



Township of Macdonald, Meredith & Aberdeen Additional  
Echo Bay

DRINKING WATER SYSTEM  
FINANCIAL PLAN # 278-301

November 12, 2013



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## 1 Introduction

### 1.1 Background

The Drinking water licensing program was developed by the Province of Ontario based on Justice O'Connor's Part II Walkerton 2000 Report issued as a result of his inquiry following the Walkerton Ontario Drinking Water incident. The licensing program was required by Regulations under the promulgation of the Safe Drinking Water Act in 2002. The program includes several elements which are pre-requisites to formal issuance of a Drinking Water License by the Ministry of the Environment. These elements include:

- Receipt of a Drinking Water Works Permit, (DWWP) which replaces the Certificate of Approval formerly issued
- A Permit to Take Water – required under the Ontario Water Resources Act for daily water taking in excess of 50,000 litres per day
- An approved Operational Plan (OP) - in compliance with the Drinking Water Quality Management Standard, (DWQMS)
- An approved Financial Plan – as required under the Financial Plans Regulation (O. Reg. 453/07)
- Accreditation of the Drinking Water Operating Authority – based on the acceptance of an audited OP by the Canadian General Standards Board

The requirement for the Financial Plan for the Township of Macdonald, Meredith & Aberdeen Additional applies since it is an existing water works system and is, therefore, included as a condition in the License for the water works. The License condition requires that the Financial Plan be submitted within 6 months of the date of issuance of the License. The License was issued on August 23, 2011. The content of the Financial Plan must be prepared in accordance with the requirements outlined in the Financial Plans Regulation (O Reg 453/07).

### 1.2 Study Area

The Village of Echo Bay is situated approximately 26 km east of Sault Ste. Marie, on the shore of Lake George. Located at the junction of Highway 17 and Highway 638, Echo Bay is the commercial hub for the Township of MacDonald, Meredith and Aberdeen Additional which encompasses a large area of the shoreline of Lake George and inland toward the north abutting Garden River First Nation in the District of Algoma. The Township is responsible for a water supply, treatment and distribution within the community of Echo Bay. The community is located immediately north of Lake George and along its shore abutting the eastern boundary of Garden River First Nation. Municipal services, including water and wastewater are supplied to 242 homes (approximate population is 500) and businesses. The population is largely stable with the majority of employment in Sault Ste. Marie.

Figure 1-1: Study Area



### 1.3 Drinking Water System Description

The new Environmental Centre was commissioned in 1996 and includes both the water wastewater treatment facilities. The raw water is drawn from Lake George through a 1600 meter, 300 millimeter intake and passes through screening and pre-sedimentation. Water treatment includes conventional filtration facility supplemented by Granular Activated Charcoal. Following filtration, disinfection is provided by a duplex hypochlorite (chlorine) disinfection system. Treated water is stored in a 545 cubic meter underground clear well beneath the treatment plant. This storage is supplemented by a 682 cubic meter elevated water tower.

### 1.4 Licensing Requirements

The Safe Drinking Water Act (SDWA) mandates the licensing of municipal water providers in Section 31. This section states:

31. (1) 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 2002, c. 32, s. 31 (1).

### 1.5 Operational Plan

The Operational Plan was prepared by the PUC Services (PUC). Option 2; Limited Scope – Entire DWQMS was selected and required the following;

- All elements of the DWQMS will be documented in the operational plan but are not required to be implemented;

- The operating authority will be accredited upon successful completion of an audit of the operational plan document;
- The full QMS must then be implemented within 12 months of receiving a certificate of accreditation (limited scope). Upon successful completion of an audit a certificate of accreditation (full scope) will be issued the plan will be based on the Drinking Water Quality Management Standard (DWQMS).

The Operational Plan which documents the operating authority's quality management system (QMS) was filed with the Canadian General Standards Board, (CGSB). The Operational Plan was accepted and a "desk top" audit was conducted by CGSB. The approved Operational Plan was submitted to MOE together with the other documents required for the issuance of the Drinking Water License.

## **2 Financial Plan Guidelines and Requirements**

### **2.1 Sustainable Financial Planning**

The Ministry of the Environment prepared and released a document in August, 2007 entitled, *Toward Financially Sustainable Drinking-Water and Wastewater Systems*, in order to assist with the preparation of the required Financial Plans for the Municipal Drinking Water License. Nine principles were established and are listed as follows:

- 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 Definition of Financial Plans

According to Section 30(1) of the SDWA, Financial Plans are defined as:

(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).

## 2.3 Importance of Long Range Financial Planning

A Long Range Financial Plan is important for a number of reasons in order to assist a municipality to:

- Sustain long term cash flows;
- Protect and maintain its assets through a well-developed plan;
- Distribute resources fairly between current and future ratepayers;
- Ensure financial stability during periods of economic uncertainty;
- Provide safe drinking water in the long and short terms;
- Ensure maximization of financial flexibility;
- Preserve the desired integrity of programs and services; and
- Provide rate consistency and predictability.

## 2.4 Financial Plans Regulation

The key points of the Financial Plan Regulation (O Reg 453/07) are described in the subsections below. These requirements have been limited to those required for existing systems which is the situation in the Township of Macdonald, Meredith & Aberdeen Additional:

- Declaration: The Financial Plan must include a statement that the financial impacts of the drinking water system have been considered.
- Projection Length: The Financial Plan shall be for a period of at least six years.
- Public Transparency: The Financial Plan must be made available, on request and without charge to the members of the public that are served by the water system. If the system owner maintains a website, then the Financial Plan must be made available on the website without charge. The owner must provide a notice informing the public of the availability of the Financial



Plan, in a manner that the Owner deems fit to bring the notice to the attention of the members of the public that are served by the water system.

- Approval: The Financial Plan must be approved by a council resolution that indicates that the drinking water system is financially viable.
- Submission: A copy of the Financial Plan, along with the resolution must be submitted to the Ministry of Municipal Affairs and Housing.
- Update: The Financial Plan should be updated and approved prior to applying for a licence renewal (i.e. every five years). However, the Regulation does not prevent the Plan from being amended more regularly.

In addition to the general requirements, the Financial Plan must include details of the projected financial operations, itemized by:

- Total revenues (water rates, user charges, and other revenues)
- Total expenses (amortization expenses, interest expenses, and other expenses)
- Annual surplus or deficit
- Accumulated surplus or deficit

The projected financial position must be itemized by:

1. Total financial assets;
2. Total liabilities;
3. Net debt;
4. Non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies, and prepaid expenses;
5. Changes in tangible capital assets that are additions, donations, write downs, and disposals.

Items 1, 2, and 3 apply only if the information is known to the owner at the time when the Financial Plan is prepared.

The projected gross cash receipts and payments details are itemized by:

- a. Operating transactions that are cash received from revenues and paid for operating expenses and finance charges
- b. Capital transactions that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets
- c. Investing transactions that are acquisitions and disposal of investments
- d. Financing transactions that are proceeds from the issuance of debt and debt repayment
- e. Changes in cash and cash equivalents during the year
- f. Cash and cash equivalents at the beginning and end of the year



Items a, c, e, and f apply only if the information is known to the owner at the time when the Financial Plan is prepared.

The first year to which the Financial Plan must apply is the latest of 2010 and the year in which the first licence was issued.

## 2.5 Financial Plan Guidelines

The guidelines released in the previously mentioned *Toward Financially Sustainable Drinking-Water and Wastewater Systems* document prepared by the Ministry of the Environment (August, 2007) apply to wastewater systems as well. However, a Financial Plan for a wastewater system is not mandatory.

The guidelines set out the following nine principles that have informed the development this Financial Plan:

1. Ongoing public engagement and transparency can build support for, and confidence in the Financial Plans and their corresponding system(s).
2. An integrated approach to planning among water, wastewater, and storm water systems is encouraged considering the inherent relationship among these systems.
3. Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services.
4. Life-cycle planning with mid-course corrections is preferable to short-term planning or no planning at all.
5. An asset management plan is a key input to the development of a Financial Plan
6. A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while ensuring sufficient resources for future rehabilitation and replacement needs.
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.
8. Financial Plans are documents that require continuous updates and improvement. Improved planning for the future can be achieved by comparing the accuracy of financial projections with actual results.
9. Financial Plans can benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff, and municipal council.

## 2.6 Public Sector Accounting Board (PSAB) Requirements

The Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered Accountants (CICA) approved new municipal financial accounting and reporting standards in June 2006. The new standards require full accrual accounting for 2009 and future years, as well as accounting of tangible capital assets in the financial statements.

The accrual accounting method recognizes revenues and expenses in the same period as the activities which give rise to them regardless of when the payment was actually made. Since the exchange of cash

is not necessary to report a financial transaction, the accrual method provides a more accurate picture of the city's financial position. 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.

### **3 Financial Plan Study Approach**

The Financial Plan guidelines were used to select the approach for preparing the Township of Macdonald, Meredith & Aberdeen Additional Drinking Water System Financial Plan. These steps include:

1. Determination of the current period expenses and forecast future period expenses;
2. Determination and forecasting capital expenditure needs;
3. Identification of all current revenues sources and forecast revenues with a minimal increases (as outlined in the Notes to the Projected Financial Statements) of to show some growth;
4. Assess the suitability of the existing revenues;
5. Identify funding requirements and determine the required revenue increases; and
6. Prepare the following statements based on the required revenue increases:
  - Statement of Operations
  - Statement of Cash Flow
  - Statement of Financial Position
  - Statement of Changes in Net Financial Assets

## **4 Expenses**

### **4.1 Data Sources and Assumptions**

There are three categories of expenses included for the purposes of this Financial Plan: operating costs, interest, and amortization. The current period operating expenses were determined from the Municipality's 2012 budget, as well as information provided by the PUC. A complete listing of operating expenses is provided in the Schedule of Operating Expenses included with the projected financial statements.

The future period Operation and Maintenance (O/M) expenses were assumed to increase by 2% each year. The Water and sewage contract expenses are based on the PUC contract provided by the Municipality, (contract period 2012 to 2016). Thereafter, the expense is assumed to increase two (2) percent per year. A copy of the Services Agreement is available in the Municipal Office. Further Information relating to the assumed rates of increase for additional future operating expenses can be found in the Notes to the Projected Financial Statements. In addition, all information pertaining to current debts, interest rates, and repayment schedules were provided by the Township. No new debts were projected for future periods, however, in the event that the Township should determine that there is a need to incur new debt then the forecasted interest expense will require revision to reflect this. The annual amortization expenses were calculated using the straight-line method and were based on PSAB information provided by the Township as to the historic cost of assets and their estimated useful lives.

## 4.2 Operating Expenses

Operating expenses include all charges associated with the operation and maintenance of the water works components which include; the intake works, the raw water pumping and clear well, the water treatment plant, the elevated water tower and the water distribution system. The distribution system includes only those components up to the “curbstop” and does not include service lateral. A complete description of the water system is included in the January 2012 operating Service Agreement. In addition to the services included in this agreement, the Township pays directly for the cost of Hydro. A complete list of operating expenses is provided in the Schedule of Operating Expenses.

The “initial period” for the Service Agreement commenced on January 1, 2012 for a five year period ending in December 2016. It can be renewed for successive terms as agreed to by both parties. The annual agreement cost is adjusted each year after the first year by a cost of living adjustment calculated on the annual CPI provided by Statistics Canada. As mentioned previously, for the purposes of this Financial Plan it was assumed that in future years, the CPI would be 2%, which matches the most recent CPI posted by Statistics Canada. In the case of Hydro, although there is uncertainty of Hydro costs, for the purposes of this Plan an annual increase used is 2%. Complete information on the assumed rate of increase for all operating expenses is provided in the Notes to the Projected Financial Statements.

The projected operating expenses are shown in Figure 4-1.

Figure 4-1: Projected Operating Expenses

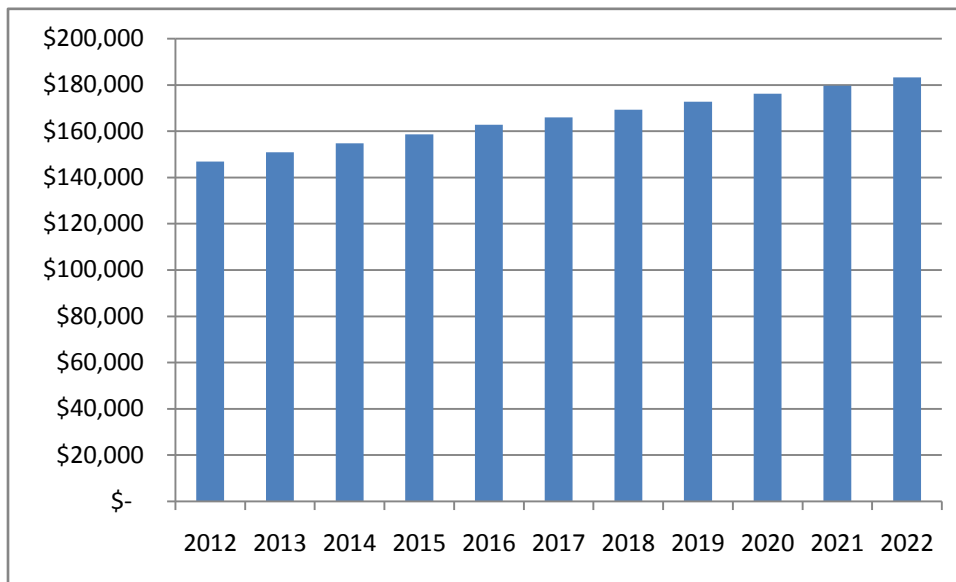
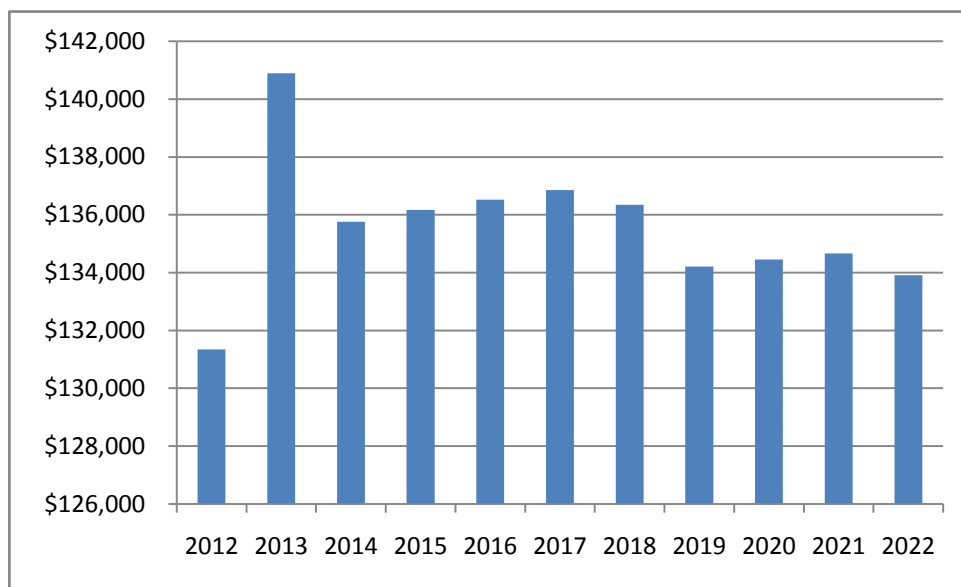


Figure 4-1 shows that operating expenses are projected to increase from \$146,935 in 2012 to \$183,285 in 2022. The operating expenses are shown to gradually increase based on the assumed rates of increase.

### 4.3 Amortization Expenses

Amortization is a non-cash expense that indicates the consumption of tangible capital assets (TCAs) over the course of their useful lives using the straight-line depreciation method. As previously mentioned, details on the historical cost of TCAs were as well as their estimated useful lives were provided by the Township. The projected amortization is shown in Figure 4-2.

Figure 4-2: Projected Amortization Expenses



The variance in amortization expenses shown in Figure 4-2 is a result of the acquisition or disposition of assets. It is important to note that, for the purposes of amortization calculations, all acquisitions and dispositions are assumed to occur as of July 1<sup>st</sup> in the first year. Amortization is therefore recalculated at 50% of the normal rate for the asset for their last year of service, (this is a procedural requirement under Regulation).

### 4.4 Interest Expenses

There is currently no debt relating to water infrastructure as provided by the Municipality. As mentioned previously, no new debt has been forecast. Should the Township identify a need to incur new debt in the future based on an evaluation of existing data the forecast interest expenses will require revision.

## 4.5 Total Expenses

The total expenses are the sum of the operating, amortization, and interest expenses. The projected total expenses are shown in Figure 4-3.

Figure 4-3: Projected Total Expenses

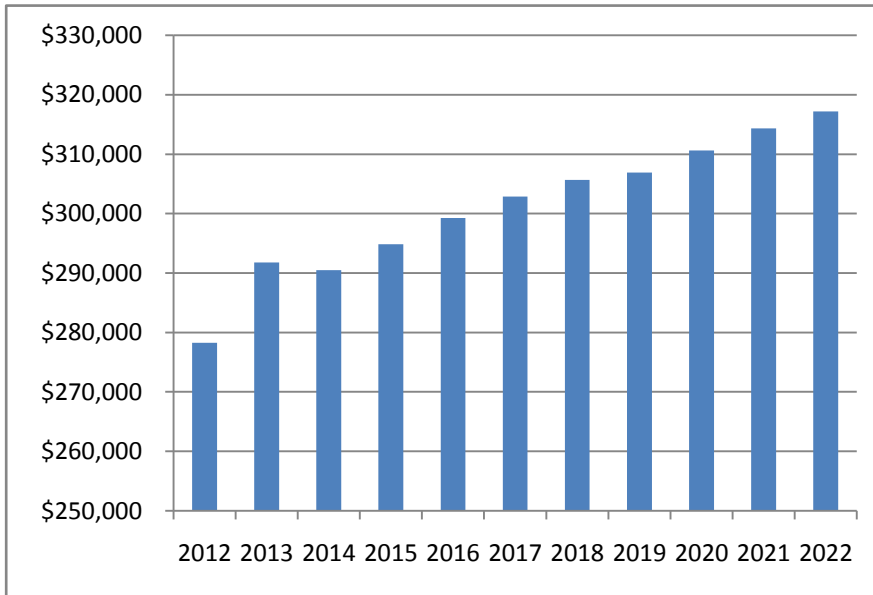


Figure 4-4 shows that the total annual expenses increase gradually over the forecast period from about \$278,282 in 2012 to \$317,202 in 2022.

## 5 Capital Expenditures

### 5.1 Data Sources and Assumptions

Capital expenditures were based on the Capital Projections 2012-2022 provided by PUC. For the years Estimates for the useful lives of all assets included in the projections were based on PSAB information provided by the Township.

### 5.2 Projected Future Capital Expenditures

The projected future capital expenditures for the Township’s water system were estimated at \$5,000 per year as provided by PUC.

## 6 Revenues

### 6.1 Data Sources and Assumptions

Revenue information was provided by the Township in its 2012 budget. The revenue stream included both water and sewage components which were broken down according to the ratio of 60% water and 40% sewage. This breakdown was provided by the Municipality.

### 6.2 Existing Revenues

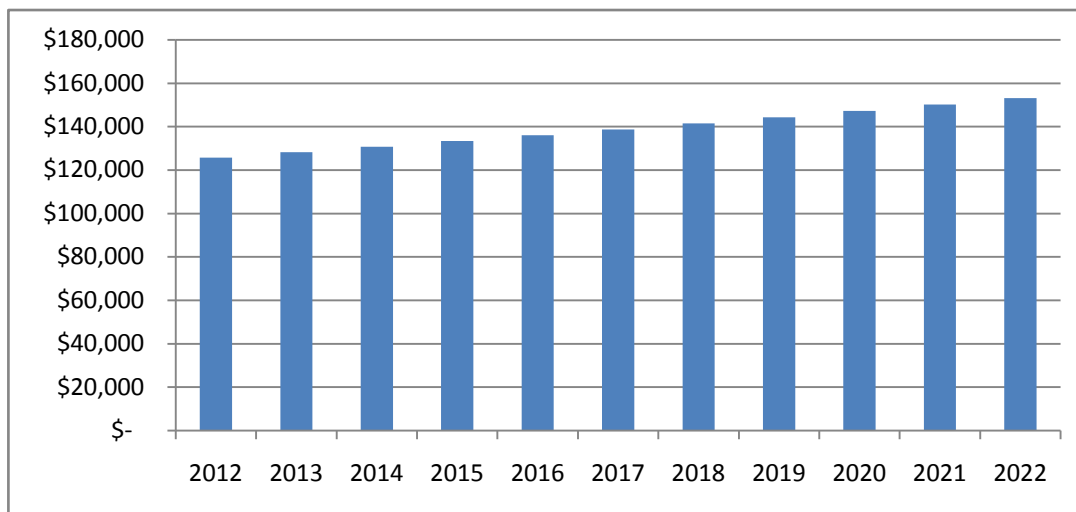
Total revenues for the years 2007 to 2011 were not available. Therefore the budgeted revenues for 2012 were provided by the Municipality as the base calculation for revenues.

### 6.3 Projected Revenues

In consultation with the Township it was determined that the highest possible assumed increase in user rate revenues is 2% each year.

The projected revenues for the Municipality's water system are shown in Figure 6-1.

Figure 6-1: Projected Revenues



With an assumed rate of increase of 2 % a year for user rates, revenues grow from approximately \$125,689 in 2012 to approximately \$153,215 in 2022. This latter figure should be compared to an estimated \$317,202 in expenses in 2022.

## 7 Revenue Analysis

### 7.1 Operating Cash Flow

Operating cash flow is calculated using the following equation:

$$\begin{aligned}
 &\text{Operating Cash Flow} \\
 &= \text{Revenues} \\
 &\quad - \text{Operating Costs (excluding amortization)} \\
 &\quad - \text{Interest on Existing Debt}
 \end{aligned}$$

This equation shows that current period operations can generate either a surplus or deficit from a cash perspective, depending on the balance between revenues and cash expenses.

As an example, the operating cash flow for 2012 can be calculated as follows:

Revenues = \$125,689 (also shown in Figure 6-1)

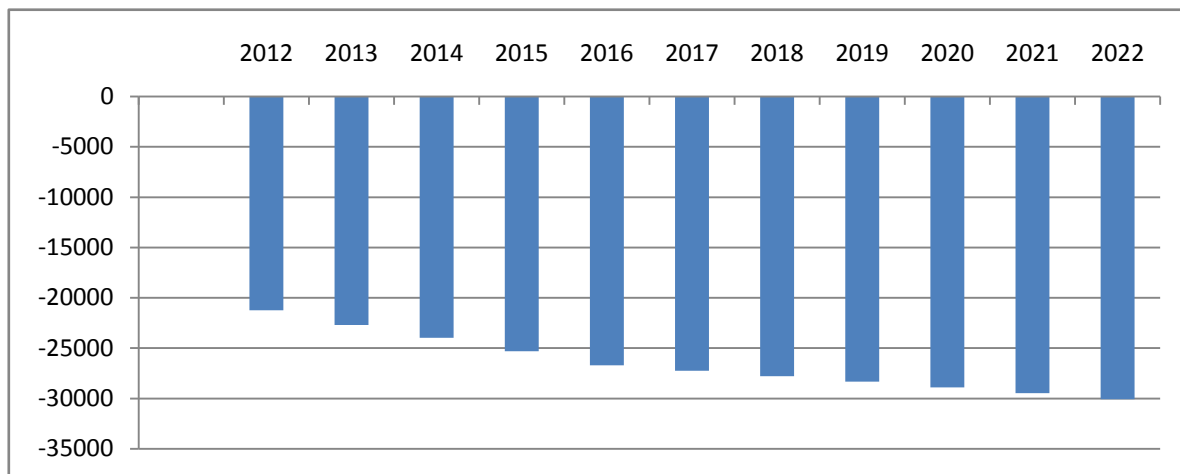
Operating Expenses = \$146,935 (also shown in Figure 4-1)

Interest Expenses = \$0 (also shown in Figure 4-3)

Operating Cash Flow = \$125,689 - \$146,935 = (\$21,246)

The operating cash flow for subsequent years can be similarly calculated. The projected operating cash flow is shown in Figure 7-1.

Figure 7-1: Projected Operating Cash Flow



Operating cash flow is seen to be decreasing over the forecast period to approximately \$35,071 in 2022.



## 8 Capital Expenditure Balance

The capital expenditure balance calculates the cash that is available for capital expenditures. It is expressed as the following equation:

$$\begin{aligned} &\text{Cash Available for Capital Expenditures} \\ &= \text{Operating Cash Flow} \\ &+ \text{New Debt} \\ &+ \text{Previous Debt Payment} \\ &+ \text{Disposals} \\ &+ \text{Transfers from Reserves} \\ &+ \text{Reserve Fund Balance} \end{aligned}$$

This equation shows that cash available for capital expenditures is the sum of operating cash flow, new debt issuance, previous debt payment and the balance of the reserve fund.

For example, in 2012 the capital expenditure balance is calculated as follows:

Operating Cash Flow = (\$21,246) (also shown in Figure 7-1)

New Debt = \$0

Previous Debt Payment = (\$0)

Disposals = \$0

Transfers from Reserves = (\$0)

Reserve Fund Balance = \$158,953

Capital Expenditure Balance = \$137,707

The capital expenditure balance for subsequent years can be determined in a similar manner. The projected capital expenditure is provided in Table 8-1.

Figure 8-1: Capital Expenditure

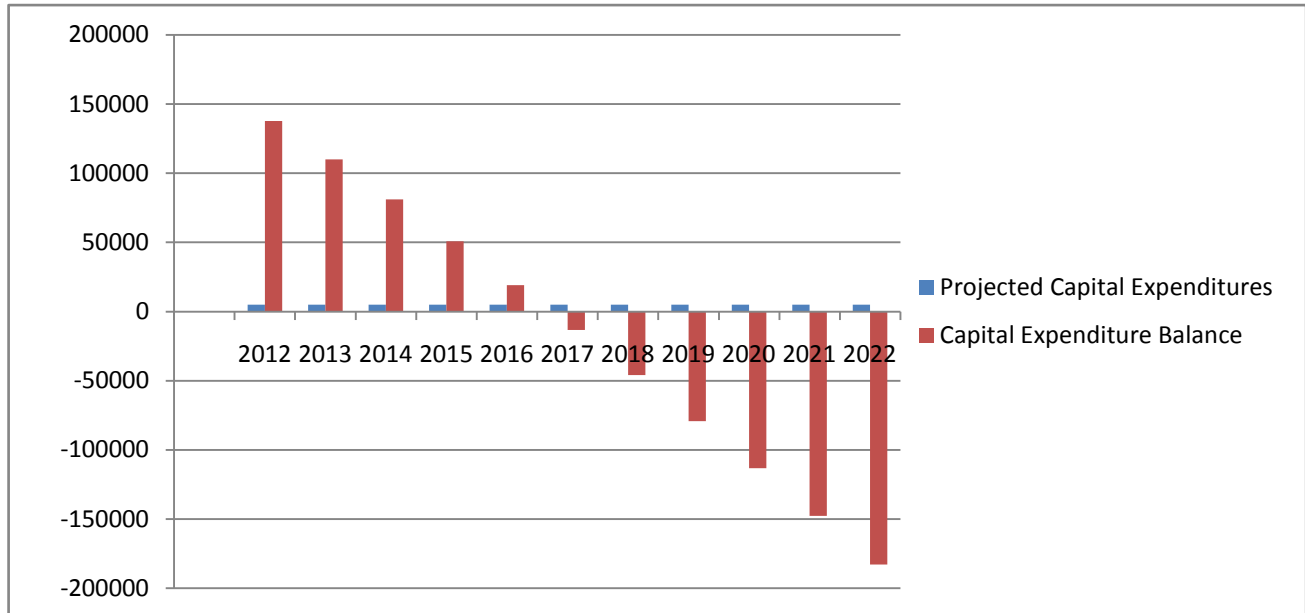


Figure 8-1 shows that the Township will not have sufficient cash available for the projected capatalexpenditures during the period of 2017 to 2022.

### 8.1 Annual Surplus/Deficit

The accumulated surplus/deficit is the primary indicator of the financial resources the Township has available to provide for future services. It consists of revenues less total expenses. It is important to note that the calculation of the annual surplus/deficit includes cash and non-cash components, the latter of which takes into account amortization expenses. This is distinct from the calculation of operating cash flow which did not include amortization expenses.

For example, the annual surplus/deficit for 2012 is calculated as follows:

Revenues = \$125,689 (also shown in Figure 6-1)

Total Expenses = \$278,282 (also shown in Figure 4-4)

Annual Surplus/Deficit = \$125,689 - \$278,282 = (\$152,593)

The annual surplus is lower than the operating cash flow because, as explained above, the former takes into account amortization expenses. Thus for 2012, although the annual surplus/deficit is (\$152,593), operating cash flow is (\$21,246).

Annual surplus/deficit for subsequent years can be similarly calculated and Figure 8-2 shows the annual surplus/deficit for the forecast period.

Figure 8-2: Annual Surplus/Deficit

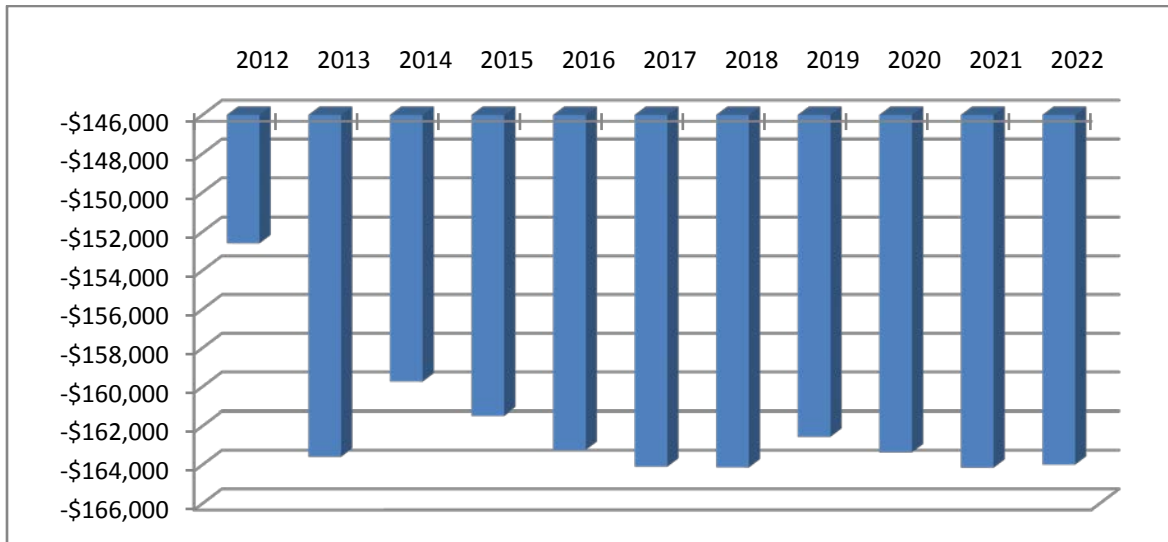
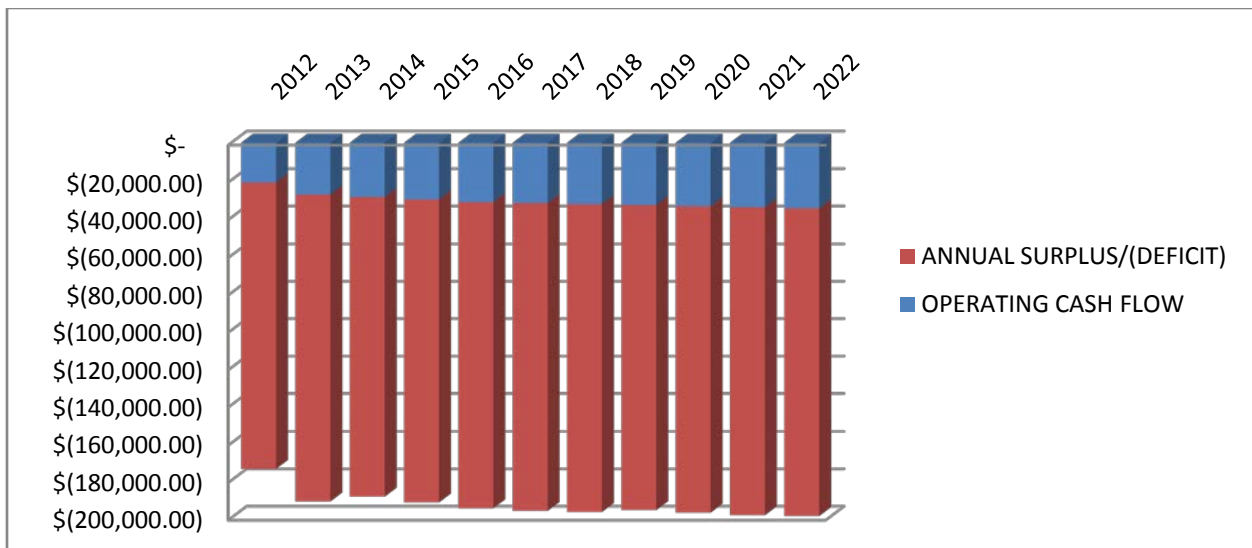


Figure 8-2 shows that the annual deficit increases gradually from approximately (\$152,593) in 2012 to approximately \$163,986 in 2022. A comparison of the annual surplus/deficit to the operating cash flow is provided in Figure 8-3.

Figure 8-3: Comparison of Annual Surplus/Deficit and Operating Cash Flow



As shown in Figure 8-3 the operating cash flow, which does not include amortization expenses is comparatively higher than the annual surplus/deficit throughout the forecast period.

## 9 Financial Plan

### 9.1 Introduction

The Financial Plan is a living document that will require ongoing updating and revision. In keeping with the Financial Plans Regulation (O Reg 453/07) it consists of the following statements:

- Statement of Operations
- Statement of Cash Flow
- Statement of Financial Position
- Statement of Changes in Net Financial Assets

### 9.2 Statement of Operations

The Statement of Operations reports on:

- revenues;
- expenses; and
- results for the forecast period.

The statement of operations for the forecast period is provided in Table 9-1.

### 9.3 Statement of Cash Flow

The statement of cash flow identifies:

- the source of the cash;
- how cash was used; and
- provides details on changes in cash and cash equivalents since the previous period.

The statement of cash flow for the forecast period is provided in Table 9-3.

### 9.4 Statement of Financial Position

The Statement of Financial Position shows the Municipality's:

- assets;
- liabilities; and
- accumulated surplus/deficit

The Statement of Financial Position for the forecast period is provided in Table 9-4.

### 9.5 Statement of changes in net financial assets

The Statement of Changes in Net Financial Assets shows:

- the difference between the annual surplus/deficit and the change in net financial assets;
- how TCAs were acquired and disposed of; and
- details relating to the changes in net financial assets since the previous period.

The Statement of Changes in Net Financial Assets for the forecast period is provided in Table 9-5.

Table 9-1: Projected Statement of Operations 2012-2022 (Unaudited)

		Forecast Period										
NOTES		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>REVENUE</b>												
W&S Oper Rated Billing GLP/Sales	1, 11	125,689	128,203	130,767	133,383	136,050	138,771	141,547	144,378	147,265	150,210	153,215
<b>Total Revenue</b>		125,689	128,203	130,767	133,383	136,050	138,771	141,547	144,378	147,265	150,210	153,215
<b>EXPENSES</b>												
Operating Expenses	2	146,935	150,888	154,740	158,693	162,752	166,007	169,327	172,714	176,168	179,691	183,285
Interest		-	-	-	-	-	-	-	-	-	-	-
Amortization	3	131,347	140,898	135,759	136,164	136,528	136,856	136,350	134,212	134,451	134,666	133,916
<b>Total Expenses</b>		278,282	291,786	290,499	294,857	299,280	302,863	305,677	306,926	310,619	314,357	317,202
<b>Annual surplus/ (deficit)</b>		(152,593)	(163,583)	(159,732)	(161,474)	(163,230)	(164,092)	(164,130)	(162,548)	(163,354)	(164,147)	(163,986)
<b>Accumulated surplus, beginning of period</b>	4	3,707,170	3,554,577	3,390,994	3,231,263	3,069,788	2,906,558	2,742,466	2,578,335	2,415,787	2,252,433	2,088,285
<b>Accumulated surplus, end of period</b>		3,554,577	3,390,994	3,231,262	3,069,789	2,906,558	2,742,466	2,578,336	2,415,787	2,252,433	2,088,286	1,924,299
<b>EXPENSE TO REVENUE RATIO</b>		221%	228%	222%	221%	220%	218%	216%	213%	211%	209%	207%

See accompanying notes and assumptions to these projected financial statements

Table 9-2: Schedule of Operating Expenses 2012-2022 (Unaudited)

SCHEDULE OF OPERATING EXPENSES	NOTES	Forecast Period										
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Consultant Expenses	5	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717	11,951	12,190
Property Taxes - Enviro Centre	6, 11	6,627	6,760	6,895	7,033	7,174	7,317	7,464	7,613	7,765	7,920	8,079
Property Taxes - Tower	6, 11	4,454	4,543	4,634	4,727	4,821	4,918	5,016	5,116	5,219	5,323	5,429
W/S - Municipal Maintenance	7	3,763	3,838	3,915	3,993	4,073	4,154	4,237	4,322	4,408	4,497	4,586
Telephone- Enviro Centre	8, 11	1,021	1,041	1,062	1,083	1,105	1,127	1,150	1,173	1,196	1,220	1,244
W/S - PUC Contract	9, 11	80,773	83,403	85,905	88,482	91,136	92,959	94,818	96,715	98,649	100,622	102,634
Utilities - Enviro Centre - Union Gas	10, 11	3,670	3,743	3,818	3,894	3,972	4,052	4,132	4,215	4,300	4,385	4,475
Utilities - Enviro Centre - Algoma Power	10	36,627	37,360	38,107	38,869	39,647	40,439	41,248	42,073	42,914	43,773	44,648
Total Operating Expenses		146,935	150,888	154,740	158,693	162,752	166,007	169,327	172,714	176,168	179,691	183,285

See accompanying notes and assumptions to these projected financial statements

Table 9-3: Statement of Cash Flow 2012-2022 (Unaudited)

		Forecast Period										
NOTES	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
<b>OPERATING TRANSACTIONS</b>												
Cash received from:												
Revenues	125,689	128,203	130,767	133,383	136,050	138,771	141,547	144,378	147,265	150,210	153,215	
Cash paid for:												
Operating costs	146,935	150,888	154,740	158,693	162,752	166,007	169,327	172,714	176,168	179,691	183,285	
Finance charges	-	-	-	-	-	-	-	-	-	-	-	
Total	146,935	150,888	154,740	158,693	162,752	166,007	169,327	172,714	176,168	179,691	183,285	
Cash provided from operating transactions	(21,246)	(22,685)	(23,973)	(25,310)	(26,702)	(27,236)	(27,780)	(28,336)	(28,903)	(29,481)	(30,070)	
<b>CAPITAL TRANSACTIONS</b>												
Acquisition of tangible capital assets	12	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	
Cash applied to capital transactions	-	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	
<b>FINANCE TRANSACTIONS</b>												
Proceeds from debt issues	13	-	-	-	-	-	-	-	-	-	-	
Transfer from reserve	-	-	-	-	-	-	-	-	-	-	-	
Debt repayment	-	-	-	-	-	-	-	-	-	-	-	
Cash applied to financing transactions	-	-	-	-	-	-	-	-	-	-	-	
Increase/(decrease) in cash and cash equivalents	(21,246)	(27,685)	(28,973)	(30,310)	(31,702)	(32,236)	(32,780)	(33,336)	(33,903)	(34,481)	(35,070)	
Cash and cash equivalents, beginning of period	14	158,953	137,707	110,022	81,049	50,739	19,037	(13,199)	(45,979)	(79,315)	(113,218)	
Cash and cash equivalents, end of period	137,707	110,022	81,049	50,739	19,037	(13,199)	(45,979)	(79,315)	(113,218)	(147,699)	(182,769)	
Cash as percentage of net fixed assets	4%	3%	3%	2%	1%	0%	-2%	-3%	-5%	-6%	-8%	

See accompanying notes and assumptions to these projected financial statements



Table 9-4: Statement of Financial Position 2012-2022 (Unaudited)

		Forecast Period										
	NOTES	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>FINANCIAL ASSETS</b>												
Bank CIBC#58-04612	14	137,708	110,022	81,049	50,739	19,037	(13,199)	(45,979)	(79,315)	(113,218)	(147,699)	(182,769)
<b>Liabilities</b>												
Debt	12	-	-	-	-	-	-	-	-	-	-	-
<b>Net financial assets (debt)</b>		137,708	110,022	81,049	50,739	19,037	(13,199)	(45,979)	(79,315)	(113,218)	(147,699)	(182,769)
<b>NON FINANCIAL ASSETS</b>												
Tangible Capital Assets	16	3,467,823	3,331,924	3,201,166	3,070,002	2,938,474	2,806,617	2,675,267	2,546,055	2,416,604	2,286,938	2,158,021
<b>ACCUMULATED SURPLUS/ (DEFICIT)</b>		3,605,531	3,441,946	3,282,215	3,120,741	2,957,511	2,793,418	2,629,288	2,466,740	2,303,386	2,139,239	1,975,252

See accompanying notes and assumptions to these projected financial statements

Table 9-5: Statement of Changes in Net Financial Assets 2012-2022 (Unaudited)

	NOTES	Forecast Period										
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Annual surplus/(deficit)		(152,593)	(163,583)	(159,732)	(161,474)	(163,230)	(164,092)	(164,130)	(162,548)	(163,354)	(164,147)	(163,986)
Amortization of tangible capital assets		131,347	140,898	135,759	136,164	136,528	136,856	136,350	134,212	134,451	134,666	133,916
Acquisition of tangible capital assets		-	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
Change in net financial assets (debt)		(21,246)	(27,685)	(28,973)	(30,310)	(31,702)	(32,236)	(32,780)	(33,336)	(33,903)	(34,481)	(35,070)
Net financial assets (debt) position, beginning of period		158,953	137,707	110,022	81,049	50,739	19,037	(13,199)	(45,979)	(79,315)	(113,218)	(147,699)
Net financial asset (debt) position, end of period	17	137,707	110,022	81,049	50,739	19,037	(13,199)	(45,979)	(79,315)	(113,218)	(147,699)	(182,769)

See accompanying notes and assumptions to these projected financial statements

## 9.6 Notes to the Projected Financial Statements

1. User rate revenue increase by two (2) percent per year over the forecast period.
2. Operating costs are outlined in the Schedule of Operating Costs – Water.
3. For the purposes of amortization calculations – all acquisitions and dispositions are based on the straight-line approach and the figure is calculated at 50% of the normal rate for the asset for their last year of service. The assets values and estimated useful lives were provided by the Municipality based on the PSAB document.
4. Accumulated surplus, beginning of period is calculated as the sum of the fixed assets for the previous period and the reserve fund balance for the previous period.
5. Consultant expenses are calculated based on the 2012 water revenue and expenses budget provided by the Municipality and are assumed to increase two (2) percent per year.
6. Property taxes are assumed to increase two (2) percent per year.
7. Municipal Maintenance expenses are based on the 2012 budget expenses provided by the Municipality and are assumed to increase two (2) percent per year.
8. Telephone expenses are based on the 2012 budget expenses provided by the Municipality and are assumed to increase two (2) percent per year.
9. The Water and sewage contract expenses are based on the PUC contract provided by the Municipality for the forecast period of 2012 to 2016. Thereafter, the expense is assumed to increase two (2) percent per year. This contract includes insurance costs and wages costs.
10. Utility expenses are based on the 2012 budget expenses provided by the Municipality and are assumed to increase two (2) percent per year.
11. Revenue and expenses which included both water and sewage components were broken down according to the ratio of 60% water and 40% sewage. This breakdown was provided by the Municipality and was used on the revenue flows, property tax expenses, telephone, PUC contract, and utilities expenses.
12. The value of assets acquired based on estimates provided by the Municipality.
13. No debt issues were projected by the Municipality.
14. Cash and cash equivalents, beginning of period the opening balance of the reserve fund provided by the Municipality.
15. Cash is equal to the reserve fund balance at the end of the year.

16. Tangible capital assets are non-financial assets calculated as the net book value of the fixed assets plus any acquisition made during the period.
17. The net financial assets (debt) position, end of period indicates that there is a net debt of \$182,769 at the end of 2022. This negative net debt position indicates that the system will not have the necessary resources to finance future operations. It is believed this negative debt position is a result of the factor provided by the municipality (60% Water/ 40% Sewage) not reflecting an accurate allocation of revenues and expenses.

## 10 Conclusions

The Financial Plan was developed to determine the most appropriate balance of operating revenues, short term one-time government funding and new debt financing.

The Financial Plan has achieved the following conclusions:

- The flat water rate structure was developed by a “Cost Recovery for Water System Operation” conducted in 2005. Revenues are presently set annually based on the financial statements from the previous year. These are supplemented by transfers from reserves;
- The Township must consider future rate increases based on the principles outlined in the *Toward Financially Sustainable Drinking-Water and Wastewater Systems* guidelines document released by the Ministry of the Environment. Adoption of these principles results in a need to consider the sizable projected increases in rates proposed in this Financial Plan;
- Water consumption for the purpose of this Financial Plan are assumed to remain unchanged for the duration of the study period to 2022;
- Government funding programs are scheduled to end in the second year of the forecast period (2013);
- Amortization of the Water Treatment Plant commissioned in 1996 represents one of the largest projected expenses, and is on a comparable level with operating costs throughout the forecast period;
- There is no requirement to finance the cost of the Water Treatment Plant. There are additional minor capital costs identified throughout the forecast period based on information provided by PUC;
- The Financial Plan achieves an increase over the forecast period in the cash reserves. The annual rate increases result in sufficient revenue to cover the Township’s annual operating costs and cash expenditures; and
- Annual rate increases were projected significantly higher in order to achieve the revenue/ expenditure balance over the planning period included in the Financial Plans Regulation (O Reg 453/07) planning period of 6 years. This demonstrates a significant increase in annual operating costs as a result of inclusion of the amortization of capital assets. This was reduced following consultation with the Ministry of Municipal Affairs (MMAH). MMAH indicated that the study timeframe could be extended to 2022 given the size of the municipality and the proportionally

higher per residence rate charges. The reduced annual rate increases still result in maintenance of reserves and the ability to meet in future capital requirements however over a longer forecast period. In the event that the Township should choose to adopt slightly higher initial rate increases the need for yearly rate increases could be significantly reduced by the end of the forecast period.

## **11 Council Resolution**

A Council Resolution accepting the Financial Plan was passed at the regular meeting of Township Council held on November 5, 2013. The Council Resolution is provided in Appendix A.

## **12 Next Steps**

The following next steps are required in accordance with the requirements of the Financial Plan Regulation:

1. Notice of the availability of the Financial Plan must be advertised;
2. The Financial Plan be made available, on request and without charge, to the members of the public that are served by the water system;
3. The Financial Plan be made available on the Township of Macdonald, Meredith & Aberdeen Additional's website without charge
4. A copy of the Financial Plan, along with the council resolution be submitted to the Ministry of Municipal Affairs and Housing (MMAH)
5. The Financial Plan must be updated and approved prior to applying for a licence renewal (i.e. every five years); a copy of the Council resolution will have to be submitted to the Ministry of the Environment with the licence renewal application.

# Appendix A

## Council Resolution

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THE MUNICIPAL CORPORATION OF

MACDONALD, MEREDITH & ABERDEEN ADDITIONAL  
ECHO BAY, ONTARIO

P0S 1C0

Telephone (705) 248-2441

Fax (705) 248-3091

Resolution # 13-323

Date: Nov. 5, 2013

Moved By: Jean Robbins  
Seconded By: Shelly Bailey

**WHEREAS** the Township of Macdonald, Meredith & Aberdeen Additional received a Municipal Drinking Water License #278-101 for the Township's Drinking Water System dated August 23, 2012;

**AND WHEREAS** the Drinking Water License requires under Section 8.0 that a Financial Plan be prepared and approved six months after the date the license for the system was issued in compliance with Section 3 on Ontario Regulation 453/07;

**AND WHEREAS** the Financial Plan for the Drinking Water System has been developed, must be approved by resolution, must apply for a period of at least six years and must contain the information in accordance with Ontario Regulation 453/07;

**AND WHEREAS** the Financial Plan will place an unacceptable financial constraint on the Township and water users to achieve a balanced budget within a six year planning period. The Ministry of Municipal Affairs and Housing agreed that this period is too short and indicated that a longer period would be appropriate to achieve the balanced budget;

**AND WHEREAS** discussions with the representative from the Ministry of Municipal Affairs and Housing indicated that a 10 year period could be included in the Financial Plan to achieve a balanced budget;

**AND WHEREAS** the owner is required to make the Financial Plan available without charge, provide notice to the public of the availability and provide a copy to the ministry of Municipal Affairs and Housing;

**THEREFOR BE IT RESOLVED** that the council of the Township endorses Financial Plan 278-301 for the Township's Drinking Water System which satisfies the requirements set out in Ontario Regulation 453/07. The planning period for achieving a balanced budget in the Financial Plan is 10 years;

**AND FURTHER** that the Ministry of Environment be advised that preparation of the Financial Plan identifies a significant financial burden to the water system users over the 10 year period and that financial assistance to help small communities must be provided.

**Mayor Lynn Watson**

**CD.**