

Township of Amaranth
Water
Ontario Regulation 453/07
Financial Plan

Financial Plan # 239-301

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 **Planning for growth**

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List of Acronyms

O.Reg.	Ontario Regulation
P.S.A.B.	Public Sector Accounting Board
S.D.W.A.	Safe Drinking Water Act
S.W.S.S.A.	Sustainable Water and Sewage Systems Act

1. Introduction

1.1 Study Purpose

Watson & Associates Economists Ltd. (Watson) was retained by the Township of Amaranth (the Township) 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 regards to the Township's Water system has already been completed and documented by Watson within the "Township of Amaranth Water Rate Study, May 11, 2015" (2015 Rate Study). The objective of the report provided herein is to convert the findings of the 2015 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; and
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

Section 30 (1) of the S.D.W.A. provides the following definition of financial plans:

“financial plans’ means,

- a) financial plans that satisfy the requirements of subsection (2), but only if,
 - (i) Bill 175 (Sustainable Water and Sewage Systems Act, 2002, introduced on September 23, 2002) receives Royal Assent, and
 - (ii) sections 3 and 9 of Bill 175 (Sustainable Water and Sewage Systems Act, 2002) are in force, or
- b) financial plans that satisfy the requirements prescribed by the Minister, in any other case. 2002, c. 32, s. 30 (1).”

As of time of writing, the Sustainable Water and Sewage Systems Act, 2002 cited above has been repealed (see Section 2.2 of this report); however, the standards that it directs underpin the specific requirements of s.30 (1) part b as they are outlined in O.Reg. 453/07 and which will be examined in detail below.

1.2.2 Financial Plan Requirements – New System

O.Reg. 453/07 provides the following parameters with regard to s.30 (1) part b of the S.D.W.A. for new water systems:

- Financial plans must be approved by Council resolution (or governing body) indicating that the drinking water system is financially viable;
- Financial plans must include a statement that the financial impacts have been considered and apply for a minimum six-year period (commencing when the system first serves the public);
- 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 Public Sector Accounting Board (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 plans are to be submitted to the Ministry of Municipal Affairs and Housing.

1.2.3 Financial Plan Requirements – Existing System

O.Reg. 453/07 also provides details with regard 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 the 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 the 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 plans are to be submitted to the Ministry of Municipal Affairs and Housing.

1.2.4 Financial Plan Requirements - General

Given that the legislation falls under the S.D.W.A., a financial plan is mandatory for water systems and encouraged for wastewater systems. The financial plans shall be for a forecast period of at least six years but longer planning horizons are encouraged. The financial plan is to be completed, approved and submitted at the time of licence renewal (i.e. six months prior to licence expiry). Financial plans may be amended and additional information beyond what is prescribed can be included if deemed necessary.

The financial plans must contain, on the front page, the appropriate financial plan number as set out in Schedule A of the Municipal Drinking Water Licence document.

1.2.5 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.”

Both the Statement of Financial Position and the Statement of Operations were required for financial reporting purposes in pre-2009 reporting years; however, the format changed in 2009 to conform to the requirements of PS1200 and PS3150 (see Figures 1-1 and 1-2). Financial statements are now reported on a full accrual accounting basis, which will continue in future years. 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. Before 2009, financial results were reported on a modified cash basis of accounting, whereby revenues and expenses are recognized when cash is paid or received and only certain accrual-type items such as payables and receivables are recognized at year-end. The difference between the methods is in the timing of when transactions are reported. This timing difference has

impacted the presentation of the statements in that various accounts have been added or deleted in order to properly report the transactions.

Moreover, since the 2009 fiscal year, additional information relating to the accounting treatment of tangible capital assets is included in annual reporting, as indicated by the requirements under section PS3150. Pre-2009, the costs to acquire, develop and/or construct capital assets were expensed in the year in which they occur. Going forward, tangible capital assets will be capitalized so as to create an inventory of the assets owned and to account for their ability to provide future benefits. The reporting of tangible capital assets requires further changes to the format of existing financial statements. From a financial planning perspective, this change is significant for Water assets as they can represent a significant portion of the Township's total assets.

The Statement of Cash Flow and the Statement of Change in Net Financial Assets/Debt (which is a new statement as of 2009) are required statements going forward. 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 (see Figure 1-3). 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 (see Figure 1-4).

It should be noted that the Statement of Reserves and Reserve Funds and the Statement of Capital, as used by the public sector pre-2009, have now been eliminated by the new reporting format. The balances and transactions that make up these two statements have been transferred to either the Statement of Operations or the Statement of Financial Position depending on the nature of the account.

Figure 1-1
Statement of Financial Position

OLD FORMAT (PRE-2009)**2009 AND FUTURE**

<u>Assets</u>
Financial Assets
Cash
Accounts Receivable
Investments
Inventory for resale
Other Assets
Total Financial Assets
<u>Non-Financial Assets</u>
Inventory of Supplies
Prepaid Expenses
Total Non-Financial Assets
<u>Liabilities</u>
Accounts Payable & Accrued Liabilities
Debt (Principal only)
Other (DC Reserves-Deferred Revenue)
Total Liabilities
NET ASSETS
<u>Municipal Position</u>
Fund Balances
Current Fund
Capital Fund
Reserves and Reserve Funds
Amounts to be Recovered
From Future Revenues
From Reserves & Reserve Funds
TOTAL MUNICIPAL POSITION

<u>Financial Assets</u>
Cash
Accounts Receivable
Investments
Inventory for resale
Other Assets
Total Financial Assets
<u>Liabilities</u>
Accounts Payable & Accrued Liabilities
Debt (Principal only)
Other (DC Reserves-Deferred Revenue)
Total Liabilities
NET FINANCIAL ASSETS/(DEBT)
<u>Non-Financial Assets</u>
Tangible Capital Assets
Inventory of Supplies
Prepaid Expenses
Total Non-Financial Assets
ACCUMULATED SURPLUS/(DEFICIT)

Figure 1-2
Statement of Operations

OLD FORMAT (PRE-2009)

<u>Revenues</u>
Base Charge Revenue
Rate Based Revenue
Transfers from Reserves
Other Revenue
Total Revenues
<u>Expenditures</u>
Operating Expenses
Capital
Total Expenditures
Net Revenues for the year
Increase (decrease) in amounts to be recovered
Change in fund balances

2009 AND FUTURE

<u>Revenue</u>
Base Charge Revenue
Rate Based Revenue
Earned DC Revenue
Other Revenue
Total Revenue
<u>Expenses</u>
Operating Expenses
Interest on Debt
Amortization
Other
Total Expenses
Annual Surplus/(Deficit)
Accum. Surplus/(Deficit), beg. of year
Accum. Surplus/(Deficit), end of year

Figure 1-3
Statement of Change in Net Financial Assets/Debt

2009 AND FUTURE

Annual Surplus/(Deficit)
Less: Acquisition of tangible capital assets
Add: Amortization of tangible capital assets
(Gain)/Loss on disposal of tangible capital assets
Add: Proceeds on sale of tangible capital assets
Add: Write-downs of tangible capital assets
Sub-total
Less: Acquisition of supplies inventory
Less: Acquisition of prepaid expenses
Add: Consumption of supplies inventory
Add: Use of prepaid expenses
Sub-total
(Increase)/Decrease in net financial assets/net debt
Net financial assets/(net debt), beginning of year
Net financial assets/(net debt), end of year

Figure 1-4
Statement of Cash Flow¹

DIRECT METHOD	INDIRECT METHOD
<p><u>Operating Transactions</u> Cash received from: Water Operations Less: Cash paid for: Operating expenses Finance charges</p>	<p><u>Operating Transactions</u> Annual Surplus/(Deficit) Add: Amortization of Tangible Capital Assets Loss/(Gain) on sale of Tangible Capital Assets Decrease/(Increase) in Accounts Receivable Increase/(Decrease) in Accounts Payable Decrease/(Increase) in Inventories for sale Other items</p>
Cash provided by operating transactions	Cash provided by operating transactions
<p><u>Capital Transactions</u> Proceeds on sale of tangible capital assets Less: Cash used to acquire tangible capital assets</p>	<p><u>Capital Transactions</u> Proceeds on sale of tangible capital assets Less: Cash used to acquire tangible capital assets</p>
Cash applied to capital transactions	Cash applied to capital transactions
<p><u>Investing Transactions</u> Proceeds from investments Less: Cash used to acquire investments</p>	<p><u>Investing Transactions</u> Proceeds from investments Less: Cash used to acquire investments</p>
Cash provided by (applied to) investing transactions	Cash provided by (applied to) investing transactions
<p><u>Financing Transactions</u> Proceeds from debt issue Less: Debt repayment (Principal only)</p>	<p><u>Financing Transactions</u> Proceeds from debt issue Less: Debt repayment (Principal only)</p>
Cash applied to financing transactions	Cash applied to financing transactions
Increase in cash and cash equivalents	Increase in cash and cash equivalents
Cash and cash equivalents, beginning of year	Cash and cash equivalents, beginning of year
Cash and cash equivalents, end of year	Cash and cash equivalents, end of year

¹ The statement of cash flow can be prepared using either the direct or indirect methods. The indirect method derives cash flow by making adjustments to the net surplus/deficit reported on the statement of operations. The direct method calculates cash flow identifying the direct sources and uses of cash.

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 Systems") 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(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 services should ultimately be used to meet the needs of those services.
- Principle #4: Lifecycle planning with mid-course corrections is preferable to planning over the short term, or not planning at all.
- Principle #5: An asset management plan is a key input to the development of a financial plan.
- Principle #6: A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs.
- Principle #7: Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.
- Principle #8: Financial plans are "living" documents that require continuous improvement. Comparing the accuracy of financial projections with actual results can lead to improved planning in the future.
- Principle #9: Financial plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff and municipal Council.

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 (Bill 72)

Since the passage of the Safe Drinking Water Act, changes and refinements to the legislation have been introduced, including Bill 72. Bill 72 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; to create opportunities for economic development and clean-technology jobs; and to conserve and sustain water resources. To achieve this, Bill 72 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 Bill 72 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.

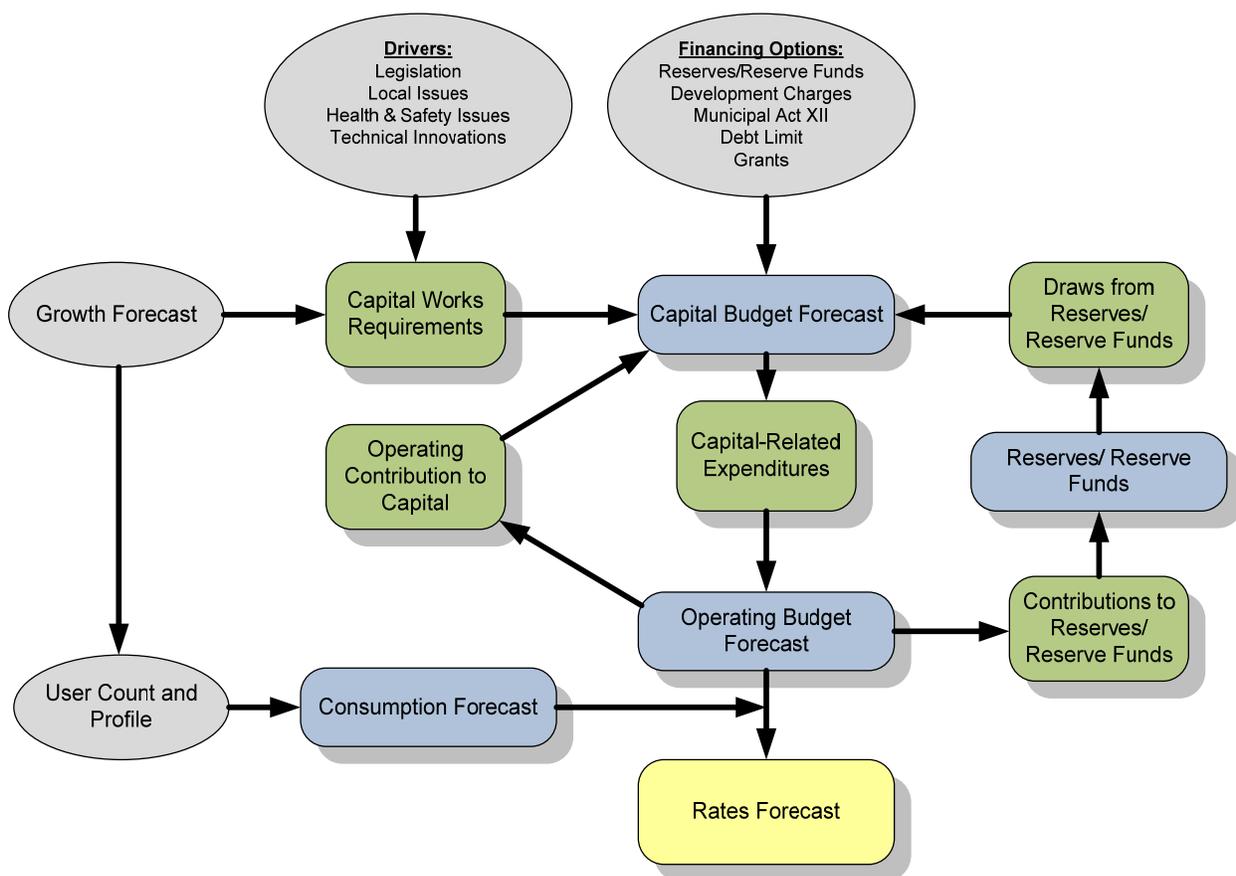
Where a Board has jurisdiction over a service, the plan (and any plan amendments) must be approved by the municipality in which the municipal service is provided, before submission to the Minister. The Minister may also direct preparation of joint or partially joint plans.

Regulations (still forthcoming) will prescribe details with 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 Water Rate Study

As noted above, Watson has already completed extensive financial planning as documented in the 2015 Rate Study conducted on behalf of the Township. The study process was designed to address “full cost” principles and reflect the guiding principles toward sustainable financial planning. Figure 2-1 below summarizes the process.

Figure 2-1
Water Rate Calculation Process



As a result of employing this process, the 2015 Rate Study provides a sound financial plan for the Township’s Water system by providing:

- A detailed assessment of current and future capital needs including an analysis of potential funding sources;
- An analysis of fixed and variable operating costs in order to determine how they will be impacted by evolving infrastructure needs and system growth;
- A review and recommendation on rate structures that ensure revenues are equitable and sufficient to meet system needs; and

- A public process that involves ongoing consultation with the main stakeholders including the Township 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 financial plan.

The details of the financial plan arising from the 2015 Rate Study are contained in Appendix A.

3. Approach

3.1 Overview

The 2015 Rate Study has been prepared on a modified cash basis; therefore, a conversion was 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; and
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 2015 Rate Study as well as part of the Township's annual P.S.A.B. 3150 compliance processes. Given the prospective nature of the 2015 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; and
- Disposals and related gains or losses for each year of the forecast period.

Future water capital needs have also been determined and summarized within the 2015 Rate Study. These estimates, however, only represent future assets that the Township anticipates purchasing or constructing without consideration for assets that are contributed by developers and other parties (at no cost or partial cost to the Township). 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

As per subsection 1.2.5 above, the new Statement of Operations eliminates and/or adds certain transactions that have been reported differently by municipalities since 2009 (see Figure 3-1). A wide range of adjustments will be considered and will depend on the size and complexity of the system. For example, the revenues and expenses associated with the now obsolete Statement of Capital and Statement of Reserves and Reserve Funds (see subsection 1.2.5) will need to be adjusted for and included within the Statement of Operations. This includes all non-tangible capital asset costs previously included in the capital statement (i.e. expenses related to various studies) while at the same time eliminating all expenditures incurred to acquire tangible capital assets which will now form part of the tangible capital asset balance discussed in subsection 3.2.1. Transfers to and from reserves are no longer explicitly reported on the Statement of Operations. Instead, these transactions are represented by changes in cash and accumulated surplus. Also, debt repayment costs relating to the principal payment portion only need to be removed, as they no longer qualify as an expense for reporting purposes. Principal payments will now be reported as a decrease in debt liability on the Statement of Financial Position. Finally, expenses relating to tangible capital assets, such as amortization, write-offs and (gain)/loss on disposal of assets, will be 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.

Table 3-1
Conversion Adjustments
Statement of Operations (Water)

Modified Cash Basis	Budget 2015	Adjustments		Full Accrual Budget 2015	Accrual Basis
		DR	CR		
Revenues					Revenues
Flat Rate Revenue	78,880			78,880	Flat Rate Revenue
Contributions from Ratepayers	33,091	26,610		6,481	Interest Earned on Long-term Accounts Receivable
Total Revenues	111,971			85,361	Total Revenues
Expenditures					Expenses
Operating	76,500	16,000		92,500	Operating Expenses
Capital					
Transfers to Reserves	2,380		2,380		
Debt Repayment (Principal & Interest)	33,091		26,610	6,481	Interest on Debt
		108,941		108,941	Amortization
Total Expenditures	111,971			207,922	Total Expenses
Net Expenditures	-			(122,561)	Annual Surplus/(Deficit)
Increase (decrease) in amounts to be recovered	-			4,273,072	Accumulated Surplus/(Deficit), beginning of year
Change in Fund Balances	-		122,561	4,150,511	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		151,551	151,551		

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 and 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 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 2015	Adjustments		Full Accrual Budget 2015	Accrual Basis
		DR	CR		
ASSETS					ASSETS
Financial Assets					Financial Assets
Cash	42,688			42,688	Cash
Accounts Receivable	18,463			18,463	Accounts Receivable
Long-term Accounts Receivable	69,714			69,714	Long-term Accounts Receivable
<i>Total Financial Assets</i>	<i>130,865</i>			<i>130,865</i>	<i>Total Financial Assets</i>
LIABILITIES					Liabilities
Accounts Payable & Accrued Liabilities	17,796			17,796	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	69,714			69,714	Debt (Principal only)
<i>Total Liabilities</i>	<i>87,510</i>			<i>87,510</i>	<i>Total Liabilities</i>
Net Assets/(Debt)	43,355			43,355	Net Financial Assets/(Debt)
		4,123,156	16,000	4,107,156	Non-Financial Assets
				4,107,156	Tangible Capital Assets
					Total Non-Financial Assets
Municipal Position					
Water Reserves	43,355	43,355			
Total Municipal Position	43,355		4,150,511	4,150,511	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		4,166,511	4,166,511		

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 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:

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

- b) Amortization Expense – The method and timing of amortization should be based on the Township'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 2015 Rate Study.
- 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.

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 document² 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 Township'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 estimation 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 2015, the Township's water system will be in a net financial asset position of just over \$43,000. After 2015, the financial plan forecasts a fluctuating net financial asset position, reaching a minimum of approximately \$10,600 in 2019, and then improving in each subsequent year of the forecast period. By the end of 2025, the Township's water system is projected to attain a net financial asset position of approximately \$100,000.

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 are imperative to water service delivery;

² 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; and
- 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 decrease by approximately \$817,000 over the forecast period. This indicates that the Township's anticipated use of existing assets will exceed its planned investments in tangible capital assets over the forecast period.

4.2.2 Statement of Operations (Table 4-2)

The Statement of Operations summarizes the revenues and expenses generated by the water system for a given period. The annual surplus/deficit measures whether the revenues generated were sufficient to cover the expenses incurred and, in turn, whether net financial assets have been maintained or depleted. Table 4-2 illustrates the ratio of expenses to revenues decreasing from 244% to 141% over the forecast period and, as a result, the Township improves from a projected annual deficit position of approximately \$123,000 in 2015 to an annual deficit position of approximately \$53,500 in 2025. It is important to note that an annual surplus is beneficial to ensure funding is available to non-expense costs such as tangible capital asset acquisitions and reserve/reserve fund transfers.

Another important indicator on this statement is accumulated surplus/deficit. An accumulated surplus indicates that the available net resources are sufficient to provide future 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 indicates a reduction of approximately \$777,000 to a 2014 accumulated surplus of just under \$4.3 million over the forecast period. This 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 forecasted tangible capital asset acquisitions (net of amortization for the year) exceed the forecasted annual surplus/(deficit) for 2015, resulting in a decrease of approximately \$17,000 in net financial assets. Net financial assets also decrease in 2016, 2017, 2019 and 2024 to 2025. In each of the remaining years (i.e. 2018 and 2020 to 2023), forecasted annual surplus exceeds forecasted tangible capital asset acquisitions (net of amortization for the year) resulting in annual increases in net financial assets. This allows for a long-term plan of funding capital through accumulated surplus (i.e. reserves). This is evidenced by the ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions improving from a negative value of 3.89, to a positive value of 1.15 over the forecast period.³

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 over the forecast period. The financial plan projects the cash position of the Township's water system to improve from approximately \$59,000 at the beginning of 2015 to just under \$91,000 by 2025. For further discussions on projected cash balances, please refer to the Notes to the Financial Plan.

³ A desirable ratio is 1:1 or better.

Table 4-1
Statement of Financial Position: Water Services
UNAUDITED: For Financial Planning Purposes Only
2015-2025

	Notes	Forecast										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Financial Assets												
Cash	1	42,688	39,570	6,974	28,977	-	21,609	63,138	89,366	130,695	113,524	90,675
Accounts Receivable	1	18,463	18,463	22,442	26,421	30,400	30,400	30,400	30,400	30,400	30,400	30,400
Long-term Accounts Receivable	2	69,714	41,508	38,594	35,462	32,094	28,474	24,583	20,400	15,903	11,068	5,872
Total Financial Assets		130,865	99,541	68,010	90,860	62,494	80,483	118,121	140,166	176,998	154,992	126,947
Liabilities												
Bank Indebtedness	1	-	-	-	-	820	-	-	-	-	-	-
Accounts Payable & Accrued Liabilities	1	17,796	18,098	18,401	18,703	19,005	19,354	19,703	20,052	20,401	20,750	21,122
Debt (Principal only)	2	69,714	41,508	38,594	35,462	32,094	28,474	24,583	20,400	15,903	11,068	5,872
Total Liabilities		87,510	59,606	56,995	54,165	51,919	47,828	44,286	40,452	36,304	31,818	26,994
Net Financial Assets/(Debt)		43,355	39,935	11,015	36,695	10,575	32,655	73,835	99,714	140,694	123,174	99,953
Non-Financial Assets												
Tangible Capital Assets	4	4,107,156	4,002,645	3,939,259	3,836,091	3,797,587	3,693,436	3,610,514	3,541,312	3,455,231	3,426,126	3,395,843
Total Non-Financial Assets		4,107,156	4,002,645	3,939,259	3,836,091	3,797,587	3,693,436	3,610,514	3,541,312	3,455,231	3,426,126	3,395,843
Accumulated Surplus/(Deficit)	5	4,150,511	4,042,580	3,950,274	3,872,786	3,808,162	3,726,091	3,684,349	3,641,026	3,595,925	3,549,300	3,495,796
Financial Indicators												
	Total Change	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1) Increase/(Decrease) in Net Financial Assets	39,478	(17,120)	(3,420)	(28,920)	25,680	(26,120)	22,080	41,180	25,879	40,980	(17,520)	(23,221)
2) Increase/(Decrease) in Tangible Capital Assets	(816,754)	(105,441)	(104,511)	(63,386)	(103,168)	(38,504)	(104,151)	(82,922)	(69,202)	(86,081)	(29,105)	(30,283)
3) Increase/(Decrease) in Accumulated Surplus	(777,276)	(122,561)	(107,931)	(92,306)	(77,488)	(64,624)	(82,071)	(41,742)	(43,323)	(45,101)	(46,625)	(53,504)

Table 4-2
Statement of Operations: Water Services
UNAUDITED: For Financial Planning Purposes Only
2015-2025

	Notes	Forecast										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Water Revenue												
Flate Rate Revenue		78,880	78,880	95,880	112,880	129,880	129,880	129,880	129,880	129,880	129,880	129,880
Interest Earned on Long-term Accounts Receivable	2	6,481	4,885	3,113	2,895	2,660	2,407	2,135	1,844	1,530	1,193	830
Total Revenues		85,361	83,765	98,993	115,775	132,540	132,287	132,015	131,724	131,410	131,073	130,710
Water Expenses												
Operating Expenses	Sch. 4-1	92,500	77,800	79,100	80,400	84,400	100,500	84,700	86,200	87,700	89,200	109,900
Interest on Debt	2	6,481	4,885	3,113	2,895	2,660	2,407	2,135	1,844	1,530	1,193	830
Amortization	4	108,941	109,011	109,086	109,968	110,104	111,451	86,922	87,002	87,281	87,305	73,483
Total Expenses		207,922	191,696	191,299	193,263	197,164	214,358	173,757	175,046	176,511	177,698	184,213
Annual Surplus/(Deficit)		(122,561)	(107,931)	(92,306)	(77,488)	(64,624)	(82,071)	(41,742)	(43,323)	(45,101)	(46,625)	(53,504)
Accumulated Surplus/(Deficit), beginning of year	5	4,273,072	4,150,511	4,042,580	3,950,274	3,872,786	3,808,162	3,726,091	3,684,349	3,641,026	3,595,925	3,549,300
Accumulated Surplus/(Deficit), end of year		4,150,511	4,042,580	3,950,274	3,872,786	3,808,162	3,726,091	3,684,349	3,641,026	3,595,925	3,549,300	3,495,796
Note 5:												
Accumulated Surplus/(Deficit) Reconciliation:												
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Reserve Balances												
Reserves: Capital/Other		43,355	39,935	11,015	36,695	10,575	32,655	73,835	99,714	140,694	123,174	99,953
Total Reserves Balance		43,355	39,935	11,015	36,695	10,575	32,655	73,835	99,714	140,694	123,174	99,953
Less: Debt Obligations and Deferred Revenue		(69,714)	(41,508)	(38,594)	(35,462)	(32,094)	(28,474)	(24,583)	(20,400)	(15,903)	(11,068)	(5,872)
Add: Long-term Accounts Receivable		69,714	41,508	38,594	35,462	32,094	28,474	24,583	20,400	15,903	11,068	5,872
Add: Tangible Capital Assets	4	4,107,156	4,002,645	3,939,259	3,836,091	3,797,587	3,693,436	3,610,514	3,541,312	3,455,231	3,426,126	3,395,843
Total Ending Balance		4,150,511	4,042,580	3,950,274	3,872,786	3,808,162	3,726,091	3,684,349	3,641,026	3,595,925	3,549,300	3,495,796
Financial Indicators												
	Total Change	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1) Expense to Revenue Ratio		244%	229%	193%	167%	149%	162%	132%	133%	134%	136%	141%
2) Increase/(Decrease) in Accumulated Surplus	(777,276)	(122,561)	(107,931)	(92,306)	(77,488)	(64,624)	(82,071)	(41,742)	(43,323)	(45,101)	(46,625)	(53,504)

Schedule 4-1
Statement of Operating Expenses: Water Services
UNAUDITED: For Financial Planning Purposes Only
2015-2025

	Notes	Forecast										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Operating Expenses												
Hydro		16,300	16,600	16,900	17,200	17,500	17,900	18,300	18,700	19,100	19,500	19,900
Telephone		1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Operating Contract		49,000	50,000	51,000	52,000	53,000	54,100	55,200	56,300	57,400	58,500	59,700
Contingencies and Other		10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Non TCA - Expenses from Capital Budget	6	16,000	-	-	-	2,700	17,300	-	-	-	-	19,100
TOTAL OPERATING EXPENSES		92,500	77,800	79,100	80,400	84,400	100,500	84,700	86,200	87,700	89,200	109,900

Table 4-3
Statement of Changes in Net Financial Assets/Debt: Water Services
UNAUDITED: For Financial Planning Purposes Only
2015-2025

	Notes	Forecast										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Surplus/(Deficit)		(122,561)	(107,931)	(92,306)	(77,488)	(64,624)	(82,071)	(41,742)	(43,323)	(45,101)	(46,625)	(53,504)
Less: Acquisition of Tangible Capital Assets	4	(3,500)	(4,500)	(45,700)	(6,800)	(71,600)	(7,300)	(4,000)	(17,800)	(1,200)	(58,200)	(43,200)
Add: Amortization of Tangible Capital Assets	4	108,941	109,011	109,086	109,968	110,104	111,451	86,922	87,002	87,281	87,305	73,483
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-	-
		105,441	104,511	63,386	103,168	38,504	104,151	82,922	69,202	86,081	29,105	30,283
Increase/(Decrease) in Net Financial Assets/(Net Debt)		(17,120)	(3,420)	(28,920)	25,680	(26,120)	22,080	41,180	25,879	40,980	(17,520)	(23,221)
Net Financial Assets/(Net Debt), beginning of year		60,475	43,355	39,935	11,015	36,695	10,575	32,655	73,835	99,714	140,694	123,174
Net Financial Assets/(Net Debt), end of year		43,355	39,935	11,015	36,695	10,575	32,655	73,835	99,714	140,694	123,174	99,953
Financial Indicators												
1) Acquisition of Tangible Capital Assets (Cumulative)		3,500	8,000	53,700	60,500	132,100	139,400	143,400	161,200	162,400	220,600	263,800
2) Annual Surplus/Deficit before Amortization (Cumulative)		(13,620)	(12,540)	4,240	36,720	82,200	111,580	156,760	200,439	242,619	283,299	303,278
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)		(3.89)	(1.57)	0.08	0.61	0.62	0.80	1.09	1.24	1.49	1.28	1.15

Table 4-4
Statement of Cash Flow – Indirect Method: Water Services
UNAUDITED: For Financial Planning Purposes Only
2015-2025

	Notes	Forecast										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Operating Transactions												
Annual Surplus/Deficit		(122,561)	(107,931)	(92,306)	(77,488)	(64,624)	(82,071)	(41,742)	(43,323)	(45,101)	(46,625)	(53,504)
Add: Amortization of TCA's	4	108,941	109,011	109,086	109,968	110,104	111,451	86,922	87,002	87,281	87,305	73,483
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-	-
Change in A/R (Increase)/Decrease		3,625	-	(3,979)	(3,979)	(3,979)	-	-	-	-	-	-
Change in A/P Increase/(Decrease)		(2,950)	302	303	302	302	349	349	349	349	349	372
Cash Provided by Operating Transactions		(12,945)	1,382	13,104	28,803	41,803	29,729	45,529	44,028	42,529	41,029	20,351
Capital Transactions												
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(3,500)	(4,500)	(45,700)	(6,800)	(71,600)	(7,300)	(4,000)	(17,800)	(1,200)	(58,200)	(43,200)
Cash Applied to Capital Transactions		(3,500)	(4,500)	(45,700)	(6,800)	(71,600)	(7,300)	(4,000)	(17,800)	(1,200)	(58,200)	(43,200)
Financing Transactions												
Proceeds from Debt Issue	2	-	-	-	-	-	-	-	-	-	-	-
Add: Long-term Accounts Receivable Proceeds (recovery of debt)	2	26,610	28,206	2,914	3,132	3,367	3,620	3,892	4,183	4,497	4,834	5,197
Less: Debt Repayment (Principal only)	2	(26,610)	(28,206)	(2,914)	(3,132)	(3,367)	(3,620)	(3,892)	(4,183)	(4,497)	(4,834)	(5,197)
Cash Applied to Financing Transactions		-	-	-	-	-	-	-	-	-	-	-
Increase in Cash and Cash Equivalents		(16,445)	(3,118)	(32,596)	22,003	(29,797)	22,429	41,529	26,228	41,329	(17,171)	(22,849)
Cash and Cash Equivalents, beginning of year	1	59,133	42,688	39,570	6,974	28,977	(820)	21,609	63,138	89,366	130,695	113,524
Cash and Cash Equivalents, end of year	1	42,688	39,570	6,974	28,977	(820)	21,609	63,138	89,366	130,695	113,524	90,675

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. The financial plan, however, 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); and
- 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; and
- 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 of Amaranth, 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

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

- a) Receivables: Based on municipal-wide historical levels of accounts receivable as a percentage of annual non-taxation revenue earned (source: prior years audited financial statements); and
 - b) Payables: Based on municipal-wide historical levels of accounts payable as a percentage of annual expenses incurred (source: prior years audited financial statements).
- ## 2. Debt

Outstanding water related debt at the end of 2014 was approximately \$96,300. No additional debt proceeds are anticipated over the forecast period. Principal debt repayments over the forecast period are scheduled as follows:

Year	Principal Payments
2015	26,610
2016	28,206
2017	2,914
2018	3,132
2019	3,367
2020	3,620
2021	3,892
2022	4,183
2023	4,497
2024	4,834
2025	5,197
Total	\$ 90,452

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

3. Deferred Revenue

Deferred revenue is typically made up of water development charge reserve 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.

The Township of Amaranth does not collect water development charges, therefore, deferred revenue is assumed to be zero over the forecast period.

4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water-related assets in the following categories:
 - i. Infrastructure; and
 - ii. Facilities.
- Amortization is calculated based on the straight-line approach.
- Given the planned asset replacement forecast in the 2015 Rate Study, useful life on acquisitions is assumed to be equal to typical useful life estimates used in municipalities for 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 disposals 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 subsection 3.2.1, are deemed to be insignificant/unknown during the forecast period and are, therefore, assumed to be \$0.

- 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	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Opening Tangible Capital Asset Balance	6,972,038	6,975,209	6,979,402	7,021,607	7,027,661	7,091,929	7,098,311	7,101,766	7,118,111	7,119,120	7,167,097
Acquisitions	3,500	4,500	45,700	6,800	71,600	7,300	4,000	17,800	1,200	58,200	43,200
Disposals	329	307	3,495	746	7,332	918	545	1,455	191	10,223	6,676
Closing Tangible Capital Asset Balance	6,975,209	6,979,402	7,021,607	7,027,661	7,091,929	7,098,311	7,101,766	7,118,111	7,119,120	7,167,097	7,203,621
Opening Accumulated Amortization	2,759,441	2,868,053	2,976,757	3,082,348	3,191,570	3,294,342	3,404,875	3,491,252	3,576,799	3,663,889	3,740,971
Amortization Expense	108,941	109,011	109,086	109,968	110,104	111,451	86,922	87,002	87,281	87,305	73,483
Amortization on Disposal	329	307	3,495	746	7,332	918	545	1,455	191	10,223	6,676
Ending Accumulated Amortization	2,868,053	2,976,757	3,082,348	3,191,570	3,294,342	3,404,875	3,491,252	3,576,799	3,663,889	3,740,971	3,807,778
Net Book Value	4,107,156	4,002,645	3,939,259	3,836,091	3,797,587	3,693,436	3,610,514	3,541,312	3,455,231	3,426,126	3,395,843

5. Accumulated Surplus

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

Water	2015 Opening Accumulated Surplus
Reserve Balances	
Reserves: Capital/Other	60,475
Total Reserves Balance	60,475
Less: Debt Obligations and Deferred Revenue	(96,324)
Add: Long-term Accounts Receivable	96,324
Add: Tangible Capital Assets	4,212,597
Total Opening Balance	4,273,072

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

6. 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.

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

As mentioned in Section 1.2, the requirement to prepare the financial plan is provided in Section 32 (5) 2 ii of the S.D.W.A. Proof of the preparation of a financial plan is one of the submission requirements for municipal drinking water licensing and, upon completion, must be submitted to the Ministry of the Environment. As part of O.Reg. 453/07, the process established for plan approval, public circulation and filing is set out as follows:

1. The financial plan must be approved by resolution 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 Ministry of the Environment 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)

6. Recommendations

This report presents the Water financial plan for the Township of Amaranth 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 2015 Rate Study. Nevertheless, Council is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

1. The Township of Amaranth Water Financial Plan prepared by Watson & Associates Economists Ltd. dated May 11, 2015 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 Financial Plan, the Council Resolution approving the Financial Plan, and the Water Rate Study underpinning 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)

Appendix A – 2015 Water Rate Study – Summary Tables

Table 2
Township of Amaranth
Waldemar Water Services
Capital Budget Forecast
 Inflated \$

Description	Total	Budget 2015	Forecast										
			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Capital Expenditures													
Well One													
Camera inspection of well casing	3,100	-	-	3,100	-	-	-	-	-	-	-	-	-
Submersible pump replacement	8,400	-	-	-	-	-	-	-	-	-	-	8,400	-
Transmission main repairs	3,000	-	-	-	-	-	-	-	-	-	-	3,000	-
Well Two													
Camera inspection of well casing	3,100	-	-	3,100	-	-	-	-	-	-	-	-	-
Submersible pump replacement	8,400	-	-	-	-	-	-	-	-	-	-	8,400	-
Transmission main repairs	3,100	-	-	3,100	-	-	-	-	-	-	-	-	-
Well Three													
Camera inspection of well casing	3,100	-	-	3,100	-	-	-	-	-	-	-	-	-
Submersible pump replacement	8,500	-	-	-	-	-	-	-	-	-	-	-	8,500
Transmission main repairs	3,000	-	-	-	-	-	-	-	-	-	-	-	3,000
Pumphouse Raw Water Piping													
Replace pressure gauges	1,600	-	-	-	-	1,600	-	-	-	-	-	-	-
Service flow control valves	5,400	-	-	-	-	5,400	-	-	-	-	-	-	-
Service pressure relief valve	5,400	-	-	-	-	5,400	-	-	-	-	-	-	-
Process piping repairs	5,200	-	-	5,200	-	-	-	-	-	-	-	-	-
Replace raw water meters	12,200	-	-	-	-	-	-	-	-	-	-	-	12,200
Pumphouse Treatment Equipment													
Chemical metering pumps	16,200	-	-	-	-	16,200	-	-	-	-	-	-	-
Discharge piping/valves	27,400	-	-	5,200	-	16,200	-	-	-	-	-	6,000	-
Centreline Injectors	6,100	500	500	500	500	500	600	600	600	600	600	600	600
Reservoir													
Camera inspection/clean	2,700	-	-	-	-	2,700	-	-	-	-	-	-	-
Treated Water Process													
Replace pressure gauges	2,100	-	-	2,100	-	-	-	-	-	-	-	-	-
Service flow control valves	5,200	-	-	5,200	-	-	-	-	-	-	-	-	-
Service pressure relief valve	5,200	-	-	5,200	-	-	-	-	-	-	-	-	-
Rebuild high lift pumps	17,500	-	-	-	-	5,400	-	-	-	-	-	6,000	6,100
Service emergency pump	6,200	-	-	2,600	-	-	-	-	-	-	-	3,600	-
Replace treated water meters	13,200	-	-	-	4,200	-	4,400	-	4,600	-	-	-	-
Instrumentation and SCADA													
Replace free chlorine analyzer	8,400	-	-	-	-	-	-	-	-	-	-	8,400	-
Replace laptop	3,200	-	-	-	-	3,200	-	-	-	-	-	-	-
Replace data logger	3,000	-	-	-	-	-	-	-	-	-	-	3,000	-
Replace well level transducers	3,200	-	-	-	-	3,200	-	-	-	-	-	-	-
Replace wireless link	-	-	-	-	-	-	-	-	-	-	-	-	-
Building Services													
Electrical	13,600	2,500	-	2,600	-	2,700	-	2,800	-	-	-	3,000	-
Heating	6,100	500	500	500	500	500	600	600	600	600	600	600	600
Lighting	2,800	-	500	-	500	-	600	-	600	-	-	600	-
Generator Service	5,500	-	1,000	-	1,100	-	1,100	-	1,100	-	-	1,200	-
Treated Water Distribution													
Distribution mains leak repairs	17,700	-	500	-	-	5,400	-	-	5,700	-	-	-	6,100
Valve repair	4,900	-	1,500	-	-	1,600	-	-	-	-	-	1,800	-
Hydrant repair	14,300	-	-	2,600	-	2,700	-	-	2,900	-	-	-	6,100
Service repairs	8,500	-	-	1,600	-	1,600	-	-	1,700	-	-	3,600	-
Studies													
Water Rate Study & Financial Plan	52,400	16,000	-	-	-	-	17,300	-	-	-	-	-	19,100
Total Capital Expenditures	318,900	19,500	4,500	45,700	6,800	74,300	24,600	4,000	17,800	1,200	58,200	62,300	
Capital Financing													
Provincial/Federal Grants	-	-	-	-	-	-	-	-	-	-	-	-	-
Debtenture Requirements	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Reserve	318,900	19,500	4,500	45,700	6,800	74,300	24,600	4,000	17,800	1,200	58,200	62,300	
Total Capital Financing	318,900	19,500	4,500	45,700	6,800	74,300	24,600	4,000	17,800	1,200	58,200	62,300	

Table 3
Township of Amaranth
Waldemar Water Services
Schedule of Debenture Repayments
 Inflated \$

Debenture Year	Principal (Inflated)	Budget 2015	Forecast										
			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
2016	-			-	-	-	-	-	-	-	-	-	-
2017	-				-	-	-	-	-	-	-	-	-
2018	-					-	-	-	-	-	-	-	-
2019	-						-	-	-	-	-	-	-
2020	-							-	-	-	-	-	-
2021	-								-	-	-	-	-
2022	-									-	-	-	-
2023	-										-	-	-
2024	-											-	-
2025	-												-
Total Annual Debt Charges	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4
Township of Amaranth
Waldemar Water Services
Water Reserve Continuity
 Inflated \$

Water Reserve	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Opening Balance	60,475	43,355	39,935	11,015	36,695	10,575	32,655	73,835	99,715	140,695	123,175
Transfer from Operating	2,380	1,080	16,780	32,480	48,180	46,680	45,180	43,680	42,180	40,680	39,080
Transfer to Capital	19,500	4,500	45,700	6,800	74,300	24,600	4,000	17,800	1,200	58,200	62,300
Transfer to Operating	-	-	-	-	-	-	-	-	-	-	-
Closing Balance	43,355	39,935	11,015	36,695	10,575	32,655	73,835	99,715	140,695	123,175	99,955
Interest	-	-	-	-	-	-	-	-	-	-	-

Table 5
Township of Amaranth
Waldemar Water Services
Operating Budget Forecast
 Inflated \$

Description	Budget 2015	Forecast									
		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
EXPENDITURES											
Operating Costs											
Hydro	16,300	16,600	16,900	17,200	17,500	17,900	18,300	18,700	19,100	19,500	19,900
Telephone	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Operating Contract	49,000	50,000	51,000	52,000	53,000	54,100	55,200	56,300	57,400	58,500	59,700
Contingencies and Other	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
<i>Sub Total Operating</i>	<i>76,500</i>	<i>77,800</i>	<i>79,100</i>	<i>80,400</i>	<i>81,700</i>	<i>83,200</i>	<i>84,700</i>	<i>86,200</i>	<i>87,700</i>	<i>89,200</i>	<i>90,800</i>
Capital-Related											
Debentures											
New Debt (Principal)	-	-	-	-	-	-	-	-	-	-	-
New Debt (Interest)	-	-	-	-	-	-	-	-	-	-	-
A/R Part XII Repayment	33,091	33,091	6,027	6,027	6,027	6,027	6,027	6,027	6,027	6,027	6,027
Transfers											
Transfer to Reserve	2,380	1,080	16,780	32,480	48,180	46,680	45,180	43,680	42,180	40,680	39,080
<i>Sub Total Capital Related</i>	<i>35,471</i>	<i>34,171</i>	<i>22,807</i>	<i>38,507</i>	<i>54,207</i>	<i>52,707</i>	<i>51,207</i>	<i>49,707</i>	<i>48,207</i>	<i>46,707</i>	<i>45,107</i>
Total Expenditures	111,971	111,971	101,907	118,907	135,907						
Revenues											
Operating Revenue											
Municipal Act Capital Charge Recovery	33,091	33,091	6,027	6,027	6,027	6,027	6,027	6,027	6,027	6,027	6,027
Transfer from Reserve	-	-	-	-	-	-	-	-	-	-	-
<i>Sub Total Operating Revenue</i>	<i>33,091</i>	<i>33,091</i>	<i>6,027</i>								
Water Billing Recovery	78,880	78,880	95,880	112,880	129,880						
Revenue Summary											
10 Year Capital Charge	27,064	27,064	-	-	-	-	-	-	-	-	-
20 Year Capital Charge	6,027	6,027	6,027	6,027	6,027	6,027	6,027	6,027	6,027	6,027	6,027
Flat Rate Charge	78,880	78,880	95,880	112,880	129,880	129,880	129,880	129,880	129,880	129,880	129,880
Total Revenue	111,971	111,971	101,907	118,907	135,907						

Table 6
Township of Amaranth
Waldemar Water Services
Water Rate Forecast
 Inflated \$

Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Water Billing Recovery	78,880	78,880	95,880	112,880	129,880	129,880	129,880	129,880	129,880	129,880	129,880
Total Customers	116	116	141	166	191	191	191	191	191	191	191
Current Rates - 10 Year Replacement											
Flat Rate (Annual)	680	680	680	680	680	680	680	680	680	680	680
Capital Charge (10 Year)	398	398	-	-	-	-	-	-	-	-	-
Total	1,078	1,078	680								
Annual Increase in Total Rate		0.0%	-36.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Current Rates - 20 Year Replacement											
Flat Rate (Annual)	680	680	680	680	680	680	680	680	680	680	680
Capital Charge (20 Year)	287	287	287	287	287	287	287	287	287	287	287
Total	967	967	967	967	967	967	967	967	967	967	967
Annual Increase in Total Rate		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%