Township of Cavan Monaghan

Water
Ontario Regulation 453/07
Financial Plan

Financial Plan # 136-301

January 26, 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



Contents

			Page
1.	Intro	ductionduction	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	
		1.2.4 Financial Plan Requirements - General	
		1.2.5 Public Sector Accounting Board (P.S.A.B.) Requirements	
2.	Sust	ainable 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)	
	2.4	2015 Water and Wastewater Rate Study	
3.	Appr	oach	
	3.1	Overview	3-1
	3.2	Conversion Process	
		3.2.1 Calculate Tangible Capital Asset Balances	
		3.2.2 Convert Statement of Operations	
		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.		ncial Plan	
	4.1	Introduction	
	4.2	Water Financial Plan	
		4.2.1 Statement of Financial Position (Table 4-1)	
		4.2.2 Statement of Operations (Table 4-2)	
		4.2.3 Statement of Change in Net Financial Assets/Debt (Table 4	
		3)	4-3
		4.2.4 Statement of Cash Flow (Table 4-4)	4-3
5.	Proc	ess for Financial Plan Approval and Submission to the Province	5-1
6.	Reco	ommendations	6-1
App	endix A	– 2015 Rate Study – 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 Cavan Monaghan (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 Cavan Monaghan 2015 Water and Wastewater Rate Study" (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,

- 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;
- 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 <u>existing</u> 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 <u>mandatory</u> for water systems and <u>encouraged</u> 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

Assets

Financial Assets

Cash

Accounts Receivable

Investments

Inventory for resale

Other Assets

Total Financial Assets

Non-Financial Assets

Inventory of Supplies

Prepaid Expenses

Total Non-Financial Assets

Liabilities

Accounts Payable & Accrued Liabilities

Debt (Principal only)

Other (DC Reserves-Deferred Revenue)

Total Liabilities

NET ASSETS

Municipal Position

Fund Balances

Current Fund

Capital Fund

Reserves and Reserve Funds

Amounts to be Recovered

From Future Revenues

From Reserves & Reserve Funds

TOTAL MUNICIPAL POSITION

Financial Assets

Cash

Accounts Receivable

Investments

Inventory for resale

Other Assets

Total Financial Assets

Liabilities

Accounts Payable & Accrued Liabilities

Debt (Principal only)

Other (DC Reserves-Deferred Revenue)

Total Liabilities

NET FINANCIAL ASSETS/(DEBT)

Non-Financial Assets

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)

2009 AND FUTURE

Revenues

Base Charge Revenue Rate Based Revenue Transfers from Reserves

Other Revenue

Total Revenues

Expenditures

Operating Expenses

Capital

Total Expenditures

Net Revenues for the year Increase (decrease) in amounts to be recovered

Change in fund balances

Revenue

Base Charge Revenue Rate Based Revenue Earned DC Revenue Other Revenue

Total Revenue

Expenses

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

Operating Transactions
Cash received from:
Water Operations
Less: Cash paid for:
Operating expenses
Finance charges
Cash provided by operating transactions
Conital Transactions
Capital Transactions
Proceeds on sale of tangible capital assets
Less: Cash used to acquire tangible capital assets
Cash applied to capital transactions
Investing Technologies
Investing Transactions
Proceeds from investments
Less: Cash used to acquire investments
Cash provided by (applied to) investing transactions
Financing Transactions
Proceeds from debt issue
Less: Debt repayment (Principal only)
Cash applied to financing transactions
Increase in cash and cash equivalents
Cash and cash equivalents, beginning of year
Cash and cash equivalents, end of year

Operating Transactions

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

Cash provided by operating transactions

Capital Transactions

Proceeds on sale of tangible capital assets Less: Cash used to acquire tangible capital assets

Cash applied to capital transactions

Investing Transactions

Proceeds from investments

Less: Cash used to acquire investments

Cash provided by (applied to) investing transactions

Financing Transactions

Proceeds from debt issue

Less: Debt repayment (Principal only)

Cash applied to financing transactions

Increase in cash and cash equivalents

Cash and cash equivalents, beginning 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 Water and Wastewater 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.

Drivers: Financing Options: Reserves/Reserve Funds Legislation Local Issues Development Charges Health & Safety Issues Municipal Act XII **Technical Innovations Debt Limit** Grants Draws from Capital Works **Growth Forecast** Capital Budget Forecast Reserves/ Requirements Reserve Funds Capital-Related Operating Reserves/Reserve Expenditures Contribution to **Funds** Capital Contributions to Operating Budget Reserves/ Forecast Reserve Funds User Count and Consumption Forecast Profile Rates Forecast

Figure 2-1
Water (and Wastewater) 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
- 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.

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

Modified Cash Basis	Budget	Adjust	ments	Full Accrual Budget	Accrual Basis
	2015	DR	CR	2015	
Revenues					Revenues
Base Charge Revenue	150,616			150,616	Base Charge Revenue
Rate Based Revenue	103,414			103,414	Rate Based Revenue
Other Revenue	102,281			102,281	Other Revenue
Total Revenues	356,311			356,311	Total Revenues
Expenditures					Expenses
Operating	311,000			311,000	Operating Expenses
Capital					
Transfers to Reserves	45,311		45,311		
		85,600		85,600	Amortization
Total Expenditures	356,311			396,600	Total Expenses
Net Expenditures	-			(40,289)	Annual Surplus/(Deficit)
Increase (decrease) in amounts to be recovered	-			2,528,773	Accumulated Surplus/(Deficit), beginning of year
Change in Fund Balances	-		40,289	2,488,484	Accumulated Surplus/(Deficit), end of year

	TOTAL ADJUSTMENTS	Ī	85,600	85,600
--	-------------------	---	--------	--------

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	Adjustr	nents	Full Accrual Budget	Accrual Basis
	2015	DR	CR	2015	
ASSETS					<u>ASSETS</u>
Financial Assets					Financial Assets
Cash	502,329			502,329	Cash
Accounts Receivable	44,539			44,539	Accounts Receivable
Total Financial Assets	546,868			546,868	Total Financial Assets
LIABILITIES					<u>Liabilities</u>
Accounts Payable & Accrued Liabilities	56,594			56,594	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	1,199,900			1,199,900	Debt (Principal only)
Deferred Revenue	44,963			44,963	Deferred Revenue
Total Liabilities	1,301,457			1,301,457	Total Liabilities
Net Assets/(Debt)	(754,589)			(754,589)	Net Financial Assets/(Debt)
		3,243,073		3,243,073	Non-Financial Assets Tangible Capital Assets
				3,243,073	Total Non-Financial Assets
Municipal Position					
Water Reserves	445,311	445,311			
Development Charge Reserve Fund	44,963	44,963			
Amounts to be Recovered	(1,244,863)		1,244,863		
Total Municipal Position	(754,589)		2,488,484	2,488,484	Accumulated Surplus/(Deficit), end of year

TOTAL ADJUSTMENTS	3,733,347	3,733,347
-------------------	-----------	-----------

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:

Ending Reserve/Reserve Fund Balance

Plus: Ending Accounts Payable Balance

Less: Ending Accounts Receivable Balance

Equals: Approximate Ending Cash Balance

b) <u>Amortization Expense</u> – 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) <u>Accumulated Amortization</u> 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) <u>Accumulated Surplus</u> 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 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 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 the Township's water system will be in a net debt position of approximately \$755,000 in 2015. A net debt position continues from 2016 to 2023, reaching a maximum of \$4.0 million in 2017, before improving annually thereafter to just over \$708,000 at the end of 2023. In 2024 and 2025, the financial plan projects a net financial asset position, with a forecasted result of over \$1.3 million in 2025.

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;

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

- These assets represent significant economic resources in terms of their historical and replacement costs; therefore, ongoing capital asset management is essential to managing significant replacements and repairs; 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 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 increase by approximately \$6.1 million over the forecast period. This indicates that the Township has plans to invest in tangible capital assets in excess of the anticipated use of existing assets over the forecast period.

4.2.2 Statement of Operations (Table 4-2)

The Statement of Operations summarizes the revenues and expenses generated by the water system for a given period. The annual surplus/deficit measures whether the revenues generated were sufficient to cover the expenses incurred and, in turn, whether net financial assets have been maintained or depleted. Table 4-2 illustrates the ratio of expenses to revenues decreasing from 111% in 2015, to a value of 21% in 2016, primarily the result of the anticipated receipt of significant capital grants in 2016. In 2017, the ratio of expenses to revenues is projected to increase to 91%, then decrease annually to 39% by 2025. As a result, an annual deficit of just over \$40,000 is projected for 2015. However, annual surpluses are anticipated in every subsequent year (i.e. 2016 to 2025) of the forecast. Annual surplus is projected to achieve a result of approximately \$1.9 million in 2016, then to decrease to just over \$62,000 in 2017, then to increase annually thereafter, achieving a result of just under \$990,000 by 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 proposes to add approximately \$7.4 million to a 2015 accumulated surplus of approximately \$2.5 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 the years 2015 to 2017, forecasted tangible capital asset acquisitions (net of amortization for the year) exceed forecasted annual surplus, resulting in decreases in net financial assets during these years. In each of the other years (i.e. 2018 to 2025) the forecasted annual surplus exceeds the forecasted tangible capital asset acquisitions (net of amortization for the year), resulting in an increase to net financial assets each year. This allows for a long-term plan of funding capital through accumulated surplus (i.e. reserve funds). This is evidenced by the ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions increasing from 0.06 in 2015, to a value of 1.16 by 2025.¹

4.2.4 Statement of Cash Flow (Table 4-4)

The Statement of Cash Flow summarizes how water system is 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), make debt payments and build internal reserves and reserve funds over the forecast period. The financial plan projects the cash position of the Township's water system to fluctuate over the forecast period, with deficit cash positions forecasted in 2018 and 2019. In each of the other years (2015 to 2017 and 2020 to 2025), a positive cash balance is projected. Overall, the cash position is forecasted to improve

¹ A desirable ratio is 1:1 or better.

from just over \$502,000 at the end of 2015 to over \$2.2 million at the end of 2025. For further discussions on projected cash balances, please refer to the Notes to the Financial Plan.

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

	Natas	Notes Forecast										
	Notes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Financial Assets												
Cash	1	502,329	552,876	145,409	-	-	39,050	321,228	659,582	1,039,116	1,486,645	2,232,446
Accounts Receivable	1 1	44,539	53,579	90,293	109,697	133,483	162,569	170,676	178,811	186,945	195,080	203,216
Accounts Receivable - Other		-	-	-	32,820	82,554	132,318	180,600	226,489	269,906	310,750	348,918
Total Financial Assets		546,868	606,455	235,702	142,517	216,037	333,937	672,504	1,064,882	1,495,967	1,992,475	2,784,580
<u>Liabilities</u>												
Bank Indebtedness		-	-	-	61,353	79,776	-	-	-	-	-	-
Accounts Payable & Accrued Liabilities	1	56,594	57,875	59,140	60,430	61,751	63,105	64,488	65,907	67,365	68,855	70,389
Debt (Principal only)	2	1,199,900	4,030,746	4,197,637	3,878,612	3,550,191	3,212,095	2,864,036	2,505,719	2,136,838	1,757,079	1,366,119
Deferred Revenue	3	44,963	78,011	19,177	-	-	-	-	-	-	-	-
Total Liabilities		1,301,457	4,166,632	4,275,954	4,000,395	3,691,718	3,275,200	2,928,524	2,571,626	2,204,203	1,825,934	1,436,508
Net Financial Assets/(Debt)		(754,589)	(3,560,177)	(4,040,252)	(3,857,878)	(3,475,681)	(2,941,263)	(2,256,020)	(1,506,744)	(708,236)	166,541	1,348,072
Non-Financial Assets												
Tangible Capital Assets	4	3,243,073	7,938,325	8,480,835	8,499,750	8,517,936	8,611,255	8,619,596	8,666,685	8,716,059	8,764,726	8,572,376
Total Non-Financial Assets		3,243,073	7,938,325	8,480,835	8,499,750	8,517,936	8,611,255	8,619,596	8,666,685	8,716,059	8,764,726	8,572,376
Accumulated Surplus/(Deficit)	5	2,488,484	4,378,148	4,440,583	4,641,872	5,042,255	5,669,992	6,363,576	7,159,941	8,007,823	8,931,267	9,920,448
		•		•	·	•		·			•	
Financial Indicators	Total Change	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Increase/(Decrease) in Net Financial Assets	1,332,972	(769,689)	(2,805,588)	(480,075)	182,374	382,197	534,418	685,243	749,276	798,508	874,777	1,181,531
Increase/(Decrease) in Tangible Capital Assets	6,058,703	729,400	4,695,252	542,510	18,915	18,186	93,319	8,341	47,089	49,374	48,667	(192,350)
Increase/(Decrease) in Accumulated Surplus	7,391,675	(40,289)	1,889,664	62,435	201,289	400,383	627,737	693,584	796,365	847,882	923,444	989,181

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

	Notes					Forec	ast					
	Notes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Water Revenue												
Base Charge Revenue		150,616	182,923	231,124	301,086	396,425	512,603	548,954	585,305	621,656	658,008	694,359
Rate Based Revenue		103,414	127,800	162,270	213,359	280,997	366,481	395,070	423,659	452,248	480,837	509,426
Earned Development Charges Revenue	3	-	-	174,057	194,220	194,220	194,220	194,220	194,220	194,220	194,220	194,220
Other Revenue	6	102,281	2,069,083	141,712	168,910	196,220	227,244	227,166	227,301	227,439	227,579	227,722
Total Revenues		356,311	2,379,806	709,163	877,575	1,067,862	1,300,548	1,365,410	1,430,485	1,495,563	1,560,644	1,625,727
Water Expenses												
Operating Expenses	Sch. 4-1	311,000	318,040	324,990	343,080	339,340	346,780	354,380	362,180	382,190	378,380	386,810
Interest on Debt	2	-	29,754	125,048	129,321	119,925	110,250	100,287	90,029	79,465	68,587	57,386
Amortization	4	85,600	142,348	196,690	203,885	208,214	215,781	217,159	181,911	186,026	190,233	192,350
Total Expenses		396,600	490,142	646,728	676,286	667,479	672,811	671,826	634,120	647,681	637,200	636,546
Annual Surplus/(Deficit)		(40,289)	1,889,664	62,435	201,289	400,383	627,737	693,584	796,365	847,882	923,444	989,181
Accumulated Surplus/(Deficit), beginning of year	5	2,528,773	2,488,484	4,378,148	4,440,583	4,641,872	5,042,255	5,669,992	6,363,576	7,159,941	8,007,823	8,931,267
Accumulated Surplus/(Deficit), end of year		2,488,484	4,378,148	4,440,583	4,641,872	5,042,255	5,669,992	6,363,576	7,159,941	8,007,823	8,931,267	9,920,448
		<u>'</u>		•				•				
Note 5: Accumulated Surplus/(Deficit) Reconciliation:		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Reserve Balances		2015	2016	2017	2010	2019	2020	2021	2022	2023	2024	2025
Reserves: Development Charges		44.963	78.011	19,177	(32,820)	(82,554)	(132,318)	(180,600)	(226,489)	(269,906)	(310,750)	(348,918
Reserves: Capital/Other		445.311	470.569	157.385	20.734	74,510	270.832	608,016	998.975	1,428,602	1,923,620	2,714,191
Total Reserves Balance		490,274	548.580	176,562	(12,086)	(8,044)	138,514	427,416	772,486	1,158,696	1,612,870	2,365,273
Less: Debt Obligations and Deferred Revenue	+	(1,244,863)	(4,108,757)	(4,216,814)	(3,845,792)	(3,467,637)	(3,079,777)	(2,683,436)	(2,279,230)	(1,866,932)	(1,446,329)	(1,017,201
Add: Tangible Capital Assets	4	3,243,073	7,938,325	8,480,835	8,499,750	8,517,936	8,611,255	8,619,596	8.666.685	8,716,059	8,764,726	8,572,376
Total Ending Balance		2,488,484	4,378,148	4,440,583	4.641.872	5,042,255	5.669.992	6,363,576	7,159,941	8.007.823	8,931,267	9,920,448
		2, .55, .64	.,0.0,.40	., ,	.,,	5,5 .2,250	0,000,002	3,333,510	.,,	3,00.,020	5,55.,251	3,323,440
Financial Indicators	Total Change	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Expense to Revenue Ratio		111%	21%	91%	77%	63%	52%	49%	44%	43%	41%	39%
2) Increase/(Decrease) in Accumulated Surplus	7.391.675	(40.289)	1.889.664	62.435	201.289	400.383	627.737	693,584	796.365	847.882	923,444	989.181

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

		Notes 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024										
	Notes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Operating Expenses												
Gross Wages - Full Time		32,200	32,840	33,500	34,170	34,850	35,550	36,260	36,990	37,730	38,480	39,250
Benefits - OMERS		3,500	3,570	3,640	3,710	3,780	3,860	3,940	4,020	4,100	4,180	4,260
Benefits - El Reduced Premium		500	510	520	530	540	550	560	570	580	590	600
Benefits - CPP		1.000	1.020	1.040	1.060	1.080	1,100	1,120	1,140	1.160	1.180	1.200
Benefits - EHT		650	660	670	680	690	700	710	720	730	740	750
Benefits - WCB		950	970	990	1.010	1,030	1,050	1,070	1.090	1,110	1,130	1,150
Manulife Group Benefits		2,850	2.910	2,970	3,030	3,090	3,150	3,210	3,270	3,340	3,410	3,480
Benefits - Other		20	20	20	20	20	20	20	20	20	20	20
Meal Allocwance		50	50	50	50	50	50	50	50	50	50	50
Mileage Reimbursement / Travel		100	100	100	100	100	100	100	100	100	100	100
Staff Training & Development		1,500	1.530	1.560	1.590	1.620	1.650	1,680	1,710	1.740	1.770	1.810
								1,000				
Uniforms / Clothing		100	100	100	100	100	100		100	100	100	100
Legal Expense		250	500	510	520	530	540	550	560	570	580	590
Memberships		150	150	150	150	150	150	150	150	150	150	150
Software support (sensus)		1,750	1,790	1,830	1,870	1,910	1,950	1,990	2,030	2,070	2,110	2,150
Water Meters		1,500	1,530	1,560	1,590	1,620	1,650	1,680	1,710	1,740	1,770	1,810
Office Supplies		500	510	520	530	540	550	560	570	580	590	600
Allocated Phone Service		350	360	370	380	390	400	410	420	430	440	450
Advertising		200	200	200	200	200	200	200	200	200	200	200
Postage/Courier		1,000	1,020	1,040	1,060	1,080	1,100	1,120	1,140	1,160	1,180	1,200
Application Fees		400	410	420	430	440	450	460	470	480	490	500
Purchase of Equipment		150	150	150	150	150	150	150	150	150	150	150
Contracted Services		4,000	4.080	4,160	4.240	4,320	4,410	4.500	4.590	4.680	4,770	4,870
Allocated Vehicle Costs		1,000	1.020	1.040	1.060	1.080	1,100	1,120	1,140	1.160	1,180	1,200
Property taxes		2,450	2,500	2.550	2,600	2,650	2,700	2,750	2.810	2.870	2,930	2,990
Millbrook Water - Distribution System		2, 100	2,000	2,000	2,000	2,000	2,7.00	2,700	2,0.0	2,0.0	2,000	
Leak Detection		1,000	1,020	1,040	1,060	1,080	1,100	1,120	1,140	1,160	1,180	1,200
Hydrant Maintenance		5,000	5.100	5,200	5,300	5.410	5,520	5,630	5.740	5.850	5,970	6.090
Materials and Supplies		500	530	560	590	620	650	680	710	750	790	830
Contracted Services		40,000	40,800	41,620	42,450	43,300	44,170	45,050	45,950	46,870	47,810	48,770
Lead Testing		2,000	2.040	2.080	2,120	2.160	2,200	2.240	2.280	2.330	2.380	2.430
		2,000	2,040	2,080	2,120	2,160	2,200	2,240	2,280	2,330	2,380	2,430
Millbrook Water - Treatment & Supply		4 000				4.500	4.500	4.500	4 500	4 000		4 000
Audit Fees		1,380	1,410	1,440	1,470	1,500	1,530	1,560	1,590	1,620	1,650	1,680
OCWA Repairs & Maintenance		10,000	10,200	10,400	10,610	10,820	11,040	11,260	11,490	11,720	11,950	12,190
Chemical Pump Maintenance		1,500	1,530	1,560	1,590	1,620	1,650	1,680	1,710	1,740	1,770	1,810
OCWA Contracted Services		116,000	118,320	120,690	123,100	125,560	128,070	130,630	133,240	135,900	138,620	141,390
Special Equipment		1,000	1,020	1,040	1,060	1,080	1,100	1,120	1,140	1,160	1,180	1,200
Hydro		16,000	16,800	17,640	18,520	19,450	20,420	21,440	22,510	23,640	24,820	26,060
Contracted Services		2,500	2,550	2,600	2,650	2,700	2,750	2,810	2,870	2,930	2,990	3,050
Millbrook Water - Standpipe Tower												
Mechanical Repairs & Maintenance		1,000	1,020	1,040	1,060	1,080	1,100	1,120	1,140	1,160	1,180	1,200
Hydro		2,500	2,630	2,760	2,900	3,050	3,200	3,360	3,530	3,710	3,900	4,100
Contracted Services		500	510	520	530	540	550	560	570	580	590	600
Bulk Water Sale												
Material and Supplies		1,000	1.020	1.040	1.060	1.080	1,100	1,120	1,140	1,160	1,180	1,200
Contracted Services		2,000	2.040	2.080	2,120	2,160	2,200	2,240	2,280	2.330	2,380	2,430
Interdepartmental Charge - Water		50,000	51,000	52,020	53,060	54,120	55,200	56,300	57,430	58,580	59,750	60,950
The separate and the separate		50,500	31,000	52,520	55,566	5-, 120	33,200	55,550	37,-30	50,550	55,750	55,350
Non TCA - Expenses from Capital Budget	7	-	-	-	11.000	-				12.000	-	-
WITTON - LADETISES HUTT CAPITAL DUUYEL				-	11,000	-				12,000		
OTAL OPERATING EXPENSES		311,000	318.040	324.990	343.080	339,340	346.780	354,380	362.180	382.190	378,380	386.810

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

	Notes					Fore	cast					
	Notes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual Surplus/(Deficit)		(40,289)	1,889,664	62,435	201,289	400,383	627,737	693,584	796,365	847,882	923,444	989,181
Less: Acquisition of Tangible Capital Assets	4	(815,000)	(4,837,600)	(739,200)	(222,800)	(226,400)	(309,100)	(225,500)	(229,000)	(235,400)	(238,900)	-
Add: Amortization of Tangible Capital Assets	4	85,600	142,348	196,690	203,885	208,214	215,781	217,159	181,911	186,026	190,233	192,350
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-	-
		(729,400)	(4,695,252)	(542,510)	(18,915)	(18,186)	(93,319)	(8,341)	(47,089)	(49,374)	(48,667)	192,350
Increase/(Decrease) in Net Financial Assets/(Net Debt)		(769,689)	(2,805,588)	(480,075)	182,374	382,197	534,418	685,243	749,276	798,508	874,777	1,181,531
Net Financial Assets/(Net Debt), beginning of year		15,100	(754,589)	(3,560,177)	(4,040,252)	(3,857,878)	(3,475,681)	(2,941,263)	(2,256,020)	(1,506,744)	(708,236)	166,541
Net Financial Assets/(Net Debt), end of year		(754,589)	(3,560,177)	(4,040,252)	(3,857,878)	(3,475,681)	(2,941,263)	(2,256,020)	(1,506,744)	(708,236)	166,541	1,348,072
Financial Indicators		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Acquisition of Tangible Capital Assets (Cumulative)		815,000	5,652,600	6,391,800	6,614,600	6,841,000	7,150,100	7,375,600	7,604,600	7,840,000	8,078,900	8,078,900
Annual Surplus/Deficit before Amortization (Cumulative)		45,311	2,077,323	2,336,448	2,741,622	3,350,219	4,193,737	5,104,480	6,082,756	7,116,664	8,230,341	9,411,872
Ratio of Annual Surplus before Amortization to Acquisition of TCA's (C	Cumulative)	0.06	0.37	0.37	0.41	0.49	0.59	0.69	0.80	0.91	1.02	1.16

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

	Notes					Fore	cast					
	Notes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Operating Transactions												
Annual Surplus/Deficit		(40,289)	1,889,664	62,435	201,289	400,383	627,737	693,584	796,365	847,882	923,444	989,181
Add: Amortization of TCA's	4	85,600	142,348	196,690	203,885	208,214	215,781	217,159	181,911	186,026	190,233	192,350
Less: Earned Deferred Revenue	3	-	-	(174,057)	(194,220)	(194,220)	(194,220)	(194,220)	(194,220)	(194,220)	(194,220)	(194,220)
Add: Deferred Revenue Proceeds		4,749	33,048	115,223	142,224	144,487	144,456	145,938	148,332	150,803	153,377	156,053
Change in A/R (Increase)/Decrease		1,942	(9,039)	(36,714)	(19,405)	(23,787)	(29,086)	(8,107)	(8,136)	(8,134)	(8,136)	(8,137)
Change in A/P Increase/(Decrease)		(15,820)	1,281	1,265	1,290	1,321	1,354	1,383	1,419	1,458	1,490	1,534
Cash Provided by Operating Transactions		36,182	2,057,302	164,842	335,063	536,398	766,022	855,737	925,671	983,815	1,066,188	1,136,761
Capital Transactions												
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(815,000)	(4,837,600)	(739,200)	(222,800)	(226,400)	(309,100)	(225,500)	(229,000)	(235,400)	(238,900)	-
Cash Applied to Capital Transactions		(815,000)	(4,837,600)	(739,200)	(222,800)	(226,400)	(309,100)	(225,500)	(229,000)	(235,400)	(238,900)	-
Financing Transactions												
Proceeds from Debt Issue	2	735,000	3,360,423	439,200	-	-	-	-	-	-	-	-
Less: Debt Repayment (Principal only)	2	-	(529,578)	(272,309)	(319,025)	(328,421)	(338,096)	(348,059)	(358,317)	(368,881)	(379,759)	(390,960)
Cash Applied to Financing Transactions		735,000	2,830,845	166,891	(319,025)	(328,421)	(338,096)	(348,059)	(358,317)	(368,881)	(379,759)	(390,960)
Increase/(Decrease) in Cash and Cash Equivalents		(43,818)	50,547	(407,467)	(206,762)	(18,423)	118,826	282,178	338,354	379,534	447,529	745,801
Cash and Cash Equivalents, beginning of year	1	546,147	502,329	552,876	145,409	(61,353)	(79,776)	39,050	321,228	659,582	1,039,116	1,486,645
Cash and Cash Equivalents, end of year	1	502,329	552,876	145,409	(61,353)	(79,776)	39,050	321,228	659,582	1,039,116	1,486,645	2,232,446

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 Cavan Monaghan, 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 typical ratios of receivables as a percentage of annual revenues as witnessed in other municipalities, applied to projected Cavan Monaghan water revenues; and
- b) Payables: Based on the ratio of municipal-wide payables as a percentage of annual expenses, applied to projected Cavan Monaghan water expenses (source: prior years' audited financial statements).

2. Debt

The Township had internal water related debt of \$464,900 at the end of 2014. It is anticipated that additional debt proceeds will be required over the forecast period to fund growth related needs. *Principal* repayments over the forecast period are estimated as follows:

Year	Principal Payments
2015	-
2016	529,578
2017	272,309
2018	319,025
2019	328,421
2020	338,096
2021	348,059
2022	358,317
2023	368,881
2024	379,759
2025	390,960
Total	\$ 3,633,405

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/Accounts Receivable - Other

Deferred revenue is made up of development charge reserve fund balances which are considered to be a liability for financial reporting purposes until the funds are used to emplace the works for which they have been collected. In years when the water development charge reserve fund balance is negative, it is shown as an asset (accounts receivable – other) for financial reporting purposes, representing future amounts to be collected from developers.

4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water-related assets in the following categories:
 - i. Infrastructure;
 - ii. Facilities:
 - iii. Equipment; and
 - iv. Land.
- Amortization is calculated based on the straight-line approach.
- For the purposes of calculating amortization, 2015 construction in progress is assumed to be brought into service in 2016.
- Given the planned asset replacement forecast in the 2015 Rate Study, 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 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	4,014,026	4,795,501	9,591,124	10,296,401	10,483,641	10,672,386	10,940,530	11,124,477	11,311,059	11,501,713	11,695,488
Acquisitions	815,000	4,837,600	739,200	222,800	226,400	309,100	225,500	229,000	235,400	238,900	-
Disposals	33,525	41,977	33,923	35,560	37,655	40,956	41,553	42,418	44,746	45,125	-
Closing Tangible Capital Asset Balance	4,795,501	9,591,124	10,296,401	10,483,641	10,672,386	10,940,530	11,124,477	11,311,059	11,501,713	11,695,488	11,695,488
Opening Accumulated Amortization	1,500,353	1,552,428	1,652,799	1,815,566	1,983,891	2,154,450	2,329,275	2,504,881	2,644,374	2,785,654	2,930,762
Amortization Expense	85,600	142,348	196,690	203,885	208,214	215,781	217,159	181,911	186,026	190,233	192,350
Amortization on Disposal	33,525	41,977	33,923	35,560	37,655	40,956	41,553	42,418	44,746	45,125	-
Ending Accumulated Amortization	1,552,428	1,652,799	1,815,566	1,983,891	2,154,450	2,329,275	2,504,881	2,644,374	2,785,654	2,930,762	3,123,112
Net Book Value	3,243,073	7,938,325	8,480,835	8,499,750	8,517,936	8,611,255	8,619,596	8,666,685	8,716,059	8,764,726	8,572,376

5. Accumulated Surplus

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

Water	2015 Opening Accumulated Surplus
Reserve Balances	
Reserves: Development Charges	40,214
Reserves: Capital/Other	480,000
Total Reserves Balance	520,214
Less: Debt Obligations and Deferred Revenue	(505,114)
Add: Tangible Capital Assets	2,513,673
Total Opening Balance	2,528,773

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

6. Other Revenue

Other revenue includes bulk water sales, connection fees, 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.

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 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 Cavan Monaghan 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 Cavan Monaghan Water Financial Plan prepared by Watson & Associates Economists Ltd. dated January 26, 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 Rate Study – Water Summary Tables

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

Description	Budget	Total		*			Foreca	ıst				
Description	2015	Total	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Capital Expenditures												
Water Distribution System (4830)												
Water Main System	-	1,492,000	153,000	156,000	159,000	162,000	166,000	169,000	172,000	176,000	179,000	-
OCWA Provision for Capital	250,000	· · ·	· -	· -	· -	-	-	· -	-	-	-	-
Hydrants Provision	20,000	198,900	20,400	20,800	21,200	21,600	22,100	22,500	23,000	23,400	23,900	-
King Street Watermain Replacement	300,000	-	-	-	-	-	-	-	-	-	-	-
Centennial Lane Reconstruction	200,000	-	-	-	-	-	-	-	-	-	-	-
Water Main Valves (Budgeted 15,000 in operaring in 2015)	-	150,000	15,000	16,000	16,000	16,000	17,000	17,000	17,000	18,000	18,000	-
Water Curbstops (Budgeted 15,000 in operaring in 2015)	-	150,000	15,000	16,000	16,000	16,000	17,000	17,000	17,000	18,000	18,000	-
Diesel Generator	-	66,000	-	-	-	-	66,000	-	-	-	-	-
Pioneer Pump	-	10,000	-	-	-	-	10,000	-	-	-	-	-
Remote Meter Read System	25,000	26,000	26,000	-	-	-	-	-	-	-	-	-
Water Treatment (4831)												
VFD Pump	20,000	-	-	-	-	-	-	-	-	-	-	-
Well Inspections	-	23,000	-	-	11,000	-	-	-	-	12,000	-	-
Buildings					-							
Water Treatment Plant - Interior Components	-	53,000	10,200	10,400	10,600	10,800	11,000	-	-	-	-	-
Studies:					-							
Preservicing Studies - from Fraserville Study	-	474,000	474,000	-	-	-	-	-	-	-	-	-
Growth Related:		,	,									
Stand by Generator and Electrical Connection at Pump House in												
Millbrook	-	82,000	82,000	-	-	-	-	-	-	-	-	-
Water Service Extension to Municipal Buildings	-	41,000	41,000	-	-	-	-	-	-	-	-	-
New Water Standpipe	-	2,955,000	2,955,000	-	-	-	-	-	-	-	-	-
King Street Watermain	-	1,336,000	816,000	520,000	-	-	-	-	-	-	-	-
Scada System Upgrades	-	112,000	112,000	-	-	-	-	-	-	-	-	-
RVA Engineering	-	592,000	592,000	-	-	-	-	-	-	-	-	-
Total Capital Expenditures	815,000	7,760,900	5,311,600	739,200	233,800	226,400	309,100	225,500	229,000	247,400	238,900	-
Capital Financing												
Provincial/Federal Grants - Growth Related	-	1,951,177	1,951,177	-	-	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	735,000	1,098,461	832,941	265,520	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	993,339	819,659	173,680	-	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements - BCF Projects	-	586,508	586,508	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements - BCF Projects	-	1,121,315	1,121,315	-	-	-	-	-	-	-	-	-
Water Reserve	80,000	2,010,100	-	300,000	233,800	226,400	309,100	225,500	229,000	247,400	238,900	-
Total Capital Financing	815,000	7,760,900	5,311,600	739,200	233,800	226,400	309,100	225,500	229,000	247,400	238,900	-

Table A-2 Township of Cavan Monaghan Water Service

Schedule of Non-Growth Related Debenture Repayments - Other Projects

Inflated \$

				πιιατου φ								
Debenture		Principal					Forec	ast				
Year	2015	(Inflated)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2015		735,000	85,331	85,331	85,331	85,331	85,331	85,331	85,331	85,331	85,331	85,331
2016		832,941		96,702	96,702	96,702	96,702	96,702	96,702	96,702	96,702	96,702
2017		265,520			30,826	30,826	30,826	30,826	30,826	30,826	30,826	30,826
2018		-				-	-	-	-	-	-	-
2019		-					-	-	-	-	-	-
2020		-						-	-	-	-	-
2021		-							-	-	-	-
2022		-								-	-	-
2023		-									-	-
2024		-										-
2025		-										
Total Annual Debt Charges	-	1,833,461	85,331	182,033	212,859	212,859	212,859	212,859	212,859	212,859	212,859	212,859

Table A-3 Township of Cavan Monaghan Water Service

Schedule of Growth Related Debenture Repayments - Other Projects

Inflated \$

Debenture	2015	Principal					Forec	ast				
Year	2015	(Inflated)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2016		819,659		95,160	95,160	95,160	95,160	95,160	95,160	95,160	95,160	95,160
2017		173,680			20,164	20,164	20,164	20,164	20,164	20,164	20,164	20,164
2018		-				-	-	-	-	-	-	-
2019		-					-	-	-	-	-	-
2020		-						-	-	-	-	-
2021		-							-	-	-	-
2022		-								-	-	-
2023		-									-	-
2024		-										-
2025		-										
Total Annual Debt Charges	-	993,339		95,160	115,323	115,323	115,323	115,323	115,323	115,323	115,323	115,323

Table A-4 Township of Cavan Monaghan Water Service Schedule of Non-Growth Related Debenture Repayments - BCF

Inflated \$

Debenture		Principal					Forec	ast				
Year	2015	(Inflated)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2015		-	-	-	-	-	-	-	-	-	- 1	-
2016		586,508		41,267	41,267	41,267	41,267	41,267	41,267	41,267	41,267	41,267
2017		-			-	-	-	-	-	-	-	-
2018		-				-	-	-	-	-	-	-
2019		-					-	-	-	-	-	-
2020		-						-	-	-	-	-
2021		-							-	-	-	-
2022		-								-	-	-
2023		-									-	-
2024		-										-
2025		-										
Total Annual Debt Charges	-	586,508	-	41,267	41,267	41,267	41,267	41,267	41,267	41,267	41,267	41,267

Table A-5 Township of Cavan Monaghan Water Service

Schedule of Growth Related Debenture Repayments - BCF

Inflated \$

Debenture	2015	Principal		·			Forec	ast				
Year	2013	(Inflated)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2016		1,121,315		78,897	78,897	78,897	78,897	78,897	78,897	78,897	78,897	78,897
2017		-			-	-	-	-	-	-	-	-
2018		-				-	-	-	-	-	-	-
2019		-					-	-	-	-	-	-
2020		-						-	-	-	-	-
2021		-							-	-	-	-
2022		-								-	-	-
2023		-									-	-
2024		-										-
2025		-										
Total Annual Debt Charges	•	1,121,315	-	78,897	78,897	78,897	78,897	78,897	78,897	78,897	78,897	78,897

Table A-6 Township of Cavan Monaghan Water Service Water Reserves/ Reserve Funds Continuity

Inflated \$

Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Opening Balance	480,000	445,311	470,569	157,385	20,733	74,509	270,832	608,016	998,975	1,428,602	1,923,620
Transfer from Operating	45,311	25,258	-	97,149	280,176	505,422	562,684	619,959	677,027	733,918	790,571
Transfer to Capital	80,000		300,000	233,800	226,400	309,100	225,500	229,000	247,400	238,900	-
Transfer to Operating	-	-	13,184	-	-	-	-	-	-	-	-
Closing Balance	445,311	470,569	157,385	20,733	74,509	270,832	608,016	998,975	1,428,602	1,923,620	2,714,191

Table A-7 Township of Cavan Monaghan Water Service Water Development Charges Reserve Fund Continuity

Inflated \$

Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Opening Balance	40,214	44,963	78,011	19,177	(32,819)	(82,553)	(132,317)	(180,598)	(226,487)	(269,905)	(310,749)
Development Charge Proceeds	4,194	32,085	114,986	142,629	145,506	146,090	148,168	151,128	154,135	157,213	160,361
Transfer to Capital	-	-	-			-	-	-		-	-
Transfer to Operating	-	-	174,057	194,220	194,220	194,220	194,220	194,220	194,220	194,220	194,220
Closing Balance	44,408	77,048	18,941	(32,414)	(81,534)	(130,683)	(178,369)	(223,691)	(266,572)	(306,912)	(344,608)
Interest	555	963	237	(405)	(1,019)	(1,634)	(2,230)	(2,796)	(3,332)	(3,836)	(4,308)
Required from Development Charges	-	3,892,151	173,680	-	-	-	-	-	-	-	-
BCF Grants	-	1,951,177	-	-	-	-	-	-	-	-	-
Net Required from DCs	-	1,940,974	173,680	-	-	-	-	-	-	-	-

Table A-8
Township of Cavan Monaghan
Water Services
Operating Budget Forecast
Inflated \$

Description 2015		Budget		miated \$	-		Forec	ast				
Control Costs Cost	Description		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Gross Wages Full Time 32,200 32,840 33,500 34,770 34,850 35,550 36,280 36,990 37,730 38,860 38,660 37,730 38,860 38,660 37,730 38,860 38,660 37,730 38,860 38,660 37,730 38,860 38,660 37,730 38,860 38,660 37,730 38,860 38,6	Expenditures											
Bandins - OMERS 3,000 3,770 3,780 3,780 3,880 3,404 4,002 4,100 4,180 4,888 5,886 5,90	Operating Costs											
Benefits - OMERS 3,500 3,570 3,590 3,710 3,780 3,880 3,404 4,002 4,100 4,180 4,800 4,800 5,00	Gross Wages - Full Time	32.200	32.840	33.500	34.170	34.850	35.550	36.260	36.990	37.730	38.480	39,250
Benefits - El Reduced Premium									4.020			4,260
Benefits - EHT	Benefits - El Reduced Premium		il '		,		,			,	590	600
Benefits - EHT	Benefits - CPP	1.000	1.020	1.040	1.060	1.080	1.100	1.120	1.140	1.160	1.180	1,200
Benefits - WCB 950 970 990 1,010 1,050 1,070 1,109 1,110 1,130 1									,	,		750
Manufile Group Benefits 2,856 2,910 2,970 3,000 3,150 3,210 3,270 3,340 3,410 3,250 3,260 3,270 3,340 3,410 3,250 3,260 3,270 3,340 3,410 3,250 3,270 3,340 3,410 3,250 3,270 3,340 3,410 3,250 3,270 3,340 3,410 3,250 3,270 3,270 3,340 3,410 3,250 3,270 3,	Benefits - WCB		970	990	1.010	1.030	1.050	1.070	1.090	1.110	1.130	1,150
Benefits - Other 20	Manulife Group Benefits	2.850	2.910	2.970	,	3.090	3.150			,	,	3,480
Meal Microwance 50 50 50 50 50 50 50 5										,		20
Mileage Reimbursement / Travel 100					50						50	50
Staff Training & Development 1,500 1,530 1,560 1,590 1,620 1,680 1,710												100
Inflorms / Clothing 100												1,810
Legal Expense					,	100	100			100	100	100
Memberships 150											580	590
Software support (sensus)												150
Water Meters 1,500												2,150
Office Supplies 500 510 520 530 540 550 560 570 580 590	''' '		1,530	1,560	,	1.620	,			,	1,770	1,810
Allocated Phone Service 350 360 370 380 390 400 410 420 430 440						,				, -	, -	600
Advertising 200 20						390					440	450
Postage/Courier				200				200			200	200
Application Fees	ŭ											1,200
Purchase of Equipment				,		,					,	500
Contracted Services			-			-			-			150
Allocated Vehicle Costs 1,000 1,020 1,040 1,060 1,080 1,100 1,120 1,140 1,160 1,180												4,870
Property taxes										,	,	1,200
Millbrook Water - Distribution System Leak Detection 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,100 1,100 1,120 1,140 1,160 1,180 1,1							,			,	,	2,990
Leak Detection		_,	_,,,,,,	_,~~~	_,,,,,	_,,,,,	_,	_,	_,-,	_,-,	_,,,,,	_,,,,,
Hydrant Maintenance 5,000 5,100 5,200 5,300 5,410 5,520 5,630 5,740 5,850 5,970 60 500 500 500 500 500 500 500 500 500		1 000	1 020	1 040	1.060	1 080	1 100	1 120	1 140	1 160	1 180	1,200
Materials and Supplies 500 500 500 500 500 500 620 650 680 710 750 790 Contracted Services 40,000 40,800 41,620 42,450 43,300 44,170 45,050 45,950 46,870 47,810 48 40,800 41,620 2,040 2,080 2,120 2,160 2,200 2,240 2,280 2,330 2,380 2 40,800 40,800 41,620 2,040 2,080 2,120 2,160 2,200 2,240 2,280 2,330 2,380 2 40,800 2,300 44,170 45,050 45,950 46,870 47,810 48 40,800 41,620 2,040 2,080 2,120 2,160 2,200 2,240 2,280 2,330 2,380 2 40,800 40,8												6,090
Contracted Services 40,000 Lead Testing 2,000 2,000 2,000 2,000 2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,200 2,240 2,280 2,330 2,380 2,	*									,		830
Lead Testing 2,000 2,040 2,080 2,120 2,160 2,200 2,240 2,280 2,330 2,380												48,770
Millbrook Water - Treatment & Supply 1,380 1,410 1,440 1,470 1,500 1,530 1,560 1,590 1,620 1,650 1 OCWA Repairs & Maintenance 10,000 10,200 10,400 10,610 10,820 11,040 11,260 11,490 11,720 11,950 12 Chemical Pump Maintenance 1,500 1,530 1,580 1,590 1,620 1,680 1,710 1,740 1,770 1 OCWA Contracted Services 116,000 118,320 120,690 123,100 125,560 128,070 130,630 133,240 135,900 138,620 144 Special Equipment 1,000 1,020 1,040 1,060 1,080 1,100 1,140 1,140 1,140 1,140 1,180 14 Hydro 16,000 16,800 17,640 18,520 19,450 20,420 21,440 22,510 23,640 24,820 26 Contracted Services 2,500 2,550 2,600 2,650												2,430
Audit Fees 1,380 1,410 1,440 1,470 1,500 1,530 1,560 1,590 1,620 1,650 1		2,000	2,010	2,000	2,120	2,.00	2,200	2,2.0	2,200	2,000	2,000	2,.00
OCWA Repairs & Maintenance 10,000 10,200 10,400 10,610 10,820 11,040 11,260 11,490 11,720 11,950 12 Chemical Pump Maintenance 1,500 1,530 1,560 1,590 1,620 1,650 1,680 1,710 1,740 1,770 1 OCWA Contracted Services 116,000 118,320 120,690 123,100 125,560 128,070 130,630 133,240 135,900 138,620 141 Special Equipment 1,000 1,020 1,040 1,060 1,080 1,100 1,120 1,140 1,160 1,180 14 Hydro 16,000 16,800 17,640 18,520 19,450 20,420 21,440 22,510 23,640 24,820 26 Contracted Services 2,500 2,550 2,600 2,650 2,700 2,750 2,810 2,870 2,930 2,990 3		1.380	1 410	1 440	1 470	1 500	1 530	1 560	1 590	1 620	1 650	1,680
Chemical Pump Maintenance 1,500 1,530 1,560 1,590 1,620 1,680 1,710 1,740 1,770 1 OCWA Contracted Services 116,000 118,320 120,690 123,100 125,560 128,070 130,630 133,240 135,900 138,620 141 Special Equipment 1,000 1,020 1,040 1,060 1,080 1,100 1,120 1,140 1,160 1,180 1 Hydro 16,000 16,800 17,640 18,520 19,450 20,420 21,440 22,510 23,640 24,820 26 Contracted Services 2,500 2,550 2,600 2,650 2,700 2,750 2,810 2,870 2,930 2,990 3 Millbrook Water - Standpipe Tower 1,000			il '		,					,	,	12.190
OCWA Contracted Services 116,000 118,320 120,690 123,100 125,560 128,070 130,630 133,240 135,900 138,620 141 Special Equipment 1,000 1,000 1,040 1,060 1,080 1,100 1,120 1,140 1,160 1,180 1 Hydro 16,000 16,800 17,640 18,520 19,450 20,420 21,440 22,510 23,640 24,820 26 Contracted Services 2,500 2,550 2,600 2,650 2,700 2,750 2,810 2,870 2,930 2,990 3 Millbrook Water - Standpipe Tower 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,100 1,100 1,140 1,160 1,180 1			-,	-,		-,	,		,		,	1,810
Special Equipment 1,000 1,020 1,040 1,060 1,080 1,100 1,120 1,140 1,160 1,180 1 Hydro 16,000 16,800 17,640 18,520 19,450 20,420 21,440 22,510 23,640 24,820 26 Contracted Services 2,500 2,550 2,600 2,650 2,700 2,750 2,810 2,870 2,930 2,990 3 Millbrook Water - Standpipe Tower 1,000 1,040 1,060 1,080 1,100 1,120 1,140 1,160 1,180 1	·		il '		,	,	,		, -	,	,	141,390
Hydro 16,000 16,800 17,640 18,520 19,450 20,420 21,440 22,510 23,640 24,820 26 Contracted Services 2,550 2,600 2,650 2,700 2,750 2,810 2,870 2,930 2,990 3 Millbrook Water - Standpipe Tower											,	1,200
Contracted Services 2,500 2,550 2,600 2,650 2,700 2,750 2,810 2,870 2,930 2,990 3 Millbrook Water - Standpipe Tower			il '		,		,			,	,	26,060
Millbrook Water - Standpipe Tower												3,050
		2,000	2,000	2,000	2,000	2,. 00	2,.00	2,0.0	2,0.0	2,000	2,000	0,000
	Mechanical Repairs & Maintenance	1,000	1 020	1.040	1,060	1.080	1,100	1,120	1,140	1.160	1.180	1,200
						,				,	,	4,100
			il '				,				,	600
Bulk Water Sale			310	320	030	0.70	330	330	3.0	330	000	000
		1 000	1 020	1 0/0	1 060	1 020	1 100	1 120	1 140	1 160	1 120	1,200
	· ·			,	,							2,430
			il '				,		,		,	60,950
												386,810

Table A-8 Continued Township of Cavan Monaghan Water Services Operating Budget Forecast Inflated \$

	Budget		ii iiiateu ş			Forec	ast				
Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<u>Capital-Related</u>											
Existing Debt (Principal) - Growth Related											
Existing Debt (Interest) - Growth Related											
New Growth Related Debt (Principal)		-	72,127	89,437	91,950	94,534	97,191	99,922	102,730	105,616	108,584
New Growth Related Debt (Interest)		-	23,032	25,886	23,373	20,789	18,133	15,402	12,594	9,707	6,739
New Growth Related Debt (Principal) - BCF		-	39,651	41,039	42,475	43,962	45,500	47,093	48,741	50,447	52,213
New Growth Related Debt (Interest) - BCF		-	39,246	37,858	36,422	34,935	33,397	31,804	30,156	28,450	26,684
Existing Debt (Principal) - Non-Growth Related											
Existing Debt (Interest) - Non-Growth Related											
New Non-Growth Related Debt (Principal)		64,678	139,791	167,084	171,779	176,606	181,569	186,671	191,916	197,309	202,853
New Non-Growth Related Debt (Interest)		20,654	42,242	45,775	41,080	36,253	31,290	26,188	20,942	15,550	10,005
New Non-Growth Related Debt (Principal) - BCF		-	20,740	21,465	22,217	22,994	23,799	24,632	25,494	26,387	27,310
New Non-Growth Related Debt (Interest) - BCF		-	20,528	19,802	19,051	18,273	17,468	16,635	15,773	14,881	13,957
Transfer to Capital	-	-	-	-	-	-	-	-	-	-	-
Transfer to Capital Reserve	45,311	25,258	-	97,149	280,176	505,422	562,684	619,959	677,027	733,918	790,571
Sub Total Capital Related	45,311	110,589	397,357	545,495	728,522	953,768	1,011,030	1,068,305	1,125,373	1,182,264	1,238,917
Total Expenditures	356,311	428,629	722,347	877,575	1,067,862	1,300,548	1,365,410	1,430,485	1,495,563	1,560,644	1,625,727
Revenues											
Base Charge	150,616	182,923	231,124	301,086	396,425	512,603	548,954	585,305	621,656	658,008	694,359
Miscellaneouas Revenue - Sysco	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Rent Revenue	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200
Meter Installation Revenue	500	1,805	6,679	11,372	12,455	12,274	12,094	12,094	12,094	12,094	12,094
Local Improvements - Water/Sewer	12,481	12,481	12,481	12,481	12,481	12,481	12,481	12,481	12,481	12,481	12,481
Water & Sewer Ownership Change F	1,100	300	1,110	1,890	2,070	2,040	2,010	2,010	2,010	2,010	2,010
Penalty and Interest Income - W	6,000	6,120	6,242	6,367	6,495	6,624	6,757	6,892	7,030	7,171	7,314
Other Revenue - Bulk Water Sale	75,000	90,000	108,000	129,600	155,520	186,624	186,624	186,624	186,624	186,624	186,624
Contributions from Development Charges Reserve Fund	-	-	174,057	194,220	194,220	194,220	194,220	194,220	194,220	194,220	194,220
Contributions from Reserves / Reserve Funds	-	-	13,184	-	-	-	-	-	-	_	-
Total Operating Revenue	252,897	300,829	560,077	664,216	786,865	934,067	970,340	1,006,826	1,043,315	1,079,807	1,116,301
Water Billing Recovery - Operating	103,414	127,800	162,270	213,359	280,997	366,481	395,070	423,659	452,248	480,837	509,426
Lifecycle Reserve Contribution (\$)		Ì									
Water Billing Recovery - Total	103,414	127,800	162,270	213,359	280,997	366,481	395,070	423,659	452,248	480,837	509,426