

Township of Hamilton
Water
Ontario Regulation 453/07
Financial Plan

Financial Plan # 139-301A

January 22, 2016



Plaza Three
101-2000 Argentia Rd.
Mississauga, Ontario
Canada L5N 1V9

Phone: (905) 272-3600

Fax: (905) 272-3602

e-mail: info@watson-econ.ca

www.watson-econ.ca

 **Planning for growth**

Contents

	Page
1. Introduction.....	1-1
1.1 Study Purpose	1-1
1.2 Background.....	1-1
1.2.1 Financial Plan Defined	1-2
1.2.2 Financial Plan Requirements – New System	1-2
1.2.3 Financial Plan Requirements – Existing System	1-3
1.2.4 Financial Plan Requirements - General	1-4
1.2.5 Public Sector Accounting Board (P.S.A.B.) Requirements.....	1-4
2. Sustainable Financial Planning.....	2-1
2.1 Introduction	2-1
2.2 Sustainable Water and Sewage Systems Act.....	2-2
2.3 Water Opportunities Act, 2010 (Bill 72).....	2-2
2.4 2015 Forecast.....	2-3
3. Approach	3-1
3.1 Overview	3-1
3.2 Conversion Process.....	3-1
3.2.1 Calculate Tangible Capital Asset Balances.....	3-1
3.2.2 Convert Statement of Operations.....	3-2
3.2.3 Convert Statement of Financial Position	3-4
3.2.4 Convert Statement of Cash Flow and Net Financial Assets/Debt.....	3-4
3.2.5 Verification and Note Preparation	3-6
4. Financial Plan	4-1
4.1 Introduction	4-1
4.2 Water Financial Plan.....	4-1
4.2.1 Statement of Financial Position (Table 4-1)	4-1
4.2.2 Statement of Operations (Table 4-2).....	4-2
4.2.3 Statement of Change in Net Financial Assets/Debt (Table 4- 3).....	4-2
4.2.4 Statement of Cash Flow (Table 4-4)	4-3
5. Process for Financial Plan Approval and Submission to the Province.....	5-1
6. Recommendations.....	6-1
Appendix A – 2015 Forecast – Water Summary Tables.....	A-1

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 Hamilton (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 systems has already been completed and documented by Township staff through the 2015 Budget, and supplemented with forecasts developed by staff with assistance from Watson (2015 Forecast). The objective of the report provided herein is to convert the findings of the 2015 Forecast 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 Chartered Professional Accountants Canada (previously 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 are 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 required 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 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 and Wastewater Systems") that provides possible approaches to achieving sustainability. The Province's Principles of Financially Sustainable Water and Wastewater Services are provided below:

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

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.

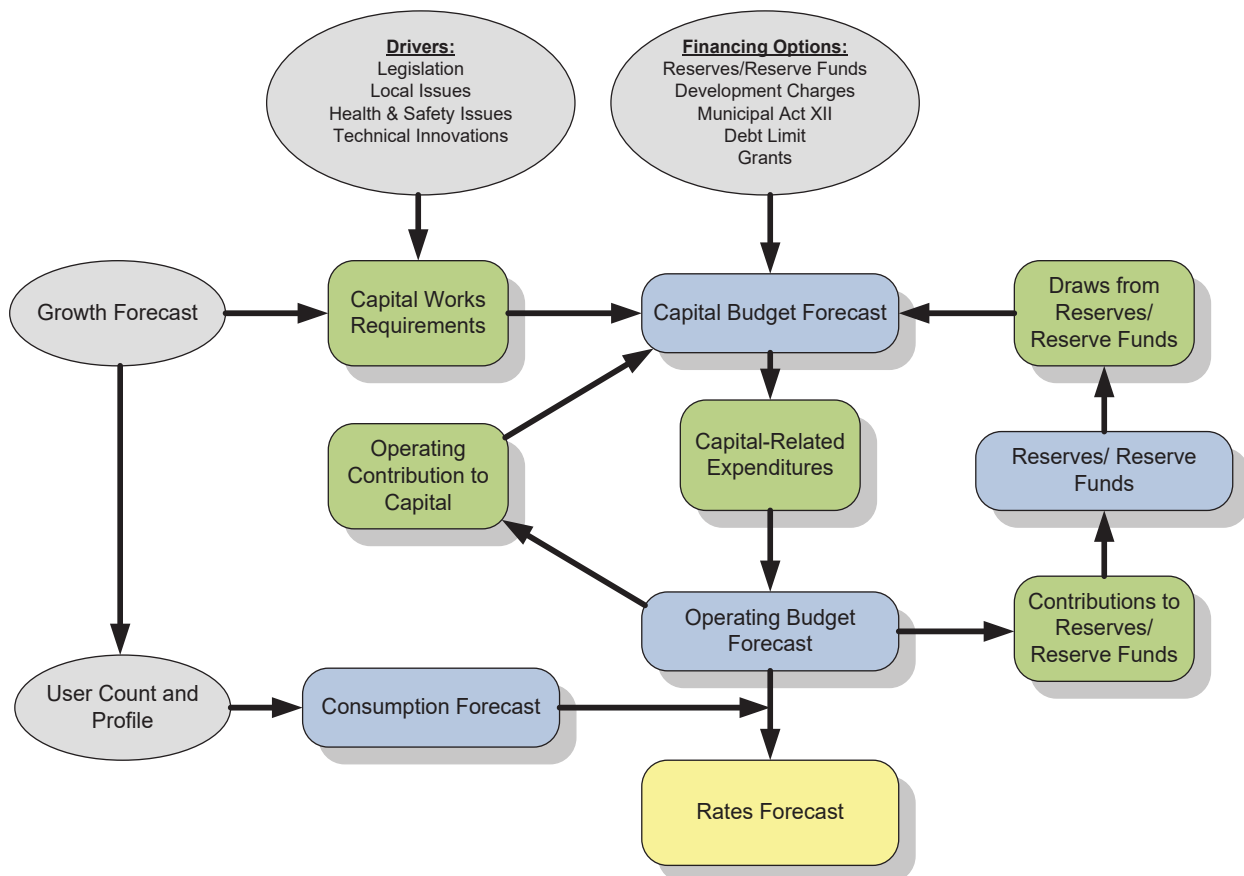
Where a Board has jurisdiction over a service, the plan (and any plan amendments) must be approved by the municipality in which the municipal service is provided, before submission to the Minister. The Minister may also direct preparation of joint or partially joint plans.

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 2015 Forecast

As noted above, Watson has assisted Municipal staff in completing a 6-year water forecast. However, this forecast does not represent a Rate Study. The Rate Study process is 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, a Rate Study provides a sound financial plan for a municipality’s water systems 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.

It is recommended that the Township complete a Water Rate Study in the near future to address the principles discussed above.

Given this water financial plan was based on the staff prepared 2015 Forecast, the details of the financial plan arising from the 2015 Forecast are contained in Appendix A.

3. Approach

3.1 Overview

The 2015 Forecast 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 Forecast as well as part of the Township's annual P.S.A.B. 3150 compliance processes. Given the prospective nature of the 2015 Forecast, 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 Forecast. 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.

**Figure 3-1
Conversion Adjustments
Statement of Operations (Water)**

Modified Cash Basis	Budget 2015	Adjustments		Full Accrual Budget 2015	Accrual Basis
		DR	CR		
Revenues					Revenues
Base Charge and Rate Revenue	290,000			290,000	Base Charge Revenue
Contributions from Ratepayers	83,967	64,013		19,954	Interest Earned on Long-term Accounts Receivable
Other Revenue	36,598	3,160		33,438	Other Revenue
Total Revenues	410,565			343,392	Total Revenues
Expenditures					Expenses
Operating	267,201			267,201	Operating Expenses
Capital					
Transfers to Reserves	143,363		143,363		
		153,069		153,069	Amortization
Total Expenditures	410,564			420,270	Total Expenses
Net Expenditures	-			(76,878)	Annual Surplus/(Deficit)
Increase (decrease) in amounts to be recovered	-			6,420,075	Accumulated Surplus/(Deficit), beginning of year
Change in Fund Balances	-		76,878	6,343,197	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		220,242	220,242		

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.

**Figure 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
Accounts Receivable	17,501			17,501	Accounts Receivable
Long-term Accounts Receivable	525,822			525,822	Long-term Accounts Receivable
<i>Total Financial Assets</i>	<i>543,323</i>			<i>543,323</i>	<i>Total Financial Assets</i>
LIABILITIES					Liabilities
Bank Indebtedness	301,751			301,751	Bank Indebtedness
Accounts Payable & Accrued Liabilities	34,895			34,895	Accounts Payable & Accrued Liabilities
<i>Total Liabilities</i>	<i>336,646</i>			<i>336,646</i>	<i>Total Liabilities</i>
Net Assets/(Debt)	206,677			206,677	Net Financial Assets/(Debt)
		6,136,520		6,136,520	Non-Financial Assets
				6,136,520	Tangible Capital Assets
					Total Non-Financial Assets
Municipal Position					
Water Reserves	(319,145)		319,145		
Amounts to be Recovered	525,822	525,822			
Total Municipal Position	206,677		6,343,197	6,343,197	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		6,662,342	6,662,342		

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 Forecast.
- 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 systems. A brief description and analysis of each table is provided below. It is important to note that the financial plan that follows is a forward look at the financial position of the Township's water systems. 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 Township's water systems. The first important indicator is net financial assets/(debt), which is defined as the difference between financial assets and liabilities. This indicator provides an 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 at the end of 2015, the Township's water systems will be in a net financial asset position of approximately \$207,000. Net financial assets are forecasted to grow annually throughout the projection period, reaching just over \$348,000 in 2021.

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;
- 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

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

- 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 Township 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 \$849,000 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 systems 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 increasing slightly from 122% in 2015 to 127% by 2021. As a result, annual deficits are forecast to increase from just under \$77,000 in 2015 to approximately \$106,000 in 2021. 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 indicates a reduction of approximately \$667,000 from a 2014 accumulated surplus of approximately \$6.4 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 in each year of the forecast period (i.e. 2015 to 2021), 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 maintaining a value in excess of 1.00 (decreasing from 2.18 in 2015 to 1.73 by 2021).¹

4.2.4 Statement of Cash Flow (Table 4-4)

The Statement of Cash Flow summarizes how water systems are expected to generate and use cash resources during the forecast period. The transactions that provide/use cash are classified as operating, capital, investing and financing activities as shown in Table 4-4. This statement focuses on the cash aspect of these transactions and thus is the link between cash 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 Township's water systems to improve annually from a deficit position of approximately \$302,000 at the end of 2015, achieving a positive balance in 2019 of just over \$89,000, then continuing to improve to just under \$287,000 by the end of 2021. For further discussions on projected cash balances, please refer to the Notes to the Financial Plan.

¹ A desirable ratio is 1:1 or better.

Table 4-1
Statement of Financial Position: Water Services
UNAUDITED: For Financial Planning Purposes Only
2015-2021

	Notes	Forecast						
		2015	2016	2017	2018	2019	2020	2021
Financial Assets								
Cash	1	-	-	-	-	89,423	187,862	286,901
Accounts Receivable	1	17,501	19,251	19,619	19,993	20,368	20,748	21,146
Long-term Accounts Receivable	2	525,822	459,248	390,011	318,005	243,118	165,236	84,239
Total Financial Assets		543,323	478,499	409,630	337,998	352,909	373,846	392,286
Liabilities								
Bank Indebtedness	1	301,751	202,468	105,738	8,439	-	-	-
Accounts Payable & Accrued Liabilities	1	34,895	40,173	40,929	41,699	42,470	43,253	44,076
Total Liabilities		336,646	242,641	146,667	50,138	42,470	43,253	44,076
Net Financial Assets/(Debt)		206,677	235,858	262,963	287,860	310,439	330,593	348,210
Non-Financial Assets								
Tangible Capital Assets	4	6,136,520	6,015,315	5,894,357	5,772,881	5,650,862	5,528,276	5,405,099
Total Non-Financial Assets		6,136,520	6,015,315	5,894,357	5,772,881	5,650,862	5,528,276	5,405,099
Accumulated Surplus/(Deficit)	5	6,343,197	6,251,173	6,157,320	6,060,741	5,961,301	5,858,869	5,753,309
Financial Indicators								
	Total Change	2015	2016	2017	2018	2019	2020	2021
1) Increase/(Decrease) in Net Financial Assets	182,724	41,191	29,181	27,105	24,897	22,579	20,154	17,617
2) Increase/(Decrease) in Tangible Capital Assets	(849,490)	(118,069)	(121,205)	(120,958)	(121,476)	(122,019)	(122,586)	(123,177)
3) Increase/(Decrease) in Accumulated Surplus	(666,766)	(76,878)	(92,024)	(93,853)	(96,579)	(99,440)	(102,432)	(105,560)

Table 4-2
Statement of Operations: Water Services
UNAUDITED: For Financial Planning Purposes Only
2015-2021

	Notes	Forecast						
		2015	2016	2017	2018	2019	2020	2021
Water Revenue								
Base Charge and Rate Revenue		290,000	319,000	325,100	331,300	337,500	343,800	350,400
Interest Earned on Long-term Accounts Receivable	2	19,954	31,208	28,563	25,794	22,913	19,918	16,803
Other Revenue	6	33,438	20,588	21,542	22,503	23,466	24,436	25,414
Total Revenues		343,392	370,796	375,205	379,597	383,879	388,154	392,617
Water Expenses								
Operating Expenses	Sch. 4-1	267,201	307,615	313,400	319,300	325,200	331,200	337,500
Amortization	4	153,069	155,205	155,658	156,876	158,119	159,386	160,677
Total Expenses		420,270	462,820	469,058	476,176	483,319	490,586	498,177
Annual Surplus/(Deficit)		(76,878)	(92,024)	(93,853)	(96,579)	(99,440)	(102,432)	(105,560)
Accumulated Surplus/(Deficit), beginning of year	5	6,420,075	6,343,197	6,251,173	6,157,320	6,060,741	5,961,301	5,858,869
Accumulated Surplus/(Deficit), end of year		6,343,197	6,251,173	6,157,320	6,060,741	5,961,301	5,858,869	5,753,309
Note 5:								
Accumulated Surplus/(Deficit) Reconciliation:		2015	2016	2017	2018	2019	2020	2021
Reserve Balances								
Reserves: Capital/Other		(319,145)	(223,390)	(127,048)	(30,145)	67,321	165,357	263,971
Total Reserves Balance		(319,145)	(223,390)	(127,048)	(30,145)	67,321	165,357	263,971
Add: Long-term Accounts Receivable		525,822	459,248	390,011	318,005	243,118	165,236	84,239
Add: Tangible Capital Assets	4	6,136,520	6,015,315	5,894,357	5,772,881	5,650,862	5,528,276	5,405,099
Total Ending Balance		6,343,197	6,251,173	6,157,320	6,060,741	5,961,301	5,858,869	5,753,309
Financial Indicators								
	Total Change	2015	2016	2017	2018	2019	2020	2021
1) Expense to Revenue Ratio		122%	125%	125%	125%	126%	126%	127%
2) Increase/(Decrease) in Accumulated Surplus	(666,766)	(76,878)	(92,024)	(93,853)	(96,579)	(99,440)	(102,432)	(105,560)

Schedule 4-1
Statement of Operating Expenses: Water Services
UNAUDITED: For Financial Planning Purposes Only
2015-2021

	Notes	Forecast						
		2015	2016	2017	2018	2019	2020	2021
Operating Expenses								
<u>Water Administration</u>								
Salaries/Wages & Benefits		121,151	150,115	153,100	156,200	159,300	162,500	165,800
Mileage/Vehicle		4,000	800	800	800	800	800	800
Training Seminars		10,550	6,500	6,600	6,700	6,800	6,900	7,000
Dues/Memberships		900	900	900	900	900	900	900
Telephone/Pagers		6,000	6,900	7,000	7,100	7,200	7,300	7,400
Courier		200	200	200	200	200	200	200
Hydrant Inspections		-	3,700	3,700	3,700	3,700	3,700	3,700
Answering Service		700	700	700	700	700	700	700
Contracted Services		15,000	15,300	15,600	15,900	16,200	16,500	16,800
Laboratory Supplies		4,000	4,100	4,200	4,300	4,400	4,500	4,600
Audit		6,000	6,100	6,200	6,300	6,400	6,500	6,600
Legal		1,500	-	-	-	-	-	-
Office Supplies		2,000	1,200	1,200	1,200	1,200	1,200	1,200
<u>Camborne Water</u>								
Holding Tank/Septic		500	1,000	1,000	1,000	1,000	1,000	1,000
Maintenance		7,000	7,100	7,200	7,300	7,400	7,500	7,700
Hydro/Union Gas		7,500	9,700	9,900	10,100	10,300	10,500	10,700
Chemicals		1,200	1,700	1,700	1,700	1,700	1,700	1,700
Water Samples		3,500	3,600	3,700	3,800	3,900	4,000	4,100
<u>Baltimore/Creighton Water</u>								
Holding Tank/Septic		2,000	2,000	2,000	2,000	2,000	2,000	2,000
Maintenance		15,000	16,200	16,500	16,800	17,100	17,400	17,700
Hydro		45,000	54,000	55,100	56,200	57,300	58,400	59,600
Chemicals		9,000	11,000	11,200	11,400	11,600	11,800	12,000
Water Samples		4,500	4,800	4,900	5,000	5,100	5,200	5,300
Non TCA - Expenses from Capital Budget	7	-	-	-	-	-	-	-
TOTAL OPERATING EXPENSES		267,201	307,615	313,400	319,300	325,200	331,200	337,500

Table 4-3
Statement of Changes in Net Financial Assets/Debt: Water Services
UNAUDITED: For Financial Planning Purposes Only
2015-2021

	Notes	Forecast						
		2015	2016	2017	2018	2019	2020	2021
Annual Surplus/(Deficit)		(76,878)	(92,024)	(93,853)	(96,579)	(99,440)	(102,432)	(105,560)
Less: Acquisition of Tangible Capital Assets	4	(35,000)	(34,000)	(34,700)	(35,400)	(36,100)	(36,800)	(37,500)
Add: Amortization of Tangible Capital Assets	4	153,069	155,205	155,658	156,876	158,119	159,386	160,677
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-
		118,069	121,205	120,958	121,476	122,019	122,586	123,177
Increase/(Decrease) in Net Financial Assets/(Net Debt)		41,191	29,181	27,105	24,897	22,579	20,154	17,617
Net Financial Assets/(Net Debt), beginning of year		165,486	206,677	235,858	262,963	287,860	310,439	330,593
Net Financial Assets/(Net Debt), end of year		206,677	235,858	262,963	287,860	310,439	330,593	348,210

Financial Indicators	2015	2016	2017	2018	2019	2020	2021
1) Acquisition of Tangible Capital Assets (Cumulative)	35,000	69,000	103,700	139,100	175,200	212,000	249,500
2) Annual Surplus/Deficit before Amortization (Cumulative)	76,191	139,372	201,177	261,474	320,153	377,107	432,224
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)	2.18	2.02	1.94	1.88	1.83	1.78	1.73

Table 4-4
Statement of Cash Flow – Indirect Method: Water Services
UNAUDITED: For Financial Planning Purposes Only
2015-2021

	Notes	Forecast						
		2015	2016	2017	2018	2019	2020	2021
Operating Transactions								
Annual Surplus/Deficit		(76,878)	(92,024)	(93,853)	(96,579)	(99,440)	(102,432)	(105,560)
Add: Amortization of TCA's	4	153,069	155,205	155,658	156,876	158,119	159,386	160,677
Change in A/R (Increase)/Decrease		(1,992)	(1,750)	(368)	(374)	(375)	(380)	(398)
Change in A/P Increase/(Decrease)		1,109	5,278	756	770	771	783	823
Less: Interest Proceeds		3,160	2,212	1,258	298	(667)	(1,637)	(2,614)
Cash Provided by Operating Transactions		78,468	68,921	63,451	60,991	58,408	55,720	52,928
Capital Transactions								
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(35,000)	(34,000)	(34,700)	(35,400)	(36,100)	(36,800)	(37,500)
Cash Applied to Capital Transactions		(35,000)	(34,000)	(34,700)	(35,400)	(36,100)	(36,800)	(37,500)
Investing Transactions								
Proceeds from Investments		(3,160)	(2,212)	(1,258)	(298)	667	1,637	2,614
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	-
Cash Provided by (applied to) Investing Transactions		(3,160)	(2,212)	(1,258)	(298)	667	1,637	2,614
Financing Transactions								
Add: Long-term Accounts Receivable Proceeds	2	64,013	66,574	69,237	72,006	74,887	77,882	80,997
Cash Applied to Financing Transactions		64,013	66,574	69,237	72,006	74,887	77,882	80,997
Increase in Cash and Cash Equivalents		104,321	99,283	96,730	97,299	97,862	98,439	99,039
Cash and Cash Equivalents, beginning of year	1	(406,072)	(301,751)	(202,468)	(105,738)	(8,439)	89,423	187,862
Cash and Cash Equivalents, end of year	1	(301,751)	(202,468)	(105,738)	(8,439)	89,423	187,862	286,901

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 Hamilton, 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 historical levels of water receivables as a percentage of annual water revenues (source: Township staff);
- b) Payables: Based on historical levels of Municipal-wide payables as a percentage of annual expenses incurred, applied to projected water expenses (source: prior years' audited financial statements).

2. Debt

The Township had no outstanding water related debt at the end of 2014. No debt proceeds are anticipated over the forecast period.

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 Hamilton 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 has been obtained from the 2014 Financial Information Return for the Township and includes water-related assets in the following categories:
 - i. Infrastructure;
 - ii. Land; and
 - iii. Facilities.
- Amortization is calculated based on the straight-line approach.
- For the purposes of calculating amortization, 2014 Construction in Progress is assumed to be brought into service in 2015.
- Given the planned asset replacement forecast in the 2015 Forecast, useful life on acquisitions is assumed to be equal to typical values assigned by the Township for each 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 shown as Developer Contributions, a revenue, on the Statement of Operations in the year of contribution, if applicable.
- The Township is unaware of any specific lead service piping in the Township's water systems.

The balance of tangible capital assets is summarized as follows:

Asset Historical Cost	2015	2016	2017	2018	2019	2020	2021
Opening Tangible Capital Asset Balance	7,900,181	7,922,101	7,954,955	7,981,307	8,008,059	8,035,299	8,062,827
Acquisitions	35,000	34,000	34,700	35,400	36,100	36,800	37,500
Disposals	13,080	1,146	8,348	8,648	8,860	9,272	9,665
Closing Tangible Capital Asset Balance	7,922,101	7,954,955	7,981,307	8,008,059	8,035,299	8,062,827	8,090,662
Opening Accumulated Amortization	1,645,592	1,785,581	1,939,640	2,086,950	2,235,178	2,384,437	2,534,551
Amortization Expense	153,069	155,205	155,658	156,876	158,119	159,386	160,677
Amortization on Disposal	13,080	1,146	8,348	8,648	8,860	9,272	9,665
Ending Accumulated Amortization	1,785,581	1,939,640	2,086,950	2,235,178	2,384,437	2,534,551	2,685,563
Net Book Value	6,136,520	6,015,315	5,894,357	5,772,881	5,650,862	5,528,276	5,405,099

5. Accumulated Surplus

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

Water	2015 Opening Accumulated Surplus
Reserve Balances	
Reserves: Capital/Other	(424,349)
Total Reserves Balance	(424,349)
Add: Long-term Accounts Receivable	589,835
Add: Tangible Capital Assets	6,254,589
Total Opening Balance	6,420,075

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

6. Other Revenue

Other revenue includes capital upgrade revenue, penalties and interest, as well as other non-operating general revenues.

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.

8. Accounts Receivable - Other

The Township is receiving payments from landowners who benefitted from capital upgrades performed in the past. The amount of unpaid funds is presented on the statement of financial position as “Accounts Receivable – Other”. Repayments received prior to 2013 are assumed to be related to principal only. Starting in 2013, imputed interest has been calculated on the repayments and included as a revenue item on the statement of operations.

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 systems or the governing body of the owner. (O.Reg. 453/07, Section 3 (1) 1)
2. The owner of the drinking water systems 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 systems 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 systems 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 Hamilton 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 Forecast or a future Rate Study process. Nevertheless, Council is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

1. The Township of Hamilton Water Financial Plan prepared by Watson & Associates Economists Ltd. dated January 22, 2016 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. The Financial Plan and the Council Resolution approving 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 and 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)).

Appendix A – 2015 Forecast – Water Summary Tables

Table A-1
Hamilton Township
Water Services Capital Budget Forecast
 Inflated \$

Project Description	Total	Budget 2015	Forecast					
			2016	2017	2018	2019	2020	2021
Capital Expenditures								
System-Wide Requirements								
Capital Provisions	214,500	-	34,000	34,700	35,400	36,100	36,800	37,500
Baltimore Well De-Commissioning	20,000	20,000	-	-	-	-	-	-
Water Meter Reader	15,000	15,000	-	-	-	-	-	-
Total Capital Expenditures	249,500	35,000	34,000	34,700	35,400	36,100	36,800	37,500
Capital Financing								
Debt Requirements	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-
Reserves	249,500	35,000	34,000	34,700	35,400	36,100	36,800	37,500
Total Financing	249,500	35,000	34,000	34,700	35,400	36,100	36,800	37,500

Table A-2
Hamilton Township
Water Services Debenture and Debt Charges
 Inflated \$

Debenture Year	(Inflated)	Budget 2015	Forecast					
			2016	2017	2018	2019	2020	2021
2015	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-
Total Annual Debt Charges	-	-	-	-	-	-	-	-
Total Annual Debt Charges - Baltimore/CH	-	-	-	-	-	-	-	-
Total Annual Debt Charges - Camborne	-	-	-	-	-	-	-	-

Table A-3
Hamilton Township
Reserves & Reserve Fund Continuity Schedule
 Inflated \$

Camborne Water Reserves	Budget 2015	Forecast					
		2016	2017	2018	2019	2020	2021
Opening Balance	(234,522)	(191,965)	(156,314)	(120,528)	(84,618)	(48,581)	(12,418)
Transfers from Operating - Area/Capital Charge Repayment	43,855	48,891	48,900	48,900	48,900	48,900	48,900
Transfers from Operating	2,833	1,692	1,739	1,784	1,828	1,873	1,918
Transfer to Operating	-	-	-	-	-	-	-
Transfer to Capital	2,230	13,384	13,660	13,936	14,211	14,487	14,762
Closing Balance	(190,064)	(154,766)	(119,335)	(83,780)	(48,100)	(12,295)	23,637
Interest	(1,901)	(1,548)	(1,193)	(838)	(481)	(123)	236

Baltimore/Creighton Heights Water Reserves	Budget 2015	Forecast					
		2016	2017	2018	2019	2020	2021
Opening Balance	(226,705)	(201,391)	(165,057)	(128,508)	(91,765)	(54,825)	(17,687)
Transfers from Operating - Area/Capital Charge Repayment	43,855	48,891	48,900	48,900	48,900	48,900	48,900
Transfers from Operating	16,223	9,693	9,961	10,216	10,472	10,727	10,982
Transfer to Operating	-	-	-	-	-	-	-
Transfer to Capital	32,770	20,616	21,040	21,464	21,889	22,313	22,738
Closing Balance	(199,397)	(163,423)	(127,236)	(90,857)	(54,282)	(17,511)	19,458
Interest	(1,994)	(1,634)	(1,272)	(909)	(543)	(175)	195

Cobourg Serviced Area Water Reserves	Budget 2015	Forecast					
		2016	2017	2018	2019	2020	2021
Opening Balance	36,878	74,210	97,981	121,988	146,236	170,727	195,462
Transfers from Operating	36,597	22,800	22,800	22,800	22,800	22,800	22,800
Closing Balance	73,476	97,010	120,781	144,788	169,036	193,527	218,262
Interest	735	970	1,208	1,448	1,690	1,935	2,183

COMBINED RESERVE FUND BALANCES	(319,145)	(223,390)	(127,048)	(30,147)	67,320	165,357	263,971
---------------------------------------	------------------	------------------	------------------	-----------------	---------------	----------------	----------------

Table A-4
Hamilton Township
Water Services Operating Budget Forecast
 Inflated \$

Description	Budget	Forecast					
	2015	2016	2017	2018	2019	2020	2021
Water Administration							
Operating Expenditures							
Salaries/Wages & Benefits	121,151	150,115	153,100	156,200	159,300	162,500	165,800
Mileage/Vehicle	4,000	800	800	800	800	800	800
Training Seminars	10,550	6,500	6,600	6,700	6,800	6,900	7,000
Dues/Memberships	900	900	900	900	900	900	900
Telephone/Pagers	6,000	6,900	7,000	7,100	7,200	7,300	7,400
Courier	200	200	200	200	200	200	200
Hydrant Inspections	-	3,700	3,700	3,700	3,700	3,700	3,700
Misc. Supplies	-	-	-	-	-	-	-
Answering Service	700	700	700	700	700	700	700
Contracted Services	15,000	15,300	15,600	15,900	16,200	16,500	16,800
Laboratory Supplies	4,000	4,100	4,200	4,300	4,400	4,500	4,600
Audit	6,000	6,100	6,200	6,300	6,400	6,500	6,600
Legal	1,500	-	-	-	-	-	-
Office Supplies	2,000	1,200	1,200	1,200	1,200	1,200	1,200
Capital-Related Expenditures							
Transfer to Capital	-	-	-	-	-	-	-
Transfer to Reserves	19,056	11,385	11,700	12,000	12,300	12,600	12,900
Subtotal - Water Administration	191,057	207,900	211,900	216,000	220,100	224,300	228,600
Camborne Water							
Operating Expenditures							
Holding Tank/Septic	500	1,000	1,000	1,000	1,000	1,000	1,000
Maintenance	7,000	7,100	7,200	7,300	7,400	7,500	7,700
Hydro/Union Gas	7,500	9,700	9,900	10,100	10,300	10,500	10,700
Chemicals	1,200	1,700	1,700	1,700	1,700	1,700	1,700
Water Samples	3,500	3,600	3,700	3,800	3,900	4,000	4,100
Capital-Related Expenditures							
Transfer to Capital	-	-	-	-	-	-	-
Transfer to Reserves - Area/Capital Charge Repayment	43,855	48,891	48,900	48,900	48,900	48,900	48,900
Subtotal - Camborne Water	63,555	71,991	72,400	72,800	73,200	73,600	74,100
Baltimore/Creighton Water							
Operating Expenditures							
Holding Tank/Septic	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Maintenance	15,000	16,200	16,500	16,800	17,100	17,400	17,700
Hydro	45,000	54,000	55,100	56,200	57,300	58,400	59,600
Chemicals	9,000	11,000	11,200	11,400	11,600	11,800	12,000
Water Samples	4,500	4,800	4,900	5,000	5,100	5,200	5,300
Capital-Related Expenditures							
Transfer to Capital	-	-	-	-	-	-	-
Transfer to Reserves - Area/Capital Charge Repayment	43,855	48,891	48,900	48,900	48,900	48,900	48,900
Subtotal - Baltimore/Creighton Heights Water	119,355	136,891	138,600	140,300	142,000	143,700	145,500
Cobourg Serviced Area Water							
Capital-Related Expenditures							
Transfer to Capital	-	-	-	-	-	-	-
Transfer to Reserves	36,597	22,800	22,800	22,800	22,800	22,800	22,800
Subtotal - Capital Related Expenditures	36,597	22,800	22,800	22,800	22,800	22,800	22,800
TOTAL GROSS OPERATING EXPENDITURES	410,564	439,582	445,700	451,900	458,100	464,400	471,000
Operating Revenues							
Capital Upgrades - Camborne	12,482	12,482	12,500	12,500	12,500	12,500	12,500
Capital Upgrades - Creighton Heights	71,485	85,300	85,300	85,300	85,300	85,300	85,300
Capital Upgrades - Dunganon	36,597	22,800	22,800	22,800	22,800	22,800	22,800
TOTAL OPERATING REVENUES	120,564	120,582	120,600	120,600	120,600	120,600	120,600
WATER BILLING RECOVERY	290,000	319,000	325,100	331,300	337,500	343,800	350,400