

MUNICIPALITY OF MACHIN

WATER
ONTARIO REGULATION 453/07
FINANCIAL PLAN

FINANCIAL PLAN #290-301

DECEMBER 20, 2012



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 Planning for growth

CONTENTS

	<u>Page</u>
1. INTRODUCTION	
1.1 Study Purpose	1-1
1.2 Background	1-1
1.2.1 Financial Plans 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	1-3
1.2.5 Public Sector Accounting Board (PSAB) Requirements	1-4
2. SUSTAINABLE FINANCIAL PLANNING	
2.1 Introduction	2-1
2.2 <i>Sustainable Water and Sewage Systems Act</i>	2-1
2.3 <i>Water Opportunities Act (Bill 72)</i>	2-2
2.4 Water Forecast	2-3
3. APPROACH	
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 Statements of Cash Flow and Change in Net Financial Assets/Debt	3-4
3.2.5 Verification and Note Preparation	3-6
4. FINANCIAL PLAN	
4.1 Introduction	4-1
4.2 Water Financial Plan	4-1
4.2.1 Statement of Financial Position	4-1
4.2.2 Statement of Operations	4-2
4.2.3 Statement of Change in Net Financial Assets/Debt	4-3
4.2.4 Statement of Cash Flow	4-3
5. PROCESS FOR FINANCIAL PLAN APPROVAL AND SUBMISSION TO THE PROVINCE	5-1
6. RECOMMENDATIONS	6-1

APPENDIX

A	2012 WATER FORECAST
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1. INTRODUCTION

1. INTRODUCTION

1.1 Study Purpose

Watson & Associates Economists Ltd. (Watson) was retained by the Municipality of Machin (the Municipality) 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 Municipality's water system has been compiled and documented by Watson, with the assistance of municipal staff, into a long term water forecast (2012 Water Forecast). The objective of the report provided herein is to convert the findings of the 2012 Water 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* (SDWA) 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 SDWA 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 (SWSSA) cited above is not in force (see Section 2.2 of this report) however, the standards that it directs will 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 regards to s.30 (1) part b of the SDWA 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 Public Sector Accounting Board (PSAB)) for each year in which the financial plans apply;
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system;
- Financial plans are to be made available to the public upon request and at no charge;
- If a website is maintained, financial plans are to be made available to the public through publication on the Internet at no charge;
- Notice of the availability of the financial plans is to be given to the public; and
- Financial plan is 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 regards to s.30 (1) part b of the SDWA 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 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 PSAB) for each year in which the financial plans apply;
- Financial plans must present financial position itemized by total financial assets, total liabilities, net debt, non-financial assets, and tangible capital assets (i.e. the components of a “Statement of Financial Position” as per PSAB) for each year in which the financial plans apply;
- Gross cash receipts/payments itemized by operating transactions, capital transactions, investing transactions and financial transactions (i.e. the components of a “Statement of Cash Flow” as per PSAB) for each year in which the financial plans apply;
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system;
- Financial plans are to be made available to the public upon request and at no charge;
- If a website is maintained, financial plans are to be made available to the public through publication on the Internet at no charge;
- Notice of the availability of the financial plans is to be given to the public; and
- Financial plan is 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 SDWA, a financial plan is mandatory for water systems and encouraged for wastewater systems. The financial plans shall be for a period of at least six years but longer planning horizons are encouraged. The financial plan is to be completed and approved by the later of July 1, 2010 and the date that is six months after the first license is issued. Financial plans may be amended and additional information beyond what is prescribed can be included if deemed necessary.

Where a licence has been issued, the financial plan must contain on the front page, the appropriate financial plan number as set out in Schedule A of the Municipal Drinking Water Licence document.

1.2.5 Public Sector Accounting Board (PSAB) Requirements

The components of the financial plans indicated by the regulation are consistent with the requirements for financial statement presentation as set out in section PS1200 of the Canadian Institute of Chartered Accountants (CICA) 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). For example, the financial statements were reported on a full accrual accounting basis for 2009 and this 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 a municipality's financial position. Before 2009, municipalities reported their financial results 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, municipalities have been required to report additional information relating to the accounting treatment of tangible capital assets as indicated by the requirements under section PS3150. Pre-2009, the costs to acquire, develop and/or construct capital assets were expensed in the year in which they occur. Going forward, tangible capital assets will be capitalized so as to create an inventory of the assets owned and to account for their ability to provide future benefits. The reporting of tangible capital assets requires further changes to the format of existing financial statements. From a financial planning perspective, this change is significant for water assets as they represent a significant portion of the Municipality's infrastructure.

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 which provides 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 municipalities pre-2009, have now been eliminated by the new reporting format. The balances and transactions that make up these two statements have been transferred to either the Statement of Operations or the Statement of Financial Position depending on the nature of the account.

FIGURE 1-1 STATEMENT OF FINANCIAL POSITION

OLD FORMAT (PRE-2009)

<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

2009 AND FUTURE

<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)

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

2009 AND FUTURE

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

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. SUSTAINABLE FINANCIAL PLANNING

2.1 Introduction

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

2.2 Sustainable Water and Sewage Systems Act

The *Sustainable Water and Sewage Systems Act* (SWSSA) was passed on December 13, 2002. The intent of the Act is to introduce the requirement for municipalities to undertake an assessment of the "full cost" of providing their water and the wastewater services. It is noted that, at the time of writing, the regulations, which accompany the Act, have not been issued. In total, there are 40 areas within the Act to which the Minister may make Regulations.

The Act would require the preparation of two reports for submission to the Ministry of the Environment (or such other member of the Executive Council as may be assigned the administration of this Act under the Executive Council Act). The first report is on the "full cost of services" and the second is the "cost recovery plan." Once these reports have been reviewed and approved by the Ministry, the municipality will be required to implement the plans within a specified time period.

The Act provides the Minister the power to approve or not approve the plans. If the Minister is not satisfied with the report or if a municipality does not submit a plan, the Minister may have a plan prepared. The cost to the Crown for preparing the plan will be recovered from the municipality. Once the plans are approved and in place, the municipality will be required to submit progress reports. The timing of these reports and the information to be contained therein will be established by the regulations. A municipal auditor's opinion must be provided with the progress report.

As of the time of writing, the regulations to implement this Act have not been passed; hence the Act will not be in effect until these regulations are passed.

2.3 Water Opportunities Act, 2010 (Bill 72)

Since the passage of the *Safe Drinking Water Act*, continuing changing and refinements to the legislation has been introduced, including Bill 72. Bill 72 was introduced into legislation on May 18, 2010 and received Royal Assent on November 29, 2010.

The purposes of the *Water Opportunities Act* are to: foster innovative water, wastewater and storm water technologies, services and practices; create opportunities for economic development and clean-technology jobs; and conserve and sustain water resources. To achieve this 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.

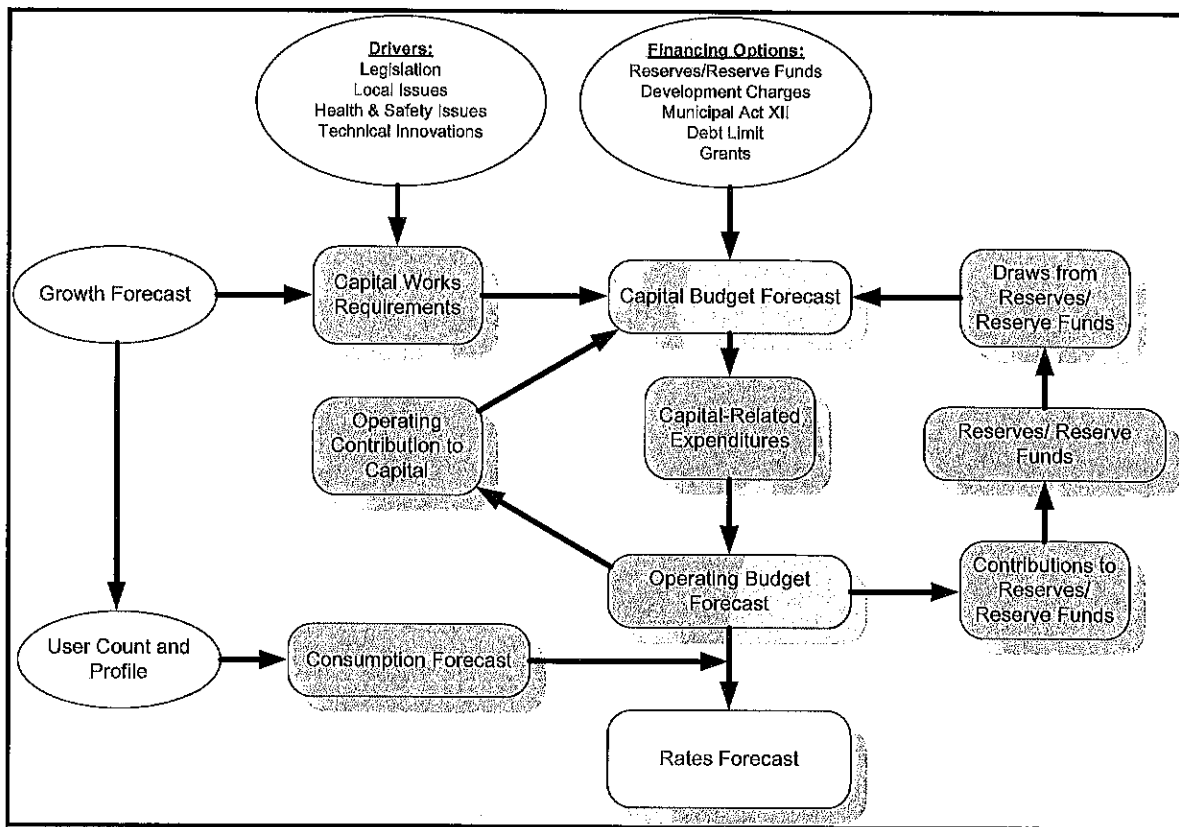
Where a Board has jurisdiction over a service, the plan (and any plan amendments) must be approved by the municipality in which the municipal service is provided, before submission to the Minister. The Minister may also direct preparation of joint or partially joint plans.

Regulations (to be forthcoming) will prescribe details in regard to any time periods or time limits, contents of the plans, identifying which portions of the plan will require certification, the public consultation process (if required), limitations updates and refinements.

2.4 Water Forecast

As noted above, Watson has already assisted Municipality of Machin staff with the development of a water forecast (2012 Water Forecast). While this 2012 Water Forecast provides the necessary tools to complete the legislated water financial plan, it is not a comprehensive rate study. The rate study process is designed to address the “full cost” principles within SWSSA and does so in a manner that also reflects the guiding principles toward sustainable financial planning. Figure 2-1 below summarizes the process.

**FIGURE 2-1
WATER (AND WASTEWATER) RATE CALCULATION PROCESS**



A comprehensive rate study provides a sound and more complete financial plan for a Municipality's water system by providing:

- A detailed assessment of current and future capital needs including an analysis of potential funding sources (*Principles 2, 4, 5, 6, 9*);
- An analysis of fixed and variable operating costs in order to determine how they will be impacted by evolving infrastructure needs and system growth (*Principles 2, 3, 6, 7, 9*);
- A review and recommendation on rate structures that ensure revenues are equitable and sufficient to meet system needs (*Principles 2, 3, 6, 7, 9*); and
- A public process that involves ongoing consultation with the main stakeholders including the Municipal 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 (*Principles 1, 9*).

It is recommended that the Municipality of Machin complete a water (and wastewater) rate study in the near future. This study will calculate what "full cost" rates are in Machin so that staff and members of Council can fully assess the impacts of providing water and wastewater services.

The 2012 Water Forecast is provided in Appendix A to this report.

3. APPROACH

3. APPROACH

3.1 Overview

The 2012 Water 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. It is noted that the financial plan has been prepared for water only.

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 as part of the Municipality's efforts to become compliant with PSAB 3150. From an asset valuation standpoint, 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 (if any); and
- Disposals and related gains or losses for each year of forecast period (if applicable).

Regarding future water capital needs, Machin staff has informed Watson that there are no requirements within the forecast period.

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 section 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 Section 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 section 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 (if applicable) 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
Municipality of Machin
Conversion Adjustments
Statement of Operations (Water)**

Modified Cash Basis	Budget 2011	Adjustments		Full Accrual Budget 2011	Accrual Basis	Notes on Adjustments
		DR	CR			
Revenues						
Billing Revenue	181,363			181,363		
Transfers from Reserves	60,000	60,000		-		No change Removes non-accrual reserve account New Account to reflect earned Gas Tax Revenue To Account for Interest Revenue
Other Revenue	101,053			101,053		
Total Revenues	322,436			322,436		
Expenditures						
Operating Capital	245,054			245,054		Various Expenses previously classified as capital expenditures
Transfers to Reserves	-			-		
Transfers to Capital	-			-		Removes non-accrual reserve account
Debt Repayment (Principal & Interest)	77,363		21,981	55,922		Removes TCA related balances which are now captured in statement of financial position Removes principal portion of debt - now reflected on statement of cash flow. New account created as a result of PSAB 3150 - reflects cost of using TCA
Total Expenditures	322,436	340,278		640,854		
Net Expenditures				(318,418)		Represents difference between Revenues and Expenditures
Increase (decrease) in amounts to be recovered	-			5,077,753		To transfer annual surplus to accumulated surplus
Change in fund balances	-		318,418	4,789,538		
TOTAL ADJUSTMENTS		400,278	400,278			

Note: The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)

3.2.3 Convert Statement of Financial Position

Once the Statement of Operations has been converted and the net book value of tangible capital assets has been recorded, balances for the remaining items on the Statement of Financial Position are determined and recorded (see Figure 3-2). As noted earlier, the applicable balances from the Statement of Capital and the Statement of Reserve and Reserve Funds will need to be transferred to this statement. The opening/actual balances for the remaining accounts such as accounts receivable, inventory, accounts payable, outstanding debt (principal only), are recorded and classified according to the structure of the Statement of Financial Position as outlined in PS1200.

It is acknowledged that some of the balances required on the Statement of Financial Position will be consolidated across the Municipality 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 Municipality 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
Municipality of Machin
Conversion Adjustments
Statement of Financial Position (Water)

Modified Cash Basis	Budget 2011	Adjustments		Full Accrual Budget 2011	Accrual Basis	Notes on Adjustments
		DR	CR			
Assets						
Financial Assets						
Cash	40,829			40,829	Financial Assets	
Accounts Receivable	11,708			11,708	Cash	No change
Total Financial Assets	52,537			52,537	Accounts Receivable	No change
Liabilities						
Accounts Payable & Accrued Liabilities	37,182			37,182	Liabilities	No Change
Gross Long-term Liabilities	1,100,678			1,100,678	Accounts Payable & Accrued Liabilities	No Change
Deferred Revenue	-			-	Debt (Principal only)	No Change
Total Liabilities	1,137,860			1,137,860	Deferred Revenue	No Change
Net Assets/(Debt)	(1,085,323)			(1,085,323)	Net Financial Assets/(Debt)	
Municipal Position						
Water Reserves	15,355			15,355	Non-Financial Assets	Adds NEV of Tangible Capital Assets - offset entry is to accumulated surplus
Gas Tax Reserve Fund	-			-	Tangible Capital Assets	
Development Charge Reserve Fund	-			-	Total Non-Financial Assets	
Amounts to be Recovered	(1,100,678)			(1,100,678)		Removes non-accrual reserve account - balance to be transferred to accumulated surplus
Total Municipal Position	(1,085,323)			(1,085,323)	Accumulated Surplus/(Deficit)	Removes non-accrual reserve account - balance to be transferred to accumulated surplus
						Removes account - balance to be transferred to accumulated surplus
TOTAL ADJUSTMENTS		5,860,014	5,860,014	4,759,335		Represents offset entry for TCA's and existing reserve fund balances

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 Municipality 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 with the Municipality's ledgers. However, it may not be possible to extract this information from the ledgers for water alone; therefore a reasonable proxy will be needed. One approach is to assume 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 Municipality'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 2012 Water Forecast.
- d. Contributed Assets Contributed assets could represent a significant part of the Municipality'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. FINANCIAL PLAN

4.1 Introduction

The following tables provide the complete financial plan for the Municipality'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 Municipality'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 Municipality's water system. The first important indicator is net financial assets/(debt), which is defined as the difference between financial assets and liabilities. This indicator provides an indication of the system's "future revenue requirement". A net financial asset position is where financial assets are greater than liabilities and implies that the system has the resources to finance future operations. Conversely, a net debt position implies that the future revenues generated by the system will be needed to finance past transactions, as well as future operations. Table 4-1 indicates that in 2011 due to the existing water debt principal balance and low reserve balance, the Municipality's water system was in a net debt position of \$1,085,323. However, this net debt position improves to \$1,062,361 in 2012 then continues to improve throughout the forecast period, resulting in a net debt position of \$755,519 by 2020. The net debt position is projected to improve by over \$350,000 over the forecast period. This is due to the 2012 Water Forecast projecting a reducing debt balance and increasing reserve balance over the forecast period.

Another important indicator on the Statement of Financial Position is the tangible capital asset balance. As noted earlier, providing this information is a new requirement of municipalities as part of PS3150 compliance (since 2009) 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 municipality or donation/contribution by a third party. A decrease in the tangible capital asset balance can indicate a disposal, write down, or use of assets. A use of assets is usually represented by an increase in accumulated amortization due to annual amortization expenses arising as a result of allocating the cost of the asset to operations over the asset's useful life. Table 4-1 shows that there are no current plans to purchase or construct water tangible capital assets during the forecast period. As a result, the tangible capital asset net book value is anticipated to decrease by over \$3 million during this time, due to annual amortization amounts. This indicates that the Municipality has no plans to invest in water tangible capital asset over the forecast period.

4.2.2 Statement of Operations (Table 4-2)

The Statement of Operations summarizes the revenues and expenses generated by the water system for a given period. The annual surplus/deficit measures whether the revenues generated were sufficient to cover the expenses incurred and in turn, whether net financial assets have been maintained or depleted. Table 4-2 illustrates the ratio of expenses to revenues at 199% in 2011 and 2012, 203% in 2013 then gradually improving to 160% by 2020. As a result, annual deficit amounts are shown at \$318,418 in 2011, \$317,316 in 2012, \$320,817 in 2013 then gradually improving to \$226,762 by 2020. Deficit are shown due to the fact that the Municipality is not currently contributing to water reserves at amounts equalling or exceeding amortization expense each year. Amortization, which is a non-cash expense from a full accrual reporting standpoint, is included in operating expenses as shown in Table 4-2. 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 in the future.

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 illustrates a reduction in accumulated surplus of approximately \$2.7 million over the forecast period. This is due to the projection of annual deficits as well as the decreasing tangible capital asset net book value over the forecast period. The existing accumulated surplus, as indicated in Table 4-2, is predominately made up of reserve balances as well as historical investments in tangible capital assets.

4.2.3 Statement of Change in Net Financial Assets/Debt (Table 4-3)

The Statement of Change in Net Financial Assets/Debt indicates whether revenue generated was sufficient to cover operating and non-financial asset costs (i.e. inventory supplies, prepaid expenses, tangible capital assets, etc.) and in so doing, explains the difference between the annual surplus/deficit and the change in net financial assets/debt for the period. Table 4-3 indicates that forecasted tangible capital asset amortization exceeds the forecasted annual deficit for each year of the forecast period, resulting in an increase in net financial assets each year. This trend of improving the net financial asset position will eventually allow for a long term plan of funding capital through accumulated surplus (i.e. reserve balances).

4.2.4 Statement of Cash Flow (Table 4-4)

The Statement of Cash Flow summarizes how the water system is expected to generate and use cash resources during the planning 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 start building internal reserves and make required debt payments over the forecast period. The financial plan projects the cash position of the Municipality's water system to decline from a balance of approximately \$40,829 at the beginning of 2011 to \$34,243 in 2014 and then improve to an estimated balance of \$118,017 by 2020. For further discussions, on projected cash balances please refer to the Notes to the Financial Plan.

TABLE 4-1
Municipality of Machin
Statement of Financial Position (Water)
UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY
2011- 2020

	Notes	Budget					Forecast				
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Financial Assets											
Cash	1	40,829	40,571	34,505	34,243	37,887	45,685	58,000	75,004	95,007	118,017
Accounts Receivable	1	11,708	11,587	12,601	12,734	13,133	13,581	14,047	14,528	14,927	15,336
Total Financial Assets		52,537	52,158	47,006	46,977	51,020	59,278	72,047	89,532	109,934	133,353
Liabilities											
Accounts Payable & Accrued Liabilities	1	37,182	36,803	36,306	37,032	37,775	38,531	38,302	40,087	40,889	41,708
Debt (Principal only)	2	1,100,678	1,077,716	1,053,600	1,028,270	1,001,666	973,722	944,373	813,547	881,170	847,164
Deferred Revenue	3	-	-	-	-	-	-	-	-	-	-
Total Liabilities		1,137,860	1,114,519	1,089,906	1,065,302	1,039,441	1,012,253	983,675	853,634	922,059	888,872
Net Financial Assets/(Debt)		(1,085,323)	(1,062,361)	(1,042,900)	(1,018,325)	(988,421)	(952,977)	(911,628)	(864,102)	(812,125)	(755,519)
Non-Financial Assets											
Tangible Capital Assets	4	5,844,658	5,504,380	5,164,102	4,823,824	4,512,001	4,228,633	3,945,265	3,661,897	3,378,529	3,095,161
Total Non-Financial Assets		5,844,658	5,504,380	5,164,102	4,823,824	4,512,001	4,228,633	3,945,265	3,661,897	3,378,529	3,095,161
Accumulated Surplus/(Deficit)	5	4,759,335	4,442,019	4,121,202	3,805,499	3,523,580	3,275,656	3,033,637	2,797,795	2,566,404	2,338,642
Financial Indicators											
1) Increase/(Decrease) in Net Financial Assets		21,861	22,862	19,461	24,575	29,904	35,444	41,349	47,526	51,977	56,606
2) Increase/(Decrease) in Tangible Capital Assets		(340,279)	(340,278)	(340,278)	(340,278)	(311,823)	(283,368)	(283,368)	(283,366)	(283,368)	(283,366)
3) Increase/(Decrease) in Accumulated Surplus		(316,416)	(317,316)	(320,817)	(315,703)	(281,919)	(247,924)	(242,019)	(235,842)	(231,391)	(226,762)

TABLE 4-2
Municipality of Machin
Statement of Operations (Water)
UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY
2011- 2020

	Notes	Budget					Forecast				
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Water Revenue		161,363	164,363	177,038	164,208	191,633	199,253	207,243	215,503	222,033	228,753
Billing Revenue	3	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Earned Development Charges & Gas Tax Revenue	6	101,063	74,970	74,970	76,480	78,010	79,570	81,160	82,780	84,430	86,110
Other Revenue		322,436	319,938	312,008	320,688	328,643	338,823	348,403	358,253	365,463	374,883
Total Revenues		544,862	544,301	563,054	561,376	650,286	677,946	697,206	716,536	731,926	749,746
Water Expenses											
Operating Expenses	Sched. 4-1	245,054	242,553	239,280	244,060	248,360	253,940	259,020	264,200	269,480	274,880
Interest on Debt	2	55,522	54,422	53,267	52,063	50,779	49,440	48,034	46,557	45,006	43,377
Amortization	4	340,278	340,278	340,278	340,278	311,823	283,368	283,368	283,368	283,368	283,368
Total Expenses		640,854	637,253	632,815	636,391	611,962	586,748	590,422	594,125	597,854	601,625
Annual Surplus/(Deficit)		(98,992)	(92,952)	(69,761)	(75,115)	(61,676)	(108,802)	(93,216)	(77,589)	(65,928)	(51,879)
Accumulated Surplus/(Deficit), beginning of year	5	5,077,753	4,759,335	4,442,019	4,121,202	3,805,489	3,523,580	3,275,656	3,033,637	2,797,795	2,566,404
Accumulated Surplus/(Deficit), end of year		4,759,335	4,442,019	4,121,202	3,805,489	3,523,580	3,275,656	3,033,637	2,797,795	2,566,404	2,339,642
Note 5:											
Accumulated Surplus/(Deficit) is made up of:											
Reserve Balances											
Reserves: Gas Tax		15,355	15,355	10,700	9,945	13,245	20,745	32,745	49,445	69,045	91,645
Reserves: Capital/Other											
Total Reserves Balance		15,355	15,355	10,700	9,945	13,245	20,745	32,745	49,445	69,045	91,645
Less: Debt Obligations and Deferred Revenue		(1,100,678)	(1,077,716)	(1,063,600)	(1,026,270)	(1,001,666)	(973,722)	(944,373)	(913,547)	(881,170)	(847,164)
Add: Tangible Capital Assets	4	5,944,658	5,504,380	5,164,102	4,823,824	4,512,001	4,228,833	3,945,265	3,661,897	3,378,529	3,095,161
Total Ending Balance		4,759,335	4,442,019	4,121,202	3,805,489	3,523,580	3,275,656	3,033,637	2,797,795	2,566,404	2,339,642
Financial Indicators											
1) Expense to Revenue Ratio		199%	199%	203%	198%	186%	173%	169%	166%	163%	160%
2) Increase/(Decrease) in Accumulated Surplus		(318,418)	(317,316)	(320,817)	(315,703)	(281,919)	(247,924)	(242,019)	(235,842)	(231,391)	(226,762)

Schedule 4-1
Municipality of Machin
Schedule of Operating Expenses
UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY
2011- 2020

	Notes	Budget					Forecast						
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Expenditures													
<u>Operating Costs</u>													
Green Shield		-	500	510	520	530	540	550	560	570	580	590	
Union Gas		4,000	4,890	4,890	4,780	4,880	4,880	5,080	5,180	5,280	5,380		
Hydro		22,629	20,000	20,400	20,810	21,230	21,650	22,080	22,520	22,970	23,430		
Insurance		12,950	13,500	13,770	14,050	14,330	14,620	14,910	15,210	15,510	15,820		
Memberships/Subscriptions		275	280	300	310	320	330	340	350	360	370		
DW/GMS Audit		-	10,000	10,200	10,400	10,610	10,820	11,040	11,260	11,480	11,720		
OID Contract		200,000	180,000	183,600	187,270	191,020	194,840	198,740	202,710	206,760	210,900		
Property Taxes		2,200	2,200	2,240	2,280	2,330	2,380	2,430	2,480	2,530	2,580		
Building Maintenance		1,000	1,000	1,020	1,040	1,060	1,080	1,100	1,120	1,140	1,160		
Distribution Parts & Maintenance		2,000	2,500	2,550	2,600	2,650	2,700	2,750	2,810	2,870	2,930		
CPW Grant		-	7,953	-	-	-	-	-	-	-	-		
Non TCA - Expenses from Capital Budget	7	-	-	-	-	-	-	-	-	-	-		
TOTAL OPERATING EXPENSES		245,084	242,553	239,280	244,080	246,960	253,940	259,020	264,200	269,480	274,860		

TABLE 4-3
Municipality of Machin
Statement of Changes in Net Financial Assets/Debt (Water)
UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY
2011-2020

	Notes	Budget					Forecast				
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Annual Surplus/(Deficit)		(919,418)	(917,916)	(920,817)	(915,709)	(881,919)	(247,924)	(242,019)	(235,942)	(231,391)	(228,792)
Less: Acquisition of Tangible Capital Assets	4	-	-	-	-	-	-	-	-	-	-
Add: Amortization of Tangible Capital Assets	4	340,278	340,278	340,278	340,278	311,823	283,368	283,368	283,368	283,368	283,368
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Increase/(Decrease) in Net Financial Assets/(Net Debt)		21,861	22,962	19,461	24,575	29,904	35,444	41,349	47,528	51,977	56,606
Net Financial Assets/(Net Debt), beginning of year		(1,107,184)	(1,085,323)	(1,062,361)	(1,042,900)	(1,018,325)	(988,421)	(952,977)	(911,628)	(864,102)	(812,125)
Net Financial Assets/(Net Debt), end of year		(1,085,323)	(1,062,361)	(1,042,900)	(1,018,325)	(988,421)	(952,977)	(911,628)	(864,102)	(812,125)	(755,519)
Financial Indicators											
1) Acquisition of Tangible Capital Assets (Cumulative)		-	-	-	-	-	-	-	-	-	-
2) Annual Surplus/Deficit before Amortization (Cumulative)		21,860	44,822	64,283	88,868	118,762	154,206	185,555	243,081	285,058	351,664
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)		-	-	-	-	-	-	-	-	-	-

TABLE 4-4
Municipality of Machin
Statement of Cash Flow - Indirect Method (Water)
UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY
2011- 2020

	Notes	Forecast\$																		
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020									
Operating Transactions																				
Annual Surplus/Deficit		(318,418)	(317,316)	(320,817)	(315,703)	(261,919)	(247,924)	(242,019)	(235,842)	(231,391)	(228,762)									
Add: Amortization of TCA's	4	340,278	340,278	340,278	340,278	311,823	283,368	283,368	283,368	283,368	283,368									
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-									
Less: Earned Deferred Revenue		(60,000)	(60,000)	(60,000)	(60,000)	(60,000)	(60,000)	(60,000)	(60,000)	(60,000)	(60,000)									
Less: Developer Contributions	3	-	-	-	-	-	-	-	-	-	-									
Add: Development Charge and Gas Tax Proceeds		60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000									
Change in A/R (Increase)/(Decrease)		-	121	(914)	(233)	(399)	(448)	(466)	(481)	(399)	(409)									
Change in A/P (Increase)/(Decrease)		-	(379)	(487)	726	743	756	771	785	802	819									
Less: Interest Proceeds		-	-	-	-	-	-	-	-	-	-									
Cash Provided by Operating Transactions		21,860	22,704	18,060	25,068	30,248	35,752	41,654	47,830	52,390	57,018									
Capital Transactions																				
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-									
Less: Cash Used to acquire Tangible Capital Assets	4	-	-	-	-	-	-	-	-	-	-									
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	2	-	-	-	-	-	-	-	-	-	-									
Less: Debt Repayment (principal only)	2	(21,860)	(22,961)	(24,116)	(25,330)	(26,604)	(27,943)	(29,349)	(30,826)	(32,377)	(34,006)									
Cash Applied to Financing Transactions		(21,860)	(22,961)	(24,116)	(25,330)	(26,604)	(27,943)	(29,349)	(30,826)	(32,377)	(34,006)									
Increase in Cash and Cash Equivalents		-	(298)	(6,086)	(262)	3,644	7,808	12,305	17,004	20,003	23,010									
Cash and Cash Equivalents, beginning of year	1	40,829	40,829	40,871	34,505	34,243	37,887	45,695	58,000	75,004	95,007									
Cash and Cash Equivalents, end of year	1	40,829	40,571	34,505	34,243	37,887	45,695	58,000	75,004	95,007	118,017									

WATER NOTES TO FINANCIAL PLAN

The financial plan format as outlined in Chapter 4 closely approximates the full accrual format used by municipalities (2009 onward) on their audited financial statements. However, the financial plan is not an audited document and contains various estimates. In this regard, Section 3(2) of O.Reg. 453/07 states the following:

“Each of the following sub-subparagraphs applies only if the information referred to in the sub-subparagraph is known to the owner at the time the financial plans are prepared:

1. Sub-subparagraphs 4 i A, B and C of subsection (1)
2. Sub-subparagraphs 4 iii A, C, E and F of subsection (1).”

The information referred to in sub-subparagraphs 4 i A, B and C of subsection (1) includes:

- A. Total financial assets (i.e. cash and receivables);
- B. Total liabilities (i.e. payables, debt and deferred revenue); 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;
- C. Investing transactions that are acquisitions and disposal of investments;
- E. Change in cash and cash equivalents during the year; and
- F. 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 Municipality of Machin, some of the items listed above have been estimated given that the Municipality does not maintain all financial asset and liability data separately for water. Usually, this type of data is combined with the financial assets and liabilities of other departments and services given that there is not a current obligation to disclose this data separately (as there is with revenue and expenses). The assumptions used have been documented below:

1. Cash, Receivables and Payables

It is assumed that the opening cash balances required to complete the financial plan are equal to:

Ending Reserve/Reserve Fund Balance
Plus: Ending Accounts Payable Balance
Less: Ending Accounts Receivable Balance
Equals: Approximate Ending Cash Balance

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

- a. Receivables: Based on historical levels of receivables as a percentage of annual revenue earned (source: prior years audited financial statements); and
- b. Payables: Based on historical levels of payables as a percentage of annual expenses incurred (source: prior years audited financial statements).

2. Debt

Outstanding water related debt at the end of 2010 was \$1,143,353 with no additional debt proceeds anticipated throughout the forecast period. Principal repayments for existing over the forecast period are scheduled as follows:

Year	Principal Payments
2011	\$ 21,861
2012	\$ 22,961
2013	\$ 24,116
2014	\$ 25,330
2015	\$ 26,604
2016	\$ 27,943
2017	\$ 29,349
2018	\$ 30,826
2019	\$ 32,377
2020	\$ 34,006
Total	\$ 275,373

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 balances and/or gas tax 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 Municipality of Machin does not collect water development charges and does not maintain an ongoing gas tax balances specifically for water services, therefore deferred revenue is assumed to be zero over the forecast period.

4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water related assets in the following categories:
 - i. Water Treatment Assets;
 - ii. Water Distribution Assets;
 - iii. Other Water Assets;
- Amortization is calculated based on using the straight-line approach;
- Write-offs are assumed to equal \$0 for each year in the forecast period;
- Tangible capital assets are shown on a net book value basis.
- Gains/losses on disposal are assumed to be \$0;
- Contributed Assets are assumed to be \$0; and
- The Municipality is unaware of any specific lead service piping in the municipal water system.

The balance of tangible capital assets is summarized as follows:

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Opening TCA Balance (Historical Cost)	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579
Acquisitions	-	-	-	-	-	-	-	-	-	-
Disposals	-	-	-	-	-	-	-	-	-	-
Closing TCA Balance (Historical Cost)	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579	8,487,579
Opening Accumulated Amortization	2,302,643	2,642,921	2,983,199	3,323,477	3,663,755	3,975,578	4,258,946	4,542,314	4,825,682	5,109,060
Amortization Expense	340,278	340,278	340,278	340,278	311,823	283,368	283,368	283,368	283,368	283,368
Amortization on Disposal	-	-	-	-	-	-	-	-	-	-
Ending Accumulated Amortization	2,642,921	2,983,199	3,323,477	3,663,755	3,975,578	4,258,946	4,542,314	4,825,682	5,109,060	5,392,418
Net Book Value	5,844,658	5,604,380	5,164,102	4,823,824	4,512,001	4,228,633	3,945,266	3,661,897	3,378,529	3,095,161

5. Accumulated Surplus

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

Water	2011 Opening Accumulated Surplus
Reserve Balances	
Reserves: Gas Tax	-
Reserves: Capital/Other	15,355
Total Reserves Balance	15,355
Less: Debt Obligations and Deferred Revenue	(1,122,539)
Add: Tangible Capital Assets	6,184,937
Total Opening Balance	5,077,753

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

6. Other Revenue

Other revenue includes frontage connections, miscellaneous sale of water, hydrant changes and other operating general revenues.

7. Operating Expenses

Capital expenditures for items not meeting the definition of tangible capital assets, if applicable, would have to be reclassified and shown as an operating expense in the year in which they occur. This is not applicable for Machin.

5. PROCESS FOR FINANCIAL PLAN APPROVAL AND SUBMISSION TO THE PROVINCE

5. PROCESS FOR APPROVAL AND SUBMISSION TO THE PROVINCE

As provided in section 1.2, the requirement to prepare the financial plan is provided in Section 32 (5) 2 ii of the SDWA. 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 approval of the plan, public circulation, and filing is provided as follows:

1. The financial plan must be approved by resolution of the municipality who owns the drinking water system or the governing body of the owner. (O.Reg. 453/07, Section 3 (1) 1)
2. The owner of the drinking water system must provide notice advertising the availability of the financial plan. The plans will be made available to the public upon request and without charge. The plans must also be made available to the public on the municipality's website. (O.Reg. 453/07, Section 3 (1) 5)
3. The owner of the drinking water system must provide a copy of the financial plan to the Director of Policy Branch, Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3 (1) 6)
4. The owner of the drinking water system must provide proof satisfactory to the Ministry of the Environment that the financial plans for the system satisfy the requirements under the *Safe Drinking Water Act*. (SDWA Section 32 (5) 2 ii)

6. RECOMMENDATIONS

6. RECOMMENDATIONS

This report presents the water financial plan for the Municipality of Machin 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 2012 Water Forecast, given that there is no current rate study to rely on for budgeting purposes. Nevertheless, Council is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

1. The Municipality of Machin Water Financial Plan prepared by Watson & Associates Economists Ltd. dated December 20, 2012 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. Submit the Financial Plan and the Council Resolution approving the Financial Plan to the Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3 (1) 6)
4. Submit the Council Resolution approving the Financial Plan, to the Ministry of the Environment, satisfying the requirements under the *Safe Drinking Water Act*. (SDWA Section 32 (5) 2 ii))¹

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

APPENDIX A
2012 WATER FORECAST

Table A-1
Municipality of Machin
Water Service
Capital Budget Forecast
Inflated \$

Description	Total	Budget		Forecast								
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Capital Expenditures												
None identified by staff	-											
	-											
	-											
	-											
Total Capital Expenditures	-											
Capital Financing												
Provincial/Federal Grants	-											
Debt Service Requirements	-											
Operating Contributions	-											
Water Reserve	-											
Total Capital Financing	-											

Table A-2
Municipality of Machin
Water Service
Schedule of New Debt Service Repayments
Inflated \$

Debt Service Year	Principal (Inflated)	Budget		Forecast								
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
2011	-											
2012	-											
2013	-											
2014	-											
2015	-											
2016	-											
2017	-											
2018	-											
2019	-											
2020	-											
Total Annual Debt Charges	-											

Table A-3
Municipality of Machin
Water Service
Water Reserve Continuity
Inflated \$

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Opening Balance	15,355	15,355	15,355	10,700	9,945	13,245	20,745	32,745	49,445	69,045
Transfer from Operating	-	-	-	-	3,300	7,500	12,000	16,700	19,600	22,600
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	4,655	755	-	-	-	-	-	-
Closing Balance	15,355	15,355	10,700	9,945	13,245	20,745	32,745	49,445	69,045	91,645
Interest	-	-	-	-	-	-	-	-	-	-

Table A-4
Municipality of Machin
Water Service
Gas Tax Reserve Fund (Water Only)
Inflated \$

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Opening Balance	-	-	-	-	-	-	-	-	-	-
Proceeds Received	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Operating (to fund capital related debt)	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Closing Balance	-	-	-	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-	-	-	-

Table A-5
Municipality of Machin
Water Services
Operating Budget Forecast
Inflated \$

Description	Budget				Forecast						
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Expenditures											
Operating Costs											
Green Shield	-	500	510	520	530	540	550	560	570	580	
Union Gas	4,000	4,600	4,690	4,780	4,880	4,980	5,080	5,180	5,280	5,390	
Hydro	22,628	20,000	20,400	20,810	21,230	21,650	22,080	22,520	22,970	23,430	
Insurance	12,950	13,500	13,770	14,050	14,330	14,620	14,910	15,210	15,510	15,820	
Memberships/Subscriptions	275	290	300	310	320	330	340	350	360	370	
DWQMS Audit	-	10,000	10,200	10,400	10,610	10,820	11,040	11,260	11,490	11,720	
O/D Contract	200,000	180,000	183,600	187,270	191,020	194,840	198,740	202,710	206,760	210,900	
Property Taxes	2,200	2,200	2,240	2,280	2,330	2,380	2,430	2,480	2,530	2,580	
Building Maintenance	1,000	1,000	1,020	1,040	1,060	1,080	1,100	1,120	1,140	1,160	
Distribution Parts & Maintenance	2,000	2,500	2,550	2,600	2,650	2,700	2,750	2,810	2,870	2,930	
OPW Grant	-	7,963	-	-	-	-	-	-	-	-	
Sub Total Operating Capital-Related	245,053	242,553	239,280	244,060	248,960	253,940	259,020	264,200	269,480	274,880	
Existing Debt (Principal) - OSIFA	21,861	22,961	24,116	25,330	26,604	27,943	29,349	30,826	32,377	34,006	
Existing Debt (Interest) - OSIFA	55,522	54,422	53,267	52,053	50,779	49,440	48,034	46,557	45,006	43,377	
Transfer to Capital Reserve	-	-	-	-	3,300	7,500	12,000	16,700	19,600	22,600	
Sub Total Capital Related	77,383	77,383	77,383	77,383	80,683	84,883	89,383	94,083	96,983	99,983	
Total Expenditures	322,436	319,936	316,663	321,443	329,643	338,823	348,403	358,283	366,463	374,863	
Revenues											
Water Meter Revenue	70,000	64,000	65,280	66,590	67,920	69,280	70,670	72,080	73,520	74,990	
Frontage/Flankage/Connection	5,300	5,300	5,410	5,520	5,630	5,740	5,850	5,970	6,090	6,210	
Sale of Water	1,000	1,500	1,530	1,560	1,590	1,620	1,650	1,680	1,710	1,740	
Hydrant Charge	2,700	2,700	2,750	2,810	2,870	2,930	2,990	3,050	3,110	3,170	
OSWAP Grant	22,053	22,053	-	-	-	-	-	-	-	-	
Gas Tax Revenue	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	
Contributions from Reserves / Reserve Funds	-	-	4,655	755	-	-	-	-	-	-	
Total Operating Revenue	161,053	155,553	139,625	137,235	138,010	139,570	141,160	142,780	144,430	146,110	
Water Billing Recovery	161,383	164,383	177,038	184,208	191,633	199,253	207,243	215,503	222,033	228,753	
Total Revenues	322,436	319,936	316,663	321,443	329,643	338,823	348,403	358,283	366,463	374,863	
% Increase (adjusted for additional 2013 revenue per staff)		1.9%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	3.0%	3.0%	

