



 **Watson
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ECONOMISTS LTD.

Water Ontario Regulation 453/07 Financial Plan

Town of Petawawa

Financial Plan #199-301

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List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
D.C.	Development Charges
MECP	Ministry of the Environment, Conservation and Parks
MMAH	Ministry of Municipal Affairs and Housing
OCIF	Ontario Community Infrastructure Fund
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

Watson & Associates Economists Ltd. (Watson) was retained by the Town of Petawawa (the Town) 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. This detailed financial planning and forecasting in regard to the Town's water system has already been completed and documented by Watson within the "Town of Petawawa Water and Wastewater Rate Study, September 24, 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.) was passed in December, 2002 in order to address some of the recommendations made by the Walkerton Inquiry Part II report. 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.

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

O.Reg. 453/07 also provides details with regards to s.30 (1) part b of the S.D.W.A. for existing water systems. The requirements for existing systems are summarized as follows:

- Financial plans must be approved by Council resolution (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 P.S.A.B.) 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 P.S.A.B.) 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 P.S.A.B.) 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; and
- Financial plan is to be submitted to the Ministry of Municipal Affairs and Housing.

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, the 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 (P.S.A.B.) 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 Town’s Financial Plan

The Town is currently in the process of renewing the drinking water license 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. As the Town’s water license expires in 2021, this financial plan provides for a 2021 start year and forecast period to 2030.



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 S.D.W.A. requires a declaration of the financial plan's sustainability, it does not give a clear definition of what would be considered sustainable. Instead, the Ministry of the Environment released a guideline ("Towards Financially Sustainable Drinking-Water") that provides possible approaches to achieving sustainability. The Province's Principles of Financially Sustainable Water Services are provided below:

Principle #1: Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system 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 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 W.O.A.

The purposes of the W.O.A. 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, the 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 the 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 Town's asset management plan must include the following for each asset category:

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

2.5 Water Forecast

The Town has already completed their financial planning through its 2020 water budget and a forecasting exercise through the 2020 Rate Study. The budget and rate study are 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 financial plan for the Town'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 and system growth;
-



- An analysis of required water rates that ensure revenues are equitable and sufficient to meet system needs; and
- A public process that involves consultation with the main stakeholders including the Town 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 financial plan.

The details of the financial plan arising from the 2020 Rate Study are contained in Appendix A.



Chapter 3

Approach



3. Approach

3.1 Overview

The 2020 Rate Study 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 financial plan.

3.2 Conversion Process

The conversion from the existing modified cash basis financial plan 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 within the 2020 Rate Study as well as part of the Town's annual P.S.A.B. 3150 compliance processes. Given the prospective nature of the 2020 Rate Study, replacement cost is provided for each asset. However, historical cost (which is the original cost to purchase, develop, or construct



each asset) is required for financial reporting purposes. Once historical cost is established, 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. However, these estimates only represent future assets that the Town anticipates purchasing or constructing without consideration for assets that are contributed by developers and other parties (at no or partial cost to the Town). These contributed assets could form a significant part of the infrastructure going forward in terms of the sustainability of the system as a whole and despite their non-monetary nature; the financial plan 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 system, in order to convert from the cash to full accrual basis. 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 (Water)

Modified Cash Basis	Budget 2021	Adjustments		Full Accrual Budget 2021	Accrual Basis
		DR	CR		
Revenues					Revenues
Base Charge Revenue	1,684,882			1,684,882	Base Charge Revenue
Rate Based Revenue	1,003,569			1,003,569	Rate Based Revenue
Transfers from Reserves	-	-			
Other Revenue	-		214,200	214,200	Earned Development Charges and Gas Tax Revenue
			139,957	139,957	Other Revenue
Total Revenues	2,688,451			3,042,608	Total Revenues
Expenditures					Expenses
Operating	1,756,779	-		1,756,779	Operating Expenses
Capital					
Transfers to Reserves	931,672		931,672		
Debt Repayment (Principal & Interest)	-		-	-	Interest on Debt
		301,323		301,323	Amortization
		-		-	Loss on Disposal of Tangible Capital Assets
Total Expenditures	2,688,451			2,058,102	Total Expenses
Net Expenditures	-			984,506	Annual Surplus/(Deficit)
Increase (decrease) in amounts to be recovered	-			14,704,452	Accumulated Surplus/(Deficit), beginning of year
Change in Fund Balances	-	984,506	-	15,688,958	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		1,285,829	1,285,829		

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). As noted earlier, the applicable balances from the Statement of Capital and the Statement of Reserve and Reserve Funds will need to be transferred to this statement. 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 Town and as such, it may 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 Town 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 new 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, additional 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
Statements of Financial Position (Water)**

Modified Cash Basis	Budget 2021	Adjustments		Full Accrual Budget 2021	Accrual Basis
		DR	CR		
ASSETS					ASSETS
Financial Assets					Financial Assets
Cash	6,520,082			6,520,082	Cash
Accounts Receivable	238,886			238,886	Accounts Receivable
Long-term Accounts Receivable	598,426			598,426	Long-term Accounts Receivable
				-	Investments
				-	Inventory for resale
Total Financial Assets	7,357,394			7,357,394	Total Financial Assets
Non-Financial Assets					
Inventory of Supplies	-		-		
Prepaid Expenses	-		-		
Total Non-Financial Assets	-				
LIABILITIES					Liabilities
Accounts Payable & Accrued Liabilities	219,597			219,597	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	-			-	Debt (Principal only)
Deferred Revenue	-			-	Deferred Revenue
Other	-			-	Other
Total Liabilities	219,597			219,597	Total Liabilities
Net Assets/(Debt)	7,137,797			7,137,797	Net Financial Assets/(Debt)
		8,551,161	-	8,551,161	Non-Financial Assets
		-		-	Tangible Capital Assets
		-		-	Inventory of Supplies
					Prepaid Expenses
				8,551,161	Total Non-Financial Assets
Municipal Position					
Water Reserves	7,137,797	7,137,797	-		
Gas Tax Reserve Fund	-	-	-		
Development Charge Reserve Fund	(598,426)	-	598,426		
Amounts to be Recovered	598,426	598,426	-		
Total Municipal Position	7,137,797		15,688,958	15,688,958	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		16,287,384	16,287,384		

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 of the statements created by the previous steps are in balance. The Statement of Financial Position summarizes the resources and obligations of the Town 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 Town’s ledgers. However, it may not be possible 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 Town’s amortization policy. Otherwise, an assumption will need to be made and applied consistently throughout the financial plan.
- 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 2020 Rate Study.
- d) Contributed Assets – As noted earlier, contributed assets could represent a significant part of the Town’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 Town'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 Town's water system. It is not an audited document¹ and 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 Town's water system. 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 for 2021, the Town's water system will be in a net financial asset position of approximately \$7.1 million. The Town's net financial asset position is projected to increase to \$12.0 million by the end of the forecast.

Another important indicator on the Statement of Financial Position is the tangible capital asset balance. 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 plants 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 are expected to grow by approximately \$7.2 million over the 10-year forecast period. This indicates that the Town has plans to invest in tangible capital assets in excess of the anticipated use of existing 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 decreasing from 68% to 58% over the forecast period and as a result, annual surplus grows from \$984,506 to over \$1.9 million. 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, reserve/reserve fund transfers and debt principal payments.

Another important indicator on this statement is accumulated surplus/deficit. An accumulated surplus indicates that the available net resources are sufficient to provide future 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 \$13.0 million to a 2021 accumulated surplus of \$14.7 million over the forecast period. This



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.

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 for the all the years except 2021 and 2024, forecasted annual surplus exceeds forecasted tangible capital asset acquisitions (net of amortization for the year), resulting in an increase in the net financial asset balance. For the years 2021 and 2024, forecasted tangible capital asset acquisitions (net of amortization for the year) exceed the forecasted annual surplus, resulting in decreases to the net financial asset balance. This is a result of more significant capital asset acquisitions forecasted allowing for a long-term plan of funding capital through accumulated surplus (i.e. reserves and reserve funds). The ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions is 0.99 in 2021 and increases to 1.39 over the forecast period (note: a desirable ratio is 1:1 or better).

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- 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 Town's water system to improve from a balance of approximately \$6.7 million at the beginning of 2021, to just under \$11.6 million by the end of 2030. For further discussion on projected cash balances please refer to the Notes to the Financial Plan.



Table 4-1
Statement of Financial Position: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2030

	Notes	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Financial Assets											
Cash	1	6,520,082	6,754,125	7,012,091	6,890,802	7,501,203	8,139,022	8,322,837	9,220,404	10,317,859	11,587,500
Accounts Receivable	1	238,886	251,282	264,320	278,035	292,461	307,636	323,598	340,389	358,050	376,628
Long-term Accounts Receivable	2	598,426	565,861	531,780	496,067	458,689	421,051	381,735	340,708	297,855	253,143
Total Financial Assets		7,357,394	7,571,268	7,808,191	7,664,904	8,252,353	8,867,709	9,028,170	9,901,501	10,973,764	12,217,271
Liabilities											
Accounts Payable & Accrued Liabilities	1	219,597	221,513	227,413	229,100	235,575	238,775	242,975	250,813	252,525	260,575
Deferred Revenue	3	-	-	-	-	-	-	-	-	-	-
Total Liabilities		219,597	221,513	227,413	229,100	235,575	238,775	242,975	250,813	252,525	260,575
Net Financial Assets/(Debt)		7,137,797	7,349,755	7,580,778	7,435,804	8,016,778	8,628,934	8,785,195	9,650,688	10,721,239	11,956,696
Non-Financial Assets											
Tangible Capital Assets	4	8,551,161	9,212,225	9,938,875	11,161,923	11,752,877	12,450,236	13,730,458	14,410,941	15,070,382	15,711,022
Total Non-Financial Assets		8,551,161	9,212,225	9,938,875	11,161,923	11,752,877	12,450,236	13,730,458	14,410,941	15,070,382	15,711,022
Accumulated Surplus/(Deficit)	5	15,688,958	16,561,980	17,519,653	18,597,727	19,769,655	21,079,170	22,515,653	24,061,629	25,791,621	27,667,718
Financial Indicators											
	Total Change	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1) Increase/(Decrease) in Net Financial Assets	4,807,728	(11,171)	211,958	231,023	(144,974)	580,974	612,156	156,261	865,493	1,070,551	1,235,457
2) Increase/(Decrease) in Tangible Capital Assets	8,155,538	995,677	661,064	726,650	1,223,048	590,954	697,359	1,280,222	680,483	659,441	640,640
3) Increase/(Decrease) in Accumulated Surplus	12,963,266	984,506	873,022	957,673	1,078,074	1,171,928	1,309,515	1,436,483	1,545,976	1,729,992	1,876,097



Table 4-2
Statement of Operations: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2030

	Notes	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Water Revenue											
Base Charge Revenue		1,684,882	1,797,552	1,908,247	2,033,166	2,155,642	2,295,743	2,441,661	2,589,067	2,756,087	2,920,687
Rate Based Revenue		1,003,569	1,030,394	1,066,433	1,095,861	1,135,740	1,166,419	1,200,142	1,241,698	1,273,444	1,317,924
Earned Development Charges Revenue	3	214,200	-	-	-	-	-	-	-	-	-
Other Revenue	6	139,957	144,112	148,643	145,799	157,192	169,194	172,258	189,228	210,220	234,446
Total Revenues		3,042,608	2,972,058	3,123,323	3,274,826	3,448,574	3,631,356	3,814,061	4,019,993	4,239,751	4,473,057
Water Expenses											
Operating Expenses	Sch. 4-1	1,756,779	1,772,100	1,819,300	1,832,800	1,884,600	1,910,200	1,943,800	2,006,500	2,020,200	2,084,600
Interest on Debt	2	-	-	-	-	-	-	-	-	-	-
Amortization	4	301,323	326,936	346,350	363,952	392,046	411,641	433,778	467,517	489,559	512,360
Loss on Disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Total Expenses		2,058,102	2,099,036	2,165,650	2,196,752	2,276,646	2,321,841	2,377,578	2,474,017	2,509,759	2,596,960
Annual Surplus/(Deficit)		984,506	873,022	957,673	1,078,074	1,171,928	1,309,515	1,436,483	1,545,976	1,729,992	1,876,097
Accumulated Surplus/(Deficit), beginning of year	5	14,704,452	15,688,958	16,561,980	17,519,653	18,597,727	19,769,655	21,079,170	22,515,653	24,061,629	25,791,621
Accumulated Surplus/(Deficit), end of year		15,688,958	16,561,980	17,519,653	18,597,727	19,769,655	21,079,170	22,515,653	24,061,629	25,791,621	27,667,718
Note 5:											
Accumulated Surplus/(Deficit) Reconciliation:											
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Reserve Balances											
Reserves: Development Charges		(598,426)	(565,861)	(531,780)	(496,067)	(458,689)	(421,051)	(381,735)	(340,708)	(297,855)	(253,143)
Reserves: Capital/Other		7,137,797	7,349,755	7,580,778	7,435,804	8,016,778	8,628,934	8,785,195	9,650,688	10,721,239	11,956,696
Total Reserves Balance		6,539,371	6,783,894	7,048,998	6,939,737	7,558,089	8,207,883	8,403,460	9,309,980	10,423,384	11,703,553
Less: Debt Obligations and Deferred Revenue		-	-	-	-	-	-	-	-	-	-
Add: Long-term Accounts Receivable		598,426	565,861	531,780	496,067	458,689	421,051	381,735	340,708	297,855	253,143
Add: Tangible Capital Assets	4	8,551,161	9,212,225	9,938,875	11,161,923	11,752,877	12,450,236	13,730,458	14,410,941	15,070,382	15,711,022
Total Ending Balance		15,688,958	16,561,980	17,519,653	18,597,727	19,769,655	21,079,170	22,515,653	24,061,629	25,791,621	27,667,718
Financial Indicators											
	Total Change	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1) Expense to Revenue Ratio		68%	71%	69%	67%	66%	64%	62%	62%	59%	58%
2) Increase/(Decrease) in Accumulated Surplus	12,963,266	984,506	873,022	957,673	1,078,074	1,171,928	1,309,515	1,436,483	1,545,976	1,729,992	1,876,097



Schedule 4-1
Statement of Operating Expenses: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2030

	Notes	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Operating Expenses											
Waterworks Salaries		48,900	49,800	50,800	51,800	52,900	53,900	55,000	56,100	57,200	58,400
Training/Associations		9,200	9,400	9,600	9,700	9,900	10,100	10,300	10,500	10,800	11,000
Dispatch/Alarm Monitoring		1,000	1,000	1,100	1,100	1,100	1,100	1,100	1,200	1,200	1,200
Audit		8,700	8,800	9,000	9,200	9,400	9,600	9,800	10,000	10,200	10,400
Service Contract-OCWA		896,479	914,400	932,700	951,400	970,400	989,800	1,009,600	1,029,800	1,050,400	1,071,400
Waterworks Administration		114,400	116,700	119,100	121,400	123,900	126,400	128,900	131,500	134,100	136,800
Water Purchase-Pembroke		70,000	71,400	72,800	74,300	75,800	77,300	78,800	80,400	82,000	83,700
Tools/Parts/Supplies		2,000	2,000	2,100	2,100	2,200	2,200	2,300	2,300	2,300	2,400
Leak Repairs		51,000	52,000	53,100	54,100	55,200	56,300	57,400	58,600	59,800	60,900
Third-party Contractor Hydrant Maintenance & Installation		42,300	43,200	44,000	44,900	45,800	46,700	47,700	48,600	49,600	50,600
Other Distribution System Maintenance		6,100	6,200	6,400	6,500	6,600	6,800	6,900	7,000	7,200	7,300
Water Rate Review		-	-	-	-	18,300	-	-	-	-	20,200
Water Treatment Plant		121,400	123,800	126,300	128,800	131,400	134,000	138,700	139,400	142,200	145,100
Minor Capital		39,800	20,800	32,900	10,800	7,700	14,600	8,000	34,000	8,400	12,200
Water Plant Electricity		248,900	253,900	258,900	264,100	269,400	274,800	280,300	285,900	291,600	297,400
Insurance		27,500	28,100	28,700	29,200	29,800	30,400	31,000	31,600	32,300	32,900
Elevated Tank-Woodland		400	400	400	400	400	400	500	500	500	500
Elevated Tank-Tower Road		8,000	8,200	8,300	8,500	8,700	8,800	9,000	9,200	9,400	9,600
Booster Station 1-Brumm		6,000	6,100	6,200	6,400	6,500	6,600	6,800	6,900	7,000	7,200
Booster Station 2-Blvd		12,500	12,800	13,000	13,300	13,500	13,800	14,100	14,400	14,600	14,900
Infrastructure/Mapping Update		30,000	30,600	31,200	31,800	32,500	33,100	33,800	34,500	35,100	35,900
Water System PILT County		12,200	12,500	12,700	13,000	13,200	13,500	13,800	14,100	14,300	14,600
Non TCA - Expenses from Capital Budget	7	-	-	-	-	-	-	-	-	-	-
TOTAL OPERATING EXPENSES		1,756,779	1,772,100	1,819,300	1,832,800	1,884,600	1,910,200	1,943,800	2,006,500	2,020,200	2,084,600



Table 4-3
Statement of Changes in Net Financial Assets/Debt: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2030

	Notes	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Annual Surplus/(Deficit)		984,506	873,022	957,673	1,078,074	1,171,928	1,309,515	1,436,483	1,545,976	1,729,992	1,876,097
Less: Acquisition of Tangible Capital Assets	4	(1,297,000)	(988,000)	(1,073,000)	(1,587,000)	(983,000)	(1,109,000)	(1,714,000)	(1,148,000)	(1,149,000)	(1,153,000)
Add: Amortization of Tangible Capital Assets	4	301,323	326,936	346,350	363,952	392,046	411,641	433,778	467,517	489,559	512,360
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Increase/(Decrease) in Net Financial Assets/(Net Debt)		(11,171)	211,958	231,023	(144,974)	580,974	612,156	156,261	865,493	1,070,551	1,235,457
Net Financial Assets/(Net Debt), beginning of year		7,148,968	7,137,797	7,349,755	7,580,778	7,435,804	8,016,778	8,628,934	8,785,195	9,650,688	10,721,239
Net Financial Assets/(Net Debt), end of year		7,137,797	7,349,755	7,580,778	7,435,804	8,016,778	8,628,934	8,785,195	9,650,688	10,721,239	11,956,696
Financial Indicators		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1) Acquisition of Tangible Capital Assets (Cumulative)		1,297,000	2,285,000	3,358,000	4,945,000	5,928,000	7,037,000	8,751,000	9,899,000	11,048,000	12,201,000
2) Annual Surplus/Deficit before Amortization (Cumulative)		1,285,829	2,485,787	3,789,810	5,231,836	6,795,810	8,516,966	10,387,227	12,400,720	14,620,271	17,008,728
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)		0.99	1.09	1.13	1.06	1.15	1.21	1.19	1.25	1.32	1.39



Table 4-4
Statement of Cash Flow – Indirect Method: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2030

	Notes	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Operating Transactions											
Annual Surplus/Deficit		984,506	873,022	957,673	1,078,074	1,171,928	1,309,515	1,436,483	1,545,976	1,729,992	1,876,097
Add: Amortization of TCA's	4	301,323	326,936	346,350	363,952	392,046	411,641	433,778	467,517	489,559	512,360
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Earned Deferred Revenue	3	(214,200)	-	-	-	-	-	-	-	-	-
Less: Developer Contributions		-	-	-	-	-	-	-	-	-	-
Add: Deferred Revenue Proceeds		31,078	32,565	34,081	35,713	37,378	37,638	39,316	41,027	42,852	44,712
Change in A/R (Increase)/Decrease		(4,884)	(12,396)	(13,038)	(13,715)	(14,426)	(15,175)	(15,962)	(16,791)	(17,661)	(18,578)
Change in A/P Increase/(Decrease)		(16,753)	1,916	5,900	1,687	6,475	3,200	4,200	7,838	1,712	8,050
Less: Interest Proceeds		(139,957)	(144,113)	(148,643)	(145,800)	(157,192)	(169,195)	(172,259)	(189,229)	(210,220)	(234,445)
Cash Provided by Operating Transactions		941,113	1,077,930	1,182,323	1,319,911	1,436,209	1,577,624	1,725,556	1,856,338	2,036,235	2,188,196
Capital Transactions											
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(1,297,000)	(988,000)	(1,073,000)	(1,587,000)	(983,000)	(1,109,000)	(1,714,000)	(1,148,000)	(1,149,000)	(1,153,000)
Cash Applied to Capital Transactions		(1,297,000)	(988,000)	(1,073,000)	(1,587,000)	(983,000)	(1,109,000)	(1,714,000)	(1,148,000)	(1,149,000)	(1,153,000)
Investing Transactions											
Proceeds from Investments		139,957	144,113	148,643	145,800	157,192	169,195	172,259	189,229	210,220	234,445
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	-	-	-	-
Cash Provided by (applied to) Investing Transactions		139,957	144,113	148,643	145,800	157,192	169,195	172,259	189,229	210,220	234,445
Financing Transactions											
Proceeds from Debt Issue	2	-	-	-	-	-	-	-	-	-	-
Less: Debt Repayment (Principal only)	2	-	-	-	-	-	-	-	-	-	-
Cash Applied to Financing Transactions		-	-	-	-	-	-	-	-	-	-
Increase in Cash and Cash Equivalents		(215,930)	234,043	257,966	(121,289)	610,401	637,819	183,815	897,567	1,097,455	1,269,641
Cash and Cash Equivalents, beginning of year	1	6,736,012	6,520,082	6,754,125	7,012,091	6,890,802	7,501,203	8,139,022	8,322,837	9,220,404	10,317,859
Cash and Cash Equivalents, end of year	1	6,520,082	6,754,125	7,012,091	6,890,802	7,501,203	8,139,022	8,322,837	9,220,404	10,317,859	11,587,500



Water

Notes to Financial Plan

The financial plan format as outlined in Chapter 4 closely approximates the full accrual format used by municipalities (2009 onward) 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 Town of Petawawa, some of the items listed above have been estimated given that the Town 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

Receivable and payable balances were estimated for each year of the forecast based on the following factors:

- a) Receivables: Based on historical levels of receivables as a percentage of annual revenue earned (source: 2017-2019 Financial Information Return (F.I.R.); and
- b) Payables: Based on historical levels of payables as a percentage of annual expenditures (source: 2017-2019 Financial Information Return (F.I.R.).

2. Debt

The Town had no water related debt at the end of 2020. Furthermore, no new debt is expected over the forecast period.

3. Deferred Revenue

Deferred revenue is typically made up of water development charge reserve fund 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 accounts receivable”) for financial reporting



purposes, representing future amounts to be collected from developers. Note that the 2020 Water and Wastewater Rate Study anticipates that the water D.C. reserve fund will continue to stay in a deficit position throughout the forecast.

4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water related assets in the following categories:
 - i. Infrastructure;
 - ii. Facilities;
 - iii. Equipment; and
 - iv. Land.

- Amortization is calculated based on 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, unless the asset is documented as a new asset. The value of each asset disposal is calculated by estimating the original purchase/construction date and deflating current replacement cost values to those estimated dates in order to calculate original historical cost.
- 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 Town 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	2030
Opening Tangible Capital Asset Balance	20,529,223	21,716,203	22,585,929	23,523,684	24,858,018	25,674,226	26,600,799	28,036,375	28,984,276	29,919,099
Acquisitions	1,297,000	988,000	1,073,000	1,587,000	983,000	1,109,000	1,714,000	1,148,000	1,149,000	1,153,000
Disposals	110,020	118,274	135,245	252,666	166,792	182,427	278,424	200,099	214,177	244,336
Closing Tangible Capital Asset Balance	21,716,203	22,585,929	23,523,684	24,858,018	25,674,226	26,600,799	28,036,375	28,984,276	29,919,099	30,827,763
Opening Accumulated Amortization	12,973,739	13,165,042	13,373,704	13,584,809	13,696,095	13,921,349	14,150,563	14,305,917	14,573,335	14,848,717
Amortization Expense	301,323	326,936	346,350	363,952	392,046	411,641	433,778	467,517	489,559	512,360
Amortization on Disposal	110,020	118,274	135,245	252,666	166,792	182,427	278,424	200,099	214,177	244,336
Ending Accumulated Amortization	13,165,042	13,373,704	13,584,809	13,696,095	13,921,349	14,150,563	14,305,917	14,573,335	14,848,717	15,116,741
Net Book Value	8,551,161	9,212,225	9,938,875	11,161,923	11,752,877	12,450,236	13,730,458	14,410,941	15,070,382	15,711,022

5. Accumulated Surplus

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

Water	2021 Opening Accumulated Surplus
Reserve Balances	
Reserves: Development Charges	(415,304)
Reserves: Capital/Other	7,148,968
Total Reserves Balance	6,733,664
Less: Debt Obligations and Deferred Revenue	415,304
Add: Tangible Capital Assets	7,555,484
Total Opening Balance	14,704,452

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

6. Other Revenue

No other revenues have been identified.

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 Town 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 Town'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



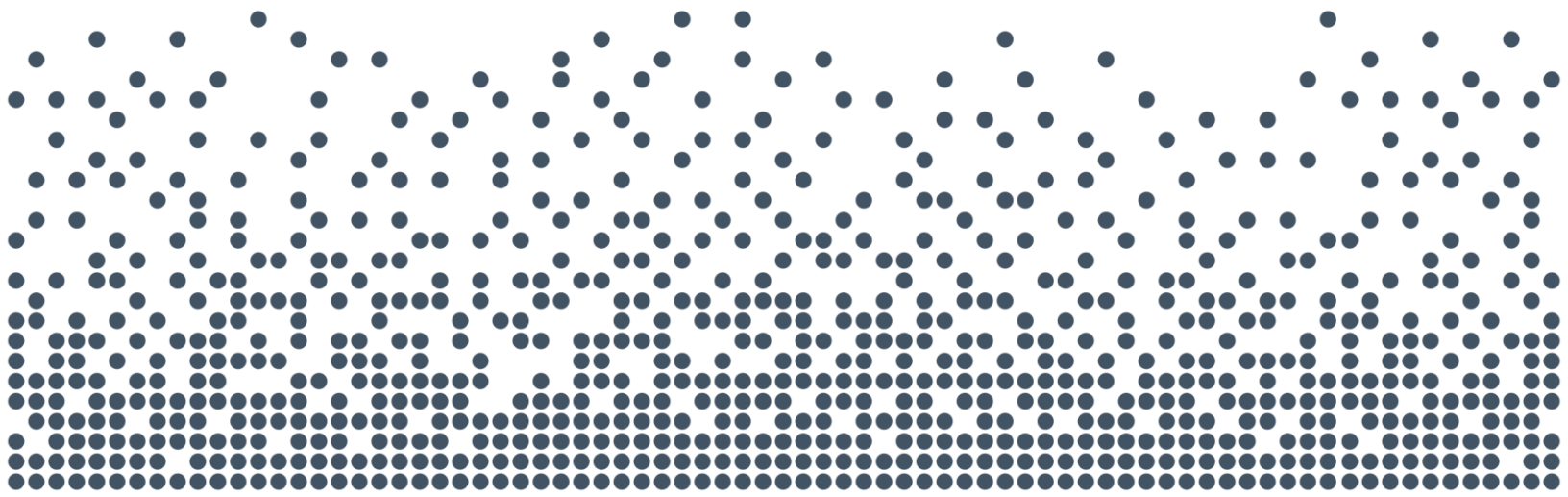
6. Recommendations

This report presents the water financial plan for the Town of Petawawa 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 Rate Study.

Nevertheless, Council is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

1. The Town of Petawawa Water Financial Plan prepared by Watson & Associates Economists Ltd. dated December 15, 2020 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. The Financial Plan, the Council Resolution approving the Financial Plan, and the Water Rate Study underpinning the Financial Plan be submitted to the Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3 (1) 6)
4. The Council Resolution approving the Financial Plan be submitted to the Ministry of the Environment, satisfying the requirements under the Safe Drinking Water Act. (S.D.W.A. Section 32 (5) 2 ii))¹

¹ Note: The Ministry of the Environment does not require the Council Resolution for the initial financial plan submission. We encourage the municipality to contact the Ministry of the Environment to verify all requirements have been met.



Appendices



Appendix A

Water Budget and Forecast Summary Tables



Appendix A-1 Water Service Capital Forecast 2021-2030

Description	Total	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Capital Expenditures											
Facilities											
Major Treatment Capital - OCWA	518,000	98,000	80,000	150,000	40,000	12,000	12,000	51,000	13,000	48,000	14,000
Water Plant	195,000	-	-	-	-	-	-	-	-	-	-
Linear											
Integrated Road Reconstruction - Water Mains	9,805,000	836,000	865,000	895,000	927,000	959,000	993,000	1,027,000	1,063,000	1,101,000	1,139,000
Major Distribution Capital - OCWA	1,572,000	57,000	43,000	28,000	620,000	12,000	104,000	636,000	72,000	-	-
Water System	176,790	-	-	-	-	-	-	-	-	-	-
Growth Related											
Portage Rd. Watermain Expansion	993,413	306,000	-	-	-	-	-	-	-	-	-
Total Capital Expenditures	13,260,203	1,297,000	988,000	1,073,000	1,587,000	983,000	1,109,000	1,714,000	1,148,000	1,149,000	1,153,000
Capital Financing											
Provincial/Federal Grants	-	-	-	-	-	-	-	-	-	-	-
Development Charges Reserve Fund	695,389	214,200	-	-	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-	-
Operating Contributions	578,014	-	-	-	-	-	-	-	-	-	-
Water Reserve Fund	11,986,800	1,082,800	988,000	1,073,000	1,587,000	983,000	1,109,000	1,714,000	1,148,000	1,149,000	1,153,000
Total Capital Financing	13,260,203	1,297,000	988,000	1,073,000	1,587,000	983,000	1,109,000	1,714,000	1,148,000	1,149,000	1,153,000

Appendix A-2 Schedule of Non-Growth-Related Debenture Repayments 2021-2030

Debenture Year	Principal (Inflated)	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2021	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	-	-	-	-
2030	-	-	-	-	-	-	-	-	-	-	-
Total Annual Debt Charges	-	-	-	-	-	-	-	-	-	-	-



Appendix A-3
Water Reserve Continuity
2021-2030

Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Opening Balance	7,148,968	7,137,796	7,349,755	7,580,777	7,435,804	8,016,777	8,628,934	8,785,195	9,650,689	10,721,240
Transfer from Operating	931,672	1,055,846	1,155,379	1,296,226	1,406,782	1,551,962	1,698,002	1,824,264	2,009,331	2,154,011
Transfer to Capital	1,082,800	988,000	1,073,000	1,587,000	983,000	1,109,000	1,714,000	1,148,000	1,149,000	1,153,000
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	6,997,840	7,205,642	7,432,135	7,290,004	7,859,586	8,459,739	8,612,936	9,461,459	10,511,019	11,722,251
Interest	139,957	144,113	148,643	145,800	157,192	169,195	172,259	189,229	210,220	234,445

Appendix A-4
Water Development Charges Reserve Fund Continuity
2021-2030

Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Opening Balance	(415,304)	(598,426)	(565,861)	(531,780)	(496,067)	(458,689)	(421,051)	(381,735)	(340,707)	(297,855)
Development Charge Proceeds	42,812	43,660	44,508	45,440	46,372	45,894	46,801	47,708	48,692	49,676
Transfer to Capital	214,200	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	(586,692)	(554,766)	(521,353)	(486,340)	(449,695)	(412,795)	(374,250)	(334,027)	(292,015)	(248,179)
Interest	(11,734)	(11,095)	(10,427)	(9,727)	(8,994)	(8,256)	(7,485)	(6,681)	(5,840)	(4,964)
Required from Development Charges	214,200	-	-	-	-	-	-	-	-	-



Appendix A-5 Water Operating Forecast 2021-2030

Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
EXPENDITURES										
Operating Costs										
Waterworks Salaries	48,900	49,800	50,800	51,800	52,900	53,900	55,000	56,100	57,200	58,400
Training/Associations	9,200	9,400	9,600	9,700	9,900	10,100	10,300	10,500	10,800	11,000
Dispatch/Alarm Monitoring	1,000	1,000	1,100	1,100	1,100	1,100	1,100	1,200	1,200	1,200
Audit	8,700	8,800	9,000	9,200	9,400	9,600	9,800	10,000	10,200	10,400
Service Contract-OCWA	896,479	914,400	932,700	951,400	970,400	989,800	1,009,600	1,029,800	1,050,400	1,071,400
Service Contract-OCWA Extra	-	-	-	-	-	-	-	-	-	-
Waterworks Administration	114,400	116,700	119,100	121,400	123,900	126,400	128,900	131,500	134,100	136,800
Water Purchase-Pembroke	70,000	71,400	72,800	74,300	75,800	77,300	78,800	80,400	82,000	83,700
Tools/Parts/Supplies	2,000	2,000	2,100	2,100	2,200	2,200	2,300	2,300	2,300	2,400
Water Distribution System Maintenance (OCWA Forecast)										
Leak Repairs	51,000	52,000	53,100	54,100	55,200	56,300	57,400	58,600	59,800	60,900
Third-party Contractor Hydrant Maintenance & Installation	42,300	43,200	44,000	44,900	45,800	46,700	47,700	48,600	49,600	50,600
Other Distribution System Maintenance	6,100	6,200	6,400	6,500	6,600	6,800	6,900	7,000	7,200	7,300
Water Rate Review	-	-	-	-	18,300	-	-	-	-	20,200
Water Treatment Plant	121,400	123,800	126,300	128,800	131,400	134,000	138,700	139,400	142,200	145,100
Minor Capital	39,800	20,800	32,900	10,800	7,700	14,600	8,000	34,000	8,400	12,200
Water Plant Electricity	248,900	253,900	258,900	264,100	269,400	274,800	280,300	285,900	291,600	297,400
Insurance	27,500	28,100	28,700	29,200	29,800	30,400	31,000	31,600	32,300	32,900
Elevated Tank-Woodland	400	400	400	400	400	400	500	500	500	500
Elevated Tank-Tower Road	8,000	8,200	8,300	8,500	8,700	8,800	9,000	9,200	9,400	9,600
Booster Station 1-Brumm	6,000	6,100	6,200	6,400	6,500	6,600	6,800	6,900	7,000	7,200
Booster Station 2-Blvd	12,500	12,800	13,000	13,300	13,500	13,800	14,100	14,400	14,600	14,900
Hydrant Maintenance	-	-	-	-	-	-	-	-	-	-
Infrastructure/Mapping Update	30,000	30,600	31,200	31,800	32,500	33,100	33,800	34,500	35,100	35,900
Water System PILT County	12,200	12,500	12,700	13,000	13,200	13,500	13,800	14,100	14,300	14,600
Sub-Total Operating	1,756,779	1,772,100	1,819,300	1,832,800	1,884,600	1,910,200	1,943,800	2,006,500	2,020,200	2,084,600
Capital-Related										
Existing Debt (Principal) - Growth Related										
Existing Debt (Interest) - Growth Related										
New Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related										
Existing Debt (Interest) - Non-Growth Related										
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Capital Reserve	931,672	1,055,846	1,155,379	1,296,226	1,406,782	1,551,962	1,698,002	1,824,264	2,009,331	2,154,011
Sub-Total Capital-Related	931,672	1,055,846	1,155,379	1,296,226	1,406,782	1,551,962	1,698,002	1,824,264	2,009,331	2,154,011
Total Expenditures	2,688,451	2,827,946	2,974,679	3,129,026	3,291,382	3,462,162	3,641,802	3,830,764	4,029,531	4,238,611



Appendix A-5 (continued)
Water Operating Budget and Forecast
2021-2030

Description	Forecast									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
REVENUES										
Operating										
Miscellaneous Revenue/Grant	-	-	-	-	-	-	-	-	-	-
Contributions from Development Charges Reserve Fund	-	-	-	-	-	-	-	-	-	-
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	-	-	-	-	-	-	-	-	-	-
Billing										
Waterworks User Charges	-	-	-	-	-	-	-	-	-	-
Flat Rate Billing	1,684,882	1,797,552	1,908,247	2,033,166	2,155,642	2,295,743	2,441,661	2,589,067	2,756,087	2,920,687
Consumptive Billing	1,003,569	1,030,394	1,066,433	1,095,861	1,135,740	1,166,419	1,200,142	1,241,698	1,273,444	1,317,924
Total Billing Revenue	2,688,451	2,827,946	2,974,679	3,129,026	3,291,382	3,462,162	3,641,802	3,830,764	4,029,531	4,238,611
Total Revenues	2,688,451	2,827,946	2,974,679	3,129,026	3,291,382	3,462,162	3,641,802	3,830,764	4,029,531	4,238,611



Appendix A-6 Water Rate Budget and Forecast 2021-2030

Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Water Billing Recovery	2,688,451	2,827,946	2,974,679	3,129,026	3,291,382	3,462,162	3,641,802	3,830,764	4,029,531	4,238,611
Consumption	-	-	-	-	-	-	-	-	-	-
Garrison	807,475	807,475	807,475	807,475	807,475	807,475	807,475	807,475	807,475	807,475
Town Metered Users [^]	59,055	59,055	59,055	59,055	59,055	59,055	59,055	59,055	59,055	59,055
Total Metered Consumption (m3)	866,530	866,530	866,530	866,530	866,530	866,530	866,530	866,530	866,530	866,530
Consumptive Rates (per m³)										
Garrison	1.1399	1.1632	1.1978	1.2230	1.2610	1.2922	1.3270	1.3716	1.4030	1.4506
Non-Residential	1.4079	1.5427	1.6802	1.8341	1.9897	2.0831	2.1786	2.2723	2.3799	2.4821
Flat Rates (per year)										
Residential	366.78	384.03	400.41	419.14	436.74	457.25	478.22	498.78	522.41	544.83
Non-Residential	495.15	518.44	540.55	565.85	589.60	617.29	645.59	673.36	705.25	735.52
Annual Percentage Increase										
<u>Consumptive Rates</u>										
Garrison	3.4%	2.0%	3.0%	2.1%	3.1%	2.5%	2.7%	3.4%	2.3%	3.4%
Non-Residential	5.7%	9.6%	8.9%	9.2%	8.5%	4.7%	4.6%	4.3%	4.7%	4.3%
<u>Flat Rates</u>										
Residential	4.1%	4.7%	4.3%	4.7%	4.2%	4.7%	4.6%	4.3%	4.7%	4.3%
Non-Residential	3.0%	4.7%	4.3%	4.7%	4.2%	4.7%	4.6%	4.3%	4.7%	4.3%

[^] Includes bulk water sales.