



Water Ontario Regulation 453/07 Financial Plan

Township of Cavan Monaghan

Financial Plan #136-301

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Table of Contents

	Page
1. Introduction.....	1-1
1.1 Study Purpose	1-1
1.2 Background.....	1-1
1.2.1 Financial Plan Defined	1-2
1.2.2 Financial Plan Requirements – Existing System.....	1-2
1.2.3 Financial Plan Requirements – General	1-3
1.2.4 Public Sector Accounting Board (PSAB) Requirements	1-4
1.2.5 The Township’s Financial Plan	1-4
2. Sustainable Financial Planning.....	2-1
2.1 Introduction	2-1
2.2 Sustainable Water and Sewage Systems Act.....	2-2
2.3 Water Opportunities Act, 2010.....	2-2
2.4 Infrastructure for Jobs and Prosperity Act (I.J.P.A.), 2015	2-3
2.5 Water Forecast	2-4
3. Approach.....	3-1
3.1 Overview	3-1
3.2 Conversion Process.....	3-1
3.2.1 Calculate Tangible Capital Asset Balances	3-1
3.2.2 Convert Statement of Operations.....	3-2
3.2.3 Convert Statement of Financial Position	3-4
3.2.4 Convert Statement of Cash Flow and Net Financial Assets/Debt.....	3-4
3.2.5 Verification and Note Preparation	3-6
4. Financial Plan	4-1
4.1 Introduction	4-1
4.2 Water Financial Plan.....	4-1
4.2.1 Statement of Financial Position (Table 4-1)	4-1
4.2.2 Statement of Operations (Table 4-2).....	4-2



Table of Contents (Cont'd)

	Page
4.2.3 Statement of Change in Net Financial Assets/Debt (Table 4-3)	4-3
4.2.4 Statement of Cash Flow (Table 4-4)	4-3
5. Process for Financial Plan Approval and Submission to the Province	5-1
6. Recommendations	6-1
Appendix A Water and Wastewater Forecast as per the 2020 Rate Study	A-1



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 Township of Cavan Monaghan (the Township) 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 Township's water systems has been completed based on the Township's 2020 Water and Wastewater Rate Study, dated November 10, 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 nine-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 Township's Financial Plan

The Township is currently in the process of renewing the drinking water license for the Cavan Monaghan 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 nine-year forecast period 2021 to 2029.



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 Township will need to consider the impacts during the annual budget and forecast process.

2.5 Water Forecast

As noted earlier, the Township has undertaken a Rate Study, dated November 10, 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 Rate Study provides the basis for a sound financial plan for the Township'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 Township'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 system.



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 Township 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 Township anticipates purchasing or constructing without consideration for future assets that are contributed by developers and other parties (at no or partial cost to the Township). 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 2021	Adjustments		Full Accrual Budget 2021	Accrual Basis
		DR	CR		
Revenues					Revenues
Base Charge Revenue	381,164			381,164	Base Charge Revenue
Rate Based Revenue	246,737			246,737	Rate Based Revenue
Transfers from Reserves	86,537	86,537			
			106,537	106,537	Earned Development Charges Revenue
Other Revenue	125,943		34,975	160,918	Other Revenue
Total Revenues	840,381			895,356	Total Revenues
Expenditures					Expenses
Operating	369,778	20,000		389,778	Operating Expenses
Capital					
Transfers to Reserves	360,178		360,178		
Transfers to Capital	-		-		
Debt Repayment (Principal & Interest)	110,425		53,029	57,396	Interest on Debt
		167,634		167,634	Amortization
		-		-	Loss on Disposal of Tangible Capital Assets
Total Expenditures	840,381			614,808	Total Expenses
Net Expenditures	-			280,548	Annual Surplus/(Deficit)
Increase (decrease) in amounts to be recovered	-			6,583,325	Accumulated Surplus/(Deficit), beginning of year
Change in Fund Balances	-	280,548	-	6,863,873	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		554,719	554,719		

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 Township 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 Township 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 2021	Adjustments		Full Accrual Budget 2021	Accrual Basis
		DR	CR		
ASSETS					ASSETS
Financial Assets					Financial Assets
Cash	923,341			923,341	Cash
Accounts Receivable	155,620			155,620	Accounts Receivable
Long-term Accounts Receivable - Other	401,252			401,252	Long-term Accounts Receivable - Other
Total Financial Assets	1,480,213			1,480,213	Total Financial Assets
Non-Financial Assets					
Inventory of Supplies	-		-		
Prepaid Expenses	-		-		
Total Non-Financial Assets	-				
LIABILITIES					Liabilities
Accounts Payable & Accrued Liabilities	-			-	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	5,173,606			5,173,606	Debt (Principal only)
Deferred Revenue	-			-	Deferred Revenue
Other	-			-	Other
Total Liabilities	5,173,606			5,173,606	Total Liabilities
Net Assets/(Debt)	(3,693,393)			(3,693,393)	Net Financial Assets/(Debt)
		10,577,266	20,000	10,557,266	Non-Financial Assets
		-		-	Tangible Capital Assets
		-		-	Inventory of Supplies
					Prepaid Expenses
				10,557,266	Total Non-Financial Assets
Municipal Position					
Water Reserves	1,480,213	1,480,213	-		
Development Charge Reserve Fund	-	-	-		
Amounts to be Recovered	(5,173,606)	-	5,173,606		
Total Municipal Position	(3,693,393)		6,863,873	6,863,873	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		12,057,479	12,057,479		

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 Township 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 Township’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:

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



- b) Amortization Expense – The method and timing of amortization should be based on the Township’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 Township’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 Township's water system. 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 Township's water system. 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 Township'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 2021, the Township's water system will be in a net financial debt position of \$3.69 million. This net debt position continues for the forecast period improving annually, with a net debt position of \$1.73 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 water mains 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 by \$2.1 million over the forecast period. This indicates that the Township plans to continue to add to the existing 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 at 69% in 2021. This ratio fluctuates to some extent over the forecast period, with an overall decrease from 69% in 2021 to 64% by 2029. As a result, annual surplus increases from a surplus of \$280,548 in 2021 to a surplus of \$532,030 by 2029. This is due to a general increasing trend in revenues anticipated, as provided for in the 2020 rate study. It is important to note that an annual surplus is beneficial to ensure funding is available for costs such as tangible capital asset acquisitions, debt principal payments 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 \$4.23 million to a 2021 accumulated surplus of approximately \$6.58 million over the forecast period. The accumulated surplus, as indicated in Table 4-2, is



predominantly made up of reserve balances as well as historical investments in tangible capital assets.

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 exceeds forecasted tangible capital asset acquisitions (net of amortization for the year) for the forecast period, resulting in increases to the net financial assets balance. This allows for a long-term plan of funding capital through accumulated surplus (i.e. reserves and reserve funds). This is also evidenced by the ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions maintaining a value in excess of 1.00 (increasing from 1.46 to 1.48 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 over the forecast period. The financial plan projects the cash position of the Township's water systems to improve from a balance of \$712,103 at the beginning of 2021, to just over \$1.26 million 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
Township of Cavan Monaghan
Statement of Financial Position: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2029

	Notes	Forecast								
		2021	2022	2023	2024	2025	2026	2027	2028	2029
Financial Assets										
Cash	1	923,341	682,740	111,917	270,581	420,083	598,498	856,004	1,110,459	1,262,325
Accounts Receivable	1	155,620	162,129	169,482	178,140	187,624	198,058	208,320	220,659	233,801
Long-term Receivables - Other	3	401,252	588,350	1,291,888	1,299,716	1,357,367	1,368,146	1,349,632	1,326,644	1,455,000
Total Financial Assets		1,480,213	1,433,219	1,573,287	1,748,437	1,965,074	2,164,702	2,413,956	2,657,762	2,951,126
Liabilities										
Bank Indebtedness		-	-	-	-	-	-	-	-	-
Accounts Payable & Accrued Liabilities	1	-	-	-	-	-	-	-	-	-
Debt (Principal only)	2	5,173,606	5,118,863	5,062,351	5,004,011	4,943,786	4,881,614	4,817,432	4,751,175	4,682,776
Deferred Revenue	3	-	-	-	-	-	-	-	-	-
Total Liabilities		5,173,606	5,118,863	5,062,351	5,004,011	4,943,786	4,881,614	4,817,432	4,751,175	4,682,776
Net Financial Assets/(Debt)		(3,693,393)	(3,685,644)	(3,489,064)	(3,255,574)	(2,978,712)	(2,716,912)	(2,403,476)	(2,093,413)	(1,731,650)
Non-Financial Assets										
Tangible Capital Assets	4	10,557,266	10,981,262	11,790,470	11,883,071	11,992,452	12,101,881	12,207,035	12,374,164	12,544,431
Total Non-Financial Assets		10,557,266	10,981,262	11,790,470	11,883,071	11,992,452	12,101,881	12,207,035	12,374,164	12,544,431
Accumulated Surplus/(Deficit)	5	6,863,873	7,295,618	8,301,406	8,627,497	9,013,740	9,384,969	9,803,559	10,280,751	10,812,781
Financial Indicators	Total Change									
1) Increase/(Decrease) in Net Financial Assets		2,103,925	142,182	7,749	196,580	233,490	276,862	261,800	313,436	310,063
2) Increase/(Decrease) in Tangible Capital Assets		2,125,531	138,366	423,996	809,208	92,601	109,381	109,429	105,154	167,129
3) Increase/(Decrease) in Accumulated Surplus		4,229,456	280,548	431,745	1,005,788	326,091	386,243	371,229	418,590	532,030



Table 4-2
Township of Cavan Monaghan
Statement of Operations: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2029

	Notes	Forecast								
		2021	2022	2023	2024	2025	2026	2027	2028	2029
Water Revenue										
Base Charge Revenue		381,164	405,777	427,205	453,584	482,219	511,475	544,492	581,944	618,462
Rate Based Revenue		246,737	262,717	276,639	293,788	312,410	331,440	352,917	377,273	401,015
Earned Development Charges Revenue	3	106,537	248,257	796,064	94,961	153,950	101,035	104,219	107,504	232,895
Other Revenue	6	160,918	154,610	164,638	171,513	180,469	187,007	199,178	207,968	215,616
Total Revenues		895,356	1,071,361	1,664,546	1,013,846	1,129,048	1,130,957	1,200,806	1,274,689	1,467,988
Water Expenses										
Operating Expenses	Sch. 4-1	389,778	378,210	386,526	394,846	403,573	412,406	421,445	430,490	561,841
Interest on Debt	2	57,396	58,402	59,440	60,510	61,613	62,751	63,925	65,136	66,384
Amortization	4	167,634	203,004	212,792	232,399	277,619	284,571	296,846	301,871	307,733
Loss on Disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-
Total Expenses		614,808	639,616	658,758	687,755	742,805	759,728	782,216	797,497	935,958
Annual Surplus/(Deficit)		280,548	431,745	1,005,788	326,091	386,243	371,229	418,590	477,192	532,030
Accumulated Surplus/(Deficit), beginning of year	5	6,583,325	6,863,873	7,295,618	8,301,406	8,627,497	9,013,740	9,384,969	9,803,559	10,280,751
Accumulated Surplus/(Deficit), end of year		6,863,873	7,295,618	8,301,406	8,627,497	9,013,740	9,384,969	9,803,559	10,280,751	10,812,781
Note 5:										
Accumulated Surplus/(Deficit) Reconciliation:		2021	2022	2023	2024	2025	2026	2027	2028	2029
Reserve Balances										
Reserves: Development Charges		(401,252)	(588,350)	(1,291,888)	(1,299,716)	(1,357,367)	(1,368,146)	(1,349,632)	(1,326,644)	(1,455,000)
Reserves: Capital/Other		1,480,213	1,433,219	1,573,287	1,748,437	1,965,074	2,164,702	2,413,956	2,657,762	2,951,126
Total Reserves Balance		1,078,961	844,869	281,399	448,721	607,707	796,556	1,064,324	1,331,118	1,496,126
Less: Debt Obligations and Deferred Revenue		(5,173,606)	(5,118,863)	(5,062,351)	(5,004,011)	(4,943,786)	(4,881,614)	(4,817,432)	(4,751,175)	(4,682,776)
Add: Long-term Accounts Receivable	3	401,252	588,350	1,291,888	1,299,716	1,357,367	1,368,146	1,349,632	1,326,644	1,455,000
Add: Tangible Capital Assets	4	10,557,266	10,981,262	11,790,470	11,883,071	11,992,452	12,101,881	12,207,035	12,374,164	12,544,431
Total Ending Balance		6,863,873	7,295,618	8,301,406	8,627,497	9,013,740	9,384,969	9,803,559	10,280,751	10,812,781
Financial Indicators										
1) Expense to Revenue Ratio	Total Change	2021	2022	2023	2024	2025	2026	2027	2028	2029
		69%	60%	40%	68%	66%	67%	65%	63%	64%
2) Increase/(Decrease) in Accumulated Surplus	4,229,456	280,548	431,745	1,005,788	326,091	386,243	371,229	418,590	477,192	532,030



Schedule 4-1
Township of Cavan Monaghan
Statement of Operating Expenses: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2029

	Notes	Forecast								
		2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Expenses										
Gross Wages - Full Time		45,000	45,900	46,800	47,700	48,700	49,700	50,700	51,700	52,700
Benefits – OMERS		2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
Benefits – EI Reduced Premium		425	400	400	400	400	400	400	400	400
Benefits – CPP		1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Benefits – EHT		650	700	700	700	700	700	700	700	700
Benefits – WSIB		1,125	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
Manulife Group Benefits		2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
Mileage Reimbursement / Travel		100	100	100	100	100	100	100	100	100
Staff Training & Development		750	800	800	800	800	800	800	800	800
Uniforms / Clothing		100	100	100	100	100	100	100	100	100
Legal Expense		750	800	800	800	800	800	800	800	800
Corporate Insurance		10,578	10,800	11,000	11,200	11,400	11,600	11,800	12,000	12,200
Water Meters		5,000	5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800
Radio Licenses		500	500	500	500	500	500	500	500	500
Office Supplies		800	800	800	800	800	800	800	800	800
Allocated Phone Service		300	300	300	300	300	300	300	300	300
Advertising		50	100	100	100	100	100	100	100	100
Contracted Services		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Allocated Vehicle Costs		1,250	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Property taxes		22,800	23,300	23,800	24,300	24,800	25,300	25,800	26,300	26,800
Toilet Rebate Program		5,000	5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800
Millbrook Water Distribution System										
Hydrant Maintenance		4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800
Materials and Supplies		1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800
Locates		500	500	500	500	500	500	500	500	500
Contracted Services		50,000	51,000	52,000	53,000	54,100	55,200	56,300	57,400	58,500
Millbrook Water Treatment & Supply										
Audit Fees		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Operator Contract		125,000	127,500	130,100	132,700	135,400	138,100	140,900	143,700	146,600
Phone		1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Managed Router & VDSL Servi		1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Hydro		15,000	15,800	16,600	17,400	18,300	19,200	20,200	21,200	22,300
Contracted Services		6,000	6,100	6,200	6,300	6,400	6,500	6,600	6,700	6,800
Millbrook Water - Standpipe Tower										
Phone		800	800	800	800	800	800	800	800	800
Managed Router & VDSL Servi		800	800	800	800	800	800	800	800	800
Hydro		9,000	9,500	10,000	10,500	11,000	11,600	12,200	12,800	13,400
Contracted Services		4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800
Water Capacity Monitoring										
Contracted Services		20,000	20,400	20,800	21,200	21,600	22,000	22,400	22,800	23,300
Bulk Water Sale										
Material and Supplies		1,000	1,050	1,103	1,158	1,216	1,277	1,341	1,408	1,478
Hydro		1,000	1,050	1,103	1,158	1,216	1,277	1,341	1,408	1,478
Contracted Services		500	510	520	530	541	552	563	574	585
Interdepartmental Charge - Wat		23,000	23,500	24,000	24,500	25,000	25,500	26,000	26,500	27,000
Non TCA - Expenses from Capital Budget	7	20,000	-	-	-	-	-	-	-	122,000
TOTAL OPERATING EXPENSES		389,778	378,210	386,526	394,846	403,573	412,406	421,445	430,490	561,841



Table 4-3
Township of Cavan Monaghan
Statement of Changes in Net Financial Assets/Debt: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2029

	Notes	Forecast								
		2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual Surplus/(Deficit)		280,548	431,745	1,005,788	326,091	386,243	371,229	418,590	477,192	532,030
Less: Acquisition of Tangible Capital Assets	4	(306,000)	(627,000)	(1,022,000)	(325,000)	(387,000)	(394,000)	(402,000)	(469,000)	(478,000)
Add: Amortization of Tangible Capital Assets	4	167,634	203,004	212,792	232,399	277,619	284,571	296,846	301,871	307,733
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-
		(138,366)	(423,996)	(809,208)	(92,601)	(109,381)	(109,429)	(105,154)	(167,129)	(170,267)
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)		142,182	7,749	196,580	233,490	276,862	261,800	313,436	310,063	361,763
Net Financial Assets/(Net Debt), beginning of year		(3,835,575)	(3,693,393)	(3,685,644)	(3,489,064)	(3,255,574)	(2,978,712)	(2,716,912)	(2,403,476)	(2,093,413)
Net Financial Assets/(Net Debt), end of year		(3,693,393)	(3,685,644)	(3,489,064)	(3,255,574)	(2,978,712)	(2,716,912)	(2,403,476)	(2,093,413)	(1,731,650)
Financial Indicators		2021	2022	2023	2024	2025	2026	2027	2028	2029
1) Acquisition of Tangible Capital Assets (Cumulative)		306,000	933,000	1,955,000	2,280,000	2,667,000	3,061,000	3,463,000	3,932,000	4,410,000
2) Annual Surplus/Deficit before Amortization (Cumulative)		448,182	1,082,931	2,301,511	2,860,001	3,523,863	4,179,663	4,895,099	5,674,162	6,513,925
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)		1.46	1.16	1.18	1.25	1.32	1.37	1.41	1.44	1.48



Table 4-4
Township of Cavan Monaghan
Statement of Cash Flow – Indirect Method: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2029

	Notes	Forecast								
		2021	2022	2023	2024	2025	2026	2027	2028	2029
Operating Transactions										
Annual Surplus/Deficit		280,548	431,745	1,005,788	326,091	386,243	371,229	418,590	477,192	532,030
Add: Amortization of TCA's	4	167,634	203,004	212,792	232,399	277,619	284,571	296,846	301,871	307,733
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-
Less: Earned Deferred Revenue	3	(106,537)	(248,257)	(796,064)	(94,961)	(153,950)	(101,035)	(104,219)	(107,504)	(232,895)
Less: Developer Contributions		-	-	-	-	-	-	-	-	-
Add: Deferred Revenue Proceeds		64,102	61,159	92,526	87,133	96,300	90,256	122,733	130,492	104,539
Change in A/R (Increase)/Decrease		164,520	(6,509)	(7,353)	(8,659)	(9,485)	(10,434)	(10,262)	(12,339)	(13,142)
Change in A/P Increase/(Decrease)		-	-	-	-	-	-	-	-	-
Less: Interest Proceeds		(34,975)	(33,864)	(37,174)	(41,312)	(46,431)	(51,148)	(57,037)	(62,798)	(69,730)
Cash Provided by Operating Transactions		535,292	407,278	470,516	500,691	550,296	583,439	666,651	726,914	628,535
Capital Transactions										
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(306,000)	(627,000)	(1,022,000)	(325,000)	(387,000)	(394,000)	(402,000)	(469,000)	(478,000)
Cash Applied to Capital Transactions		(306,000)	(627,000)	(1,022,000)	(325,000)	(387,000)	(394,000)	(402,000)	(469,000)	(478,000)
Investing Transactions										
Proceeds from Investments		34,975	33,864	37,174	41,312	46,431	51,148	57,037	62,798	69,730
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	-	-	-
Cash Provided by (applied to) Investing Transactions		34,975	33,864	37,174	41,312	46,431	51,148	57,037	62,798	69,730
Financing Transactions										
Proceeds from Debt Issue	2	-	-	-	-	-	-	-	-	-
Less: Debt Repayment (Principal only)	2	(53,029)	(54,743)	(56,513)	(58,339)	(60,225)	(62,172)	(64,182)	(66,257)	(68,399)
Cash Applied to Financing Transactions		(53,029)	(54,743)	(56,513)	(58,339)	(60,225)	(62,172)	(64,182)	(66,257)	(68,399)
Increase in Cash and Cash Equivalents		211,238	(240,601)	(570,823)	158,664	149,502	178,415	257,506	254,455	151,866
Cash and Cash Equivalents, beginning of year	1	712,103	923,341	682,740	111,917	270,581	420,083	598,498	856,004	1,110,459
Cash and Cash Equivalents, end of year	1	923,341	682,740	111,917	270,581	420,083	598,498	856,004	1,110,459	1,262,325



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 Township, some of the items listed above have been estimated given that the Township 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 the Township, 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 (source: t provided by Township staff); and
- b) Payables: Based on historical levels of water and wastewater payables as a percentage of annual water and wastewater expenses (source: provided by Township staff).

2. Debt

Outstanding water related debt at the end of 2020 was \$5,226,635 with no additional debt proceeds anticipated over the forecast period. Principal repayments over the forecast period are scheduled as follows:

Year	Principal Payments
2021	53,029
2022	54,743
2023	56,513
2024	58,339
2025	60,225
2026	62,172
2027	64,182
2028	66,257
2029	68,399
Total	543,859



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.

In years when the water development charge reserve fund balance is negative, it is shown as an asset (“Long-term receivables - Other”) for financial reporting purposes, representing future amounts to be collected from developers. Note that the 2020 Rate Study anticipates that the water D.C. reserve fund will be in a deficit position throughout the forecast period. Therefore, the deficit balances are being financed internally through the overall general water revenues. In future years, as D.C. revenue is received, there will be an adjustment to refund the overall water account to repay the internal financing.

4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water related assets in the following categories:
 - i. Land;
 - ii. Facilities;
 - iii. Watermains;
 - iv. Water Meters;
 - v. Hydrants; and
 - vi. Other Water Infrastructure & Equipment.
- 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 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, have been included in future years based on known developments and Township staff’s best estimate as to the year in which assets will be assumed. The contributed assets are then amortized on the same basis as all other assets in future years of the forecast.
- The Township 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	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Tangible Capital Asset Balance	12,358,471	12,655,202	13,226,613	14,238,232	14,552,543	14,928,575	15,308,707	15,695,103	16,143,479
Acquisitions	306,000	627,000	1,022,000	325,000	387,000	394,000	402,000	469,000	478,000
Disposals	9,269	55,589	10,381	10,689	10,968	13,868	15,604	20,624	21,860
Closing Tangible Capital Asset Balance	12,655,202	13,226,613	14,238,232	14,552,543	14,928,575	15,308,707	15,695,103	16,143,479	16,599,619
Opening Accumulated Amortization	1,939,571	2,097,936	2,245,351	2,447,762	2,669,472	2,936,123	3,206,826	3,488,068	3,769,315
Amortization Expense	167,634	203,004	212,792	232,399	277,619	284,571	296,846	301,871	307,733
Amortization on Disposal	9,269	55,589	10,381	10,689	10,968	13,868	15,604	20,624	21,860
Ending Accumulated Amortization	2,097,936	2,245,351	2,447,762	2,669,472	2,936,123	3,206,826	3,488,068	3,769,315	4,055,188
Net Book Value	10,557,266	10,981,262	11,790,470	11,883,071	11,992,452	12,101,881	12,207,035	12,374,164	12,544,431



5. Accumulated Surplus

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

Water	2021 Opening Accumulated Surplus
Reserve Balances	
Reserves: Development Charges	(358,817)
Reserves: Capital/Other	1,391,060
Total Reserves Balance	1,032,243
Less: Debt Obligations and Deferred Revenue	(4,867,818)
Add: Tangible Capital Assets	10,418,900
Total Opening Balance	6,583,325

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 rent revenues, meter installation revenue, user fees and service charges, new account set up fees, bulk water sales, penalty & interest charges and other miscellaneous revenues. These revenues have been inflated by 2% annually over the forecast period.

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 Township 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 November 10, 2020. Nevertheless, Council is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

1. The Township of Cavan Monaghan's Water Financial Plan prepared by Watson & Associates Economists Ltd. dated November 30, 2020 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. The Financial Plan dated November 30, 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

Water and Wastewater Forecast as per the 2020 Rate Study



Appendix A-1
Township of Cavan Monaghan
Water Service
Capital Budget Forecast
Inflated \$

Description	Budget 2020	Total	Forecast									
			2021	2022	2023	2024	2025	2026	2027	2028	2029	
Capital Expenditures												
Water Distribution System (4830)												
Water Main Replacement Main Street	200,000	-	-	-	-	-	-	-	-	-	-	-
Watermain Replacement (various locations)	-	3,335,000	306,000	312,000	318,000	325,000	331,000	394,000	402,000	469,000	478,000	
Replacement of Well and Pump	-	156,000	-	156,000	-	-	-	-	-	-	-	-
Studies:												
Water Rate Study & Financial Plan	30,000	-	-	-	-	-	-	-	-	-	-	-
Growth Related:												
Water Master Servicing Study	50,000	20,000	20,000	-	-	-	-	-	-	-	-	-
Duke Street from King Street Southwards	-	159,000	-	159,000	-	-	-	-	-	-	-	-
King Street from Queen Street to IO Property	-	56,000	-	-	-	-	56,000	-	-	-	-	-
Water Servicing Studies - Future Development Areas	-	122,000	-	-	-	-	-	-	-	-	-	122,000
Future Watermain Booster Pumping Station	-	704,000	-	-	704,000	-	-	-	-	-	-	-
Future Trunk Watermain Costs (Oversizing)	76,500	-	-	-	-	-	-	-	-	-	-	-
Total Capital Expenditures	356,500	4,552,000	326,000	627,000	1,022,000	325,000	387,000	394,000	402,000	469,000	478,000	600,000
Capital Financing												
Provincial/Federal Grants	-	-	-	-	-	-	-	-	-	-	-	-
Development Charges Reserve Fund	126,500	1,061,000	20,000	159,000	704,000	-	56,000	-	-	-	-	122,000
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Lifecycle Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-
Water Reserve	230,000	3,491,000	306,000	468,000	318,000	325,000	331,000	394,000	402,000	469,000	478,000	
Total Capital Financing	356,500	4,552,000	326,000	627,000	1,022,000	325,000	387,000	394,000	402,000	469,000	478,000	600,000



Appendix A-2
Township of Cavan Monaghan
Water Service
Water Reserves/Reserve Funds Continuity
Inflated \$

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	1,244,267	1,391,060	1,480,213	1,433,218	1,573,287	1,748,437	1,965,074	2,164,702	2,413,956	2,657,762
Transfer from Operating	343,925	360,178	387,142	420,894	458,838	501,205	542,480	594,217	650,007	701,634
Transfer to Capital	230,000	306,000	468,000	318,000	325,000	331,000	394,000	402,000	469,000	478,000
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	1,358,192	1,445,238	1,399,354	1,536,113	1,707,125	1,918,642	2,113,554	2,356,919	2,594,963	2,881,395
Interest	32,868	34,975	33,864	37,174	41,312	46,431	51,148	57,037	62,798	69,730

Appendix A-3
Township of Cavan Monaghan
Water Service
Water Development Charges Reserve Fund Contuinity
Inflated \$

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Opening Balance	(307,403)	(358,817)	(401,252)	(588,349)	(1,291,887)	(1,299,715)	(1,357,365)	(1,368,145)	(1,349,631)	(1,326,644)
Development Charge Proceeds	167,466	73,583	75,061	123,051	117,843	128,372	122,583	154,622	161,838	138,918
Transfer to Capital	126,500	20,000	159,000	704,000	-	56,000	-	-	-	122,000
Transfer to Operating	83,901	86,537	89,257	92,064	94,961	97,950	101,035	104,219	107,504	110,895
Closing Balance	(350,339)	(391,771)	(574,447)	(1,261,362)	(1,269,005)	(1,325,293)	(1,335,818)	(1,317,742)	(1,295,297)	(1,420,621)
Interest	(8,478)	(9,481)	(13,902)	(30,525)	(30,710)	(32,072)	(32,327)	(31,889)	(31,346)	(34,379)
Required from Development Charges	126,500	20,000	159,000	704,000	-	56,000	-	-	-	122,000



Appendix A-4
Township of Cavan Monaghan
Water Service
Operating Budget Forecast
Inflated \$

Description	Budget	Forecast								
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Expenditures										
Operating Costs										
Gross Wages - Full Time	32,600	45,000	45,900	46,800	47,700	48,700	49,700	50,700	51,700	52,700
Benefits – OMERS	2,600	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
Benefits – EI Reduced Premium	425	425	400	400	400	400	400	400	400	400
Benefits – CPP	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Benefits – EHT	650	650	700	700	700	700	700	700	700	700
Benefits – WSIB	1,125	1,125	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
Manulife Group Benefits	2,600	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400
Mileage Reimbursement / Trave	100	100	100	100	100	100	100	100	100	100
Staff Training & Development	750	750	800	800	800	800	800	800	800	800
Uniforms / Clothing	100	100	100	100	100	100	100	100	100	100
Legal Expense	750	750	800	800	800	800	800	800	800	800
Corporate Insurance	10,578	10,578	10,800	11,000	11,200	11,400	11,600	11,800	12,000	12,200
Water Meters	10,000	5,000	5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800
Radio Licenses	500	500	500	500	500	500	500	500	500	500
Office Supplies	750	800	800	800	800	800	800	800	800	800
Allocated Phone Service	310	300	300	300	300	300	300	300	300	300
Advertising	50	50	100	100	100	100	100	100	100	100
Contracted Services	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Allocated Vehicle Costs	1,305	1,250	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Property taxes	22,800	22,800	23,300	23,800	24,300	24,800	25,300	25,800	26,300	26,800
Toilet Rebate Program	5,000	5,000	5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800
Millbrook Water Distribution System										
Hydrant Maintenance	4,000	4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800
Materials and Supplies	1,000	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800
Locates	500	500	500	500	500	500	500	500	500	500
Contracted Services	50,000	50,000	51,000	52,000	53,000	54,100	55,200	56,300	57,400	58,500
Millbrook Water Treatment & Supply										
Audit Fees	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Operator Contract	123,335	125,000	127,500	130,100	132,700	135,400	138,100	140,900	143,700	146,600
Phone	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Managed Router & VDSL Servi	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Hydro	13,000	15,000	15,800	16,600	17,400	18,300	19,200	20,200	21,200	22,300
Contracted Services	6,000	6,000	6,100	6,200	6,300	6,400	6,500	6,600	6,700	6,800



Appendix A-4 continued
 Township of Cavan Monaghan
 Water Service
 Operating Budget Forecast
 Inflated \$

Description	Budget	Forecast								
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Millbrook Water - Standpipe Tower										
Phone	800	800	800	800	800	800	800	800	800	800
Managed Router & VDSL Servi	800	800	800	800	800	800	800	800	800	800
Hydro	5,200	9,000	9,500	10,000	10,500	11,000	11,600	12,200	12,800	13,400
Contracted Services	4,000	4,000	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800
Water Capacity Monitoring										
Contracted Services	20,000	20,000	20,400	20,800	21,200	21,600	22,000	22,400	22,800	23,300
Bulk Water Sale										
Material and Supplies	1,000	1,000	1,050	1,103	1,158	1,216	1,277	1,341	1,408	1,478
Hydro	1,000	1,000	1,050	1,103	1,158	1,216	1,277	1,341	1,408	1,478
Contracted Services	500	500	510	520	530	541	552	563	574	585
Interdepartmental Charge - Wat	23,000	23,000	23,500	24,000	24,500	25,000	25,500	26,000	26,500	27,000
Sub Total Operating	354,928	369,778	378,210	386,526	394,846	403,573	412,406	421,445	430,490	439,841
Capital-Related										
Existing Debt (Principal) - Growth Related	41,809	43,146	44,526	45,950	47,420	48,936	50,501	52,117	53,784	55,504
Existing Debt (Interest) - Growth Related	42,092	43,391	44,731	46,114	47,541	49,014	50,534	52,102	53,721	55,391
New Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	9,560	9,883	10,217	10,563	10,920	11,289	11,671	12,065	12,473	12,895
Existing Debt (Interest) - Non-Growth Related	14,328	14,005	13,671	13,326	12,968	12,599	12,217	11,823	11,415	10,993
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Capital Reserve	343,925	360,178	387,142	420,894	458,838	501,205	542,480	594,217	650,007	701,634
Sub Total Capital Related	451,714	470,603	500,287	536,847	577,687	623,044	667,404	722,324	781,400	836,416
Total Expenditures	806,642	840,381	878,497	923,373	972,533	1,026,617	1,079,810	1,143,769	1,211,890	1,276,257



Appendix A-4 continued
Township of Cavan Monaghan
Water Service
Operating Budget Forecast
Inflated \$

Description	Budget	Forecast								
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Revenues										
Base Charge	359,598	381,164	405,777	427,205	453,584	482,219	511,475	544,492	581,944	618,462
Misc. Base Charge from New Development	17,448	11,763	4,009	8,199	8,383	9,643	8,765	12,323	12,600	10,541
Public Utility Grant Program (M	18,700	18,700	19,100	19,500	19,900	20,300	20,700	21,100	21,500	21,900
Miscellaneous Revenue - Sysco	2,500	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300
Rent Revenue	4,600	4,600	4,700	4,800	4,900	5,000	5,100	5,200	5,300	5,400
Meter Installation Revenue	10,000	10,000	10,200	10,400	10,600	10,800	11,000	11,200	11,400	11,600
User Fees and Service Charge	8,400	8,400	8,600	8,800	9,000	9,200	9,400	9,600	9,800	10,000
Water Connection /Other Charge	-	-	-	-	-	-	-	-	-	-
Miscellaneous Revenue	-	-	-	-	-	-	-	-	-	-
Water & Sewer Account Set Up	11,750	11,750	12,000	12,200	12,400	12,600	12,900	13,200	13,500	13,800
Locates & User Fees	-	-	-	-	-	-	-	-	-	-
Write off - Contra Revenue Acc	500	500	500	500	500	500	500	500	500	500
Penalty and Interest Income -	13,000	13,000	13,300	13,600	13,900	14,200	14,500	14,800	15,100	15,400
Bulk Water Sale	45,000	44,730	45,736	46,765	47,818	48,894	49,994	51,119	52,269	53,445
Other Revenue										
Contributions from Development Charges Reserve Fund	83,901	86,537	89,257	92,064	94,961	97,950	101,035	104,219	107,504	110,895
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	575,397	593,643	615,779	646,733	678,746	714,207	748,369	790,853	834,617	875,242
Water Billing Recovery - Total	231,245	246,737	262,717	276,639	293,788	312,410	331,440	352,917	377,273	401,015



Appendix A-5
Township of Cavan Monaghan
Water Service
Water Rate Forecast

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Total Water Billing Recovery	231,245	246,737	262,717	276,639	293,788	312,410	331,440	352,917	377,273	401,015
Total Metered Volume (m ³)	127,058	135,570	141,170	145,370	150,970	156,990	162,870	169,590	177,290	184,290
Constant Rate	1.82	1.820	1.861	1.903	1.946	1.990	2.035	2.081	2.128	2.176
Bulk Water Rate	4.26	4.260	4.356	4.454	4.554	4.657	4.761	4.868	4.978	5.090
Annual Percentage Change		0%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%