



Water and Wastewater Ontario Regulation 453/07 Financial Plans

Municipality of Thames Centre

Financial Plan #059-301A

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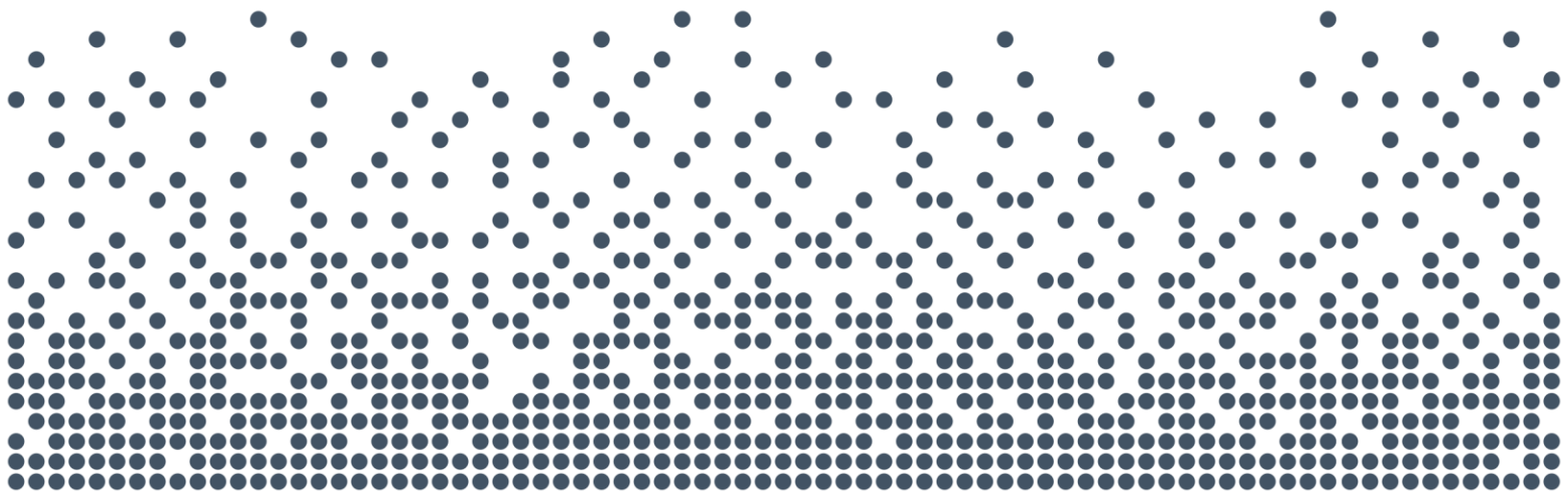
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List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
MECP	Ministry of the Environment, Conservation and Parks
MMAH	Ministry of Municipal Affairs and Housing
O. Reg.	Ontario Regulation
PSAB	Public Sector Accounting Board
S.D.W.A.	Safe Drinking Water Act
T.C.A.	Tangible Capital Assets
W.O.A.	Water Opportunities Act



Report



Chapter 1

Introduction



1. Introduction

1.1 Study Purpose

The Municipality of Thames Centre (the Municipality) retained Watson & Associates Economists Ltd. (Watson) to prepare a water financial plan as part of the five submission requirements for the purposes of obtaining a municipal drinking water license as per the *Safe Drinking Water Act, 2002*. In general, a financial plan requires an in-depth analysis of capital and operating needs, a review of current and future demand versus supply, and consideration of available funding sources. The detailed financial planning and forecasting regarding the Municipality's water systems have been completed based on the Municipality's 2020 Water and Wastewater Rate Study, dated May 15, 2020 (2020 Rate Study). The objective of the report provided herein is to convert the findings of the 2020 Rate Study into the prescribed reporting requirements for a financial plan as defined by Ontario Regulation 453/07 (O. Reg. 453/07).

1.2 Background

The Safe Drinking Water Act (S.D.W.A.), "the Act," was passed in December 2002 in order to address the recommendations made by the Walkerton Inquiry Part II report. Note that S.D.W.A. has been amended several times since 2002. One of the main requirements of the Act is the mandatory licensing of municipal water providers. Section 31 (1) specifically states:

"No person shall,

- a) establish a new municipal drinking water system or replace or carry out an alteration to a municipal drinking water system except under the authority of and in accordance with an approval under this Part or a drinking water works permit; or
- b) use or operate a municipal drinking water system that was established before or after this section comes into force except under the authority of and in accordance with an approval under this Part or municipal drinking water licence."

In order to become licensed, a municipality must satisfy five key requirements as per section 44(1):



1. Obtain a drinking water works permit.
2. Acceptance of the operational plan for the system based on the Drinking Water Quality Management Standard.
3. Accreditation of the Operating Authority.
4. Prepare and provide a financial plan.
5. Obtain permit to take water.

For licence renewals, the application must be accompanied by proof that the financial plan meets the prescribed requirements as per the Act s. 32 (5) 2.ii.

The preparation of a financial plan is a key requirement for licensing and as such, must be undertaken by all municipal water providers.

1.2.1 Financial Plan Defined

Subsection 30 of the Act provides the following definition of financial plans:

"financial plans" means financial plans that satisfy the requirements prescribed by the Minister. 2017, c. 2, Sched. 11, s. 6 (3).

As of time of writing, the Sustainable Water and Sewage Systems Act, 2002 has been repealed (see section 2.2 of this report); however, the standards that it directs underpin the specific requirements of s. 30 as they are outlined in O. Reg. 453/07 and which will be examined in detail below.

1.2.2 Financial Plan Requirements – Existing System

The O. Reg. 453/07 provides details with regards to the financial plans for existing water systems. The requirements for existing systems are summarized as follows:

- Financial plans must be approved by resolution of Council (or governing body);
- Financial plans must include a statement that the financial impacts have been considered and apply for a minimum six-year period (commencing in the year of licence expiry);
- Financial plans must include detail regarding proposed or projected financial operations itemized by total revenues, total expenses, annual surplus/deficit and



accumulated surplus/deficit (i.e. the components of a “Statement of Operations” as per the PSAB) for each year in which the financial plans apply;

- Financial plans must present financial position itemized by total financial assets, total liabilities, net debt, non-financial assets, and tangible capital assets (i.e. the components of a “Statement of Financial Position” as per PSAB) for each year in which the financial plans apply;
- Gross cash receipts/payments itemized by operating transactions, capital transactions, investing transactions and financial transactions (i.e. the components of a “Statement of Cash Flow” as per PSAB) for each year in which the financial plans apply;
- Financial plans applicable to two or more solely owned drinking water systems can be prepared as if they are for one drinking water system;
- Financial plans are to be made available to the public upon request and at no charge;
- If a website is maintained, financial plans are to be made available to the public through publication on the Internet at no charge;
- Notice of the availability of the financial plans is to be given to the public;
- Financial plan is to be submitted to the Ministry of Municipal Affairs and Housing; and
- The resolution of Council approving the Financial Plan be submitted to the Ministry of the Environment, Conservation and Parks (MECP).

1.2.3 Financial Plan Requirements – General

Given that the requirements for a financial plan is legislated under the Act, a financial plan is mandatory for water systems. The financial plans shall be for a forecast period of at least six years but longer planning horizons are encouraged. The ten-year forecast goes above and beyond the minimum requirement. The financial plan is to be completed and approved by resolution of Council or the governing body in accordance with subsection 3(1)1 of O. Reg. 453/07. Confirmation of approval of the financial plan must be submitted at the time of municipal drinking water license renewal (i.e. six months prior to license expiry).

A copy of the financial plan will be submitted to the Ministry of Municipal Affairs and Housing (MMAH) and not the MECP; however, MECP may request it in the course of review of the licence renewal. Financial plans may be amended and additional



information beyond what is prescribed can be included if deemed necessary. The financial plan must contain on the front page, the appropriate financial plan number as set out in Schedule A of the Municipal Drinking Water Licence.

1.2.4 Public Sector Accounting Board (PSAB) Requirements

The components of the financial plans indicated by the regulation are consistent with the requirements for financial statement presentation as set out in section PS1200 of the Canadian Institute of Chartered Accountants Public Sector Accounting Handbook:

“Financial statements should include a Statement of Financial Position, a Statement of Operations, a Statement of Change in Net Debt, and a Statement of Cash Flow.”

The format required is to conform to the requirements of PS1200 and PS3150. The financial statements are to be reported on a full accrual accounting basis. The accrual accounting method recognizes revenues and expenses in the same period as the activities that give rise to them regardless of when they are actually paid for. Since an exchange of cash is not necessary to report a financial transaction, the accrual method is meant to provide a more accurate picture of financial position.

The accounting treatment of tangible capital assets is prescribed under section PS3150. Tangible capital assets are to be capitalized to ensure an inventory of the assets owned are recorded and to account for their ability to provide future benefits.

The Statement of Cash Flow and the Statement of Change in Net Financial Assets/Debt are required statements. The Statement of Change in Net Financial Assets/Debt reports on whether enough revenue was generated in a period to cover the expenses in the period and whether sufficient resources have been generated to support current and future activities. The Statement of Cash Flow reports on how activities were financed for a given period providing a measure of the changes in cash for that period.

1.2.5 The Municipality's Financial Plan

The Municipality is currently in the process of renewing the drinking water licenses (059-101 for the Thorndale system and 059-102 for the Dorchester system) and the previous version of the financial plan no longer meets the requirements as it must apply to a period of a least six years beginning in the year that the licenses would otherwise expire. Although the Act requires at least six years to be included, this financial plan



provides for a ten-year forecast period 2020 to 2029. This Financial Plan #059-301A is a combined financial plan for both water licences. The Municipality's application renewal deadline is June 10, 2020 for both systems.



Chapter 2

Sustainable Financial Planning



2. Sustainable Financial Planning

2.1 Introduction

In general, sustainability refers to the ability to maintain a certain position over time. While the Act requires a declaration of the financial plan's sustainability, it does not give a clear definition of what would be considered sustainable. Instead, MECP released a guideline ("Towards Financially Sustainable Drinking-Water and Wastewater Systems") that provides possible approaches to achieving sustainability. The Province's Principles of Financially Sustainable Water and Wastewater Services are provided below:

- Principle #1: Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system(s) to which they relate.
- Principle #2: An integrated approach to planning among water, wastewater, and storm water systems is desirable given the inherent relationship among these services.
- Principle #3: Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services.
- Principle #4: Life-cycle 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.

2.2 Sustainable Water and Sewage Systems Act

The *Sustainable Water and Sewage Systems Act* (S.W.S.S.A.) was passed on December 13, 2002. The intent of the Act was to introduce the requirement for municipalities to undertake an assessment of the “full cost” of providing their water and the wastewater services. In total, there were 40 areas within the Act to which the Minister could have made Regulations. It is noted that, the regulations, which accompany the Act, were not issued and the Act was repealed on December 31, 2012.

2.3 Water Opportunities Act, 2010

Since the passage of the *Safe Drinking Water Act*, changes and refinements to the legislation have been introduced, including the *Water Opportunities Act* (W.O.A). W.O.A. was introduced into legislation on May 18, 2010 and received Royal Assent on November 29, 2010, as the *Water Opportunities Act*.

The purposes of the *Water Opportunities Act* are to: foster innovative water, wastewater and storm water technologies, services, and practices; create opportunities for economic development and clean-technology jobs; and conserve and sustain water resources. To achieve this W.O.A. provides for the creation of performance targets (financial, operational and maintenance related), which will vary by service type and location and the required submission of conservation and sustainability plans for water, wastewater, and stormwater.

The sustainability plan in W.O.A. expands on interim legislation for financial plans included in O. Reg. 453/07, to include the following:

- an asset management plan for the physical infrastructure;
- financial plan;
- water conservation plan (for water service only);
- a risk assessment;
- a strategy for maintaining and improving the services; and



- additional information considered advisable.

Where a Board has jurisdiction over a service, the plan (and any plan amendments) must be approved by the municipality in which the municipal service is provided before submission to the Minister. The Minister may also direct preparation of joint or partially joint plans.

Regulations (still forthcoming) will prescribe details in regard to any time periods or time limits, contents of the plans, identifying which portions of the plan will require certification, the public consultation process (if required), limitations updates and refinements.

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

On June 4, 2015, the Province passed the Infrastructure for Jobs and Prosperity Act (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 588/17 under I.J.P.A. which has 3 phases that municipalities must meet.

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, 2021):
 - For core assets – Municipalities must have the following:
 - Inventory of assets;
 - Current levels of service measured by standard metrics; and
 - Costs to maintain levels of service.
- Phase 2 – Asset Management Plan (by July 1, 2023):
 - Same steps as Phase 1 but for all assets.
- Phase 3 – Asset Management Plan (by July 1, 2024):
 - Builds on Phase 1 and 2 by adding:
 - Proposed levels of service; and
 - Lifecycle management and Financial strategy.



In relation to water (which is considered a core asset), municipalities will need to have an asset management plan that addresses the related infrastructure by July 1, 2021 (Phase 1). O. Reg. 588/17 specifies that the municipality's asset management plan must include the following for each asset category:

- the current levels of service being provided;
 - determined in accordance with the following qualitative descriptions and technical metrics and based on data from at most the two calendar years prior to the year in which all information required under this section is included in the asset management plan.
- the current performance of each asset category;
- 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.

Upon completion of the asset management plan for water, the Municipality will need to consider the impacts during the annual budget and forecast process.

2.5 Water Forecast

As noted earlier, the Municipality has undertaken a 2020 Rate Study in May of 2020. The 2020 Rate Study process is designed to address “full cost” principles and reflect the guiding principles toward sustainable financial planning.

As a result of employing this process, the 2020 water budget and forecast (2021 to 2029), included in the 2020 Rate Study, provides the basis for a sound financial plan for the Municipality's water system by assessing:

- A detailed assessment of current and future capital needs including an analysis of potential funding sources;



- An analysis of operating costs in order to determine how they will be impacted by evolving infrastructure needs;
- A review and recommendation on rates that ensure revenues are equitable and sufficient to meet system needs; and
- A public process that involved consultation with the main stakeholders including the Municipality's staff, Council, the general public (specifically the users of the system) and others with the aim of gaining input and collaboration on the sustainability of the water systems.



Chapter 3

Approach



3. Approach

3.1 Overview

The 2020 Rate Study (along with additional detailed information provided by Municipal Staff) has been used as a starting point to prepare the water financial plan. The Water forecast is prepared on a modified cash basis; therefore, a conversion is required in order to present a full accrual financial plan for the purposes of this report. The conversion process used will help to establish the structure of the financial plan along with the opening balances that will underpin the forecast. This chapter outlines the conversion process utilized and summarizes the adjustments made to prepare the water financial plan.

3.2 Conversion Process

The conversion from the existing modified cash basis found in the 2020 Rate Study to the full accrual reporting format required under O. Reg. 453/07 can be summarized in the following steps:

1. Calculate Tangible Capital Asset Balances
2. Convert Statement of Operations
3. Convert Statement of Financial Position
4. Convert Statement of Cash Flow and Net Assets/Debt
5. Verification and Note Preparation

3.2.1 Calculate Tangible Capital Asset Balances

In calculating tangible capital asset balances, existing and future purchased, developed, and/or contributed assets will need to be considered. For existing water assets, an inventory has already been compiled and summarized by the Municipality for the purposes of their annual PSAB 3150 compliance process. As required, for PSAB 3150 reporting purposes, the asset inventory listing included historical cost (which is the original cost to purchase, develop, or construct each asset) along with an estimated



useful life for each asset and any anticipated salvage value is recorded. The following calculations are made to determine net book value:

- Accumulated amortization up to the year prior to the first forecast year.
- Amortization expense on existing assets for each year of the forecast period.
- Acquisition of new assets for each year of the forecast period.
- Disposals and related gains or losses for each year of forecast period.

Future water capital needs have also been determined and summarized within the 2020 Rate Study. These estimates, however, only represent future assets that the Municipality anticipates purchasing or constructing without consideration for future assets that are contributed by developers and other parties (at no or partial cost to the Municipality). These contributed assets will form part of the infrastructure going forward in terms of the sustainability of the system and despite their non-monetary nature; future financial plans may need to be adjusted in order to properly account for these transactions. Once the sequence and total asset acquisition has been determined for the forecast period, annual amortization of these assets for each year is calculated in a similar manner as that used for existing assets.

Once the historical cost, accumulated amortization, and amortization expenses are calculated as described above, the total net book value of the tangible capital assets can be determined and recorded on the Statement of Financial Position.

3.2.2 Convert Statement of Operations

A wide range of adjustments will be considered, dependent on the size and complexity of the systems, in order to convert from the cash to full accrual basis (see Figure 3-1). For example, debt repayment costs relating to the principal payment portion only needs to be removed under the accrual basis, as they no longer qualify as an expense for reporting purposes. Principal payments are reported as a decrease in debt liability on the Statement of Financial Position. Transfers to and from reserves are removed as these transactions are represented by changes in cash and accumulated surplus. Finally, expenses relating to tangible capital assets, such as amortization, write-offs, and (gain)/loss on disposal of assets are reported on the Statement of Operations in order to capture the allocation of the cost of these assets to operating activities over their useful lives and therefore are added in under the accrual basis.



Table 3-1
Conversion Adjustments
Statement of Operations

Modified Cash Basis	Budget 2020	Adjustments		Full Accrual Budget 2020	Accrual Basis
		DR	CR		
Revenues					Revenues
Base Charge Revenue	947,040			947,040	Base Charge Revenue
Rate Based Revenue	666,774			666,774	Rate Based Revenue
Transfers from Reserves	34,000	34,000			
Other Revenue	58,029		6,879	64,907	Other Revenue
Total Revenues	1,705,843			1,678,721	Total Revenues
Expenditures					Expenses
Operating	1,258,449	287,600		1,546,049	Operating Expenses
Capital					
Transfers to Reserves	438,404		438,404		
Transfers to Capital	-		-		
Debt Repayment (Principal & Interest)	8,989		6,030	2,959	Interest on Debt
		486,931		486,931	Amortization
Total Expenditures	1,705,843			2,035,939	Total Expenses
Net Expenditures	-			(357,218)	Annual Surplus/(Deficit)
Increase (decrease) in amounts to be recovered	-			27,648,010	Accumulated Surplus/(Deficit), beginning of year
Change in Fund Balances	-	-	357,218	27,290,792	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		808,531	808,531		

Note: The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)



3.2.3 Convert Statement of Financial Position

Once the Statement of Operations has been converted and the net book value of tangible capital assets has been recorded, balances for the remaining items on the Statement of Financial Position are determined and recorded (see Figure 3-2). The opening/actual balances for the remaining accounts such as accounts receivable, inventory, accounts payable, outstanding debt (principal only), are recorded and classified according to the structure of the Statement of Financial Position as outlined in PS1200.

It is acknowledged that some of the balances required on the Statement of Financial Position will be consolidated across the Municipality and as such, will be difficult to isolate the information that is relevant to water. An example of this is accounts receivable, which may be administered centrally by the Finance Department. Ontario Regulation 453/07 allows for the exclusion of these numbers if they are not known at the time of preparing the financial plan. Please refer to the Financial Plan Notes in Chapter 4 for more details.

3.2.4 Convert Statement of Cash Flow and Net Financial Assets/Debt

The Statement of Cash Flow summarizes how the Municipality financed its activities or in other words, how the costs of providing services were recovered. The statement is derived using comparative Statement of Financial Position, the current Statement of Operations and other available transaction data.

The Statement of Change in Net Financial Assets/Debt is a statement which reconciles the difference between the surplus or deficit from current operations and the change in net financial assets/debt for the year. This is significant, as net debt provides an indication of future revenue requirements. In order to complete the Statement of Net Financial Assets/Debt, information regarding any gains/losses on disposals of assets, asset write-downs, acquisition/use of supplies inventory, and the acquisition use of prepaid expenses is necessary, (if applicable). Although the Statement of Change in Net Financial Assets/Debt is not required under O. Reg. 453/07, it has been included in this report as a further indicator of financial viability.



Table 3-2
Conversion Adjustments
Statement of Financial Position

Modified Cash Basis	Budget 2020	Adjustments		Full Accrual Budget 2020	Accrual Basis
		DR	CR		
ASSETS					ASSETS
Financial Assets					Financial Assets
Cash	2,317,220			2,317,220	Cash
Accounts Receivable	253,446			253,446	Accounts Receivable
Total Financial Assets	2,570,666			2,570,666	Total Financial Assets
Non-Financial Assets					
Inventory of Supplies	-		-		
Prepaid Expenses	-		-		
Total Non-Financial Assets	-				
LIABILITIES					LIABILITIES
Accounts Payable & Accrued Liabilities	55,993			55,993	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	2,301,917			2,301,917	Debt (Principal only)
Deferred Revenue	1,820,432			1,820,432	Deferred Revenue
Other	-			-	Other
Total Liabilities	4,178,342			4,178,342	Total Liabilities
Net Assets/(Debt)	(1,607,676)			(1,607,676)	Net Financial Assets/(Debt)
		29,186,068	287,600	28,898,468	Non-Financial Assets
		-		-	Tangible Capital Assets
		-		-	Inventory of Supplies
				-	Prepaid Expenses
				28,898,468	Total Non-Financial Assets
Municipal Position					
Water Reserves	694,241	694,241	-		
Gas Tax Reserve Fund	-	-	-		
Development Charge Reserve Fund	1,820,432	1,820,432	-		
Amounts to be Recovered	(4,122,349)	-	4,122,349		
Total Municipal Position	(1,607,676)		27,290,792	27,290,792	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		31,700,741	31,700,741		

Note: The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)



3.2.5 Verification and Note Preparation

The final step in the conversion process is to ensure that all the statements created by the previous steps are in balance. The Statement of Financial Position summarizes the resources and obligations of the Municipality at a set point in time. The Statement of Operations summarizes how these resources and obligations changed over the reporting period. To this end, the accumulated surplus/deficit reported on the Statement of Financial Position should equal the accumulated surplus/deficit reported on the Statement of Operations.

The Statement of Change in Net Financial Assets/Debt and the Statement of Financial Position are also linked in terms of reporting on net financial assets/debt. On the Statement of Financial Position, net financial assets/debt is equal to the difference between financial assets and liabilities and should equal net financial assets/debt as calculated on the Statement of Net Financial Assets/Debt.

While not part of the financial plan, the accompanying notes are important to summarize the assumptions and estimates made in preparing the financial plan. Some of the significant assumptions that need to be addressed within the financial plan are as follows:

- a) Opening cash balances – Opening cash balances are necessary to complete the Statement of Cash Flows and balance the Statement of Financial Position. Preferably, opening cash balances should be derived from actual information contained within the Municipality's ledgers. It may not be possible, however, to extract this information from the ledgers for water alone; therefore, a reasonable proxy will be needed. One approach is to assume that opening cash balances equal ending reserve and reserve fund balances from the previous year adjusted for accrual-based transactions reflected by accounts receivable/payable balances. The following equation outlines this approach:

$$\begin{array}{l} \text{Ending Reserve/Reserve Fund Balance} \\ \text{Plus: Ending Accounts Payable Balance} \\ \text{Less: Ending Accounts Receivable Balance} \\ \text{Equals: Approximate Ending Cash Balance} \end{array}$$



- b) Amortization Expense – The method and timing of amortization should be based on the Municipality’s amortization policy.
- c) Accumulated Amortization – Will be based on the culmination of accumulated amortization expenses throughout the life of each asset however derived, along with information on construction/acquisition date and useful life obtained from the capital asset listing provided.
- d) Contributed Assets – As noted earlier, contributed assets could represent a significant part of the Municipality’s infrastructure acquisitions. As such, a reasonable estimate of value and timing of acquisition/donation may be required in order to adequately capture these assets. In the case where contributed assets are deemed to be insignificant or unknown, an assumption of “no contributed assets within the forecast period” will be made.
- e) Accumulated Surplus – The magnitude of the surplus in this area may precipitate the need for additional explanation especially in the first year of reporting. This Accumulated Surplus captures the historical infrastructure investment which has not been reported in the past but has accumulated to significant levels. It also includes all water reserve and reserve fund balances.
- f) Other Revenues – Will represent the recognition of revenues previously deferred (i.e. development charge revenues) and/or accrued revenues (developer contributions), and/or other minor miscellaneous revenues.



Chapter 4

Financial Plan



4. Financial Plan

4.1 Introduction

The following tables provide the complete financial plan for the Municipality's water systems. A brief description and analysis of each table is provided below. It is important to note that the financial plan that follows is a forward look at the financial position of the Municipality's water systems. It is not an audited document¹ and it contains various estimates as detailed in the "Notes to the Financial Plan" section below.

4.2 Water Financial Plan

4.2.1 *Statement of Financial Position (Table 4-1)*

The Statement of Financial Position provides information that describes the assets, liabilities, and accumulated surplus of the Municipality's water systems. The first important indicator is net financial assets/(debt), which is defined as the difference between financial assets and liabilities. This indicator provides an indication of the system's "future revenue requirement." A net financial asset position is where financial assets are greater than liabilities and implies that the system has the resources to finance future operations. Conversely, a net debt position implies that the future revenues generated by the system will be needed to finance past transactions, as well as future operations. Table 4-1 indicates that in 2020, the Municipality's water system was in a net financial debt position of \$1.6 million. The financial plan forecasts a net financial debt position for each year of the forecast period, increasing to a net financial debt position of \$3.0 million by 2029.

Another important indicator on the Statement of Financial Position is the tangible capital asset balance under section PS3150. As noted earlier, providing this information is a requirement for municipalities as part of PS3150 compliance and is significant from a financial planning perspective for the following reasons:

- Tangible capital assets such as watermains and treatment facilities are imperative to water service delivery.

¹ O. Reg. 453/07 does not require an audited financial plan.



- These assets represent significant economic resources in terms of their historical and replacement costs. Therefore, ongoing capital asset management is essential to managing significant replacements and repairs.
- The annual maintenance required by these assets has an enduring impact on water operational budgets.

In general terms, an increase in the tangible capital asset balance indicates that assets may have been acquired either through purchase by the municipality or donation/contribution by a third party. A decrease in the tangible capital asset balance can indicate a disposal, write down, or use of assets. A use of assets is usually represented by an increase in accumulated amortization due to annual amortization expenses arising as a result of allocating the cost of the asset to operations over the asset's useful life. Table 4-1 shows tangible capital assets net book value is expected to increase over the forecast period by approximately \$13.98 million. This indicates that the Municipality continues to invest in tangible capital assets over the forecast period.

4.2.2 Statement of Operations (Table 4-2)

The Statement of Operations summarizes the revenues and expenses generated by the water system for a given period. The annual surplus/deficit measures whether the revenues generated were sufficient to cover the expenses incurred and in turn, whether net financial assets have been maintained or depleted. Table 4-2 illustrates the ratio of expenses to revenues, although fluctuating to some extent, fluctuating over the forecast period with a decrease from 121% in 2020 to 54% by 2029. As a result, annual surplus/deficit increases from a deficit of \$357,218 to a surplus of over \$1.87 million by 2029. This is due to a general increasing trend in the revenues anticipated based on the rate study. It is important to note that an annual surplus is beneficial to ensure funding is available to non-expense costs such as tangible capital asset acquisitions and reserve/reserve fund transfers.

Another important indicator on this statement is accumulated surplus/deficit. An accumulated surplus indicates that the available net resources are sufficient to provide future capital water services. An accumulated deficit indicates that resources are insufficient to provide future services and that borrowing, or rate increases are required to finance annual deficits. From Table 4-2, the financial plan proposes to add approximately \$9.86 million from a 2020 accumulated surplus of \$27.65 million over the forecast period to \$37.51 million in 2029. The accumulated surplus, as indicated in



Table 4-2, is predominantly made up of reserve and reserve fund balances as well as historical investments in tangible capital assets by the municipality.

4.2.3 Statement of Change in Net Financial Assets/Debt (Table 4-3)

The Statement of Change in Net Financial Assets/Debt indicates whether revenue generated was sufficient to cover operating and non-financial asset costs (i.e. inventory supplies, prepaid expenses, tangible capital assets, etc.) and in so doing, explains the difference between the annual surplus/deficit and the change in net financial assets/debt for the period. Table 4-3 indicates that the forecasted annual surplus/(deficit) does not exceed the forecasted tangible capital asset acquisitions (net of amortization for the year), resulting in a decrease to net financial assets over the forecast period to 2029. This is a result of more significant capital asset acquisitions forecasted between 2020 and 2029 allowing for a long-term plan of funding capital through accumulated surplus (i.e. reserves and reserve funds). This is evidenced by the ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions increasing from 0.05 to 0.79 over the forecast period.¹

4.2.4 Statement of Cash Flow (Table 4-4)

The Statement of Cash Flow summarizes how water systems are expected to generate and use cash resources during the forecast period. The transactions that provide/use cash are classified as operating, capital, investing, and financing activities as shown in Table 4-4. This statement focuses on the cash aspect of these transactions and thus is the link between cash-based and accrual-based reporting. Table 4-4 indicates that cash from operations will be used to fund capital transactions (i.e. tangible capital asset acquisitions) and build internal reserves and reserve funds over the forecast period. The financial plan projects the cash position of the Municipality's water systems to decrease from a balance of \$2.59 million at the beginning of 2020, to a deficit of \$13,043 by the end of 2029. For further discussions, on projected cash balances please refer to the Notes to the Financial Plan.

¹ A desirable ratio is 1:1 or better.



Table 4-1
Statement of Financial Position: Water Services
UNAUDITED: For Financial Planning Purposes Only
2020-2029

	Notes	Forecast									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Financial Assets											
Cash	1	2,317,220	2,069,568	1,673,468	1,920,571	1,526,636	1,292,381	924,546	639,336	227,249	-
Accounts Receivable	1	253,446	356,359	424,451	454,083	473,008	493,629	540,768	559,641	578,606	601,704
Long-term Accounts Receivable	3	-	-	-	-	-	-	-	-	-	366,095
Total Financial Assets		2,570,666	2,425,927	2,097,919	2,374,654	1,999,644	1,786,010	1,465,314	1,198,977	805,855	967,799
Liabilities											
Bank Indebtedness		-	-	-	-	-	-	-	-	-	13,043
Accounts Payable & Accrued Liabilities	1	55,993	55,337	56,653	58,015	59,408	60,845	62,317	63,826	65,383	66,971
Debt (Principal only)	2	2,301,917	5,194,358	5,678,723	5,319,864	4,990,617	6,682,157	5,864,352	5,053,492	4,922,400	3,894,328
Deferred Revenue	3	1,820,432	2,067,848	1,954,938	1,746,951	1,519,361	1,264,158	862,449	457,754	55,623	-
Total Liabilities		4,178,342	7,317,543	7,690,314	7,124,830	6,569,386	8,007,160	6,789,118	5,575,072	5,043,406	3,974,342
Net Financial Assets/(Debt)		(1,607,676)	(4,891,616)	(5,592,395)	(4,750,176)	(4,569,742)	(6,221,150)	(5,323,804)	(4,376,095)	(4,237,551)	(3,006,543)
Non-Financial Assets											
Tangible Capital Assets	4	28,898,468	32,692,284	34,166,501	34,234,470	35,066,894	37,808,521	38,156,557	38,509,703	39,864,845	40,512,156
Total Non-Financial Assets		28,898,468	32,692,284	34,166,501	34,234,470	35,066,894	37,808,521	38,156,557	38,509,703	39,864,845	40,512,156
Accumulated Surplus/(Deficit)	5	27,290,792	27,800,668	28,574,106	29,484,294	30,497,152	31,587,371	32,832,753	34,133,608	35,627,294	37,505,613
Financial Indicators	Total Change	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1) Increase/(Decrease) in Net Financial Assets	(4,123,974)	(2,725,107)	(3,283,940)	(700,779)	842,219	180,434	(1,651,408)	897,346	947,709	138,544	1,231,008
2) Increase/(Decrease) in Tangible Capital Assets	13,981,577	2,367,889	3,793,816	1,474,217	67,969	832,424	2,741,627	348,036	353,146	1,355,142	647,311
3) Increase/(Decrease) in Accumulated Surplus	9,857,603	(357,218)	509,876	773,438	910,188	1,012,858	1,090,219	1,245,382	1,300,855	1,493,686	1,878,319



Table 4-2
Statement of Operations: Water Services
UNAUDITED: For Financial Planning Purposes Only
2020-2029

	Notes	Forecast									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Water Revenue											
Base Charge Revenue		947,040	990,706	1,039,057	1,089,206	1,141,213	1,195,140	1,252,757	1,314,258	1,378,498	1,446,049
Rate Based Revenue		666,774	1,085,530	1,132,645	1,181,437	1,231,961	1,284,273	1,339,876	1,398,939	1,460,497	1,525,038
Earned Development Charges Revenue	3	-	263,742	626,575	727,074	751,915	784,421	988,475	994,934	1,005,863	1,029,231
Other Revenue	6	64,907	58,740	59,693	59,829	60,145	60,911	62,059	61,677	52,678	53,249
Total Revenues		1,678,721	2,398,718	2,857,970	3,057,546	3,185,234	3,324,745	3,643,167	3,769,808	3,897,536	4,053,567
Water Expenses											
Operating Expenses	Sch. 4-1	1,546,049	1,280,225	1,324,300	1,355,800	1,383,900	1,443,100	1,509,700	1,585,000	1,523,200	1,560,300
Interest on Debt	2	2,959	70,133	162,649	177,027	166,100	156,053	206,621	181,899	157,492	153,559
Amortization	4	486,931	538,484	597,583	614,531	622,376	635,373	681,464	702,054	723,158	461,389
Loss on Disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Total Expenses		2,035,939	1,888,842	2,084,532	2,147,358	2,172,376	2,234,526	2,397,785	2,468,953	2,403,850	2,175,248
Annual Surplus/(Deficit)		(357,218)	509,876	773,438	910,188	1,012,858	1,090,219	1,245,382	1,300,855	1,493,686	1,878,319
Accumulated Surplus/(Deficit), beginning of year	5	27,648,010	27,290,792	27,800,668	28,574,106	29,484,294	30,497,152	31,587,371	32,832,753	34,133,608	35,627,294
Accumulated Surplus/(Deficit), end of year		27,290,792	27,800,668	28,574,106	29,484,294	30,497,152	31,587,371	32,832,753	34,133,608	35,627,294	37,505,613
Note 5:											
Accumulated Surplus/(Deficit) Reconciliation:		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Reserve Balances											
Reserves: Development Charges		1,820,432	2,067,848	1,954,938	1,746,951	1,519,361	1,264,158	862,449	457,754	55,623	(366,095)
Reserves: Capital/Other		694,241	302,742	86,328	569,688	420,875	461,007	540,548	677,397	684,849	887,785
Total Reserves Balance		2,514,673	2,370,590	2,041,266	2,316,639	1,940,236	1,725,165	1,402,997	1,135,151	740,472	521,690
Less: Debt Obligations and Deferred Revenue		(4,122,349)	(7,262,206)	(7,633,661)	(7,066,815)	(6,509,978)	(7,946,315)	(6,726,801)	(5,511,246)	(4,978,023)	(3,894,328)
Add: Long-term Accounts Receivable	3	-	-	-	-	-	-	-	-	-	366,095
Add: Tangible Capital Assets	4	28,898,468	32,692,284	34,166,501	34,234,470	35,066,894	37,808,521	38,156,557	38,509,703	39,864,845	40,512,156
Total Ending Balance		27,290,792	27,800,668	28,574,106	29,484,294	30,497,152	31,587,371	32,832,753	34,133,608	35,627,294	37,505,613
Financial Indicators	Total Change	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1) Expense to Revenue Ratio		121%	79%	73%	70%	68%	67%	66%	65%	62%	54%
2) Increase/(Decrease) in Accumulated Surplus	9,857,603	(357,218)	509,876	773,438	910,188	1,012,858	1,090,219	1,245,382	1,300,855	1,493,686	1,878,319



Schedule 4-1
Statement of Operating Expenses: Water Services
UNAUDITED: For Financial Planning Purposes Only
2020-2029

	Notes	Forecast									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Expenses											
65100 - ADVERTISING		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
65150 - BENEFITS		82,433	84,100	85,800	87,500	89,300	91,100	92,900	94,800	96,700	98,600
65290 - CLOTHING ALLOWANCE		2,875	2,900	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700
65410 - CONVENTIONS		14,500	14,800	15,100	15,400	15,700	16,000	16,300	16,600	16,900	17,200
65510 - EMPLOYEE RELATIONS / GIFT & ENTERTAINMENT EXP		500	400	400	400	400	400	400	400	400	400
65530 - EQUIPMENT (NOT CAPITAL)		9,000	9,200	9,400	9,600	9,800	10,000	10,200	10,400	10,600	10,800
65830 - LICENSE FEES & PERMITS		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
65990 - MATERIALS / SUPPLIES		4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800	4,900
66030 - MEMBERSHIPS		750	800	800	800	800	800	800	800	800	800
66100 - OFFICE SUPPLIES		1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
66123 - ONTARIO ONE CALLS		500	500	500	500	500	500	500	500	500	500
66135 - OVERTIME		7,600	7,800	8,000	8,200	8,400	8,600	8,800	9,000	9,200	9,400
66170 - PERSONAL PROTECTIVE EQUIPMENT		500	500	500	500	500	500	500	500	500	500
66240 - POSTAGE		12,046	13,000	13,300	13,600	13,900	14,200	14,500	14,800	15,100	15,400
66290 - PUBLIC RELATIONS / GIFT & ENTERTAINMENT EXP		400	400	400	400	400	400	400	400	400	400
66300 - RADIO / PAGER EXPENSE		750	800	800	800	800	800	800	800	800	800
66435 - STUDIES / ASSESSMENTS / SURVEYS		10,000	10,200	10,400	10,600	10,800	11,000	11,200	11,400	11,600	11,800
66440 - SUB-CONTRACT / CONTRACTED SERVICES		10,000	10,200	10,400	10,600	10,800	11,000	11,200	11,400	11,600	11,800
66510 - TELECOMMUNICATIONS		3,250	3,400	3,600	3,800	4,000	4,200	4,400	4,600	4,800	5,000
66580 - WAGES - REGULAR		310,345	316,600	322,900	329,400	336,000	342,700	349,600	356,600	363,700	371,000
67100 - FACILITY RENTALS		8,264	8,400	8,600	8,800	9,000	9,200	9,400	9,600	9,800	10,000
67891 - INTERDEPARTMENTAL		148,637	151,600	154,600	157,700	160,900	164,100	167,400	170,700	174,100	177,600
66440 - SUB-CONTRACT / CONTRACTED SERVICES		15,000	15,300	15,600	15,900	16,200	16,500	16,800	17,100	17,400	17,700
Hydrant Maintenance:											
65990 - MATERIALS / SUPPLIES		5,000	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300
Water System Operation:											
65990 - MATERIALS / SUPPLIES		10,700	10,900	11,100	11,300	11,500	11,700	11,900	12,100	12,300	12,500
66440 - SUB-CONTRACT / CONTRACTED SERVICES		39,000	14,000	14,300	14,600	14,900	15,200	15,500	15,800	16,100	16,400
Water Meter Installation											
65990 - MATERIALS / SUPPLIES		30,000	30,600	31,200	31,800	32,400	33,000	33,700	34,400	35,100	35,800
Water Tower Operations:											
65200 - BUILDING REPAIRS & MAINTENANCE		11,000	1,000	1,000	1,100	1,100	1,100	1,100	1,100	1,200	1,200
65670 - GENERATOR - SERVICING & FUEL (New Account)		5,000	5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800	5,900
65680 - GROUNDS CARE - EXTERNAL CONTRACTOR		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
65990 - MATERIALS / SUPPLIES		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
66120 - ONTARIO HYDRO		7,441	7,800	8,200	8,600	9,000	9,500	10,000	10,500	11,000	11,600
66390 - SNOW REMOVAL - EXTERNAL CONTRACTOR		200	200	200	200	200	200	200	200	200	200
66470 - TELECOMMUNICATIONS		574	600	600	600	600	600	600	600	600	600
Dorchester Water Treatment Plant:											
65150 - BENEFITS		16,739	13,100	13,400	13,700	14,000	14,300	14,600	14,900	15,200	15,500
65200 - BUILDING REPAIRS & MAINTENANCE		1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
65210 - BUILDING SECURITY		1,500	500	500	500	500	500	500	500	500	500
65260 - CHEMICALS		12,500	13,100	13,800	14,500	15,200	16,000	16,800	17,600	18,500	19,400
65430 - COURIER / SHIPPING		250	200	200	200	200	200	200	200	200	200
65520 - EQUIPMENT LEASE/RENTAL		200	200	200	200	200	200	200	200	200	200
65530 - EQUIPMENT (NOT CAPITAL)		20,000	20,400	20,800	21,200	21,600	22,000	22,400	22,800	23,300	23,800
65670 - GENERATORS - SERVICING & FUEL		2,500	5,000	5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800



Schedule 4-1 (cont'd)
Statement of Operating Expenses: Water Services
UNAUDITED: For Financial Planning Purposes Only
2020-2029

	Notes	Forecast									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
65680 - GROUNDS CARE - EXTERNAL CONTRACTOR		10,500	10,700	10,900	11,100	11,300	11,500	11,700	11,900	12,100	12,300
65728 - INSPECTION / MAINTENANCE FEES CHARGED		10,000	10,200	10,400	10,600	10,800	11,000	11,200	11,400	11,600	11,800
65730 - INSURANCE PREMIUM		11,672	11,900	12,100	12,300	12,500	12,800	13,100	13,400	13,700	14,000
65910 - MAINTENANCE - OTHER EQUIP		1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
65990 - MATERIALS / SUPPLIES		15,000	15,300	15,600	15,900	16,200	16,500	16,800	17,100	17,400	17,700
66080 - MUNICIPAL TAXES		11,630	11,900	12,100	12,300	12,500	12,800	13,100	13,400	13,700	14,000
66120 - ONTARIO HYDRO		106,631	112,000	117,600	123,500	129,700	136,200	143,000	150,200	157,700	165,600
66135 - OVERTIME		6,500	6,600	6,700	6,800	6,900	7,000	7,100	7,200	7,300	7,400
66150 - P & M REPORTING		4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800	4,900
66390 - SNOW REMOVAL - EXTERNAL CONTRACTOR		1,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
66440 - SUB-CONTRACT / CONTRACTED SERVICES		35,000	35,700	36,400	37,100	37,800	38,600	39,400	40,200	41,000	41,800
66470 - TELECOMMUNICATIONS		4,566	4,800	5,000	5,300	5,600	5,900	6,200	6,500	6,800	7,100
66580 - WAGES - REGULAR		60,547	61,800	63,000	64,300	65,600	66,900	68,200	69,600	71,000	72,400
System Sampling:											
65990 - MATERIALS / SUPPLIES		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
66600 - WATER SAMPLING		15,000	15,300	15,600	15,900	16,200	16,500	16,800	17,100	17,400	17,700
Well Maintenance:											
65990 - MATERIALS / SUPPLIES		5,000	5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800	5,900
66440 - SUB-CONTRACT / CONTRACTED SERVICES		35,000	35,700	36,400	37,100	37,800	38,600	39,400	40,200	41,000	41,800
Thorndale Water Treatment Plant:											
65150 - BENEFITS		7,233	13,125	13,400	13,700	14,000	14,300	14,600	14,900	15,200	15,500
65200 - BUILDING REPAIRS & MAINTENANCE		10,000	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
65260 - CHEMICALS		6,500	6,800	7,100	7,500	7,900	8,300	8,700	9,100	9,600	10,100
65530 - EQUIPMENT (NOT CAPITAL)		2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
65670 - GENERATORS - SERVICING & FUEL		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
65680 - GROUNDS CARE - EXTERNAL CONTRACTOR		1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
65728 - INSPECTION / MAINTENANCE FEES CHARGED		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
65730 - INSURANCE PREMIUM		6,823	7,000	7,100	7,200	7,300	7,400	7,500	7,700	7,900	8,100
65910 - MAINTENANCE - OTHER EQUIP		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
65990 - MATERIALS / SUPPLIES		2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
66080 - MUNICIPAL TAXES		2,696	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400	3,500
66120 - ONTARIO HYDRO		15,191	16,000	16,800	17,600	18,500	19,400	20,400	21,400	22,500	23,600
66135 - OVERTIME		5,500	5,600	5,700	5,800	5,900	6,000	6,100	6,200	6,300	6,400
66150 - P & M REPORTING		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
66390 - SNOW REMOVAL - EXTERNAL CONTRACTOR		500	500	500	500	500	500	500	500	500	500
66440 - SUB-CONTRACT / CONTRACTED SERVICES		6,000	4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800
66470 - TELECOMMUNICATIONS		5,022	5,300	5,600	5,900	6,200	6,500	6,800	7,100	7,500	7,900
66580 - WAGES - REGULAR		26,284	26,800	27,300	27,800	28,400	29,000	29,600	30,200	30,800	31,400
System Sampling:											
65990 - MATERIALS / SUPPLIES		300	300	300	300	300	300	300	300	300	300
66600 - WATER SAMPLING		5,200	5,300	5,400	5,500	5,600	5,700	5,800	5,900	6,000	6,100
Well Maintenance:											
65990 - MATERIALS / SUPPLIES		2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
Non TCA - Expenses from Capital Budget	7	287,600	36,500	51,000	51,900	48,700	75,600	109,100	150,500	53,700	55,100
TOTAL OPERATING EXPENSES		1,546,049	1,280,225	1,324,300	1,355,800	1,383,900	1,443,100	1,509,700	1,585,000	1,523,200	1,560,300



Table 4-3
Statement of Changes in Net Financial Assets/Debt: Water Services
UNAUDITED: For Financial Planning Purposes Only
2020-2029

	Notes	Forecast									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual Surplus/(Deficit)		(357,218)	509,876	773,438	910,188	1,012,858	1,090,219	1,245,382	1,300,855	1,493,686	1,878,319
Less: Acquisition of Tangible Capital Assets	4	(2,854,820)	(4,332,300)	(2,071,800)	(682,500)	(1,454,800)	(3,377,000)	(1,029,500)	(1,055,200)	(2,078,300)	(1,108,700)
Add: Amortization of Tangible Capital Assets	4	486,931	538,484	597,583	614,531	622,376	635,373	681,464	702,054	723,158	461,389
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
		(2,367,889)	(3,793,816)	(1,474,217)	(67,969)	(832,424)	(2,741,627)	(348,036)	(353,146)	(1,355,142)	(647,311)
Less: Acquisition of Supplies Inventory		-	-	-	-	-	-	-	-	-	-
Less: Acquisition of Prepaid Expenses		-	-	-	-	-	-	-	-	-	-
Add: Consumption of Supplies Inventory		-	-	-	-	-	-	-	-	-	-
Add: Use of Prepaid Expenses		-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-
Increase/(Decrease) in Net Financial Assets/(Net Debt)		(2,725,107)	(3,283,940)	(700,779)	842,219	180,434	(1,651,408)	897,346	947,709	138,544	1,231,008
Net Financial Assets/(Net Debt), beginning of year		1,117,431	(1,607,676)	(4,891,616)	(5,592,395)	(4,750,176)	(4,569,742)	(6,221,150)	(5,323,804)	(4,376,095)	(4,237,551)
Net Financial Assets/(Net Debt), end of year		(1,607,676)	(4,891,616)	(5,592,395)	(4,750,176)	(4,569,742)	(6,221,150)	(5,323,804)	(4,376,095)	(4,237,551)	(3,006,543)

Financial Indicators	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1) Acquisition of Tangible Capital Assets (Cumulative)	2,854,820	7,187,120	9,258,920	9,941,420	11,396,220	14,773,220	15,802,720	16,857,920	18,936,220	20,044,920
2) Annual Surplus/Deficit before Amortization (Cumulative)	129,713	1,178,073	2,549,094	4,073,813	5,709,047	7,434,639	9,361,485	11,364,394	13,581,238	15,920,946
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)	0.05	0.16	0.28	0.41	0.50	0.50	0.59	0.67	0.72	0.79



Table 4-4
Statement of Cash Flow – Indirect Method: Water Services
UNAUDITED: For Financial Planning Purposes Only
2020-2029

	Notes	Forecast									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Transactions											
Annual Surplus/Deficit		(357,218)	509,876	773,438	910,188	1,012,858	1,090,219	1,245,382	1,300,855	1,493,686	1,878,319
Add: Amortization of TCA's	4	486,931	538,484	597,583	614,531	622,376	635,373	681,464	702,054	723,158	461,389
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Earned Deferred Revenue	3	-	(263,742)	(626,575)	(727,074)	(751,915)	(784,421)	(988,475)	(994,934)	(1,005,863)	(1,029,231)
Less: Developer Contributions		-	-	-	-	-	-	-	-	-	-
Add: Deferred Revenue Proceeds		401,437	511,158	513,665	519,087	524,325	529,218	586,766	590,239	603,732	607,513
Change in A/R (Increase)/Decrease		(253,446)	(102,913)	(68,092)	(29,632)	(18,925)	(20,621)	(47,140)	(18,872)	(18,965)	(23,098)
Change in A/P Increase/(Decrease)		55,993	(656)	1,316	1,362	1,393	1,437	1,472	1,509	1,557	1,588
Less: Interest Proceeds		(6,879)	(212)	(1,164)	(1,300)	(1,616)	(2,332)	(3,480)	(3,099)	(3,178)	(3,749)
Cash Provided by Operating Transactions		326,818	1,191,995	1,190,171	1,287,162	1,388,496	1,448,873	1,475,989	1,577,752	1,794,127	1,892,731
Capital Transactions											
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(2,854,820)	(4,332,300)	(2,071,800)	(682,500)	(1,454,800)	(3,377,000)	(1,029,500)	(1,055,200)	(2,078,300)	(1,108,700)
Cash Applied to Capital Transactions		(2,854,820)	(4,332,300)	(2,071,800)	(682,500)	(1,454,800)	(3,377,000)	(1,029,500)	(1,055,200)	(2,078,300)	(1,108,700)
Investing Transactions											
Proceeds from Investments		6,879	212	1,164	1,300	1,616	2,332	3,480	3,099	3,178	3,749
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	-	-	-	-
Cash Provided by (applied to) Investing Transactions		6,879	212	1,164	1,300	1,616	2,332	3,480	3,099	3,178	3,749
Financing Transactions											
Proceeds from Debt Issue	2	2,249,770	3,095,038	957,280	211,900	277,280	2,340,620	55,100	93,225	799,340	-
Less: Debt Repayment (Principal only)	2	(6,030)	(202,597)	(472,915)	(570,759)	(606,527)	(649,080)	(872,904)	(904,086)	(930,432)	(1,028,072)
Cash Applied to Financing Transactions		2,243,740	2,892,441	484,365	(358,859)	(329,247)	1,691,540	(817,804)	(810,861)	(131,092)	(1,028,072)
Increase in Cash and Cash Equivalents		(277,383)	(247,652)	(396,100)	247,103	(393,935)	(234,255)	(367,835)	(285,210)	(412,087)	(240,292)
Cash and Cash Equivalents, beginning of year	1	2,594,603	2,317,220	2,069,568	1,673,468	1,920,571	1,526,636	1,292,381	924,546	639,336	227,249
Cash and Cash Equivalents, end of year	1	2,317,220	2,069,568	1,673,468	1,920,571	1,526,636	1,292,381	924,546	639,336	227,249	(13,043)



Notes to Financial Plan

The financial plan format as outlined in Chapter 4 closely approximates the full accrual format used by municipalities on their audited financial statements. However, the financial plan is not an audited document and contains various estimates. In this regard, section 3 (2) of O. Reg. 453/07 states the following:

“Each of the following sub-subparagraphs applies only if the information referred to in the sub-subparagraph is known to the owner at the time the financial plans are prepared:

1. Sub-subparagraphs 4 i A, B and C of subsection (1)
2. Sub-subparagraphs 4 iii A, C, E and F of subsection (1).”

The information referred to in sub-subparagraphs 4 i A, B and C of subsection (1) includes:

- A. Total financial assets (i.e. cash and receivables);
- B. Total liabilities (i.e. payables, debt, and deferred revenue);
- C. Net debt (i.e. the difference between A and B above).

The information referred to in sub-subparagraphs 4 iii A, C, E and F of subsection (1) includes:

- A. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges
- B. Investing transactions that are acquisitions and disposal of investments
- C. Change in cash and cash equivalents during the year
- D. Cash and cash equivalents at the beginning and end of the year

In order to show a balanced financial plan in a full accrual format for the Municipality, some of the items listed above have been estimated given that the Municipality does not maintain all financial asset and liability data separately for water. Usually, this type of data is combined with the financial assets and liabilities of other departments and



services given that there is not a current obligation to disclose this data separately (as there is with revenue and expenses).

The assumptions used have been documented below:

1. Cash, Receivables and Payables

It is assumed that the opening cash balances required to complete the financial plan are equal to:

Ending Reserve/Reserve Fund Balance
Plus: Ending Accounts Payable Balance
Less: Ending Accounts Receivable Balance
Equals: *Approximate Ending Cash Balance*

For Thames Centre, receivable and payable balances were estimated for each year of the forecast based on the following factors:

- a) Receivables: Based on the historical levels of water and wastewater receivables as a percentage of annual water and wastewater revenue earned; and
- b) Payables: Based on historical levels of water payables as a percentage of annual water expenses.

2. Debt

Outstanding water related debt at the end of 2019 was \$58,177. In addition, it anticipated that additional debt funding will be required over the forecast period to assist in funding growth-related projects and tangible capital asset replacement needs. Principal repayments for existing and anticipated future debt over the forecast period are scheduled as follows:



Year	Principal Payments
2020	6,030
2021	202,597
2022	472,915
2023	570,759
2024	606,527
2025	649,080
2026	872,904
2027	904,086
2028	930,432
2029	1,028,072
Total	6,243,402

For financial reporting purposes, debt principal payments represent a decrease in debt liability and the interest payments represent a current year operating expense.

3. Deferred Revenue

Deferred revenue is typically made up of water development charge reserve balances which are considered to be a liability for financial reporting purposes until the funds are used to emplace the works for which they have been collected. As water infrastructure is often required to be put in prior to development being able to commence, the draws against the development charge reserve fund may result in a negative balance. When this takes place, the negative balances are reflected as a long-term accounts receivable in the financial statements.

4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water related assets in the following categories:
 - i. Land;
 - ii. Hydrant Leads;
 - iii. Hydrants;
 - iv. Watermains;
 - v. Pump Houses and Pumping Stations;
 - vi. Reservoirs;
 - vii. Water treatment Facilities



viii. Water Towers; and

ix. Fleet (Vehicles).

- Amortization is calculated based on using the straight-line approach with no amortization in the year of acquisition or construction.
- Given the planned asset replacement forecast in the 2020 Rate Study, useful life on acquisitions is assumed to be equal to the weighted average useful life for all assets on hand in each respective asset category.
- Write-offs are assumed to equal \$0 for each year in the forecast period.
- Tangible capital assets are shown on a net basis. It is assumed that disposals occur when the asset is being replaced. To calculate the value of each asset disposal, the replacement value (of each new asset that has been identified as a “replacement”) has been deflated (by weighted average useful life for all assets on hand in the respective asset category) to an estimated historical cost. This figure was used to calculate disposals only. Future assets are disposed of when fully amortized.
- Gains/losses on disposal are assumed to be \$0 (it is assumed that historical cost is equal to accumulated amortization for all disposals).
- Residual value is assumed to be \$0 for all assets contained within the forecast period.
- Contributed Assets, as described in section 3.2.1, are deemed to be insignificant/unknown during the forecast period and are therefore assumed to be \$0.
- The Municipality is unaware of any specific lead service piping in the municipal water system.



- The balance of tangible capital assets is summarized as follows:

Asset Historical Cost	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Tangible Capital Asset Balance	34,743,488	37,583,518	43,961,930	46,008,790	46,679,488	48,114,097	51,315,223	52,170,165	53,047,109	54,931,085
Acquisitions	2,854,820	6,405,400	2,071,800	682,500	1,454,800	3,377,000	1,029,500	1,055,200	2,078,300	1,108,700
Disposals	14,790	26,988	24,940	11,802	20,191	175,874	174,558	178,256	194,324	216,378
Closing Tangible Capital Asset Balance	37,583,518	43,961,930	46,008,790	46,679,488	48,114,097	51,315,223	52,170,165	53,047,109	54,931,085	55,823,407
Opening Accumulated Amortization	8,212,909	8,685,050	9,196,546	9,793,018	10,419,576	11,045,590	11,528,918	12,059,652	12,607,278	13,159,940
Amortization Expense	486,931	538,484	621,412	638,360	646,205	659,202	705,292	725,882	746,986	461,389
Amortization on Disposal	14,790	26,988	24,940	11,802	20,191	175,874	174,558	178,256	194,324	216,378
Ending Accumulated Amortization	8,685,050	9,196,546	9,793,018	10,419,576	11,045,590	11,528,918	12,059,652	12,607,278	13,159,940	13,404,951
Net Book Value	28,898,468	34,765,384	36,215,772	36,259,912	37,068,507	39,786,305	40,110,513	40,439,831	41,771,145	42,418,456



5. Accumulated Surplus

Opening accumulated surplus for the forecast period is reconciled as follows:

Water	2020 Opening Accumulated Surplus
Reserve Balances	
Reserves: Development Charges	1,418,995
Reserves: Capital/Other	1,175,608
Total Reserves Balance	2,594,603
Less: Debt Obligations and Deferred Revenue	(1,477,172)
Add: Tangible Capital Assets	26,530,579
Total Opening Balance	27,648,010

The accumulated surplus reconciliation for all years within the forecast period is contained in Table 4-2.

6. Other Revenue

Other revenues include minor revenues from connection charges, discount & occupancy charges, hauled recycling revenue, hydrant recoveries from fire services, late payment charges, N.S.F. fees, these revenues have been held constant over the forecast period. Outstanding local improvement recoveries from landowners are included through to 2027 when all recoveries have been received.

7. Operating Expenses

Capital expenditures for items not meeting the definition of tangible capital assets have been reclassified as operating expenses and have been expensed in the year in which they occur.



Chapter 5

Process for Financial Plan Approval and Submission to the Province



5. Process for Financial Plan Approval and Submission to the Province

As mentioned in section 1.2, preparation of and approval of a financial plan for water assets that meets the requirements of the Act is mandatory for municipal water providers. Proof of the plan preparation and approval is a key submission requirement for municipal drinking water licensing and, upon completion, must be submitted to the MECP. The process established for plan approval, public circulation and filing is set out in O. Reg. 453/07 and can be summarized as follows:

1. The financial plan must be approved by resolution of Council of the municipality who owns the drinking water system or the governing body of the owner. (O. Reg. 453/07, section 3 (1) 1.)
2. The owner of the drinking water system must provide notice advertising the availability of the financial plan. The plans will be made available to the public upon request and without charge. The plans must also be made available to the public on the municipality's website. (O. Reg. 453/07, section 3 (1) 5.)
3. The owner of the drinking water system must provide a copy of the financial plan to the Director of Policy Branch, Ministry of Municipal Affairs and Housing. (O. Reg. 453/07, section 3 (1) 6.)
4. The owner of the drinking water system must provide proof satisfactory to the Director that the financial plans for the system satisfy the requirements under the Safe Drinking Water Act. (S.D.W.A. section 32 (5) 2.ii.)



Chapter 6

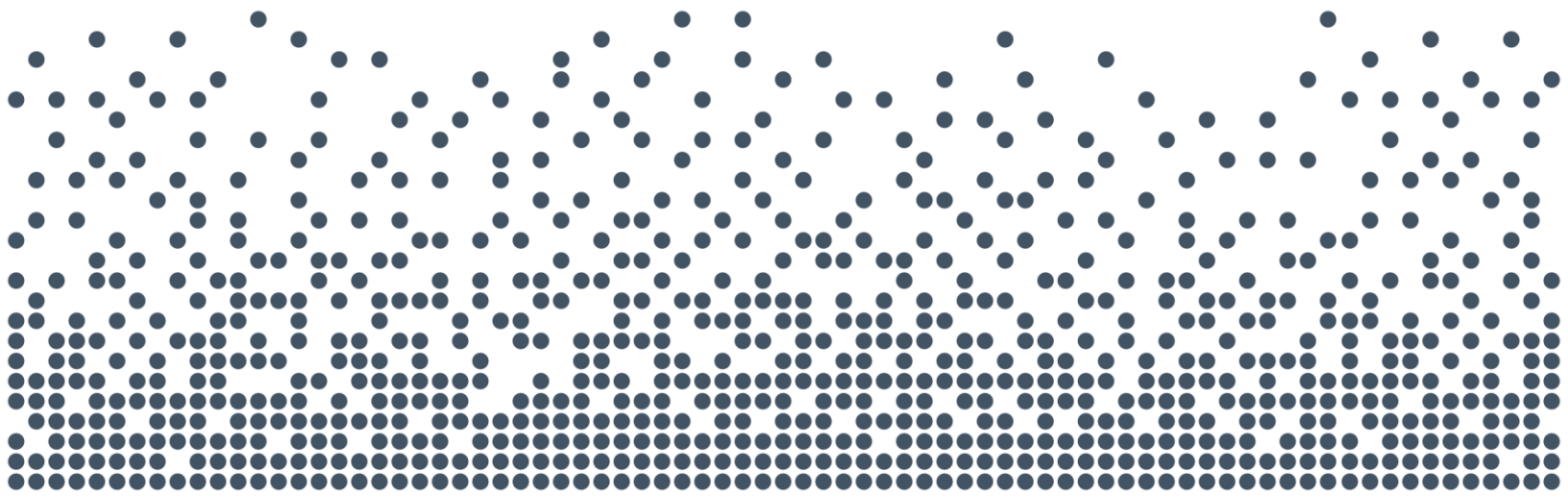
Recommendations



6. Recommendations

This report presents the water financial plan for the Municipality of Thames Centre in accordance with the mandatory reporting formats for water systems as detailed in O. Reg. 453/07. It is important to note that while mandatory, the financial plan is provided for Council's interest and approval however, for decision making purposes, it may be more informative to rely on the information contained within the 2020 Water and Wastewater Rate Study, dated May 15, 2020. Nevertheless, Council is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

1. The Municipality of Thames Centre's Water Financial Plan prepared by Watson & Associates Economists Ltd. dated May 15, 2020 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. The Financial Plan dated May 15, 2020 be submitted to the Ministry of Municipal Affairs and Housing. (O. Reg. 453/07, section 3 (1) 6).
4. The resolution of Council approving the Financial Plan be submitted to the MECP, satisfying the requirements under the Safe Drinking Water Act. (S.D.W.A. section 32 (5) 2.ii.).



Appendices



Appendix A

2020 Water and Wastewater Rate Study – Water Summary Tables



Figure A-1
Water Capital Budget Forecast
(Inflated\$)

Description	Budget 2020	Total	Forecast								
			2021	2022	2023	2024	2025	2026	2027	2028	2029
Capital Expenditures											
Major Maintenance (Leak Detection & Cleaning of Distribution System)	39,100	450,300	36,500	51,000	51,900	48,700	49,900	51,100	52,400	53,700	55,100
Lifecycle:											
Watermain Replacement	150,600	614,200	157,900	224,800	231,500	-	-	-	-	-	-
Dale Dr - Oakwood Pl - Minnie St	441,000	-	-	-	-	-	-	-	-	-	-
Porter Subdivision - Construction Phase 1	-	565,800	565,800	-	-	-	-	-	-	-	-
Sherwood Cres - Huntington Cres - Sherwood Pl	-	775,400	-	775,400	-	-	-	-	-	-	-
Porter Subdivision - Construction Phase 2	-	359,800	359,800	-	-	-	-	-	-	-	-
Thames Cres - Terrance Ave	-	761,600	-	-	-	761,600	-	-	-	-	-
North St	-	239,100	-	-	239,100	-	-	-	-	-	-
Treatment Facility, Pump House, Storage Facility Replacements	-	5,279,400	-	-	-	-	1,004,400	1,029,500	1,055,200	1,081,600	1,108,700
Studies:											
Iron Removal Study	69,400	-	-	-	-	-	-	-	-	-	-
Water Rate Study & Financial Plan	-	25,700	-	-	-	-	25,700	-	-	-	-
Growth Related:											
Dorchester:											
Dorechester Shallow Wells Expanded Supply	113,600	-	-	-	-	-	-	-	-	-	-
Dorchester Watermain - West Trunk at the Development 25	64,020	-	-	-	-	-	-	-	-	-	-
Maximize Dorchester WTF Supply	-	1,093,700	1,093,700	-	-	-	-	-	-	-	-
Dorchester Watermain - West Trunk at the Development 22	-	1,035,300	1,035,300	-	-	-	-	-	-	-	-
Dorchester Watermain - West Trunk river crossing at Development 22	-	364,900	364,900	-	-	-	-	-	-	-	-
Dorchester Watermain - West Trunk at Development 22	-	420,300	420,300	-	-	-	-	-	-	-	-
Dorchester Watermain - North St. Upgrade	-	693,200	-	-	-	693,200	-	-	-	-	-
Dorchester Watermain - Spine Trunk Upgrade on Dorchester Rd. (South of Byron Ave.)	-	1,053,300	-	-	-	-	1,053,300	-	-	-	-
Dorchester Watermain - Northeast Loop	-	231,500	-	-	-	-	231,500	-	-	-	-
Dorchester Watermain - West Trunk on Christie Dr.	-	194,400	-	-	-	-	194,400	-	-	-	-
Dorchester Watermain - Hamilton Rd. Extension	-	690,200	-	-	-	-	690,200	-	-	-	-



Figure A-1
Water Capital Budget Forecast (Cont.)
(Inflated\$)

Description	Budget 2020	Total	Forecast								
			2021	2022	2023	2024	2025	2026	2027	2028	2029
Thorndale:											
Thorndale Water Tower Generator	45,000	-	-	-	-	-	-	-	-	-	-
Thorndale Water Treatment Land Acquisition	185,000	-	-	-	-	-	-	-	-	-	-
Maximize Thorndale WTF Supply	1,020,000	-	-	-	-	-	-	-	-	-	-
Thorndale Watermain - South Trunk at Foxborough Subdivision	61,200	-	-	-	-	-	-	-	-	-	-
Thorndale Watermain Upgrade - Industrial Lands Loop	408,000	-	-	-	-	-	-	-	-	-	-
Thorndale Watermain - South Trunk at Railway Crossing	204,000	209,100	209,100	-	-	-	-	-	-	-	-
Thorndale Watermain - South Trunk at Rosewood Subdivision	122,400	125,500	125,500	-	-	-	-	-	-	-	-
Thorndale HLP Upgrades	-	1,071,600	-	1,071,600	-	-	-	-	-	-	-
Thorndale Watermain - Subtrunk at Rosewood	-	211,900	-	-	211,900	-	-	-	-	-	-
Thorndale Watermain - South Trunk at Monteith Lands	-	203,200	-	-	-	-	203,200	-	-	-	-
Thorndale Watermain - Thorndale Rd. Upgrade	-	996,700	-	-	-	-	-	-	-	996,700	-
Thorndale Watermain Upgrade - Gerald Pkwy. Upgrade	-	-	-	-	-	-	-	-	-	-	-
Fleet:											
Truck	40,000	-	-	-	-	-	-	-	-	-	-
Studies:											
Dorchester Groundwater Management Study	179,100	-	-	-	-	-	-	-	-	-	-
Master Plan Update / EA	-	98,100	-	-	-	-	-	-	98,100	-	-
Cost Benefit Study to Service 401 Corridor Lands	-	58,000	-	-	-	-	-	58,000	-	-	-
Total Capital Expenditures	3,142,420	17,822,200	4,368,800	2,122,800	734,400	1,503,500	3,452,600	1,138,600	1,205,700	2,132,000	1,163,800
Capital Financing											
Provincial/Federal Grants	-	-	-	-	-	-	-	-	-	-	-
Development Charges Reserve Fund	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	1,300,000	-	100,000	-	-	600,000	-	-	600,000	-
Growth Related Debenture Requirements	2,249,770	6,529,783	3,095,038	857,280	211,900	277,280	1,740,620	55,100	93,225	199,340	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-
Lifecycle Reserve Fund	-	4,120,000	700,000	330,000	390,000	400,000	400,000	400,000	500,000	500,000	500,000
Water Reserve	892,650	5,872,417	573,762	835,520	132,500	826,220	711,980	683,500	612,475	832,660	663,800
Total Capital Financing	3,142,420	17,822,200	4,368,800	2,122,800	734,400	1,503,500	3,452,600	1,138,600	1,205,700	2,132,000	1,163,800



Figure A-2
Schedule of New Non-Growth-Related Debenture Repayments
(Inflated\$)

Debenture Year	2020	Principal (Inflated)	Forecast								
			2021	2022	2023	2024	2025	2026	2027	2028	2029
2021		-		-	-	-	-	-	-	-	-
2022		100,000			11,723	11,723	11,723	11,723	11,723	11,723	11,723
2023		-				-	-	-	-	-	-
2024		-					-	-	-	-	-
2025		600,000						70,338	70,338	70,338	70,338
2026		-							-	-	-
2027		-								-	-
2028		600,000									70,338
2029		-									
Total Annual Debt Charges	-	1,300,000	-	-	11,723	11,723	11,723	82,061	82,061	82,061	152,400

Figure A-3
Schedule of New Growth-Related Debenture Repayments
(Inflated\$)

Debenture Year	2020	Principal (Inflated)	Forecast								
			2021	2022	2023	2024	2025	2026	2027	2028	2029
2020		2,249,770	263,742	263,742	263,742	263,742	263,742	263,742	263,742	263,742	263,742
2021		3,095,038		362,833	362,833	362,833	362,833	362,833	362,833	362,833	362,833
2022		857,280			100,499	100,499	100,499	100,499	100,499	100,499	100,499
2023		211,900				24,841	24,841	24,841	24,841	24,841	24,841
2024		277,280					32,506	32,506	32,506	32,506	32,506
2025		1,740,620						204,054	204,054	204,054	204,054
2026		55,100							6,459	6,459	6,459
2027		93,225								10,929	10,929
2028		199,340									23,369
2029		-									
Total Annual Debt Charges	-	8,779,553	263,742	626,575	727,074	751,915	784,421	988,475	994,934	1,005,863	1,029,231



Table A-4
Water Reserve Continuity
(Inflated \$)

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	1,175,608	343,435	291,921	26,958	503,397	338,436	342,093	363,059	519,347	522,796
Transfer from Operating	94,478	522,247	570,557	608,939	661,259	715,637	704,466	768,763	836,109	837,594
Transfer to Capital	892,650	573,762	835,520	132,500	826,220	711,980	683,500	612,475	832,660	663,800
Transfer to Operating	34,000	-	-	-	-	-	-	-	-	-
Closing Balance	343,435	291,921	26,958	503,397	338,436	342,093	363,059	519,347	522,796	696,590

Table A-5
Water Development Charges Reserve Fund Continuity
(Inflated \$)

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	1,418,995	1,820,432	2,067,848	1,954,938	1,746,951	1,519,361	1,264,159	862,450	457,755	55,624
Development Charge Proceeds	365,742	470,612	475,332	484,833	494,534	504,431	569,855	581,263	602,641	614,692
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	263,742	626,575	727,074	751,915	784,421	988,475	994,934	1,005,863	1,029,231
Closing Balance	1,784,737	2,027,302	1,916,605	1,712,697	1,489,570	1,239,372	845,540	448,779	54,533	(358,916)
Interest	35,695	40,546	38,332	34,254	29,791	24,787	16,911	8,976	1,091	(7,178)
Required from Development Charges	2,249,770	3,095,038	857,280	211,900	277,280	1,740,620	55,100	93,225	199,340	-

Table A-6
Water Lifecycle Reserve Fund Continuity
(Inflated \$)

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	-	350,805	10,821	59,370	66,290	82,439	118,913	177,489	158,050	162,053
Transfer from Operating	343,927	359,803	377,385	395,621	414,532	434,143	455,095	477,462	500,825	525,393
Transfer to Capital	-	700,000	330,000	390,000	400,000	400,000	400,000	500,000	500,000	500,000
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	343,927	10,608	58,206	64,990	80,823	116,582	174,009	154,951	158,875	187,446
Interest	6,879	212	1,164	1,300	1,616	2,332	3,480	3,099	3,178	3,749



Table A-7
Water Operating Budget Forecast
(Inflated \$)

Description	Budget 2020	Forecast								
		2021	2022	2023	2024	2025	2026	2027	2028	2029
Expenditures										
Water Distribution System:										
65100 - ADVERTISING	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
65150 - BENEFITS	82,433	84,100	85,800	87,500	89,300	91,100	92,900	94,800	96,700	98,600
65290 - CLOTHING ALLOWANCE	2,875	2,900	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700
65410 - CONVENTIONS	14,500	14,800	15,100	15,400	15,700	16,000	16,300	16,600	16,900	17,200
65510 - EMPLOYEE RELATIONS / GIFT & ENTERTAINMENT EXP	500	400	400	400	400	400	400	400	400	400
65530 - EQUIPMENT (NOT CAPITAL)	9,000	9,200	9,400	9,600	9,800	10,000	10,200	10,400	10,600	10,800
65800 - LEGAL FEES	-	-	-	-	-	-	-	-	-	-
65830 - LICENSE FEES & PERMITS	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
65990 - MATERIALS / SUPPLIES	4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800	4,900
66030 - MEMBERSHIPS	750	800	800	800	800	800	800	800	800	800
66050 - MISCELLANEOUS EXPENSE	-	-	-	-	-	-	-	-	-	-
66100 - OFFICE SUPPLIES	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
66123 - ONTARIO ONE CALLS	500	500	500	500	500	500	500	500	500	500
66135 - OVERTIME	7,600	7,800	8,000	8,200	8,400	8,600	8,800	9,000	9,200	9,400
66170 - PERSONAL PROTECTIVE EQUIPMENT	500	500	500	500	500	500	500	500	500	500
66240 - POSTAGE	12,046	13,000	13,300	13,600	13,900	14,200	14,500	14,800	15,100	15,400
66290 - PUBLIC RELATIONS / GIFT & ENTERTAINMENT EXP	400	400	400	400	400	400	400	400	400	400
66300 - RADIO / PAGER EXPENSE	750	800	800	800	800	800	800	800	800	800
66350 - SEMINARS / TRAINING	-	-	-	-	-	-	-	-	-	-
66435 - STUDIES / ASSESSMENTS / SURVEYS	10,000	10,200	10,400	10,600	10,800	11,000	11,200	11,400	11,600	11,800
66440 - SUB-CONTRACT / CONTRACTED SERVICES	10,000	10,200	10,400	10,600	10,800	11,000	11,200	11,400	11,600	11,800
66510 - TELECOMMUNICATIONS	3,250	3,400	3,600	3,800	4,000	4,200	4,400	4,600	4,800	5,000
66580 - WAGES - REGULAR	310,345	316,600	322,900	329,400	336,000	342,700	349,600	356,600	363,700	371,000
66625 - WRITE-OFFS - RATES	-	-	-	-	-	-	-	-	-	-
67100 - FACILITY RENTALS	8,264	8,400	8,600	8,800	9,000	9,200	9,400	9,600	9,800	10,000
67891 - INTERDEPARTMENTAL	148,637	151,600	154,600	157,700	160,900	164,100	167,400	170,700	174,100	177,600
Water Meter Read - Sub-Contract:										
66440 - SUB-CONTRACT / CONTRACTED SERVICES	15,000	15,300	15,600	15,900	16,200	16,500	16,800	17,100	17,400	17,700
Hydrant Maintenance:										
65990 - MATERIALS / SUPPLIES	5,000	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300
Water System Operation:										
65990 - MATERIALS / SUPPLIES	10,700	10,900	11,100	11,300	11,500	11,700	11,900	12,100	12,300	12,500
66440 - SUB-CONTRACT / CONTRACTED SERVICES	39,000	14,000	14,300	14,600	14,900	15,200	15,500	15,800	16,100	16,400
Water Meter Installation										
65990 - MATERIALS / SUPPLIES	30,000	30,600	31,200	31,800	32,400	33,000	33,700	34,400	35,100	35,800
Water Tower Operations:										
65200 - BUILDING REPAIRS & MAINTENANCE	11,000	1,000	1,000	1,100	1,100	1,100	1,100	1,100	1,200	1,200
65670 - GENERATOR - SERVICING & FUEL (New Account)	5,000	5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800	5,900
65680 - GROUNDS CARE - EXTERNAL CONTRACTOR	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
65990 - MATERIALS / SUPPLIES	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
66120 - ONTARIO HYDRO	7,441	7,800	8,200	8,600	9,000	9,500	10,000	10,500	11,000	11,600
66390 - SNOW REMOVAL - EXTERNAL CONTRACTOR	200	200	200	200	200	200	200	200	200	200
66470 - TELECOMMUNICATIONS	574	600	600	600	600	600	600	600	600	600



Table A-7 (Cont.)
Water Operating Budget Forecast
(Inflated \$)

Description	Budget 2020	Forecast								
		2021	2022	2023	2024	2025	2026	2027	2028	2029
Dorchester Water Treatment Plant:										
65150 - BENEFITS	16,739	13,100	13,400	13,700	14,000	14,300	14,600	14,900	15,200	15,500
65200 - BUILDING REPAIRS & MAINTENANCE	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
65210 - BUILDING SECURITY	1,500	500	500	500	500	500	500	500	500	500
65260 - CHEMICALS	12,500	13,100	13,800	14,500	15,200	16,000	16,800	17,600	18,500	19,400
65430 - COURIER / SHIPPING	250	200	200	200	200	200	200	200	200	200
65520 - EQUIPMENT LEASE/RENTAL	200	200	200	200	200	200	200	200	200	200
65530 - EQUIPMENT (NOT CAPITAL)	20,000	20,400	20,800	21,200	21,600	22,000	22,400	22,800	23,300	23,800
65670 - GENERATORS - SERVICING & FUEL	2,500	5,000	5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800
65680 - GROUNDS CARE - EXTERNAL CONTRACTOR	10,500	10,700	10,900	11,100	11,300	11,500	11,700	11,900	12,100	12,300
65728 - INSPECTION / MAINTENANCE FEES CHARGED	10,000	10,200	10,400	10,600	10,800	11,000	11,200	11,400	11,600	11,800
65730 - INSURANCE PREMIUM	11,672	11,900	12,100	12,300	12,500	12,800	13,100	13,400	13,700	14,000
65910 - MAINTENANCE - OTHER EQUIP	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
65990 - MATERIALS / SUPPLIES	15,000	15,300	15,600	15,900	16,200	16,500	16,800	17,100	17,400	17,700
66080 - MUNICIPAL TAXES	11,630	11,900	12,100	12,300	12,500	12,800	13,100	13,400	13,700	14,000
66120 - ONTARIO HYDRO	106,631	112,000	117,600	123,500	129,700	136,200	143,000	150,200	157,700	165,600
66135 - OVERTIME	6,500	6,600	6,700	6,800	6,900	7,000	7,100	7,200	7,300	7,400
66150 - P & M REPORTING	4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800	4,900
66390 - SNOW REMOVAL - EXTERNAL CONTRACTOR	1,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
66440 - SUB-CONTRACT / CONTRACTED SERVICES	35,000	35,700	36,400	37,100	37,800	38,600	39,400	40,200	41,000	41,800
66470 - TELECOMMUNICATIONS	4,566	4,800	5,000	5,300	5,600	5,900	6,200	6,500	6,800	7,100
66580 - WAGES - REGULAR	60,547	61,800	63,000	64,300	65,600	66,900	68,200	69,600	71,000	72,400
System Sampling:										
65990 - MATERIALS / SUPPLIES	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
66600 - WATER SAMPLING	15,000	15,300	15,600	15,900	16,200	16,500	16,800	17,100	17,400	17,700
Well Maintenance:										
65990 - MATERIALS / SUPPLIES	5,000	5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800	5,900
66440 - SUB-CONTRACT / CONTRACTED SERVICES	35,000	35,700	36,400	37,100	37,800	38,600	39,400	40,200	41,000	41,800
Thorndale Water Treatment Plant:										
65150 - BENEFITS	7,233	13,125	13,400	13,700	14,000	14,300	14,600	14,900	15,200	15,500
65200 - BUILDING REPAIRS & MAINTENANCE	10,000	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
65260 - CHEMICALS	6,500	6,800	7,100	7,500	7,900	8,300	8,700	9,100	9,600	10,100
65530 - EQUIPMENT (NOT CAPITAL)	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
65670 - GENERATORS - SERVICING & FUEL	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
65680 - GROUNDS CARE - EXTERNAL CONTRACTOR	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
65728 - INSPECTION / MAINTENANCE FEES CHARGED	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
65730 - INSURANCE PREMIUM	6,823	7,000	7,100	7,200	7,300	7,400	7,500	7,700	7,900	8,100
65910 - MAINTENANCE - OTHER EQUIP	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
65990 - MATERIALS / SUPPLIES	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
66080 - MUNICIPAL TAXES	2,696	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400	3,500
66120 - ONTARIO HYDRO	15,191	16,000	16,800	17,600	18,500	19,400	20,400	21,400	22,500	23,600



Table A-7 (Cont.)
Water Operating Budget Forecast
(Inflated \$)

Description	Budget 2020	Forecast								
		2021	2022	2023	2024	2025	2026	2027	2028	2029
66135 - OVERTIME	5,500	5,600	5,700	5,800	5,900	6,000	6,100	6,200	6,300	6,400
66150 - P & M REPORTING	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
66390 - SNOW REMOVAL - EXTERNAL CONTRACTOR	500	500	500	500	500	500	500	500	500	500
66440 - SUB-CONTRACT / CONTRACTED SERVICES	6,000	4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800
66470 - TELECOMMUNICATIONS	5,022	5,300	5,600	5,900	6,200	6,500	6,800	7,100	7,500	7,900
66580 - WAGES - REGULAR	26,284	26,800	27,300	27,800	28,400	29,000	29,600	30,200	30,800	31,400
System Sampling:										
65990 - MATERIALS / SUPPLIES	300	300	300	300	300	300	300	300	300	300
66600 - WATER SAMPLING	5,200	5,300	5,400	5,500	5,600	5,700	5,800	5,900	6,000	6,100
Well Maintenance:										
65990 - MATERIALS / SUPPLIES	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
Sub Total Operating	1,258,449	1,243,725	1,273,300	1,303,900	1,335,200	1,367,500	1,400,600	1,434,500	1,469,500	1,505,200
Capital-Related										
New Growth Related Debt (Principal)		196,249	466,230	554,998	590,132	632,024	802,819	831,710	864,794	908,126
New Growth Related Debt (Interest)		67,493	160,344	172,076	161,783	152,397	185,655	163,224	141,069	121,105
Existing Debt (Principal) - Non-Growth Related	6,030	6,349	6,685	7,038	7,410	7,802	8,215	8,649	-	-
Existing Debt (Interest) - Non-Growth Related	2,959	2,640	2,305	1,951	1,579	1,187	774	340	-	-
New Non-Growth Related Debt (Principal)		-	-	8,723	8,985	9,254	61,870	63,726	65,638	119,946
New Non-Growth Related Debt (Interest)		-	-	3,000	2,738	2,469	20,191	18,335	16,423	32,454
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Capital Reserve	94,478	522,247	570,557	608,939	661,259	715,637	704,466	768,763	836,109	837,594
Sub Total Capital Related	103,467	794,978	1,206,120	1,356,725	1,433,886	1,520,770	1,783,991	1,854,748	1,924,033	2,019,225
Total Expenditures	1,361,916	2,038,703	2,479,420	2,660,625	2,769,086	2,888,270	3,184,591	3,289,248	3,393,533	3,524,425
Revenues										
Base Charge Revenue*	600,678	628,407	659,114	690,963	723,993	758,243	794,838	833,901	874,706	917,615
Fire Protection Charge Revenue	2,435	2,496	2,558	2,622	2,688	2,755	2,824	2,895	2,967	3,041
Lifecycle Charge Revenue	343,927	359,803	377,385	395,621	414,532	434,143	455,095	477,462	500,825	525,393
Other Revenues:										
Connection Charge	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
Discounts & Occupancy Charge	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Hauled Recycling Revenue	750	750	750	750	750	800	800	800	800	800
Hydrant Recoveries from Fire Services	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Late Payment Charges	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500
Miscellaneous Revenue	500	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Local Improvement Recovery	9,079	9,079	9,079	9,079	9,079	9,079	9,079	9,079	-	-
N.S.F. Fee	200	200	200	200	200	200	200	200	200	200
Contributions from Development Charges Reserve Fund	-	263,742	626,575	727,074	751,915	784,421	988,475	994,934	1,005,863	1,029,231
Contributions from Reserves / Reserve Funds	34,000	-	-	-	-	-	-	-	-	-
Total Operating Revenue	1,039,069	1,312,977	1,724,161	1,874,809	1,951,658	2,038,140	2,299,811	2,367,771	2,433,861	2,524,780
Water Billing Recovery - Operating	322,847	725,726	755,260	785,816	817,428	850,130	884,780	921,477	959,672	999,645
Lifecycle Reserve Contribution (\$)	343,927	359,803	377,385	395,621	414,532	434,143	455,095	477,462	500,825	525,393
Water Billing Recovery - Total	666,774	1,085,530	1,132,645	1,181,437	1,231,961	1,284,273	1,339,876	1,398,939	1,460,497	1,525,038



Table A-8
Water Rate Forecast
(Inflated \$)

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Total Water Billing Recovery	666,774	1,085,530	1,132,645	1,181,437	1,231,961	1,284,273	1,339,876	1,398,939	1,460,497	1,525,038
Increasing Block Structure										
<i>Volume Forecast By Block (m3)</i>										
Block 1 (up to 50 m ³)*	202,777	399,376	408,526	417,676	426,826	435,976	445,726	456,076	466,576	477,376
Block 2 (over 50 m ³)	81,266	81,266	81,266	81,266	81,266	81,266	81,266	81,266	81,266	81,266
Check Total Volume	284,043	480,642	489,792	498,942	508,092	517,242	526,992	537,342	547,842	558,642
Increasing Block Rates (\$/m³)										
Block 1 (up to 50 m ³)*	2.13	2.18	2.24	2.29	2.35	2.41	2.47	2.53	2.60	2.66
Block 2 (over 50 m ³)	2.89	2.96	3.04	3.11	3.19	3.27	3.35	3.44	3.52	3.61
Annual Percentage Rate Change		2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%

* Note that 2020 Block 1 volume includes volumes between 15 m³ and 50 m³ bi-monthly due to volume included in minimum bill.