviewed capital-related issues and respond to the provincial directives to maintain and upgrade infrastructure to required levels. Chapter 5 provided a review of capital financing options. Water and wastewater reserve contributions will be the predominant basis for financing future capital replacement. Chapter 6 established the 10-year operating forecast of expenditures, including an annual capital reserve contribution. This chapter will provide for the calculation of the base charge and volumetric rates over the forecast period. The volumetric rate will be based on the net operating expenditures provided in Chapter 6, divided by the water consumption forecast and wastewater volumes provided in Chapter 2. To contextualize the calculations, the total annual bill for an average residential user with a usage of 180 cubic metres per year is also provided.

8.2 Water Rates

The recommended rate forecasts are provided to address full costs of the municipal systems, including annual operating and capital expenditures from both a lifecycle and growth-related perspective.

To achieve full cost recovery, water base charge rates would be required to increase by 15% annually throughout the forecast period. These increases would allow the Town to secure a higher amount of guaranteed revenue while reducing the amount of debt issued to finance capital and increase its annual capital funding levels to the annual lifecycle contribution amount by the end of the forecast. The calculated rates are presented in Table 8-1. Detailed calculations of the volumetric rates are provided in Appendix A.

For water services, volumetric rates for both residential and non-residential customers are projected to increase as follows:

- 10% in 2025,

- 5% annually in 2026 and 2027,
- 4% in 2028,
- 3% annually in 2029 and 2030, and
- 2% annually for the final four years of the forecast.

Consumption over the monthly block limits in Table 1-1 will be charged the block 1 rate plus 35%, as per the Town's current policy. The annual cost for unmetered compliant residential users will increase by 23%, from $671.16 to $826.49, in 2025, and by 7% annually for the remainder of the forecast period. It is noted that the forecast assumes all customers will be metered by 2026. The rate for non-compliant unmetered customers will continue to be three times the charge for compliant customers.

Table 8-1
Town of Orangeville
Water Rate Forecast

Desription	Monthly Block 1 Volume (m^3)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Metered Customers												
Base Charge by Meter Size												
5/8" to 3/4"	<= 20	$12.81	$14.73	$16.94	$19.48	$22.40	$25.77	$29.63	$34.07	$39.19	$45.06	$51.82
1"	<= 100	$17.08	$19.64	$22.59	$25.98	$29.87	$34.35	$39.51	$45.43	$52.25	$60.09	$69.10
1 ½"	<= 500	$25.62	$29.46	$33.88	$38.96	$44.81	$51.53	$59.26	$68.15	$78.37	$90.13	$103.65
2"	<= 1,000	$38.44	$44.21	$50.84	$58.46	$67.23	$77.32	$88.91	$102.25	$117.59	$135.23	$155.51
3"	<= 3,000	$44.84	$51.57	$59.30	$68.20	$78.43	$90.19	$103.72	$119.28	$137.17	$157.74	$181.40
4" and Larger	<= 6,000	$64.06	$73.67	$84.72	$97.43	$112.04	$128.85	$148.17	$170.40	$195.96	$225.36	$259.16
Volumetric Rate (per m^3)												
Residential												
Block 1		$2.13	$2.34	$2.46	$2.58	$2.69	$2.77	$2.85	$2.91	$2.97	$3.02	$3.09
Block 2		$2.88	$3.16	$3.32	$3.49	$3.63	$3.74	$3.85	$3.92	$4.00	$4.08	$4.16
Non-Residential												
Block 1		$2.23	$2.45	$2.58	$2.70	$2.81	$2.90	$2.98	$3.04	$3.10	$3.17	$3.23
Block 2		$3.01	$3.31	$3.48	$3.65	$3.80	$3.91	$4.03	$4.11	$4.19	$4.27	$4.36
Unmetered Customers												
Compliant		$672.16	$826.49	$885.49	$950.10	$1,013.82	$1,076.50	$1,145.89	$1,215.03	$1,292.49	$1,379.47	$1,477.36
Non-Compliant		$2,016.49	$2,479.48	$2,656.48	$2,850.30	$3,041.46	$3,229.49	$3,437.68	$3,645.10	$3,877.48	$4,138.42	$4,432.09

8.3 Wastewater Rates

The wastewater rate forecasts, like water rates, have been developed to recover the full costs of the Town's system. These costs include annual operating and capital expenditures from both a lifecycle and growth-related perspective.

To achieve full cost recovery identified above, wastewater base charge rates would also be required to increase by 15% throughout the forecast period. These increases would provide the Town with a higher percentage of guaranteed income to allow for a reduce amount of debt required to be issued to finance capital and increase its annual capital

funding levels to the annual lifecycle reserve contribution amount by the end of the forecast. The calculated rates are provided in Table 8-2, with detailed calculations provided in Appendix B.

For wastewater services, volumetric rates for both residential and non-residential customers are projected to increase as follows:

- 5% in 2025 and 2026,
- 4% in 2027; and
- 3% 2028-2034.

In addition, wastewater flows (based on water use) that exceed the monthly block limits in Table 1-1 will be charged the block 1 rate plus 35%, as per the Town's current policy. The annual cost for unmetered compliant residential users will increase by 18%, from $612.58 to $725.85, in 2025, and by 6% on average annually for the remainder of the forecast period. It is noted that the forecast assumes all customers will be metered by 2026. The rate for non-compliant unmetered customers will continue to be three times the charge for compliant customers.

Table 8-2
Town of Orangeville
Wastewater Rate Forecast

Meter Size	Monthly Block 1 Volume (m3)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Metered Customers												
Base Charge by Meter Size												
5/8" to 3/4"	<= 20	$12.51	$14.39	$16.54	$19.03	$21.88	$25.16	$28.94	$33.28	$38.27	$44.01	$50.61
1"	<= 100	$16.69	$19.19	$22.07	$25.38	$29.19	$33.57	$38.60	$44.40	$51.06	$58.71	$67.52
1 ½"	<= 500	$25.03	$28.78	$33.10	$38.07	$43.78	$50.34	$57.90	$66.58	$76.57	$88.05	$101.26
2"	<= 1,000	$37.54	$43.17	$49.65	$57.09	$65.66	$75.51	$86.83	$99.86	$114.84	$132.06	$151.87
3"	<= 3,000	$43.80	$50.37	$57.93	$66.61	$76.61	$88.10	$101.31	$116.51	$133.99	$154.08	$177.20
4" and Larger	<= 6,000	$62.57	$71.96	$82.75	$95.16	$109.44	$125.85	$144.73	$166.44	$191.40	$220.11	$253.13
Volumetric Rate (per m^3)												
Residential												
Block 1		$1.90	$2.00	$2.09	$2.18	$2.24	$2.31	$2.38	$2.45	$2.53	$2.60	$2.68
Block 2		$2.57	$2.69	$2.83	$2.94	$3.03	$3.12	$3.21	$3.31	$3.41	$3.51	$3.62
Non-Residential												
Block 1		$1.99	$2.09	$2.19	$2.28	$2.35	$2.42	$2.49	$2.57	$2.65	$2.72	$2.81
Block 2		$2.69	$2.82	$2.96	$3.08	$3.17	$3.27	$3.37	$3.47	$3.57	$3.68	$3.79
Unmetered Customers												
Compliant		$612.58	$725.85	$779.41	$832.42	$884.79	$942.84	$1,007.36	$1,079.25	$1,159.55	$1,249.44	$1,350.30
Non-Compliant		$1,837.74	$2,177.55	$2,338.22	$2,497.27	$2,654.38	$2,828.53	$3,022.09	$3,237.76	$3,478.65	$3,748.32	$4,050.89

8.4 Forecast water and wastewater bill impacts

Table 8-3 shows how the recommended rates affect a typical residential water and wastewater customer with a volume of 180 m^3 per year. Based on 2024 rates, the

annual water and wastewater bill for this customer would total approximately $1,080 (i.e., $564 for water and $516 for wastewater), which translates to roughly $2.96 per day. With the proposed monthly base charge and consumptive charge rates, the 2025 annual bill would increase by $105 (+10%) to approximately $1,185 (i.e., $628 for water and $557 for wastewater), which translates to roughly $3.25 per day.

Over the remainder of the forecast period, the annual water and wastewater bill increases at an average level of approximately 8% per year to $2,339, which translates to $6.41 per day.

Table 8-3
Town of Orangeville
Annual Residential Customer Water and Wastewater Bill – Based on 5/8" water meter and 180 m^3 of Volume

Annual Customer Water Bill

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Monthly Base Rate	$12.81	$14.73	$16.94	$19.48	$22.40	$25.77	$29.63	$34.07	$39.19	$45.06	$51.82
Block 1 Rate	$2.13	$2.34	$2.46	$2.58	$2.69	$2.77	$2.85	$2.91	$2.97	$3.02	$3.09
Block 2 Rate	$2.88	$3.16	$3.32	$3.49	$3.63	$3.74	$3.85	$3.92	$4.00	$4.08	$4.16
Annual Base Rate Bill	**$153.72**	**$176.78**	**$203.29**	**$233.79**	**$268.86**	**$309.19**	**$355.56**	**$408.90**	**$470.23**	**$540.77**	**$621.88**
Block 1 Volume	145	145	145	145	145	145	145	145	145	145	145
Block 2 Volume	35	35	35	35	35	35	35	35	35	35	35
Annual Volume Bill	**$409.87**	**$450.86**	**$473.40**	**$497.07**	**$516.95**	**$532.46**	**$548.44**	**$559.40**	**$570.59**	**$582.00**	**$593.64**
Total Annual Bill	**$563.59**	**$627.64**	**$676.70**	**$730.86**	**$785.81**	**$841.65**	**$904.00**	**$968.30**	**$1,040.83**	**$1,122.77**	**$1,215.53**
% Increase - Base Rate		15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
% Increase - Volume Rate		10.0%	5.0%	5.0%	4.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%
% Increase - Total Annual Bill		11.4%	7.8%	8.0%	7.5%	7.1%	7.4%	7.1%	7.5%	7.9%	8.3%

Annual Customer Wastewater Bill

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Monthly Base Rate	$12.51	$14.39	$16.54	$19.03	$21.88	$25.16	$28.94	$33.28	$38.27	$44.01	$50.61
Block 1 Rate	$1.90	$2.00	$2.09	$2.18	$2.24	$2.31	$2.38	$2.45	$2.53	$2.60	$2.68
Block 2 Rate	$2.57	$2.69	$2.83	$2.94	$3.03	$3.12	$3.21	$3.31	$3.41	$3.51	$3.62
Annual Base Rate Bill	**$150.12**	**$172.64**	**$198.53**	**$228.31**	**$262.56**	**$301.94**	**$347.24**	**$399.32**	**$459.22**	**$528.10**	**$607.32**
Block 1 Volume	145	145	145	145	145	145	145	145	145	145	145
Block 2 Volume	35	35	35	35	35	35	35	35	35	35	35
Annual Volume Bill	**$365.61**	**$383.89**	**$403.09**	**$419.21**	**$431.79**	**$444.74**	**$458.08**	**$471.83**	**$485.98**	**$500.56**	**$515.58**
Total Annual Bill	**$515.73**	**$556.53**	**$601.62**	**$647.53**	**$694.35**	**$746.69**	**$805.32**	**$871.15**	**$945.20**	**$1,028.66**	**$1,122.90**
% Increase - Base Rate		15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
% Increase - Volume Rate		5.0%	5.0%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
% Increase - Total Annual Bill		7.9%	8.1%	7.6%	7.2%	7.5%	7.9%	8.2%	8.5%	8.8%	9.2%

Annual Combined Residential Water and Wastewater Bill

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total Combined Bill (rounded)	**$1,080**	**$1,185**	**$1,279**	**$1,379**	**$1,480**	**$1,589**	**$1,709**	**$1,839**	**$1,986**	**$2,152**	**$2,339**
Overall Annual Increase (%)		10%	8%	8%	7%	7%	8%	8%	8%	8%	9%

Cost per Day

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Cost per Day	**$2.96**	**$3.25**	**$3.50**	**$3.78**	**$4.05**	**$4.35**	**$4.68**	**$5.04**	**$5.44**	**$5.90**	**$6.41**

Chapter 8
Recommendations

9. Recommendations

As presented within this report, capital and operating expenditures have been identified and projected over a 10-year forecast period for water and wastewater services. Updated rates have been calculated to fund the increased capital and operating expenditures. Based on the analysis in this report, the following recommendations are provided for Council's consideration:

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

2. That Council considers the capital plans for water and wastewater services as provided in Tables 3-1 and 3-2 and the recommended capital financing plan as set out in Tables 5-2 and 5-3.

3. That Council consider the 2025 to 2029 water and wastewater rates as shown in Chapter 8, and direct staff to review Rate Study in five years; and

4. That Council approve the Rate Study and direct staff to prepare the Water and Wastewater Financial Plan in the format required under O.Reg. 453/07.

Appendices

Appendix A
Detailed Water Rate Calculations

Table A-1
Town of Orangeville
Capital Budget Forecast (uninflated $)

Description	Budget 2024	Total 2025-2034	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
13961.0000 CF - Water Meter & Billing Upg	299,991	5,635,502	4,508,402	1,127,100	-	-	-	-	-	-	-	-
Town Wells Eavestrough Installation	-	60,000	60,000									
20417.3905 CF - Variable Frequency DriveWell 5	26,967	-	-	-	-	-	-	-	-	-	-	-
26046.0000 Wtrmn & Valve Replace:Rotary	325,700	-	-	-	-	-	-	-	-	-	-	-
33304.0000 Supply & Instal Replce NTU&CL2	440,000	-	-	-	-	-	-	-	-	-	-	-
33305.0000 Watermain Rehabilitation Program	217,500	8,570,300				1,714,060	1,714,060			1,714,060	1,714,060	1,714,060
B1293.0000 Watermain and Valve Replacement: Third Street and Fourth Avenue	-	1,040,000				120,000	-	-	920,000	-	-	-
B1305.0000 Watermain and Valve Replacement: Zehrs Backlane Easement	-	827,000	-			96,000		-	731,000	-	-	-
B1366.0000 WSR Water Shut Off Valve	-	75,000	75,000	-	-	-	-	-	-	-	-	-
B1419.0000 Replacement of Enclosed Water Works Trailer	-	35,000	-	-	-	-	-	-	-	-	-	35,000
B1491.0000 Trench Box Replacement	-	56,000	26,000	-	-	-	-	-	-	-	-	30,000
1070 Water Treatment Facility	-	-	-	-	-	-	-	-	-	-	-	-
26047.1070 Portable GeneratorWater Treatment Facility	157,329	-	-	-	-	-	-	-	-	-	-	-
3910 Well 10	-	-	-	-	-	-	-	-	-	-	-	-
3950 Reservoirs	-	-	-	-	-	-	-	-	-	-	-	-
B1313.3950 Reservoir Cleaning and Inspections	-	444,000	-	-	70,000	70,000	-	24,000	140,000	70,000	70,000	-
4036 Parks Landscape Trailer	-	-	-	-	-	-	-	-	-	-	-	-
21001.4813 Large EquipWA Landscaping Trailer	28,000	-	-	-	-	-	-	-	-	-	-	-
33306.0000 Valve Turner Replacement	130,000	135,000	-	-	-	-	-	-	-	-	-	135,000
B1345.4036 Trenchbox Trailer Replacement	-	11,500	-	11,500	-	-	-	-	-	-	-	-
4801 WA Truck 7	-	-	-	-	-	-	-	-	-	-	-	-
B1347.4000 Truck 7 Replacement	-	187,000	-	-	-	-	-	-	187,000	-	-	-
4802 WA Truck 12	-	-	-	-	-	-	-	-	-	-	-	-
B1348.4000 Truck 12 Replacement	-	182,000	-	-	-	-	-	182,000	-	-	-	-
4804 WA Truck 20	-	-	-	-	-	-	-	-	-	-	-	-
B1349.4000 Truck 20 Replacement	-	110,000	-	-	-	-	110,000	-	-	-	-	-
4805 WA Backhoe #3	-	-	-	-	-	-	-	-	-	-	-	-
B1350.4805 Backhoe 3 Replacement	-	281,000	-	-	-	-	281,000	-	-	-	-	-
4810 WA Backhoe #1	-	-	-	-	-	-	-	-	-	-	-	-
21000.4810 VehiclesWA Backhoe #1	220,000	-	-	-	-	-	-	-	-	-	-	-
4812 WA Mini Excavator - 27D	-	-	-	-	-	-	-	-	-	-	-	-
B1083.4812 Equipment Replacement - Mini Excavator	-	-	-	-	-	-	-	-	-	-	-	-
11813.0000 Engineering Standards Update	-	75,000	25,000	-	-	-	-	50,000	-	-	-	-
13986.0000 CF - Climate Change	-	12,500	12,500	-	-	-	-	-	-	-	-	-
21000.4810 -- Backhoe #1		250,000										250,000
26048.0000 Shed	-	60,000	-	-	-	60,000	-	-	-	-	-	-
31115.0000 CF - Reconn - Centennial	200,000	-	-	-	-	-	-	-	-	-	-	-
31116.0000 CF - Recon Church St	610,000	-	-	-	-	-	-	-	-	-	-	-

Table A-1 (continued)
Town of Orangeville
Capital Budget Forecast (uninflated $)

Description	Budget 2024	Total 2025-2034	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
31119.0000 Recon - Victoria St - Ontario to John	-	516,000	438,600	77,400								
31120.0000 Recon - Ontario St. Vic to Pri	-	250,000	212,500	37,500	-	-	-	-	-	-	-	-
31121.0000 Recon - Cardwell St, Townline	17,337	256,663		218,164	38,499	-	-	-	-	-	-	-
31122.0000 Recon - Cardwell St, Dufferin	-	502,626	-	-	-				427,232	75,394	-	-
31123.0000 Recon - Dufferin St, John to O	-	676,000		574,600	101,400	-	-	-	-	-	-	-
31124.0000 Recon - Third Ave, 1st St to 2nd St	-	302,000		256,700	45,300							
31125.0000 Recon - Third Ave, 2nd St to 3rd St.	-	323,000			274,550	48,450	-	-	-	-	-	-
31126.0000 Recon - Steven St	-	280,000			238,000	42,000	-	-	-	-	-	-
31127.0000 Recon - Andrew St	-	391,000			332,350	58,650	-	-	-	-	-	-
31128.0000 Bythia Street (Court) Reconstruction	-	342,000				290,700	51,300	-	-	-	-	-
B0982.0000 Recon - Carlton Dr - Madison to Lawrence	-	730,000				100,000	535,500	94,500				
B1004.0000 Recon - Erindale, Dufferin to Princess St	-	687,000	-			583,950	103,050	-	-	-	-	-
B1009.0000 Recon - Zina St, First St to Louisa	-	737,000	-	-	-	-	-	-	-		626,450	110,550
B1014.0000 Recon - Amanda, Townline to Parsons	-	566,000	-	-	-	-	-			481,100	84,900	-
B1015.0000 Recon - Amanda, Parsons to Front	-	418,000	-	-	-	-	-			355,300	62,700	-
B1195.0000 Recon of Edelwild Century to Parkview	-	845,000		100,000	633,250	111,750	-	-	-	-	-	-
B1273.0000 Recon Bythia St Townline to Church	-	778,000								661,300	116,700	
B1278.0000 Reconstruction of Dufferin Street - Erindale to Ontario	-	545,000	-			463,250	81,750	-	-	-	-	-
B1331.0000 C-Line Reconstruction Century to Town Line	-	700,000	-	-	-	-	-			-	595,000	105,000
B1332.0000 John Street Reconstruction Townline to Corp Limits	-	571,000	-	-		485,350	85,650	-	-	-	-	-
B1359.0000 Caledonia Road Reconstruction	-	342,000	-				-	27,000	267,750	47,250	-	-
B1360.0000 Hillside Drive Reconstruction	-	212,500	-	-	-	-	-	-	-		23,500	189,000
B1414.4000 Fleet Management Plan	-	10,800	10,800									
B1467.4824 Vehicle 34 Purchase	-	145,000	70,000	-	-	-	-	-	-	75,000	-	-
B1490.4392 Vehicle 53 Replacement	-	33,500							33,500			
B1497.0000 Recon/Widening - Fourth Ave: Third St to Hwy #10	-	870,000	-	-	-	-			100,000	-	654,500	115,500
B1503.0000 Hybrid Recon - Hillsdale, Goldgate and Darsam	-	885,000	-	-				60,000	701,250	123,750	-	-
B1504.0000 Recon - Church St: John to Bythia	-	280,000	-	-	-	-	-	-	-		40,000	240,000
B1505.0000 Recon - Bythia: Church to Hillside	-	280,710	-	-	-	30,000	213,104	37,607	-	-	-	-
B1548.0000 Hybrid Reconstruction of Avonmore and Johanna	-	550,000	-	467,500	82,500	-	-	-	-	-	-	-
B1463.4800 Vehicle 18 Replacement	-	78,000	-	-	-	78,000	-	-	-	-	-	-
B1456.4803 Vehicle 14 Replacement	-	175,000	-	-	85,000	-	-	-	-	-	-	90,000
B1469.4804 Vehicle 20 Replacement	-	120,000	-	-	-	-	120,000	-	-	-	-	-
B1452.4807 Vehicle 17 Replacement	-	150,500	-	72,500	-	-	-	-	-	-	78,000	-
B1454.4808 Vehicle 22 Replacement	-	150,500	-	72,500	-	-	-	-	-	-	78,000	-
B1457.4809 Vehicle 23 Replacement	-	155,000	-	-	75,000	-	-	-	-	-	-	80,000
B1458.4815 Vehicle 24 Replacement	-	155,000	-	-	75,000	-	-	-	-	-	-	80,000

Table A-1 (continued)
Town of Orangeville
Capital Budget Forecast (uninflated $)

Description	Budget 2024	Total 2025-2034	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
B1461.4817 Vehicle 28 Replacement	-	155,000	-	-	75,000	-	-	-	-	-	-	80,000
B1464.4819 Vehicle 29 Replacement	-	78,000	-	-	-	78,000	-	-	-	-	-	-
B1473.4820 Vehicle 31 Replacement	-	86,000	-	-	-	-	-	86,000	-	-	-	-
B1565.0000 Dayforce Optimization and Enhancement Initiative	-	36,000	36,000	-	-	-	-	-	-	-	-	-
20389.0000 CRM System Upgrade	-	15,000	15,000	-	-	-	-	-	-	-	-	-
B1407.0000 Website Updates	-	33,000	15,000	-	-	-	-	18,000	-	-	-	-
Lifecycle:												
Water Facilities	-	10,000,000								3,000,000	3,500,000	3,500,000
Studies:			-	-	-	-	-	-	-	-	-	-
Town Wells Building Condition Assessment	-	220,000				100,000					120,000	
Growth Related:			-	-	-	-	-	-	-	-	-	-
Town-Wide												
11721.0000 Water Optimization Study	-	350,000	350,000	-	-	-	-	-	-	-	-	-
11824.0000 Water and Wastewater Rate Study	60,000	-	-	-	-	-	-	-	-	-	-	-
11824.0000 Water and Wastewater Rate Study	-	114,000	-	-	-	-	54,000	-	-	-	-	60,000
B0925.0000 Elevated Water Storage Facility (Northwest Sector	-	15,000,000	-			600,000	1,200,000	6,600,000	6,600,000	-	-	-
13950.0000 CF - Water Supply	-	11,150,000	1,500,000	1,500,000	3,283,180	4,866,820	-	-	-	-	-	-
33088.0000 Well 6 and 11 Treatment Analysis	-	1,791,000			-	-	1,791,000	-	-	-	-	-
33099.0000 CF - Well Treatment - GUDI Upg	1,355,985	6,888,015	2,755,206	2,755,206	1,377,603	-	-	-	-	-	-	-
B0927.0000 Well 9A & 9B Treatment Upgrades	-	3,000,000		250,000	2,750,000	-	-	-	-	-	-	-
B1067.0000 District Water Metering	-	2,850,000	-	-	-				250,000	1,350,000	1,250,000	-
26043.0000 Dawson Rd watermain ext	686,400	-	-	-	-	-	-	-	-	-	-	-
B0058.0000 Zone 3B PRV/PSV Zone Valves	-	622,000	-	-	-				58,000	564,000	-	-
SCADA Projects												
11803.0000 CF - SCADA Master Plan	150,000	-	-	-	-	-	-	-	-	-	-	-
B1423.0000 SCADA Upgrade	-	1,970,000	150,000	200,000	1,325,000	295,000	-	-	-	-	-	-
20330.0000 CF - SCADA Systems	-	581,968	465,574	116,394	-	-	-	-	-	-	-	-
Projects with Growth-Related SCADA Component		-										
21181.1070 CF - Electrical & Mechanical Water Treatment Facility	-	2,273,000						579,000	495,000	429,000	659,000	111,000
26044.0000 High Lift Pump Rehabilitation	-	1,634,211		234,211	-	300,000	1,100,000	-	-	-	-	-
26045.0000 South Sector Generator Re	-	708,000		-	-	708,000	-	-	-	-	-	-
33075.0000 CF - Well Bldg and Dra-Well 5	-	455,000		455,000	-	-	-	-	-	-	-	-
33081.0000 Disinfection - UV Replacements	-	1,617,000		-	-	372,000	625,000	420,000	200,000	-	-	-
33082.3910 Well 10 Pump House GeneratorWell 10	-	704,000	563,200	140,800	-	-	-	-	-	-	-	-
33084.0000 Filter Media Rehabilitation	22,588	645,006	645,006	-	-	-	-	-	-	-	-	-
33089.0000 Well Rehab and Pump Replacement Program	150,000	1,323,000	143,000	39,000	28,000	134,000	262,000	149,000	16,000	146,000	246,000	160,000
33100.0000 CF - Reservoir - West Sector	17,063	4,632,444	632,444	2,000,000	2,000,000	-	-	-	-	-	-	-
33200.0000 CF - United Lands Flowing Well	-	50,000		50,000	-	-	-	-	-	-	-	-
33300.0000 Filter PLC Project	-	375,000	300,000	75,000	-	-	-	-		-	-	-
33302.0000 Dudgeon Generator Replacement	-	783,000	626,400	156,600	-	-	-	-	-	-	-	-

Table A-1 (continued)
Town of Orangeville
Capital Budget Forecast (uninflated $)

Description	Budget 2024	Total 2025-2034	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
33303.0000 PRV Replacement Program	-	90,000					90,000	-	-	-	-	-
B1413.0000 Acoustic Leak Detection	-	425,000		100,000	100,000	100,000	125,000	-	-	-	-	-
B1492.0000 Carbon Monoxide Sensors	-	120,000	-	60,000	60,000	-	-	-	-	-	-	-
11805.1070 CF - Rehabilitation & Optimiza Water Treatment Facility	-	1,369,000	684,500	684,500	-	-	-	-	-	-	-	-
33090.3910 Well 10 WTP Clear Baff CurtainWell 10	17,852	224,138	179,310	44,828	-	-	-	-	-	-	-	-
26005.3950 CF - GeneratorReservoirs	-	650,959	240,767	60,192	-	280,000	70,000	-	-	-	-	-
33101.3950 South Sector Reservoir Inspection and Upgrades	80,000	390,000	-	-	90,000	240,000	60,000	-	-	-	-	-
B1428.0000 Water and Wastewater System Modelling	-	225,000	-	-	-	-		-	150,000	75,000	-	-
B1424.1060 Truck Fill Station	-	45,000	45,000	-	-	-	-	-	-	-	-	-
IT Projects with Growth-Related SCADA Component	-	404,855	162,467	24,367	19,693	33,683	25,952	42,358	30,915	17,542	30,295	17,584
Area-Specific												
Additional Pump at Dudgeon Reservoir - Variable Speed	-	970,000			776,000	194,000						
Trunk Watermain (300 mm Dia.) on Hansen Blvd. between Blind Line and County Road 16	-	900,000	450,000	450,000								
Watermain on County Road 109, County Road 16 to Montgomery Blvd. East of Riddell	-	1,366,200		683,100	683,100							
Watermain on B-Line, West Sector Reservoir to Lots at B-Line and County Road 109	-	100,000					100,000					
Total Capital Expenditures	**5,212,712**	**110,476,397**	**15,397,677**	**13,094,660**	**14,618,426**	**12,653,663**	**8,798,366**	**8,369,464**	**11,307,647**	**9,184,696**	**9,949,105**	**7,102,694**

Table A-2
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Water

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
13961.0000 CF - Water Meter & Billing Upg	299,991	5,669,000	4,508,000	1,161,000	-	-	-	-	-	-	-	-
Town Wells Eavestrough Installation	-	60,000	60,000	-	-	-	-	-	-	-	-	-
20417.3905 CF - Variable Frequency DriveWell 5	26,967	-	-	-	-	-	-	-	-	-	-	-
26046.0000 Wtrmn & Valve Replace:Rotary	325,700	-	-	-	-	-	-	-	-	-	-	-
33304.0000 Supply & Instal Replce NTU&CL2	440,000	-	-	-	-	-	-	-	-	-	-	-
33305.0000 Watermain Rehabilitation Program	217,500	10,317,000	-	-	-	1,873,000	1,929,000	-	-	2,108,000	2,171,000	2,236,000
B1293.0000 Watermain and Valve Replacement: Third Street and Fourth Avenue	-	1,230,000	-	-	-	131,000	-	-	1,099,000	-	-	-
B1305.0000 Watermain and Valve Replacement: Zehrs Backlane Easement	-	978,000	-	-	-	105,000	-	-	873,000	-	-	-
B1366.0000 WSR Water Shut Off Valve	-	75,000	75,000	-	-	-	-	-	-	-	-	-
B1419.0000 Replacement of Enclosed Water Works Trailer	-	46,000	-	-	-	-	-	-	-	-	-	46,000
B1491.0000 Trench Box Replacement	-	65,000	26,000	-	-	-	-	-	-	-	-	39,000
26047.1070 Portable GeneratorWater Treatment Facility	157,329	-	-	-	-	-	-	-	-	-	-	-
B1313.3950 Reservoir Cleaning and Inspections	-	520,000	-	-	74,000	76,000	-	28,000	167,000	86,000	89,000	-
21001.4813 Large EquipWA Landscaping Trailer	28,000	-	-	-	-	-	-	-	-	-	-	-
33306.0000 Valve Turner Replacement	130,000	176,000	-	-	-	-	-	-	-	-	-	176,000
B1345.4036 Trenchbox Trailer Replacement	-	12,000	-	12,000	-	-	-	-	-	-	-	-
B1347.4000 Truck 7 Replacement	-	223,000	-	-	-	-	-	-	223,000	-	-	-
B1348.4000 Truck 12 Replacement	-	211,000	-	-	-	-	-	211,000	-	-	-	-
B1349.4000 Truck 20 Replacement	-	124,000	-	-	-	-	124,000	-	-	-	-	-
B1350.4805 Backhoe 3 Replacement	-	316,000	-	-	-	-	316,000	-	-	-	-	-
21000.4810 VehiclesWA Backhoe #1	220,000	-	-	-	-	-	-	-	-	-	-	-
11813.0000 Engineering Standards Update	-	83,000	25,000	-	-	-	-	58,000	-	-	-	-
13986.0000 CF - Climate Change	-	13,000	13,000	-	-	-	-	-	-	-	-	-
21000.4810 -- Backhoe #1	-	326,000	-	-	-	-	-	-	-	-	-	326,000
26048.0000 Shed	-	66,000	-	-	-	66,000	-	-	-	-	-	-
31115.0000 CF - Reconn - Centennial	200,000	-	-	-	-	-	-	-	-	-	-	-
31116.0000 CF - Recon Church St	610,000	-	-	-	-	-	-	-	-	-	-	-
31119.0000 Recon - Victoria St - Ontario to John	-	519,000	439,000	80,000	-	-	-	-	-	-	-	-
31120.0000 Recon - Ontario St. Vic to Pri	-	252,000	213,000	39,000	-	-	-	-	-	-	-	-
31121.0000 Recon - Cardwell St, Townline	17,337	266,000	-	225,000	41,000	-	-	-	-	-	-	-
31122.0000 Recon - Cardwell St, Dufferin	-	603,000	-	-	-	-	-	-	510,000	93,000	-	-
31123.0000 Recon - Dufferin St, John to O	-	700,000	-	592,000	108,000	-	-	-	-	-	-	-
31124.0000 Recon - Third Ave, 1st St to 2nd St	-	312,000	-	264,000	48,000	-	-	-	-	-	-	-
31125.0000 Recon - Third Ave, 2nd St to 3rd St.	-	344,000	-	-	291,000	53,000	-	-	-	-	-	-
31126.0000 Recon - Steven St	-	298,000	-	-	252,000	46,000	-	-	-	-	-	-
31127.0000 Recon - Andrew St	-	417,000	-	-	353,000	64,000	-	-	-	-	-	-
31128.0000 Bythia Street (Court) Reconstruction	-	376,000	-	-	-	318,000	58,000	-	-	-	-	-
B0982.0000 Recon - Carlton Dr - Madison to Lawrence	-	822,000	-	-	-	109,000	603,000	110,000	-	-	-	-
B1004.0000 Recon - Erindale, Dufferin to Princess St	-	754,000	-	-	-	638,000	116,000	-	-	-	-	-
B1009.0000 Recon - Zina St, First St to Louisa	-	938,000	-	-	-	-	-	-	-	-	794,000	144,000
B1014.0000 Recon - Amanda, Townline to Parsons	-	700,000	-	-	-	-	-	-	-	592,000	108,000	-
B1015.0000 Recon - Amanda, Parsons to Front	-	516,000	-	-	-	-	-	-	-	437,000	79,000	-
B1195.0000 Recon of Edelwild Century to Parkview	-	897,000	-	103,000	672,000	122,000	-	-	-	-	-	-
B1273.0000 Recon Bythia St Townline to Church	-	961,000	-	-	-	-	-	-	-	813,000	148,000	-

Table A-2 (continued)
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Water

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
B1278.0000 Reconstruction of Dufferin Street - Erindale to Ontario	-	598,000	-	-	-	506,000	92,000	-	-	-	-	-
B1331.0000 C-Line Reconstruction Century to Town Line	-	891,000	-	-	-	-	-	-	-	-	754,000	137,000
B1332.0000 John Street Reconstruction Townline to Corp Limits	-	626,000	-	-	-	530,000	96,000	-	-	-	-	-
B1359.0000 Caledonia Road Reconstruction	-	409,000	-	-	-	-	-	31,000	320,000	58,000	-	-
B1360.0000 Hillside Drive Reconstruction	-	277,000	-	-	-	-	-	-	-	-	30,000	247,000
B1414.4000 Fleet Management Plan	-	11,000	11,000	-	-	-	-	-	-	-	-	-
B1467.4824 Vehicle 34 Purchase	-	162,000	70,000	-	-	-	-	-	-	92,000	-	-
B1490.4392 Vehicle 53 Replacement	-	40,000	-	-	-	-	-	-	40,000	-	-	-
B1497.0000 Recon/Widening - Fourth Ave: Third St to Hwy #10	-	1,099,000	-	-	-	-	-	-	119,000	-	829,000	151,000
B1503.0000 Hybrid Recon - Hillsdale, Goldgate and Darsam	-	1,059,000	-	-	-	-	-	70,000	837,000	152,000	-	-
B1504.0000 Recon - Church St: John to Bythia	-	364,000	-	-	-	-	-	-	-	-	51,000	313,000
B1505.0000 Recon - Bythia: Church to Hillside	-	317,000	-	-	-	33,000	240,000	44,000	-	-	-	-
B1548.0000 Hybrid Reconstruction of Avonmore and Johanna	-	570,000	-	482,000	88,000	-	-	-	-	-	-	-
B1463.4800 Vehicle 18 Replacement	-	85,000	-	-	-	85,000	-	-	-	-	-	-
B1456.4803 Vehicle 14 Replacement	-	207,000	-	-	90,000	-	-	-	-	-	-	117,000
B1469.4804 Vehicle 20 Replacement	-	135,000	-	-	-	-	135,000	-	-	-	-	-
B1452.4807 Vehicle 17 Replacement	-	174,000	-	75,000	-	-	-	-	-	-	99,000	-
B1454.4808 Vehicle 22 Replacement	-	174,000	-	75,000	-	-	-	-	-	-	99,000	-
B1457.4809 Vehicle 23 Replacement	-	184,000	-	-	80,000	-	-	-	-	-	-	104,000
B1458.4815 Vehicle 24 Replacement	-	184,000	-	-	80,000	-	-	-	-	-	-	104,000
B1461.4817 Vehicle 28 Replacement	-	184,000	-	-	80,000	-	-	-	-	-	-	104,000
B1464.4819 Vehicle 29 Replacement	-	85,000	-	-	-	85,000	-	-	-	-	-	-
B1473.4820 Vehicle 31 Replacement	-	100,000	-	-	-	-	-	100,000	-	-	-	-
B1565.0000 Dayforce Optimization and Enhancement Initiative	-	36,000	36,000	-	-	-	-	-	-	-	-	-
20389.0000 CRM System Upgrade	-	15,000	15,000	-	-	-	-	-	-	-	-	-
B1407.0000 Website Updates	-	36,000	15,000	-	-	-	-	21,000	-	-	-	-
Water Facilities	-	12,691,000	-	-	-	-	-	-	-	3,690,000	4,434,000	4,567,000
Studies:												
Town Wells Building Condition Assessment	-	261,000	-	-	-	109,000	-	-	-	-	152,000	-
Growth Related:												
Town-Wide												
11721.0000 Water Optimization Study	-	350,000	350,000	-	-	-	-	-	-	-	-	-
11824.0000 Water and Wastewater Rate Study	60,000	-	-	-	-	-	-	-	-	-	-	-
11824.0000 Water and Wastewater Rate Study	-	139,000	-	-	-	-	61,000	-	-	-	-	78,000
B0925.0000 Elevated Water Storage Facility (Northwest Sector	-	17,539,000	-	-	-	656,000	1,351,000	7,651,000	7,881,000	-	-	-
13950.0000 CF - Water Supply	-	11,846,000	1,500,000	1,545,000	3,483,000	5,318,000	-	-	-	-	-	-
33088.0000 Well 6 and 11 Treatment Analysis	-	2,016,000	-	-	-	-	2,016,000	-	-	-	-	-
33099.0000 CF - Well Treatment - GUDI Upg	1,355,985	7,054,000	2,755,000	2,838,000	1,461,000	-	-	-	-	-	-	-
B0927.0000 Well 9A & 9B Treatment Upgrades	-	3,175,000	-	258,000	2,917,000	-	-	-	-	-	-	-
B1067.0000 District Water Metering	-	3,542,000	-	-	-	-	-	-	299,000	1,660,000	1,583,000	-
26043.0000 Dawson Rd watermain ext	686,400	-	-	-	-	-	-	-	-	-	-	-
B0058.0000 Zone 3B PRV/PSV Zone Valves	-	763,000	-	-	-	-	-	-	69,000	694,000	-	-
SCADA Projects												
11803.0000 CF - SCADA Master Plan	150,000	-	-	-	-	-	-	-	-	-	-	-
B1423.0000 SCADA Upgrade	-	2,084,000	150,000	206,000	1,406,000	322,000	-	-	-	-	-	-
20330.0000 CF - SCADA Systems	-	586,000	466,000	120,000	-	-	-	-	-	-	-	-
Projects with Growth-Related SCADA Component												
21181.1070 CF - Electrical & Mechanical Water Treatment Facility	-	2,770,000	-	-	-	-	-	671,000	591,000	528,000	835,000	145,000
26044.0000 High Lift Pump Rehabilitation	-	1,807,000	-	241,000	-	328,000	1,238,000	-	-	-	-	-

Table A-2 (continued)
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Water

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
26045.0000 South Sector Generator Re	-	774,000	-	-	-	774,000	-	-	-	-	-	-
33075.0000 CF - Well Bldg and Dra-Well 5	-	469,000	-	469,000	-	-	-	-	-	-	-	-
33081.0000 Disinfection - UV Replacements	-	1,835,000	-	-	-	406,000	703,000	487,000	239,000	-	-	-
33082.3910 Well 10 Pump House GeneratorWell 10	-	708,000	563,000	145,000	-	-	-	-	-	-	-	-
33084.0000 Filter Media Rehabilitation	22,588	645,000	645,000	-	-	-	-	-	-	-	-	-
33089.0000 Well Rehab and Pump Replacement Program	150,000	1,547,000	143,000	40,000	30,000	146,000	295,000	173,000	19,000	180,000	312,000	209,000
33100.0000 CF - Reservoir - West Sector	17,063	4,814,000	632,000	2,060,000	2,122,000	-	-	-	-	-	-	-
33200.0000 CF - United Lands Flowing Well	-	52,000	-	52,000	-	-	-	-	-	-	-	-
33300.0000 Filter PLC Project	-	377,000	300,000	77,000	-	-	-	-	-	-	-	-
33302.0000 Dudgeon Generator Replacement	-	787,000	626,000	161,000	-	-	-	-	-	-	-	-
33303.0000 PRV Replacement Program	-	101,000	-	-	-	-	101,000	-	-	-	-	-
B1413.0000 Acoustic Leak Detection	-	459,000	-	103,000	106,000	109,000	141,000	-	-	-	-	-
B1492.0000 Carbon Monoxide Sensors	-	126,000	-	62,000	64,000	-	-	-	-	-	-	-
11805.1070 CF - Rehabilitation & Optimiza Water Treatment Facility	-	1,390,000	685,000	705,000	-	-	-	-	-	-	-	-
33090.3910 Well 10 WTP Clear Baff CurtainWell 10	17,852	225,000	179,000	46,000	-	-	-	-	-	-	-	-
26005.3950 CF - GeneratorReservoirs	-	688,000	241,000	62,000	-	306,000	79,000	-	-	-	-	-
33101.3950 South Sector Reservoir Inspection and Upgrades	80,000	425,000	-	-	95,000	262,000	68,000	-	-	-	-	-
B1428.0000 Water and Wastewater System Modelling	-	271,000	-	-	-	-	-	-	179,000	92,000	-	-
B1424.1060 Truck Fill Station	-	45,000	45,000	-	-	-	-	-	-	-	-	-
IT Projects with Growth-Related SCADA Component	-	443,000	162,000	25,000	21,000	37,000	29,000	49,000	37,000	22,000	38,000	23,000
Area-Specific												
Additional Pump at Dudgeon Reservoir - Variable Speed	-	1,066,000	-	-	848,000	218,000	-	-	-	-	-	-
Trunk Watermain (300 mm Dia.) on Hansen Blvd. between Blind Line and County Road 16	-	941,000	464,000	477,000	-	-	-	-	-	-	-	-
Watermain on County Road 109, County Road 16 to Montgomery Blvd. East of Riddell	-	1,471,000	-	725,000	746,000	-	-	-	-	-	-	-
Watermain on B-Line, West Sector Reservoir to Lots at B-Line and County Road 109	-	116,000	-	-	-	-	116,000	-	-	-	-	-
Total Capital Expenditures	**5,212,712**	**124,605,000**	**15,412,000**	**13,525,000**	**15,556,000**	**13,831,000**	**9,907,000**	**9,704,000**	**13,502,000**	**11,297,000**	**12,605,000**	**9,266,000**
Capital Financing												
Canada Community-Building Fund (CCBF)	686,400	1,088,000	1,088,000	-	-	-	-	-	-	-	-	-
Provincial Grants (OCIF)	-	1,300,000	-	800,000	-	500,000	-	-	-	-	-	-
Town-Wide Development Charges Reserve Fund	1,100,084	15,915,839	2,725,913	2,656,400	6,499,350	1,120,963	1,146,067	992,663	561,675	165,550	30,613	16,647
Area-Specific Development Charges Reserve Fund	-	2,864,633	464,000	989,112	1,138,345	157,176	116,000	-	-	-	-	-
Non-Growth Related Debenture Requirements	1,200,000	39,400,000	-	1,500,000	5,500,000	4,700,000	5,500,000	-	2,000,000	6,500,000	8,200,000	5,500,000
Growth Related Debenture Requirements	-	22,400,000	-	-	100,000	5,000,000	800,000	6,700,000	7,600,000	1,400,000	800,000	-
Water Reserve Fund	2,226,228	41,636,528	11,134,088	7,579,488	2,318,305	2,352,862	2,344,933	2,011,338	3,340,325	3,231,450	3,574,388	3,749,353
Total Capital Financing	**5,212,712**	**124,605,000**	**15,412,000**	**13,525,000**	**15,556,000**	**13,831,000**	**9,907,000**	**9,704,000**	**13,502,000**	**11,297,000**	**12,605,000**	**9,266,000**

Table A-3
Town of Orangeville
Schedule of Non-Growth-Related Debenture Repayments (inflated $)

Debenture Year	2024	Principal (Inflated)	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2024	1,200,000	1,200,000	89,869	89,869	89,869	89,869	89,869	89,869	89,869	89,869	89,869	89,869
2025		-		-	-	-	-	-	-	-	-	-
2026		1,500,000			112,336	112,336	112,336	112,336	112,336	112,336	112,336	112,336
2027		5,500,000				411,899	411,899	411,899	411,899	411,899	411,899	411,899
2028		4,700,000					351,987	351,987	351,987	351,987	351,987	351,987
2029		5,500,000						411,899	411,899	411,899	411,899	411,899
2030		-							-	-	-	-
2031		2,000,000								149,782	149,782	149,782
2032		6,500,000									486,790	486,790
2033		8,200,000										614,104
2034		5,500,000										
Total Annual Debt Charges	**1,200,000**	**40,600,000**	**89,869**	**89,869**	**202,205**	**614,104**	**966,091**	**1,377,990**	**1,377,990**	**1,527,771**	**2,014,561**	**2,628,665**

Table A-4
Town of Orangeville
Schedule of Growth-Related Debenture Repayments (inflated $)

Debenture Year	2024	Principal (Inflated)	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2024	-	-	-	-	-	-	-	-	-	-	-	-
2025		-		-	-	-	-	-	-	-	-	-
2026		-			-	-	-	-	-	-	-	-
2027		100,000				7,489	7,489	7,489	7,489	7,489	7,489	7,489
2028		5,000,000					374,454	374,454	374,454	374,454	374,454	374,454
2029		800,000						59,913	59,913	59,913	59,913	59,913
2030		6,700,000							501,768	501,768	501,768	501,768
2031		7,600,000								569,170	569,170	569,170
2032		1,400,000									104,847	104,847
2033		800,000										59,913
2034		-										
Total Annual Debt Charges	**-**	**22,400,000**	**-**	**-**	**-**	**7,489**	**381,943**	**441,855**	**943,623**	**1,512,793**	**1,617,640**	**1,677,553**

Table A-5
Town of Orangeville
Water Reserve/Reserve Fund Continuity (inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	16,319,243	15,432,703	5,911,857	233,084	179,890	167,567	181,146	607,661	179,284	278,911	213,159
Transfer from Operating	1,107,004	1,497,323	1,896,144	2,261,584	2,337,253	2,354,959	2,425,938	2,908,432	3,325,608	3,504,456	3,672,024
Transfer to Capital	2,226,228	11,134,088	7,579,488	2,318,305	2,352,862	2,344,933	2,011,338	3,340,325	3,231,450	3,574,388	3,749,353
Transfer to Operating	69,918	-	-	-	-	-	-	-	-	-	-
Closing Balance	**15,130,101**	**5,795,939**	**228,514**	**176,363**	**164,282**	**177,594**	**595,747**	**175,769**	**273,442**	**208,980**	**135,830**
Interest	302,602	115,919	4,570	3,527	3,286	3,552	11,915	3,515	5,469	4,180	2,717

Table A-6
Town of Orangeville
Town-Wide Water Development Charges Reserve Fund Continuity (inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	8,425,225	7,761,254	6,428,722	5,179,213	24,839	286,845	188,908	228,049	240,718	123,435	82,206
Development Charge	283,931	1,267,328	1,305,338	1,344,488	1,384,833	1,426,369	1,469,188	1,513,247	1,558,640	1,605,412	1,653,612
Transfer to Capital	1,100,084	2,725,913	2,656,400	6,499,350	1,120,963	1,146,067	992,663	561,675	165,550	30,613	16,647
Transfer to Operating	-	-	-	-	7,489	381,943	441,855	943,623	1,512,793	1,617,640	1,677,553
Closing Balance	**7,609,072**	**6,302,669**	**5,077,660**	**24,352**	**281,220**	**185,204**	**223,578**	**235,998**	**121,015**	**80,594**	**41,618**
Interest	152,181	126,053	101,553	487	5,624	3,704	4,472	4,720	2,420	1,612	832

Table A-7
Town of Orangeville
Area-Specific Stormwater Development Charges Reserve Fund Continuity (inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	882,934	900,593	918,605	-	-	-	-	-	-	-	-
Development Charge	-	464,000	70,508	1,138,345	157,176	116,000	-	-	-	-	-
Transfer to Capital	-	464,000	989,112	1,138,345	157,176	116,000	-	-	-	-	-
Transfer to Operating	-										
Closing Balance	**882,934**	**900,593**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Interest	17,659	18,012	-	-	-	-	-	-	-	-	-

Table A-8
Town of Orangeville
Canada Community-Building Fund (Water Portion Only) Reserve Fund Continuity (inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	-	-	-	-	-	-	-	-	-	-	-
Canada Community-Building Fund (Water Portion) Receipts	686,400	1,088,000	-	-	-	-	-	-	-	-	-
Transfer to Capital Transfer to Operating	686,400	1,088,000	-	-	-	-	-	-	-	-	-
Closing Balance	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Interest	-	-	-	-	-	-	-	-	-	-	-

Table A-9
Town of Orangeville
Operating Budget Forecast – Water (inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Operating Costs											
Salaries - FT	1,715,520	1,823,265	1,868,846	1,915,567	1,963,456	2,012,542	2,062,856	2,114,427	2,167,288	2,221,470	2,277,007
Salaries - PT	34,892	30,313	31,070	31,847	32,643	33,459	34,296	35,153	36,032	36,933	37,856
Standby Pay	12,525	16,037	16,037	16,037	16,037	16,037	16,438	16,849	17,270	17,702	18,144
OT - Salaries FT	113,000	116,164	122,402	128,975	135,901	143,199	146,779	150,448	154,209	158,065	162,016
Retiree Benefits and Salary Con	6,462	4,389	-	-	-	-	-	-	-	-	-
Emp Benefits - FT	548,958	630,573	679,635	720,677	766,049	813,806	854,496	897,221	942,082	989,186	1,038,645
Emp Benefits - PT	4,102	3,698	3,830	3,967	4,111	4,261	4,474	4,698	4,933	5,179	5,438
Memberships/Subscriptions	17,500	18,000	18,500	19,000	19,500	20,000	20,400	20,808	21,224	21,649	22,082
Professional Assoc Fees	1,650	2,650	2,750	2,750	2,750	2,750	2,805	2,861	2,918	2,977	3,036
Workshops/Training Courses	21,525	33,185	42,810	43,410	44,060	44,660	45,553	46,464	47,394	48,341	49,308
Conferences	8,800	19,200	19,880	19,880	19,880	19,880	20,278	20,683	21,097	21,519	21,949
Mileage	2,000	2,000	2,000	2,000	2,000	2,000	2,040	2,081	2,122	2,165	2,208
Office Equip	8,020	1,030	1,030	1,030	1,030	1,030	1,051	1,072	1,093	1,115	1,137
Office Supplies/Materials	2,040	2,040	2,060	2,060	2,060	2,060	2,101	2,143	2,186	2,230	2,274
Advertising & Promotion	11,200	11,800	11,800	11,800	11,800	11,800	12,036	12,277	12,522	12,773	13,028
Postage/Courier/Fax	500	500	500	500	500	500	510	520	531	541	552
Water and Sewer Reading / Billi	219,000	219,000	219,000	219,000	219,000	219,000	223,380	227,848	232,405	237,053	241,794
Prof Fees - Engineering	155,250	158,000	160,500	163,500	166,000	169,000	172,380	175,828	179,344	182,931	186,590
Prof Fees - Consulting	70,000	61,000	61,000	62,000	63,000	64,000	65,280	66,586	67,917	69,276	70,661
Prof Fees - Legal	5,000	5,500	5,500	6,000	6,000	6,500	6,630	6,763	6,898	7,036	7,177
Prof Fees - Other	137,800	148,900	149,200	155,100	166,100	161,300	164,526	167,817	171,173	174,596	178,088
Insurance	128,423	146,829	161,513	177,663	195,429	214,973	236,470	260,117	286,129	314,742	346,216
Insurance Deductibles/Claims	20,000	20,000	22,000	24,200	26,620	29,282	32,210	35,431	38,974	42,872	47,159
Video Production	12,000	12,000	12,000	12,000	12,000	12,000	12,240	12,485	12,734	12,989	13,249
Telephone/Communications	57,340	30,305	30,305	30,355	30,405	30,705	31,319	31,945	32,584	33,236	33,901
Computer Operation & Supplies	40,275	35,906	36,562	37,745	38,098	38,275	39,041	39,821	40,618	41,430	42,259
Inter-Departmental	488,405	488,405	498,173	508,137	518,299	528,665	539,239	550,023	561,024	572,244	583,689
Inter-Departmental - IT	179,257	184,282	187,968	191,727	195,562	199,473	203,462	207,531	211,682	215,916	220,234
Uniforms	10,000	12,450	12,699	15,450	15,759	16,074	16,396	16,724	17,058	17,399	17,747
Outside Srv	333,000	340,100	334,220	352,246	356,479	361,569	368,800	376,176	383,700	391,374	399,201
Outside Laboratory Srv	82,200	83,550	83,900	86,000	86,500	86,750	88,485	90,255	92,060	93,901	95,779
Outside Srv - Compliance	10,000	10,000	10,000	10,000	10,000	10,000	10,200	10,404	10,612	10,824	11,041
Outside Srv - Electrical Preven	26,250	26,750	27,000	27,250	27,500	27,750	28,305	28,871	29,449	30,037	30,638
Outside Srv - Mechanical Preven	200,000	202,000	204,000	206,000	208,000	210,000	214,200	218,484	222,854	227,311	231,857
Outside Srv - Instrumentation P	125,000	125,000	126,000	127,000	128,000	129,000	131,580	134,212	136,896	139,634	142,426
Outside Srv - Bldg, Reservoir &	75,000	76,500	78,000	79,500	81,000	82,500	84,150	85,833	87,550	89,301	91,087
SCADA Mtc	58,240	60,568	62,991	64,674	66,412	68,068	69,429	70,818	72,234	73,679	75,153

Table A-9 (continued)
Town of Orangeville
Operating Budget Forecast – Water (inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Operating Costs											
Natural Gas	20,614	21,711	22,797	23,937	25,134	26,390	29,029	31,932	35,125	38,638	42,501
Hydro	442,199	508,529	559,382	615,320	676,852	744,537	818,991	900,890	990,979	1,090,077	1,199,084
Mtc Equip	34,850	35,800	40,600	41,400	41,400	41,450	42,279	43,125	43,987	44,867	45,764
Small Equip	76,900	78,950	80,000	82,050	83,100	84,150	85,833	87,550	89,301	91,087	92,908
After Hours Dispatch	7,150	7,150	7,293	7,439	7,588	7,739	7,894	8,052	8,213	8,377	8,545
Property Tax	23,290	23,290	24,222	25,190	26,198	27,246	28,336	29,469	30,648	31,874	33,149
Payment in-lieu of Tax	22,800	22,800	22,800	22,800	22,800	22,800	22,800	22,800	22,800	22,800	22,800
Chemicals	97,500	100,780	110,858	121,944	134,138	147,552	162,307	178,538	196,392	216,031	237,634
Materials & Supplies	229,000	231,000	233,000	236,000	238,000	245,000	249,900	254,898	259,996	265,196	270,500
Outside Srv - Planned Mtc	90,000	100,000	100,000	105,000	110,000	115,000	117,300	119,646	122,039	124,480	126,969
Outside Srv - Main Breaks	30,000	32,500	35,000	37,500	40,000	42,500	43,350	44,217	45,101	46,003	46,923
Pardon	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Toilet Rebate Program	8,500	8,000	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Rain Barrels	5,000	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Meter and Conservation Devices	25,000	25,000	25,000	30,000	30,000	30,000	30,600	31,212	31,836	32,473	33,122
Water Softner Rebate Program	25,000	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Prof Fees - One Call	6,000	6,000	6,120	6,242	6,367	6,495	6,624	6,757	6,892	7,030	7,171
Printing/Photocopy Costs	1,500	-	-	-	-	-	-	-	-	-	-
Software Support & Licences	7,500	7,500	7,650	7,803	7,959	8,118	8,281	8,446	8,615	8,787	8,963
Special Projects	-	3,000	3,060	3,121	3,184	3,247	3,312	3,378	3,446	3,515	3,585
Software Agreemts	120,680	98,180	105,680	110,680	112,894	115,151	117,455	119,804	122,200	124,644	127,137
Server Mtc	5,000	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975
Vehicle Mtc Costs/Parts	57,495	61,015	62,259	63,794	64,846	66,168	67,491	68,841	70,218	71,622	73,055
Fuel	43,102	44,395	45,727	47,099	48,512	49,967	50,966	51,986	53,025	54,086	55,168
Vehicle Licenses	4,900	5,300	5,406	5,514	5,624	5,736	5,851	5,968	6,087	6,209	6,333
Leased Vehicle Exp	127,577	115,473	117,784	120,139	60,403	31,392	32,020	32,660	33,313	33,980	34,659
Other Staffing Costs	126,484	133,276	136,608	140,023	143,524	233,238	239,069	245,045	251,172	257,451	263,887
Sub Total Operating	**6,586,675**	**6,854,037**	**7,087,028**	**7,358,245**	**7,556,769**	**7,877,157**	**8,164,043**	**8,467,521**	**8,788,925**	**9,129,708**	**9,491,462**

Table A-9 (continued)
Town of Orangeville
Operating Budget Forecast – Water (inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital-Related											
New Growth Related Debt (Principal)		-	-	-	3,289	167,881	201,245	430,065	698,097	773,464	832,263
New Growth Related Debt (Interest)		-	-	-	4,200	214,062	240,611	513,559	814,696	844,176	845,290
Existing Debt (Principal) - Non-Growth Related	64,297	66,573	62,953	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Non-Growth Related	5,621	3,345	1,068	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Principal)		39,469	41,127	92,190	276,961	443,180	642,693	669,686	763,594	1,009,455	1,321,556
New Non-Growth Related Debt (Interest)		50,400	48,742	110,015	337,143	522,911	735,297	708,304	764,177	1,005,106	1,307,109
Transfer to Canada Community-Building Fund (Water Portion) Reserve Fund	686,400	1,088,000	-	-	-	-	-	-	-	-	-
Transfer to Capital (Provincial Grants)	-	-	800,000	-	500,000	-	-	-	-	-	-
Transfer to Capital Reserve Fund	1,107,004	1,497,323	1,896,144	2,261,584	2,337,253	2,354,959	2,425,938	2,908,432	3,325,608	3,504,456	3,672,024
Sub Total Capital Related	**1,863,322**	**2,745,110**	**2,850,034**	**2,463,789**	**3,458,847**	**3,702,993**	**4,245,784**	**5,230,046**	**6,366,172**	**7,136,658**	**7,978,243**
Total Expenditures	**8,449,997**	**9,599,147**	**9,937,061**	**9,822,035**	**11,015,615**	**11,580,150**	**12,409,826**	**13,697,567**	**15,155,097**	**16,266,366**	**17,469,704**
Revenues											
Base Charge	1,579,147	1,828,871	2,124,995	2,465,534	2,860,421	3,318,300	3,849,184	4,464,671	5,178,197	6,005,327	6,964,551
Facilities Rental	14,200	14,500	14,800	15,096	15,382	15,690	16,004	16,324	16,650	16,983	17,323
Municipal Agreements	347,000	353,900	361,000	368,220	375,584	383,096	392,673	402,490	412,552	422,866	433,438
Srv Charges Rev	11,100	11,300	11,500	14,000	14,252	14,509	14,799	15,095	15,397	15,705	16,019
Meter and Conservation Devices	21,600	22,000	22,400	22,803	23,213	23,631	24,104	24,586	25,077	25,579	26,091
Other Sales	21,600	22,000	22,400	22,803	23,213	23,631	24,104	24,586	25,077	25,579	26,091
Other Revenue	1,000	1,000	1,000	1,000	1,000	1,000	1,020	1,040	1,061	1,082	1,104
Amaranth Servicing Agreement	-	663	2,135	4,033	6,453	9,507	9,507	9,507	9,507	9,507	9,507
Provincial Grants	-	-	800,000	-	500,000	-	-	-	-	-	-
Canada Community-Building Fund (Water Portion) Receipts	686,400	1,088,000	-	-	-	-	-	-	-	-	-
Contributions from Development Charges Reserve Fund	-	-	-	-	7,489	381,943	441,855	943,623	1,512,793	1,617,640	1,677,553
Contributions from Reserves / Reserve Fund	69,918	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**2,751,965**	**3,342,234**	**3,360,230**	**2,913,488**	**3,827,007**	**4,171,308**	**4,773,251**	**5,901,923**	**7,196,314**	**8,140,269**	**9,171,677**
Water Billing Recovery - Total	**5,698,032**	**6,256,913**	**6,576,832**	**6,908,546**	**7,188,608**	**7,408,842**	**7,636,576**	**7,795,644**	**7,958,783**	**8,126,097**	**8,298,027**

Table A-10
Town of Orangeville
Water Rate Calculation (inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total Water Billing Recovery	**5,698,032**	**6,256,913**	**6,576,832**	**6,908,546**	**7,188,608**	**7,408,842**	**7,636,576**	**7,795,644**	**7,958,783**	**8,126,097**	**8,298,027**
Increasing Block Structure - Residential											
Volume Forecast By Block (m3)											
Block 1 - Orangeville	1,354,480	1,349,273	1,351,166	1,351,297	1,351,700	1,352,372	1,353,309	1,354,508	1,355,963	1,357,672	1,359,632
Block 1 - Amaranth	-	727	2,036	3,344	4,653	5,962	7,270	8,579	9,888	11,196	12,651
Block 2	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003
Total Volume - Residential	**1,688,483**	**1,684,003**	**1,687,205**	**1,688,645**	**1,690,357**	**1,692,337**	**1,694,583**	**1,697,090**	**1,699,854**	**1,702,872**	**1,706,285**
Increasing Block Rates ($/m^3) - Residential											
Block 1 - Orangeville	2.13	2.34	2.46	2.58	2.69	2.77	2.85	2.91	2.97	3.02	3.09
Block 1 - Amaranth	1.60	1.76	1.85	1.94	2.01	2.08	2.14	2.18	2.22	2.27	2.31
Block 2	2.88	3.16	3.32	3.49	3.63	3.74	3.85	3.92	4.00	4.08	4.16
Increasing Block Structure - Non-Residential											
Volume Forecast By Block (m3)											
Block 1	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132
Block 2	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825
Total Volume - Non-Residential	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**
Increasing Block Rates ($/m^3) - Non-Residential											
Block 1	2.23	2.45	2.58	2.70	2.81	2.90	2.98	3.04	3.10	3.17	3.23
Block 2	3.01	3.31	3.48	3.65	3.80	3.91	4.03	4.11	4.19	4.27	4.36
Flat Rate (Unmetered)											
Annual Charge	$672.16	$826.49	885.49	950.10	1,013.82	1,076.50	1,145.89	1,215.03	1,292.49	1,379.47	1,477.36

Table A-11
Town of Orangeville
Water Rate Forecast

Desription	Monthly Block 1 Volume (m^3)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Metered Customers												
Base Charge by Meter Size												
5/8" to 3/4"	<= 20	$12.81	$14.73	$16.94	$19.48	$22.40	$25.77	$29.63	$34.07	$39.19	$45.06	$51.82
1"	<= 100	$17.08	$19.64	$22.59	$25.98	$29.87	$34.35	$39.51	$45.43	$52.25	$60.09	$69.10
1 ½"	<= 500	$25.62	$29.46	$33.88	$38.96	$44.81	$51.53	$59.26	$68.15	$78.37	$90.13	$103.65
2"	<= 1,000	$38.44	$44.21	$50.84	$58.46	$67.23	$77.32	$88.91	$102.25	$117.59	$135.23	$155.51
3"	<= 3,000	$44.84	$51.57	$59.30	$68.20	$78.43	$90.19	$103.72	$119.28	$137.17	$157.74	$181.40
4" and Larger	<= 6,000	$64.06	$73.67	$84.72	$97.43	$112.04	$128.85	$148.17	$170.40	$195.96	$225.36	$259.16
Volumetric Rate (per m^3)												
Residential												
Block 1		$2.13	$2.34	$2.46	$2.58	$2.69	$2.77	$2.85	$2.91	$2.97	$3.02	$3.09
Block 2		$2.88	$3.16	$3.32	$3.49	$3.63	$3.74	$3.85	$3.92	$4.00	$4.08	$4.16
Non-Residential												
Block 1		$2.23	$2.45	$2.58	$2.70	$2.81	$2.90	$2.98	$3.04	$3.10	$3.17	$3.23
Block 2		$3.01	$3.31	$3.48	$3.65	$3.80	$3.91	$4.03	$4.11	$4.19	$4.27	$4.36
Unmetered Customers												
Compliant		$672.16	$826.49	$885.49	$950.10	$1,013.82	$1,076.50	$1,145.89	$1,215.03	$1,292.49	$1,379.47	$1,477.36
Non-Compliant		$2,016.49	$2,479.48	$2,656.48	$2,850.30	$3,041.46	$3,229.49	$3,437.68	$3,645.10	$3,877.48	$4,138.42	$4,432.09

Appendix B
Detailed Wastewater Rate Calculations

Table B-1
Town of Orangeville
Capital Budget Forecast (uninflated $) – Wastewater

Description	Budget 2024	Total 2025-2034	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
11803.0000 CF - SCADA Master Plan	150,000	-	-	-	-	-	-	-	-	-	-	-
26018.0000 CF - Clarifier 3 Centre Unit R	1,420,000	-	-	-	-	-	-	-	-	-	-	-
26059.0000 Sewage Sampler & Assoc Works	20,000	79,000	-	-	-	15,000	-	15,000	15,000	-	-	34,000
33701.0000 Sewage Pump Stn - Spare Pump	-	44,000	-	-	-	-	44,000	-	-	-	-	-
26019.0000 Mixer # 6 Replacement	-	34,000	17,000	-	-	-	-	17,000	-	-	-	-
26022.1060 Mixer #4 Replacement -- Water Pollution Control Plant	-	17,000	-	-	17,000	-	-	-	-	-	-	-
26025.1060 CF - Sump Pump Replacements -- Water Pollution Control Plant	-	10,000	-	-	-	-	-	-	10,000	-	-	-
20419.1060 CF - Detritor Centre Unit Repl -- Water Pollution Control Plant	944,744	-	-	-	-	-	-	-	-	-	-	-
26027.1060 Mixer # 5 Replacement -- Water Pollution Control Plant	-	17,000	-	-	17,000	-	-	-	-	-	-	-
26034.1060 Headworks - Pumping Equipment -- Water Pollution Control Plant	16,000	-	-	-	-	-	-	-	-	-	-	-
26036.1060 Elevated Walkway -- Water Pollution Control Plant	-	77,000	77,000	-	-	-	-	-	-	-	-	-
26058.0000 New Plant - Mixers #1, #2 & #3 - Replacements	54,000	54,000	-	-	-	-	-	54,000	-	-	-	-
B0948.1060 Old Plant - Mixers 7,8,9&10 - Replacement	-	40,000	40,000	-	-	-	-	-	-	-	-	-
B1362.1060 Tractor	-	160,000	160,000	-	-	-	-	-	-	-	-	-
B1428.0000 Water and Wastewater System Modelling	-	225,000	-	-	-	-			150,000	75,000	-	-
B1424.1060 Truck Fill Station	-	30,000	30,000	-	-	-	-	-	-	-	-	-
11813.0000 Engineering Standards Update	-	58,000	25,000	-	-	-	-	33,000	-	-	-	-
13986.0000 CF - Climate Change	-	12,500	12,500	-	-	-	-	-	-	-	-	-
21206.1060 WPCP Roof Projects	67,723	438,669	131,354	96,672	91,584	76,320	42,739					
WPCP Exterior Doors	-	20,000	20,000									
26048.0000 Shed	-	30,000	-	-	-	30,000	-	-	-	-	-	-
26050.0000 Operations Equipment	9,599	-	-	-	-	-	-	-	-	-	-	-
31115.0000 CF - Reconn - Centennial	200,000	-	-	-	-	-	-	-	-	-	-	-
31116.0000 CF - Recon Church St	423,000	-	-	-	-	-	-	-	-	-	-	-
31119.0000 Recon - Victoria St - Ontario to John	-	353,000	300,050	52,950								
31120.0000 Recon - Ontario St. Vic to Pri	-	242,000	205,700	36,300	-	-	-	-	-	-	-	-
31121.0000 Recon - Cardwell St, Townline	-	242,000		242,000		-	-	-	-	-	-	-
31122.0000 Recon - Cardwell St, Dufferin	-	1,022,000	-	-	-	511,000	-	-	434,350	76,650	-	-
31123.0000 Recon - Dufferin St, John to O	-	616,000	523,600	92,400	-	-	-	-	-	-	-	-
31124.0000 Recon - Third Ave, 1st St to 2nd St	-	302,000	256,700	45,300	-	-	-	-	-	-	-	-
31125.0000 Recon - Third Ave, 2nd St to 3rd St.	-	268,000	227,800	40,200	-	-	-	-	-	-	-	-
31126.0000 Recon - Steven St	-	261,000	221,850	39,150	-	-	-	-	-	-	-	-
31127.0000 Recon - Andrew St	-	439,000	373,150	65,850	-	-	-	-	-	-	-	-
31128.0000 Bythia Street (Court) Reconstruction	-	275,000	233,750	41,250	-	-	-	-	-	-	-	-
B0982.0000 Recon - Carlton Dr - Madison to Lawrence	-	616,000	523,600	92,400								
B1004.0000 Recon - Erindale, Dufferin to Princess St	-	641,000	-	641,000		-	-	-	-	-	-	-
B1009.0000 Recon - Zina St, First St to Louisa	-	583,000	-	-	-	-	-	-	-	495,550	87,450	-
B1014.0000 Recon - Amanda, Townline to Parsons	-	471,000	-	-	-	-	-	400,350	70,650	-	-	-
B1015.0000 Recon - Amanda, Parsons to Front	-	269,000	-	-	-	-	-	228,650	40,350	-	-	-
B1195.0000 Recon of Edelwild Century to Parkview	-	636,500	-	636,500		-	-	-	-	-	-	-
B1273.0000 Recon Bythia St Townline to Church	-	595,000					505,750	89,250				
B1278.0000 Reconstruction of Dufferin Street - Erindale to Ontario	-	530,000	-	530,000		-	-	-	-	-	-	-
B1331.0000 C-Line Reconstruction Century to Town Line	-	570,000	-	-	-	-	-	484,500	85,500	-	-	-
B1332.0000 John Street Reconstruction Townline to Corp Limits	-	323,000	-	-	274,550	48,450	-	-	-	-	-	-
B1359.0000 Caledonia Road Reconstruction	-	296,000	-	34,000	222,700	39,300	-	-	-	-	-	-
B1360.0000 Hillside Drive Reconstruction	-	198,500	-	-	-	-	-	-	-	32,500	141,100	24,900
B1414.4000 Fleet Management Plan	-	2,500	2,500									
B1490.4392 Vehicle 53 Replacement	-	16,750							16,750			
B1497.0000 Recon/Widening - Fourth Ave: Third St to Hwy #10	-	535,000	-	-	-	-	50,000	-	412,250	72,750	-	-

Table B-1 (continued)
Town of Orangeville
Capital Budget Forecast (uninflated $) – Wastewater

Description	Budget 2024	Total 2025-2034	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
B1503.0000 Hybrid Recon - Hillsdale, Goldgate and Darsam	-	220,000	-	-	20,000	170,000	30,000	-	-	-	-	-
B1504.0000 Recon - Church St: John to Bythia	-	280,000	-	-	-	-	-	-	-	40,000	204,000	36,000
B1505.0000 Recon - Bythia: Church to Hillside	-	386,800	-	-	-	40,000	294,780	52,020	-	-	-	-
B1548.0000 Hybrid Reconstruction of Avonmore and Johanna	-	45,000	-	45,000	-	-	-	-	-	-	-	-
B1440.4442 Vehicle 21 Replacement	-	125,000	60,000	-	-	-	-	-	-	65,000	-	-
B1438.4701 Vehicle 27 Replacement	-	165,000	80,000	-	-	-	-	-	-	85,000	-	-
B1475.4822 Vehicle 33 Replacement	-	86,000	-	-	-	-	-	86,000	-	-	-	-
B1565.0000 Dayforce Optimization and Enhancement Initiative	-	4,800	4,800	-	-	-	-	-	-	-	-	-
20389.0000 CRM System Upgrade	-	24,000	24,000	-	-	-	-	-	-	-	-	-
B1407.0000 Website Updates	-	10,000	10,000	-	-	-	-	-	-	-	-	-
Studies:												
WPCP Building Condition Assessment	-	180,000		80,000					100,000			
Growth Related:												
Town-Wide												
11824.0000 Water and Wastewater Rate Study	30,000	-	-	-	-	-	-	-	-	-	-	-
11824.0000 Water and Wastewater Rate Study	-	114,000	-	-	-	-	54,000	-	-	-	-	60,000
11788.1060 CF - Inflow and Infiltrtn Stn -- Water Pollution Control Plant	160,910	-										
11788.1060 CF - Inflow and Infiltrtn Stn -- Water Pollution Control Plant	-	170,000	-	-	-	-	-	170,000	-	-	-	-
33703.0000 Sanitary Sewer Rehabilitation (I&I)	-	5,000,000	-	-	-	-	833,000	833,000	833,000	833,000	833,000	835,000
26049.1060 Flood Mitigation at the WPCP Water Pollution Control Plant	26,321	473,679	473,679	-	-	-	-	-	-	-	-	-
Sanitary Servicing Assessment		125,000		125,000								
SCADA Projects												
B1423.0000 SCADA Upgrade	-	2,000,000	100,000	200,000	1,100,000	600,000	-	-	-	-	-	-
20362.0000 CF - SCADA Server Replacement	-	402,163	402,163	-	-	-	-	-	-	-	-	-
Projects with Growth-Related SCADA Component												
26039.0000 Thickening Tank Centre Unit	-	520,000		520,000	-	-	-	-	-	-	-	-
33702.0000 Sewage Pumping Station - Pumpi --	47,000	384,000	50,000	50,000	-	-	-	-	237,000	47,000	-	-
B1427.0000 Sewage Pump Station Level Indicator Replacements	-	60,000	60,000	-	-	-	-	-	-	-	-	-
21182.1060 CF - Digestor No 2 Refurb -- Water Pollution Control Plant	2,621,169	1,684,796	1,684,796	-	-	-	-	-	-	-	-	-
26040.1060 Sludge Storage Tank Rehabilitation	-	750,000	250,000	500,000	-	-	-	-	-	-	-	-
26042.1060 MLR Pump Replacement Program -- Water Pollution Control Plant	-	205,000	57,000	-	37,000	-	37,000	-	37,000	-	37,000	-
33087.1060 Sludge Transfer Well Rehab -- Water Pollution Control Plant	-	22,000	22,000	-	-	-	-	-	-	-	-	-
B0952.1060 Tertiary Treatment-Travelling Bridge Replacement incl. Pumps	-	624,000	-	-	-	208,000	208,000	208,000	-	-	-	-
B0953.1060 Chlorine, Alum and SBS Tank Replacements - Chemical Building	-	122,000	-	-	-	122,000	-	-	-	-	-	-
B1086.1060 Sludge Loading Pump Replacements	-	116,000	-	-	-	116,000	-	-	-	-	-	-
B1296.1060 Chemical Storage Building Rehabilitation	-	905,000	-	-	125,000	780,000	-	-	-	-	-	-
B1298.1060 Digester 1 Cleanout and Assessment	-	472,000	-	-	-	-	-	-	472,000	-	-	-
B1314.0000 Flare Stack Replacement	-	67,000	-	67,000	-	-	-	-	-	-	-	-
B1315.1060 Admin Building Transformer Replacement	-	300,000	-	-	-	-	-	300,000	-	-	-	-
B1316.1060 Grit Removal System - New Plant	-	300,000	50,000	250,000	-	-	-	-	-	-	-	-
B1317.1060 Aeration Diffuser Piping	-	42,000	-	-	-	42,000	-	-	-	-	-	-
B1325.1060 Turbo Blower Replacements	-	257,000	-	-	-	-	-	-	-	257,000	-	-
B1326.1060 WAS Pump Replacement (Old Plant)	-	22,000	-	-	-	-	-	-	-	22,000	-	-
B1327.1060 Flo-Dar Unit Replacements	-	48,000	-	-	-	-	-	48,000	-	-	-	-
B1330.1060 Inlet VFD Replacments	-	96,000	-	-	48,000	-	-	48,000	-	-	-	-
B1493.1060 Digester Feed Grinder	-	190,000	-	190,000	-	-	-	-	-	-	-	-

Table B-1 (continued)
Town of Orangeville
Capital Budget Forecast (uninflated $) – Wastewater

Description	Budget 2024	Total 2025-2034	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
B1494.1060 Conversion to Ultraviolet (UV) Disinfection	-	9,010,000	-	120,000	8,890,000	-	-	-	-	-	-	-
B1496.1060 Membrane Aerated Biofilm Reactors	-	1,218,000	-	1,218,000	-	-	-	-	-	-	-	-
B1509.1060 Grit Removal System - Old Plant	-	2,710,000	-	-	-	-	1,355,000	1,355,000	-	-	-	-
Capital IT Projects with Growth-Related SCADA Upgrade Component	-	287,103	113,512	16,244	13,129	22,455	17,302	40,238	20,610	11,694	20,197	11,723
Area-Specific												
Hansen Boulevard Trunk Sanitary Sewer	-	554,400		554,400								
B0082.0000 Trunk Sewer Capacity Increase (Bredin Pkwy, Third St at Fourth Ave)	-	475,000	-	-	-	-	-	475,000	-	-	-	-
Total Capital Expenditures	**6,190,466**	**42,902,160**	**6,823,504**	**6,621,616**	**10,855,963**	**2,820,525**	**3,471,571**	**4,937,008**	**2,934,460**	**2,113,144**	**1,322,747**	**1,001,623**

Table B-2
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Wastewater

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
11803.0000 CF - SCADA Master Plan	150,000	-	-	-	-	-	-	-	-	-	-	-
26018.0000 CF - Clarifier 3 Centre Unit R	1,420,000	-	-	-	-	-	-	-	-	-	-	-
26059.0000 Sewage Sampler & Assoc Works	20,000	95,000	-	-	-	16,000	-	17,000	18,000	-	-	44,000
33701.0000 Sewage Pump Stn - Spare Pump	-	50,000	-	-	-	-	50,000	-	-	-	-	-
26019.0000 Mixer # 6 Replacement	-	37,000	17,000	-	-	-	-	20,000	-	-	-	-
26022.1060 Mixer #4 Replacement -- Water Pollution Control Plant	-	18,000	-	-	18,000	-	-	-	-	-	-	-
26025.1060 CF - Sump Pump Replacements -- Water Pollution Control Plant	-	12,000	-	-	-	-	-	-	12,000	-	-	-
20419.1060 CF - Detritor Centre Unit Repl -- Water Pollution Control Plant	944,744	-	-	-	-	-	-	-	-	-	-	-
26027.1060 Mixer # 5 Replacement -- Water Pollution Control Plant	-	18,000	-	-	18,000	-	-	-	-	-	-	-
26034.1060 Headworks - Pumping Equipment -- Water Pollution Control Plant	16,000	-	-	-	-	-	-	-	-	-	-	-
26036.1060 Elevated Walkway -- Water Pollution Control Plant	-	77,000	77,000	-	-	-	-	-	-	-	-	-
26058.0000 New Plant - Mixers #1, #2 & #3 - Replacements	54,000	63,000	-	-	-	-	-	63,000	-	-	-	-
B0948.1060 Old Plant - Mixers 7,8,9&10 - Replacement	-	40,000	40,000	-	-	-	-	-	-	-	-	-
B1362.1060 Tractor	-	160,000	160,000	-	-	-	-	-	-	-	-	-
B1428.0000 Water and Wastewater System Modelling	-	271,000	-	-	-	-	-	-	179,000	92,000	-	-
B1424.1060 Truck Fill Station	-	30,000	30,000	-	-	-	-	-	-	-	-	-
11813.0000 Engineering Standards Update	-	63,000	25,000	-	-	-	-	38,000	-	-	-	-
13986.0000 CF - Climate Change	-	13,000	13,000	-	-	-	-	-	-	-	-	-
21206.1060 WPCP Roof Projects	67,723	459,000	131,000	100,000	97,000	83,000	48,000	-	-	-	-	-
WPCP Exterior Doors	-	20,000	20,000	-	-	-	-	-	-	-	-	-
26048.0000 Shed	-	33,000	-	-	-	33,000	-	-	-	-	-	-
26050.0000 Operations Equipment	9,599	-	-	-	-	-	-	-	-	-	-	-
31115.0000 CF - Reconn - Centennial	200,000	-	-	-	-	-	-	-	-	-	-	-
31116.0000 CF - Recon Church St	423,000	-	-	-	-	-	-	-	-	-	-	-
31119.0000 Recon - Victoria St - Ontario to John	-	355,000	300,000	55,000	-	-	-	-	-	-	-	-
31120.0000 Recon - Ontario St. Vic to Pri	-	243,000	206,000	37,000	-	-	-	-	-	-	-	-
31121.0000 Recon - Cardwell St, Townline	-	249,000	-	249,000	-	-	-	-	-	-	-	-
31122.0000 Recon - Cardwell St, Dufferin	-	1,171,000	-	-	-	558,000	-	-	519,000	94,000	-	-
31123.0000 Recon - Dufferin St, John to O	-	619,000	524,000	95,000	-	-	-	-	-	-	-	-
31124.0000 Recon - Third Ave, 1st St to 2nd St	-	304,000	257,000	47,000	-	-	-	-	-	-	-	-
31125.0000 Recon - Third Ave, 2nd St to 3rd St.	-	269,000	228,000	41,000	-	-	-	-	-	-	-	-
31126.0000 Recon - Steven St	-	262,000	222,000	40,000	-	-	-	-	-	-	-	-
31127.0000 Recon - Andrew St	-	441,000	373,000	68,000	-	-	-	-	-	-	-	-
31128.0000 Bythia Street (Court) Reconstruction	-	276,000	234,000	42,000	-	-	-	-	-	-	-	-
B0982.0000 Recon - Carlton Dr - Madison to Lawrence	-	619,000	524,000	95,000	-	-	-	-	-	-	-	-
B1004.0000 Recon - Erindale, Dufferin to Princess St	-	660,000	-	660,000	-	-	-	-	-	-	-	-
B1009.0000 Recon - Zina St, First St to Louisa	-	720,000	-	-	-	-	-	-	-	609,000	111,000	-
B1014.0000 Recon - Amanda, Townline to Parsons	-	548,000	-	-	-	-	-	464,000	84,000	-	-	-
B1015.0000 Recon - Amanda, Parsons to Front	-	313,000	-	-	-	-	-	265,000	48,000	-	-	-
B1195.0000 Recon of Edelwild Century to Parkview	-	656,000	-	656,000	-	-	-	-	-	-	-	-
B1273.0000 Recon Bythia St Townline to Church	-	672,000	-	-	-	-	569,000	103,000	-	-	-	-
B1278.0000 Reconstruction of Dufferin Street - Erindale to Ontario	-	546,000	-	546,000	-	-	-	-	-	-	-	-
B1331.0000 C-Line Reconstruction Century to Town Line	-	664,000	-	-	-	-	-	562,000	102,000	-	-	-
B1332.0000 John Street Reconstruction Townline to Corp Limits	-	344,000	-	-	291,000	53,000	-	-	-	-	-	-
B1359.0000 Caledonia Road Reconstruction	-	314,000	-	35,000	236,000	43,000	-	-	-	-	-	-
B1360.0000 Hillside Drive Reconstruction	-	251,000	-	-	-	-	-	-	-	40,000	179,000	32,000
B1414.4000 Fleet Management Plan	-	3,000	3,000	-	-	-	-	-	-	-	-	-

Table B-2 (continued)
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Wastewater

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
B1490.4392 Vehicle 53 Replacement	-	20,000	-	-	-	-	-	-	20,000	-	-	-
B1497.0000 Recon/Widening - Fourth Ave: Third St to Hwy #10	-	637,000	-	-	-	-	56,000	-	492,000	89,000	-	-
B1503.0000 Hybrid Recon - Hillsdale, Goldgate and Darsam	-	241,000	-	-	21,000	186,000	34,000	-	-	-	-	-
B1504.0000 Recon - Church St: John to Bythia	-	354,000	-	-	-	-	-	-	-	49,000	258,000	47,000
B1505.0000 Recon - Bythia: Church to Hillside	-	436,000	-	-	-	44,000	332,000	60,000	-	-	-	-
B1548.0000 Hybrid Reconstruction of Avonmore and Johanna	-	46,000	-	46,000	-	-	-	-	-	-	-	-
B1440.4442 Vehicle 21 Replacement	-	140,000	60,000	-	-	-	-	-	-	80,000	-	-
B1438.4701 Vehicle 27 Replacement	-	185,000	80,000	-	-	-	-	-	-	105,000	-	-
B1475.4822 Vehicle 33 Replacement	-	100,000	-	-	-	-	-	100,000	-	-	-	-
B1565.0000 Dayforce Optimization and Enhancement Initiative	-	5,000	5,000	-	-	-	-	-	-	-	-	-
20389.0000 CRM System Upgrade	-	24,000	24,000	-	-	-	-	-	-	-	-	-
B1407.0000 Website Updates	-	10,000	10,000	-	-	-	-	-	-	-	-	-
Studies:												
WPCP Building Condition Assessment	-	201,000	-	82,000	-	-	-	-	119,000	-	-	-
Growth Related:												
Town-Wide												
11824.0000 Water and Wastewater Rate Study	30,000	-	-	-	-	-	-	-	-	-	-	-
11824.0000 Water and Wastewater Rate Study	-	139,000	-	-	-	-	61,000	-	-	-	-	78,000
11788.1060 CF - Inflow and Infiltrtn Stn -- Water Pollution Control Plant	160,910	-	-	-	-	-	-	-	-	-	-	-
11788.1060 CF - Inflow and Infiltrtn Stn -- Water Pollution Control Plant	-	197,000	-	-	-	-	-	197,000	-	-	-	-
33703.0000 Sanitary Sewer Rehabilitation (I&I)	-	6,067,000	-	-	-	-	938,000	966,000	995,000	1,024,000	1,055,000	1,089,000
26049.1060 Flood Mitigation at the WPCP Water Pollution Control Plant	26,321	474,000	474,000	-	-	-	-	-	-	-	-	-
Sanitary Servicing Assessment	-	133,000	-	133,000	-	-	-	-	-	-	-	-
SCADA Projects												
B1423.0000 SCADA Upgrade	-	2,129,000	100,000	206,000	1,167,000	656,000	-	-	-	-	-	-
20362.0000 CF - SCADA Server Replacement	-	402,000	402,000	-	-	-	-	-	-	-	-	-
Projects with Growth-Related SCADA Component												
26039.0000 Thickening Tank Centre Unit	-	536,000	-	536,000	-	-	-	-	-	-	-	-
33702.0000 Sewage Pumping Station - Pumpi --	47,000	443,000	50,000	52,000	-	-	-	-	283,000	58,000	-	-
B1427.0000 Sewage Pump Station Level Indicator Replacements	-	60,000	60,000	-	-	-	-	-	-	-	-	-
21182.1060 CF - Digestor No 2 Refurb -- Water Pollution Control Plant	2,621,169	1,685,000	1,685,000	-	-	-	-	-	-	-	-	-
26040.1060 Sludge Storage Tank Rehabilitation	-	765,000	250,000	515,000	-	-	-	-	-	-	-	-
26042.1060 MLR Pump Replacement Program -- Water Pollution Control Plant	-	229,000	57,000	-	39,000	-	42,000	-	44,000	-	47,000	-
33087.1060 Sludge Transfer Well Rehab -- Water Pollution Control Plant	-	22,000	22,000	-	-	-	-	-	-	-	-	-
B0952.1060 Tertiary Treatment-Travelling Bridge Replacement incl. Pumps	-	702,000	-	-	-	227,000	234,000	241,000	-	-	-	-
B0953.1060 Chlorine, Alum and SBS Tank Replacements - Chemical Building	-	133,000	-	-	-	133,000	-	-	-	-	-	-
B1086.1060 Sludge Loading Pump Replacements	-	127,000	-	-	-	127,000	-	-	-	-	-	-
B1296.1060 Chemical Storage Building Rehabilitation	-	985,000	-	-	133,000	852,000	-	-	-	-	-	-
B1298.1060 Digester 1 Cleanout and Assessment	-	564,000	-	-	-	-	-	-	564,000	-	-	-
B1314.0000 Flare Stack Replacement	-	69,000	-	69,000	-	-	-	-	-	-	-	-
B1315.1060 Admin Building Transformer Replacement	-	348,000	-	-	-	-	-	348,000	-	-	-	-
B1316.1060 Grit Removal System - New Plant	-	308,000	50,000	258,000	-	-	-	-	-	-	-	-
B1317.1060 Aeration Diffuser Piping	-	46,000	-	-	-	46,000	-	-	-	-	-	-
B1325.1060 Turbo Blower Replacements	-	316,000	-	-	-	-	-	-	-	316,000	-	-

Table B-2 (continued)
Town of Orangeville
Capital Budget Forecast and Recommended Capital Financing (inflated $) – Wastewater

Description	Budget 2024	Total	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures												
B1326.1060 WAS Pump Replacement (Old Plant)	-	27,000	-	-	-	-	-	-	-	27,000	-	-
B1327.1060 Flo-Dar Unit Replacements	-	56,000	-	-	-	-	-	56,000	-	-	-	-
B1330.1060 Inlet VFD Replacments	-	107,000	-	-	51,000	-	-	56,000	-	-	-	-
B1493.1060 Digester Feed Grinder	-	196,000	-	196,000	-	-	-	-	-	-	-	-
B1494.1060 Conversion to Ultraviolet (UV) Disinfection	-	9,555,000	-	124,000	9,431,000	-	-	-	-	-	-	-
B1496.1060 Membrane Aerated Biofilm Reactors	-	1,255,000	-	1,255,000	-	-	-	-	-	-	-	-
B1509.1060 Grit Removal System - Old Plant	-	3,096,000	-	-	-	-	1,525,000	1,571,000	-	-	-	-
Capital IT Projects with Growth-Related SCADA Upgrade Component	-	316,000	114,000	17,000	14,000	25,000	19,000	47,000	25,000	14,000	26,000	15,000
Area-Specific												
Hansen Boulevard Trunk Sanitary Sewer	-	588,000	-	588,000	-	-	-	-	-	-	-	-
B0082.0000 Trunk Sewer Capacity Increase (Bredin Pkwy, Third St at Fourth Ave)	-	567,000	-	-	-	-	-	567,000	-	-	-	-
Total Capital Expenditures	**6,190,466**	**46,999,000**	**6,827,000**	**6,843,000**	**11,516,000**	**3,082,000**	**3,908,000**	**5,741,000**	**3,504,000**	**2,597,000**	**1,676,000**	**1,305,000**
Capital Financing												
Canada Community-Building Fund (CCBF)	-	1,552,000	-	-	-	780,000	-	300,000	472,000	-	-	-
Provincial/Federal Grants	-	4,715,500			4,715,500							
Town-Wide Development Charges Reserve Fund	183,233	3,311,408	172,303	140,076	341,917	114,710	781,083	305,603	408,864	224,990	344,679	477,184
Area-Specific Development Charges Reserve Fund	-	1,074,315	-	548,738	-	-	-	525,576	-	-	-	-
Non-Growth Related Debenture Requirements	1,804,347	11,350,000	-	3,700,000	4,700,000	-	1,150,000	1,800,000	-	-	-	-
Growth Related Debenture Requirements	-	2,400,000	-	-	-	-	-	500,000	400,000	600,000	500,000	400,000
Wastewater Reserve	4,202,886	22,595,777	6,654,697	2,454,186	1,758,583	2,187,290	1,976,917	2,309,821	2,223,136	1,772,010	831,321	427,816
Total Capital Financing	**6,190,466**	**46,999,000**	**6,827,000**	**6,843,000**	**11,516,000**	**3,082,000**	**3,908,000**	**5,741,000**	**3,504,000**	**2,597,000**	**1,676,000**	**1,305,000**

Table B-3
Town of Orangeville
Schedule of Non-Growth-Related Debenture Repayments (inflated $) – Wastewater

Debenture Year	2024	Principal (Inflated)	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2025		-		-	-	-	-	-	-	-	-	-
2026		3,700,000			277,096	277,096	277,096	277,096	277,096	277,096	277,096	277,096
2027		4,700,000				351,987	351,987	351,987	351,987	351,987	351,987	351,987
2028		-					-	-	-	-	-	-
2029		1,150,000						86,124	86,124	86,124	86,124	86,124
2030		1,800,000							134,803	134,803	134,803	134,803
2031		-								-	-	-
2032		-									-	-
2033		-										-
2034		-										
Total Annual Debt Charges	**-**	**11,350,000**	**-**	**-**	**277,096**	**629,082**	**629,082**	**715,207**	**850,010**	**850,010**	**850,010**	**850,010**

Table B-4
Town of Orangeville
Schedule of Growth-Related Debenture Repayments (inflated $) – Wastewater

Debenture Year	2024	Principal (Inflated)	Forecast									
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2025		-		-	-	-	-	-	-	-	-	-
2026		-			-	-	-	-	-	-	-	-
2027		-				-	-	-	-	-	-	-
2028		-					-	-	-	-	-	-
2029		-						-	-	-	-	-
2030		500,000							37,445	37,445	37,445	37,445
2031		400,000								29,956	29,956	29,956
2032		600,000									44,934	44,934
2033		500,000										37,445
2034		400,000										
Total Annual Debt Charges	**-**	**2,400,000**	**-**	**-**	**-**	**-**	**-**	**-**	**37,445**	**67,402**	**112,336**	**149,781**

Table B-5
Town of Orangeville
Wastewater Reserve/Reserve Fund Continuity (inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	9,523,793	6,671,984	1,258,645	408,536	424,280	21,220	28,475	70,983	583,314	2,167,345	5,441,156
Transfer from Operating	1,440,551	1,216,679	1,596,066	1,766,008	1,783,815	1,983,613	2,350,937	2,724,029	3,313,545	3,998,443	4,794,072
Transfer to Capital	4,202,886	6,654,697	2,454,186	1,758,583	2,187,290	1,976,917	2,309,821	2,223,136	1,772,010	831,321	427,816
Transfer to Operating	220,297	-	-	-	-	-	-	-	-	-	-
Closing Balance	**6,541,161**	**1,233,965**	**400,525**	**415,960**	**20,804**	**27,917**	**69,591**	**571,876**	**2,124,848**	**5,334,467**	**9,807,412**
Interest	130,823	24,679	8,011	8,319	416	558	1,392	11,438	42,497	106,689	196,148

Table B-6
Town of Orangeville
Town-Wide Wastewater Development Charges Reserve Fund Continuity (inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	2,375,971	1,351,080	1,170,193	1,073,837	825,914	860,977	276,299	224,173	87,861	166,591	142,404
Development Charge	234,628	1,047,215	1,078,622	1,110,970	1,144,275	1,178,585	1,213,895	1,250,301	1,287,844	1,326,490	1,366,278
Transfer to Capital	183,233	172,303	140,076	341,917	114,710	781,083	305,603	408,864	224,990	344,679	477,184
Transfer to Operating	1,102,778	1,078,743	1,055,957	1,033,171	1,011,384	987,599	964,812	979,472	987,391	1,008,790	1,023,449
Closing Balance	**1,324,588**	**1,147,248**	**1,052,782**	**809,719**	**844,095**	**270,881**	**219,778**	**86,139**	**163,325**	**139,612**	**8,050**
Interest	26,492	22,945	21,056	16,194	16,882	5,418	4,396	1,723	3,266	2,792	161

Table B-7
Town of Orangeville
Area-Specific Wastewater Development Charges Reserve Fund Continuity (inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	-	-	-	-	-	-	-	-	-	-	-
Development Charge	-	-	548,738	-	-	-	525,576	-	-	-	-
Transfer to Capital	-	-	548,738	-	-	-	525,576	-	-	-	-
Transfer to Operating	-										
Closing Balance	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Interest	-	-	-	-	-	-	-	-	-	-	-

Table B-8
Town of Orangeville
Canada Community-Building Fund (Wastewater Portion Only) Reserve Fund Continuity (inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Opening Balance	-	-	-	-	-	-	-	-	-	-	-
Canada Community-Building Fund (Wastewater Portion)	-	-	-	-	780,000	-	300,000	472,000	-	-	-
Transfer to Capital	-	-	-	-	780,000	-	300,000	472,000	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-
Closing Balance	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Table B-9
Town of Orangeville
Operating Budget Forecast – Wastewater (inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Operating Costs											
Salaries - FT	846,953	947,411	971,096	995,373	1,020,257	1,045,765	1,071,909	1,098,707	1,126,174	1,154,329	1,183,187
Salaries - PT	-	3,107	3,185	3,264	3,345	3,429	3,515	3,603	3,693	3,785	3,880
Standby Pay	12,525	16,037	16,037	16,037	16,037	16,037	16,438	16,849	17,270	17,702	18,144
OT - Salaries FT	43,000	44,204	44,204	44,204	44,204	44,204	45,309	46,442	47,603	48,793	50,013
Distributed Labour	4,200	4,318	4,318	4,318	4,318	4,318	4,426	4,536	4,650	4,766	4,885
Emp Benefits - FT	273,120	329,738	355,396	376,919	400,739	425,842	436,488	447,400	458,585	470,050	481,801
Emp Benefits - PT	-	390	403	417	432	448	459	471	483	495	507
Memberships/Subscriptions	800	800	800	800	800	800	816	832	849	866	883
Professional Assoc Fees	1,000	1,250	1,500	1,500	1,500	1,500	1,530	1,561	1,592	1,624	1,656
Workshops/Training Courses	15,010	27,130	27,500	28,100	28,700	29,300	29,886	30,484	31,093	31,715	32,350
Conferences	1,375	11,625	11,750	11,750	11,750	11,750	11,985	12,225	12,469	12,719	12,973
Mileage	500	900	900	900	900	900	918	936	955	974	994
Advertising & Promotion	200	200	200	200	200	200	204	208	212	216	221
Water and Sewer Reading / Billing	219,000	219,000	219,000	219,000	219,000	219,000	223,380	227,848	232,405	237,053	241,794
Prof Fees - Engineering	155,600	185,600	185,600	190,600	190,600	196,000	199,920	203,918	207,997	212,157	216,400
Prof Fees - Consulting	7,400	8,600	8,800	10,000	10,000	10,000	10,200	10,404	10,612	10,824	11,041
Prof Fees - Legal	7,500	7,500	7,500	10,000	10,000	10,000	10,200	10,404	10,612	10,824	11,041
Insurance	183,337	200,899	220,990	243,088	267,398	294,137	323,551	355,906	391,496	430,646	473,711
Video Production	1,500	1,500	1,500	1,500	1,500	1,500	1,530	1,561	1,592	1,624	1,656
Computer Operation & Supplies	27,182	27,569	27,972	28,390	28,826	29,279	29,865	30,462	31,071	31,693	32,326
After Hours Dispatch	7,150	7,150	7,150	7,150	7,150	7,150	7,293	7,439	7,588	7,739	7,894
Inter-Departmental	437,064	380,064	380,064	380,064	380,064	380,064	387,665	395,419	403,327	411,393	419,621
Inter-Departmental - IT	114,635	127,212	129,742	132,536	134,087	135,669	138,382	141,150	143,973	146,852	149,790
CVC Contribution	123,835	125,693	130,092	134,645	139,358	144,236	149,284	154,509	159,917	165,514	171,307
CVC Contribution - Special	29,252	68,007	70,387	72,851	75,401	78,040	80,771	83,598	86,524	89,552	92,687
Uniforms	5,300	5,550	6,800	6,800	6,800	6,800	6,936	7,075	7,216	7,361	7,508
Outside Srv	380,000	395,000	402,000	404,500	411,500	429,000	437,580	446,332	455,258	464,363	473,651
Outside Laboratory Srv	29,000	29,000	29,500	29,500	29,500	29,500	30,090	30,692	31,306	31,932	32,570
Telephone/Communications	5,020	7,920	7,920	7,920	7,920	7,920	8,712	9,583	10,542	11,596	12,755
Hydro	449,835	517,310	569,041	625,945	688,540	757,394	833,133	916,447	1,008,091	1,108,901	1,219,791
Mtc Equip	71,000	75,000	77,000	79,000	81,000	81,000	82,620	84,272	85,958	87,677	89,431
Materials & Supplies	41,000	42,000	43,000	43,500	43,500	44,000	44,880	45,778	46,693	47,627	48,580
Software Agreemts	120,680	113,180	120,680	125,680	125,680	125,680	128,194	130,757	133,373	136,040	138,761
Server Mtc	5,000	5,000	5,000	5,000	5,000	5,000	5,100	5,202	5,306	5,412	5,520
SCADA Mtc	51,168	53,214	55,342	57,553	59,854	60,964	62,183	63,427	64,695	65,989	67,309
Srv Agreemt/Equip Repair	2,200	2,200	2,200	2,200	2,200	2,200	2,244	2,289	2,335	2,381	2,429
Small Equip	46,000	47,000	48,000	49,000	50,000	51,000	52,020	53,060	54,122	55,204	56,308
Marsh Monitoring Survey	95,000	70,000	71,400	72,828	74,285	75,770	77,286	78,831	80,408	82,016	83,656
Biosolids Disposal	742,900	792,900	808,758	824,933	841,432	858,260	875,426	892,934	910,793	929,009	947,589
Chemicals	312,000	323,500	327,000	330,000	333,000	336,000	369,600	406,560	447,216	491,938	541,131

Table B-9 (continued)
Town of Orangeville
Operating Budget Forecast – Wastewater (inflated $)

Description	Budget 2024	Forecast 2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Expenditures											
Operating Costs											
Natural Gas	80,359	84,377	88,596	93,026	97,677	102,561	112,817	124,099	136,509	150,160	165,176
Mtc Facilities	5,000	6,000	6,000	6,000	6,000	6,000	6,120	6,242	6,367	6,495	6,624
Janitorial Srv	16,500	16,500	16,500	17,000	17,000	17,000	17,340	17,687	18,041	18,401	18,769
Payment in-lieu of Tax	35,993	35,993	35,993	35,993	35,993	35,993	36,713	37,447	38,196	38,960	39,739
Fuel	4,779	5,093	5,246	5,404	5,566	5,733	6,306	6,937	7,631	8,394	9,233
Vehicle Licenses	1,060	1,081	1,103	1,125	1,148	1,171	1,194	1,218	1,243	1,268	1,293
Leased Vehicle Exp	29,794	30,390	30,998	15,025	15,325	15,712	-	-	-	-	-
Vehicle Mtc Costs/Parts	8,323	8,429	8,547	8,668	9,042	9,242	9,427	9,615	9,808	10,004	10,204
Other Staffing Costs	126,484	256,441	262,852	269,423	276,159	495,233	507,614	520,304	533,312	546,645	560,311
Sub Total Operating	**5,176,533**	**5,668,981**	**5,855,562**	**6,029,630**	**6,220,685**	**6,648,701**	**6,899,459**	**7,183,659**	**7,487,158**	**7,811,675**	**8,159,098**
Capital-Related											
Existing Debt (Principal) - Growth Related	640,062	640,062	640,062	640,062	640,062	640,062	640,062	640,062	640,062	640,062	640,062
Existing Debt (Interest) - Growth Related	462,716	438,681	415,895	393,109	371,322	347,537	324,750	301,964	279,927	256,392	233,605
New Growth Related Debt (Principal)		-	-	-	-	-	-	16,445	30,292	51,299	69,899
New Growth Related Debt (Interest)		-	-	-	-	-	-	21,000	37,109	61,037	79,882
Existing Debt (Principal) - Non-Growth Related	151,578	153,854	150,234	87,281	87,281	87,281	87,281	87,281	87,281	87,281	87,281
Existing Debt (Interest) - Non-Growth Related	68,719	63,165	57,781	53,606	50,635	47,391	44,284	41,177	38,172	34,963	31,855
New Non-Growth Related Debt (Principal)		-	-	121,696	281,394	293,212	343,351	416,975	434,488	452,737	471,752
New Non-Growth Related Debt (Interest)		-	-	155,400	347,689	335,870	371,855	433,035	415,522	397,273	378,258
Transfer to Canada Community-Building Fund (Wastewater Portion) Reserve Fund	-	-	-	-	780,000	-	300,000	472,000	-	-	-
Transfer to Capital Reserve Fund	1,440,551	1,216,679	1,596,066	1,766,008	1,783,815	1,983,613	2,350,937	2,724,029	3,313,545	3,998,443	4,794,072
Sub Total Capital Related	**2,763,626**	**2,512,441**	**2,860,038**	**3,217,162**	**4,342,197**	**3,734,967**	**4,462,521**	**5,153,969**	**5,276,399**	**5,979,486**	**6,786,668**
Total Expenditures	**7,940,159**	**8,181,422**	**8,715,600**	**9,246,792**	**10,562,882**	**10,383,668**	**11,361,980**	**12,337,628**	**12,763,556**	**13,791,162**	**14,945,766**
Revenues											
Base Charge	1,539,195	1,781,718	2,068,820	2,398,880	2,781,411	3,224,725	3,738,453	4,333,742	5,023,503	5,822,683	6,748,588
Canada Community-Building Fund (Wastewater Portion) Receipts	-	-	-	-	780,000	-	300,000	472,000	-	-	-
Contributions from Development Charges Reserve Fund	1,102,778	1,078,743	1,055,957	1,033,171	1,011,384	987,599	964,812	979,472	987,391	1,008,790	1,023,449
Contributions from Reserves / Reserve Funds	220,297	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**2,862,270**	**2,860,462**	**3,124,777**	**3,432,051**	**4,572,794**	**4,212,324**	**5,003,265**	**5,785,214**	**6,010,894**	**6,831,473**	**7,772,037**
Wastewater Billing Recovery - Total	**5,077,889**	**5,320,960**	**5,590,823**	**5,814,740**	**5,990,088**	**6,171,344**	**6,358,715**	**6,552,414**	**6,752,663**	**6,959,689**	**7,173,728**

Table B-10
Town of Orangeville
Wastewater Rate Calculation (inflated $)

Description	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Total Wastewater Billing Recovery	**5,077,889**	**5,320,960**	**5,590,823**	**5,814,740**	**5,990,088**	**6,171,344**	**6,358,715**	**6,552,414**	**6,752,663**	**6,959,689**	**7,173,728**
Increasing Block Structure -											
Volume Forecast By Block (m3)											
Block 1	1,351,571	1,346,146	1,347,967	1,348,098	1,348,501	1,349,173	1,350,110	1,351,309	1,352,764	1,354,473	1,356,433
Block 2	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003	334,003
Total Volume - Residential	**1,685,575**	**1,680,150**	**1,681,971**	**1,682,101**	**1,682,505**	**1,683,177**	**1,684,114**	**1,685,312**	**1,686,768**	**1,688,477**	**1,690,436**
Increasing Block Rates ($/m ^{3}) -											
Block 1	**1.90**	**2.00**	**2.09**	**2.18**	**2.24**	**2.31**	**2.38**	**2.45**	**2.53**	**2.60**	**2.68**
Block 2	**2.57**	**2.69**	**2.83**	**2.94**	**3.03**	**3.12**	**3.21**	**3.31**	**3.41**	**3.51**	**3.62**
Increasing Block Structure - Non-Residential											
Volume Forecast By Block (m3)											
Block 1	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132	519,132
Block 2	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825	230,825
Total Volume - Non-Residential	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**	**749,957**
Increasing Block Rates ($/m ^{3}) - Non-Residential											
Block 1	**1.99**	**2.09**	**2.19**	**2.28**	**2.35**	**2.42**	**2.49**	**2.57**	**2.65**	**2.72**	**2.81**
Block 2	**2.69**	**2.82**	**2.96**	**3.08**	**3.17**	**3.27**	**3.37**	**3.47**	**3.57**	**3.68**	**3.79**
Flat Rate (Unmetered)											
Annual Charge	$612.58	725.85	779.41	832.42	884.79	942.84	1,007.36	1,079.25	1,159.55	1,249.44	1,350.30

Table B-11
Town of Orangeville
Wastewater Rate Forecast

Meter Size	Monthly Block 1 Volume (m3)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Metered Customers												
Base Charge by Meter Size												
5/8" to 3/4"	<= 20	$12.51	$14.39	$16.54	$19.03	$21.88	$25.16	$28.94	$33.28	$38.27	$44.01	$50.61
1"	<= 100	$16.69	$19.19	$22.07	$25.38	$29.19	$33.57	$38.60	$44.40	$51.06	$58.71	$67.52
1 ½"	<= 500	$25.03	$28.78	$33.10	$38.07	$43.78	$50.34	$57.90	$66.58	$76.57	$88.05	$101.26
2"	<= 1,000	$37.54	$43.17	$49.65	$57.09	$65.66	$75.51	$86.83	$99.86	$114.84	$132.06	$151.87
3"	<= 3,000	$43.80	$50.37	$57.93	$66.61	$76.61	$88.10	$101.31	$116.51	$133.99	$154.08	$177.20
4" and Larger	<= 6,000	$62.57	$71.96	$82.75	$95.16	$109.44	$125.85	$144.73	$166.44	$191.40	$220.11	$253.13
Volumetric Rate (per m^3)												
Residential												
Block 1		$1.90	$2.00	$2.09	$2.18	$2.24	$2.31	$2.38	$2.45	$2.53	$2.60	$2.68
Block 2		$2.57	$2.69	$2.83	$2.94	$3.03	$3.12	$3.21	$3.31	$3.41	$3.51	$3.62
Non-Residential												
Block 1		$1.99	$2.09	$2.19	$2.28	$2.35	$2.42	$2.49	$2.57	$2.65	$2.72	$2.81
Block 2		$2.69	$2.82	$2.96	$3.08	$3.17	$3.27	$3.37	$3.47	$3.57	$3.68	$3.79
Unmetered Customers												
Compliant		$612.58	$725.85	$779.41	$832.42	$884.79	$942.84	$1,007.36	$1,079.25	$1,159.55	$1,249.44	$1,350.30
Non-Compliant		$1,837.74	$2,177.55	$2,338.22	$2,497.27	$2,654.38	$2,828.53	$3,022.09	$3,237.76	$3,478.65	$3,748.32	$4,050.89