



WAWA DRINKING WATER SYSTEM

FINANCIAL PLAN # 231-301

January 2016



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Appendix A: Council Resolution

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:

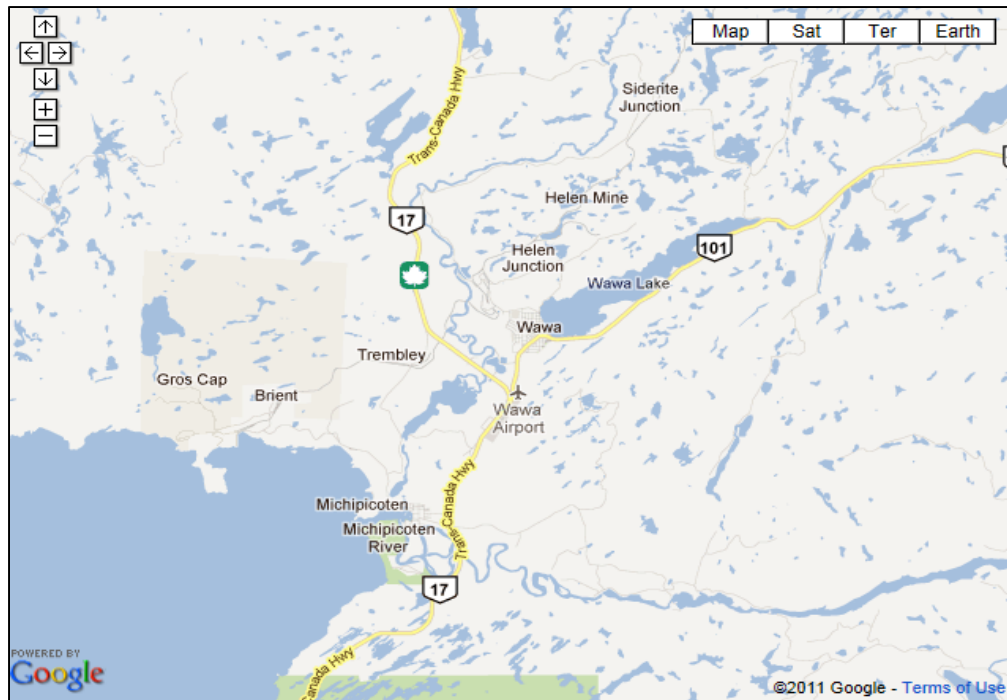
- Receipt of a Drinking Water Works Permit, (DWWP) which replaces the Certificate of Approval formerly issued
- A Permit to Take Water – required under the Ontario Water Resources Act for daily water taking in excess of 50,000 litres per day
- An approved Operational Plan (OP) - in compliance with the 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 Municipality of Wawa since it is an existing water works system is 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 4, 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). The license must be renewed in February 2016. One of the requirements for renewal is that the Financial Plan must be in place that applies for a period of at least six years, beginning in the year that your Licence would expire. The Financial Plan 231-301 is being updated to 2024.

1.2 Study Area

The Municipality of Wawa is located near the northern shore of Lake Superior approximately 225 kilometres north of Sault Ste. Marie. The Municipality is responsible for a water supply, treatment and distribution within the Town site of Wawa and the Michipicoten River Village (MRV). Municipal services, including water and wastewater are supplied to approximated 1230 homes (approximate population is 2975) and businesses. The population is stable with little seasonal fluctuation. Wawa's major business sectors include: Mining, Tourism, Forestry, Retail and Personal Services. Developing industries consist of Value-Added Forestry, Information Technology, Transportation and Diamond Mining.

Figure 1-1: Study Area



1.3 Drinking Water System Description

The Municipality of Wawa is comprised of the Town of Wawa and Michipicoten River Village, with a population of approximately 2975. The water treatment and distribution systems are owned and operated by the Municipality of Wawa. The water treatment system is a Class 2, and the distribution system is a Class 1. The treatment plant has a rated capacity of 7800 m³/d.

The intake for the water supply is located approximately 144 m offshore in Wawa Lake, at a depth of 10.7 m below low water level. The intake is housed in a timber crib structure, equipped with coarse screens. The 623 mm cast iron pipe discharges by gravity to a wet well at the low lift pump house. Three 45.6 L/s VFD pumps are used to supply raw water to the treatment plant. A line from the treatment plant provides sodium hypochlorite to the low lift discharge header for pre-chlorination, if required. The water treatment plant was constructed in 2006 and is a membrane filtration process. Raw water is pumped from the low lift station to a common header which feeds three Pall membrane systems, each consisting of a feed and backwash tank, feed/recirculation and reverse filtrate pump, 0.4 mm strainer, and 30 cartridge membrane rack. Filtered water is discharged to an under floor reservoir where chlorine is injected to provide the necessary disinfection CT prior to discharge to the distribution system. Sodium hypochlorite is used for pre-chlorination, primary and secondary disinfection, and membrane cleaning. Hydrofluorosilicic acid is also added to the filtered water for dental health protection.

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 Shelby Environmental Services Ltd. 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 CGBS. The approved Operational Plan was submitted to MOE together with the other documents required for the issuance of the Drinking Water License. The Operational Plan was audited in the summer of 2015 by SAI Global. The non-conformities found during the in-place audit were corrected to the satisfaction of the auditor.

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 Municipality of Wawa:

- 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 in Section 2.1 have formed the development this Financial Plan:

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 municipality'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 Wawa 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 revenue sources and forecast revenues with minimal increases (as outlined in the Notes to the Projected Financial Statements) 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 2014 budget, which also included expense details for 2014, as well as information provided by the Municipality's Infrastructure Services Department (ISD) which is responsible for the operation of the water and wastewater works. 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 the rates outlined in the Notes to the Projected Financial Statements. Further Information relating to the assumed rates of increase for additional future operating expenses can also 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 Municipality. No new debts were projected for future periods, however, in the event that the Municipality 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 Municipality 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 wet well, the water treatment plant and the water distribution system. The distribution system includes only those components up to the "curbstop" or property line and does not include residential service laterals. A complete description of the water system is included under section 1.3 above and in the License and

DWWP. Staff of the Municipality's ISD operate and maintain the water and wastewater works and associated distribution and collection systems respectively. In addition to these services, the Municipality pays directly for the cost of Hydro. A complete list of operating expenses is provided in the Schedule of Operating Expenses.

The annual operating and maintenance budgets are adjusted each year by a cost of living adjustment calculated on the annual CPI provided by Statistic Canada. As mentioned previously, for the purposes of this Financial Plan it was assumed that in future years, the CPI would be 2.0%, which matches the most recent CPI posted by Statistics Canada. In the case of Hydro, due to the uncertainty of Hydro costs an inflated factor above CPI was used. In this case the annual increase used is 2.0%. 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

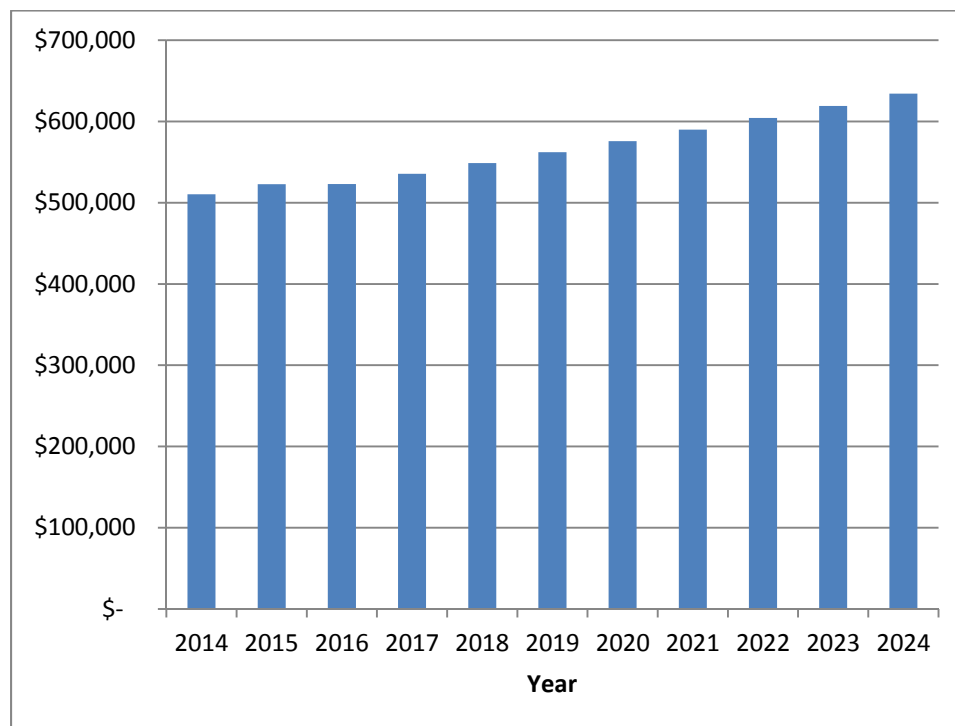


Figure 4-1 shows that operating expenses are projected to increase from \$510,428 in 2014 to \$634,223 in 2024 based on the assumed rates of increase.

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, as well as their estimated useful lives, were provided by the Municipality. The projected amortization is shown in Figure 4-2.

Figure 4-2: Projected Amortization Expenses

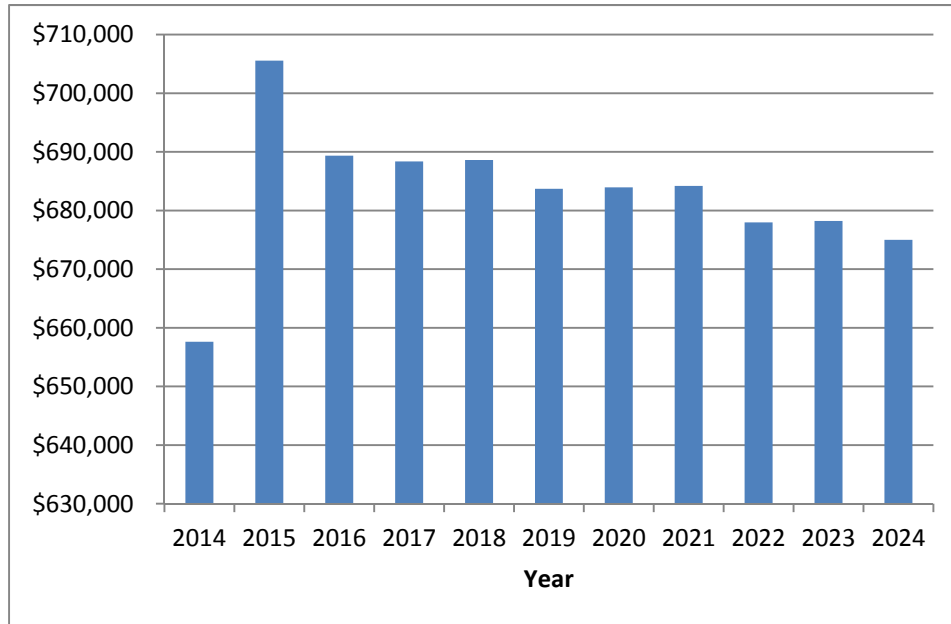


Figure 4-2 shows that amortization remains relatively consistent over the forecast period from \$657,618 in 2014 to a \$674,986 in 2024. The increase in 2015 is due to the purchase of water meters with a cost of \$734,488.

4.4 Interest Expenses

Details on current debt relating to water infrastructure were provided by the Municipality. Figure 4-3 below shows the interest expenses for the forecast period. As mentioned previously, no new debt has been forecast. Should the Municipality identify a need to incur new debt in the future based on an evaluation of existing data the forecast interest expenses will require revision.

Figure 4-3: Projected Interest Expenses

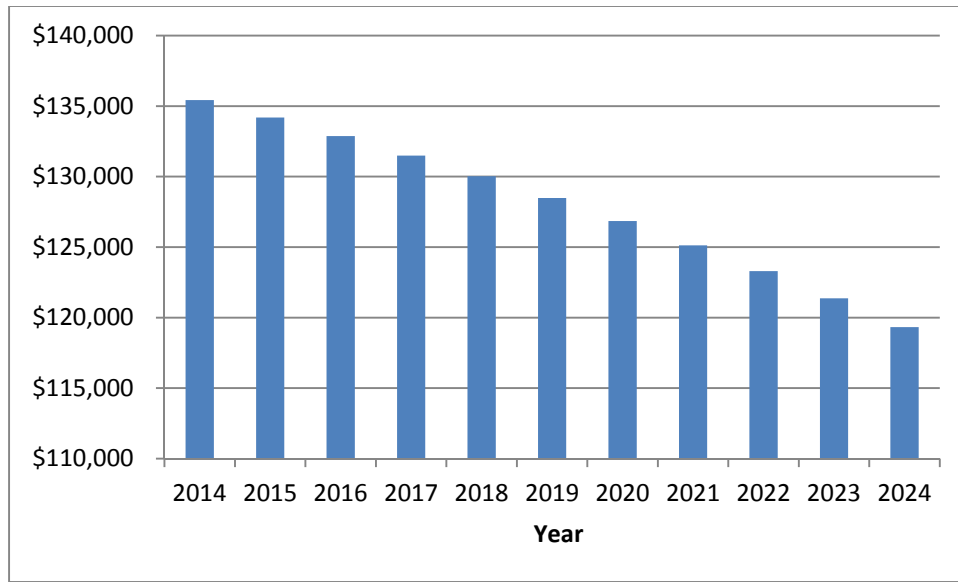


Figure 4-3 shows that the interest expenses decrease from \$135,430 in 2014 to \$119,332 in 2024. Based on information provided by the Municipality, interest expenses will end outside of the forecast period in 2049.

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 4-4.

Figure 4-4: Projected Total Expenses

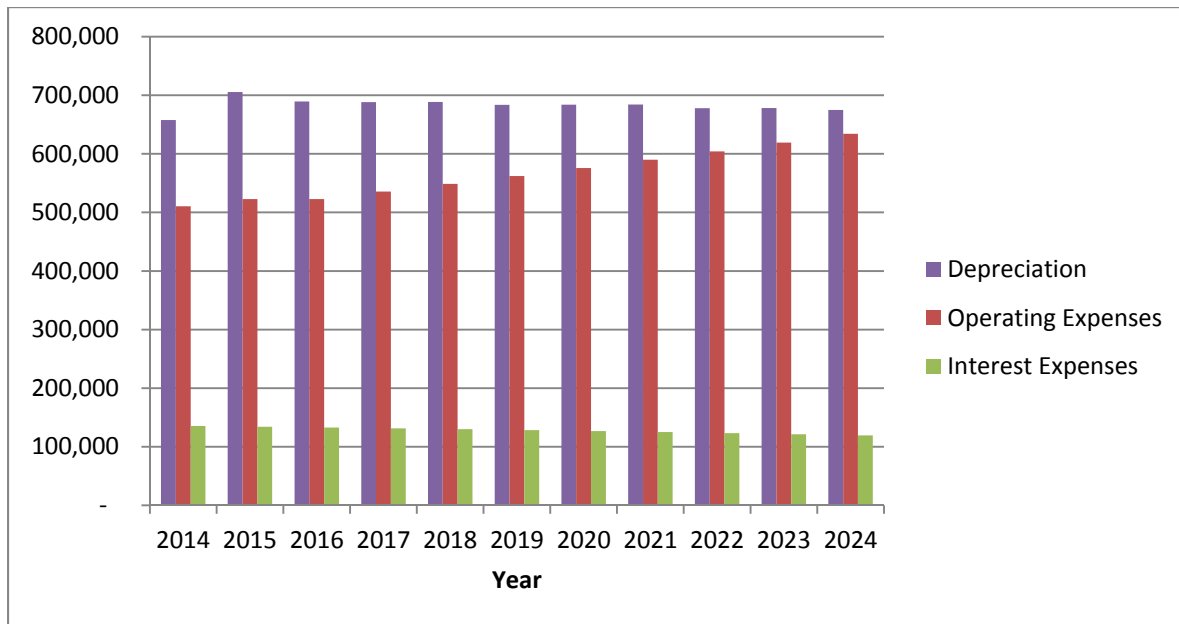


Figure 4-4 shows that the total annual expenses increase gradually over the forecast period from about \$1,303,476 in 2014 to \$ 1,428,541 in 2024. Total annual expenses remain relatively consistent throughout the forecast period. The decrease shown is primarily attributable to decreasing interest expenses associated with the overall reduction in the municipal debt on the water system.

5 Capital Expenditures

5.1 Data Sources and Assumptions

Capital expenditures were based on the Capital Projections 2014-2024 provided by the Municipality’s consultant with input from Infrastructure Services staff. Estimates for the useful lives of all assets included in the projections were based on information provided by the Municipality.

5.2 Projected Future Capital Expenditures

The projected future capital expenditures for the Municipality’s water system are shown in Figure 5-1.

Figure 5-1: Projected Future Capital Expenditures

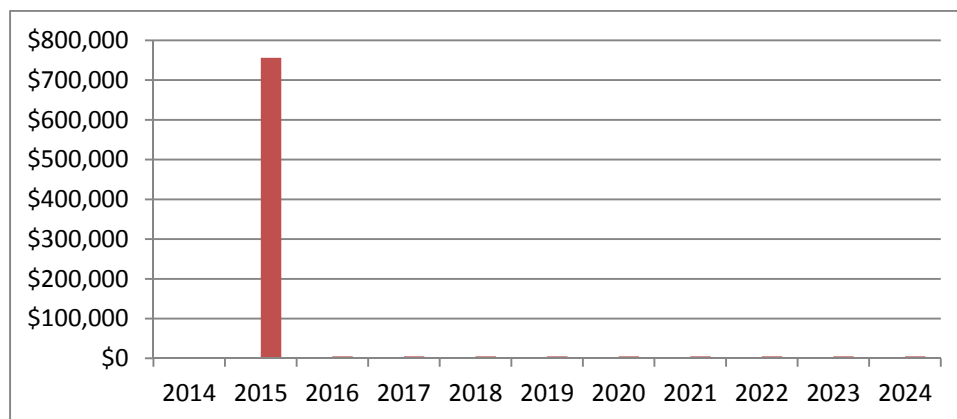


Table 5-1 provides general details on the capital expenditures shown in Figure 5-1.

Table 5-1: Forecast Capital Expenditures

Year	Asset	Amount
2014	N/A	N/A
2015	Water Meters	\$734,488
	Scada Computer	\$ 21,498
2016	Miscellaneous Equipment	\$ 5,000
2017	Miscellaneous Equipment	\$ 5,000
2018	Miscellaneous Equipment	\$ 5,000
2019	Miscellaneous Equipment	\$ 5,000
2020	Miscellaneous Equipment	\$ 5,000
2021	Miscellaneous Equipment	\$ 5,000
2022	Miscellaneous Equipment	\$ 5,000
2023	Miscellaneous Equipment	\$ 5,000
2024	Miscellaneous Equipment	\$ 5,000

6 Revenues Data Sources and Assumptions

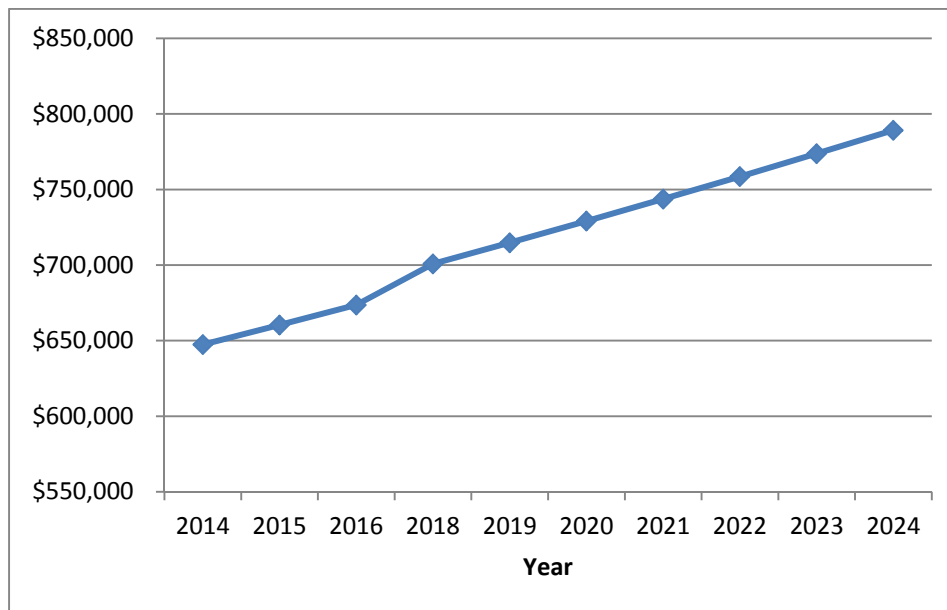
Revenue information was provided by the Municipality in its 2014 income statement.

6.1 Projected Revenues

In consultation with the Municipality it was determined that the most practical assumed increase in rate revenues is 2% each year. This increase rate does not include increases due to overhead and rate increases determined from a Rate Study that will be conducted in 2016.

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% per year for rates, revenues gradually increase from \$647,437 in 2014 to approximately \$789,221 in 2024.

7 Revenue Analysis

7.1 Operating Cash Flow

Operating cash flow is calculated using the following equation:

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

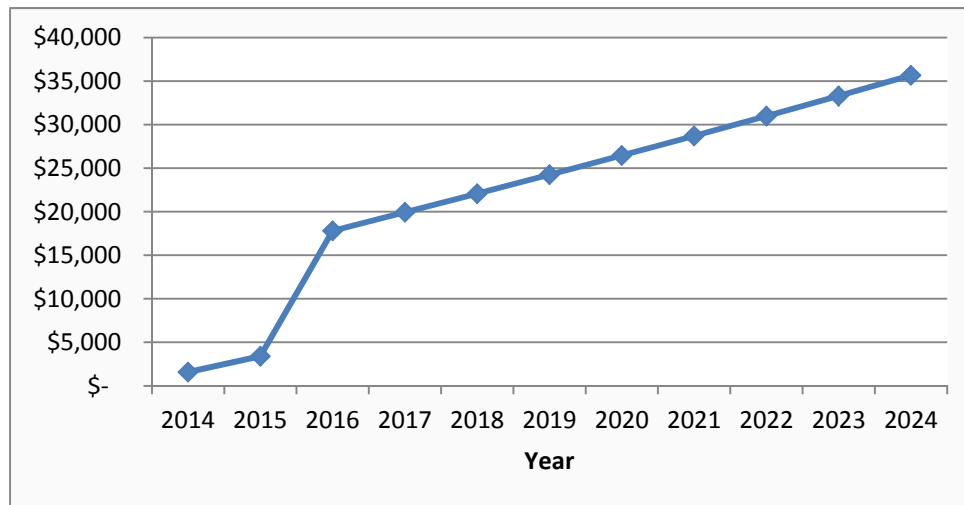
This equation shows that current period operations can generate either a surplus or deficit from a cash perspective, depending on the balance between revenues and cash expenses.

As an example, the operating cash flow for 2014 can be calculated as follows:

Revenues	= \$647,437 (also shown in Figure 6-1)
Operating Expenses	= \$510,428 (also shown in Figure 4-1)
Interest Expenses	= \$135,430 (also shown in Figure 4-3)
Operating Cash Flow	= \$647,437 - \$510,428 - \$135,430
	= \$1,579

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



After an initial decrease attributable primarily to lower Water revenue in 2014, operating cash flow is seen to be increasing over the forecast period to approximately \$35,666 in 2024. This is due primarily to the decrease in finance charges as the debt is repaid and the gradual increase in water revenue.

8 Capital Expenditure Balance

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

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

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 2014 the capital expenditure balance is calculated as follows:

Operating Cash Flow	= \$1,579 (also shown in Figure 7-1)
New Debt	= \$0
Previous Debt Payment	= (\$21,836)
Disposals	= \$0
Reserve Fund Balance	= \$859,736
Capital Expenditure Balance	= \$1,579 + \$0 + (\$21,836) + \$859,736
	= \$839,479

The capital expenditure balance for subsequent years can be determined in a similar manner. The projected capital expenditure is provided in Table 5-1.

Figure 8-1: Capital Expenditure

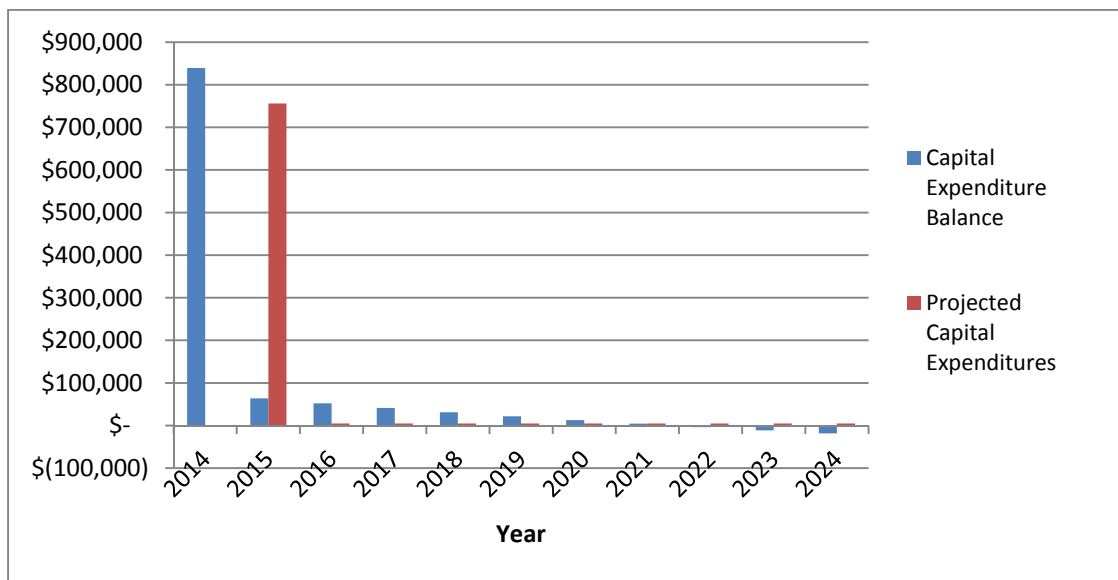


Figure 8-1 shows that the Municipality will not have sufficient cash available for the projected capital expenditures. The reserve fund is projected to decrease substantially after the large capital expenditure in 2015 for the water meters. The Municipality will not have sufficient cash available for projected capital expenditures in future years.

8.1 Annual Surplus/Deficit

The accumulated surplus/deficit is the primary indicator of the financial resources the Municipality 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 2014 is calculated as follows:

$$\begin{aligned}
 \text{Revenues} &= \$647,437 \text{ (also shown in Figure 6-1)} \\
 \text{Total Expenses} &= \$1,303,476 \text{ (also shown in Figure 4-4)} \\
 \text{Annual Surplus/Deficit} &= \$647,437 - \$1,303,476 \\
 &= (\$656,039)
 \end{aligned}$$

The annual surplus is lower than the operating cash flow because, as explained above, the former takes into account amortization expenses. Thus for 2014, although the annual surplus/deficit is (\$656,039), while operating cash flow is \$1,579.

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

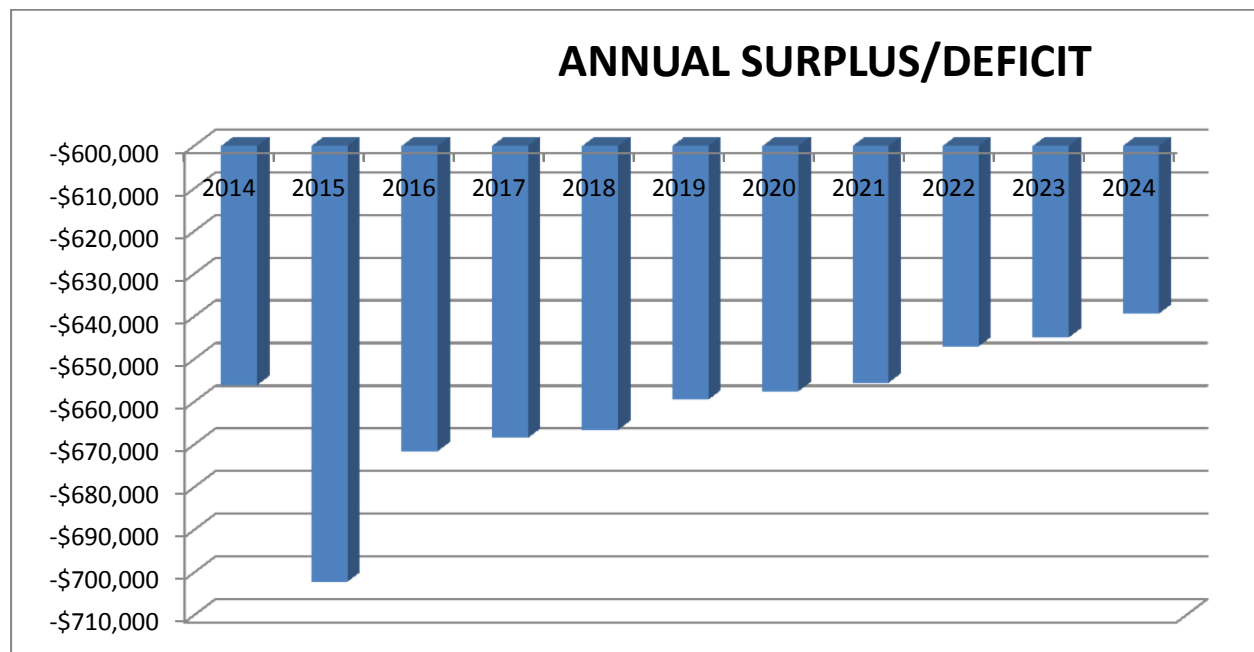
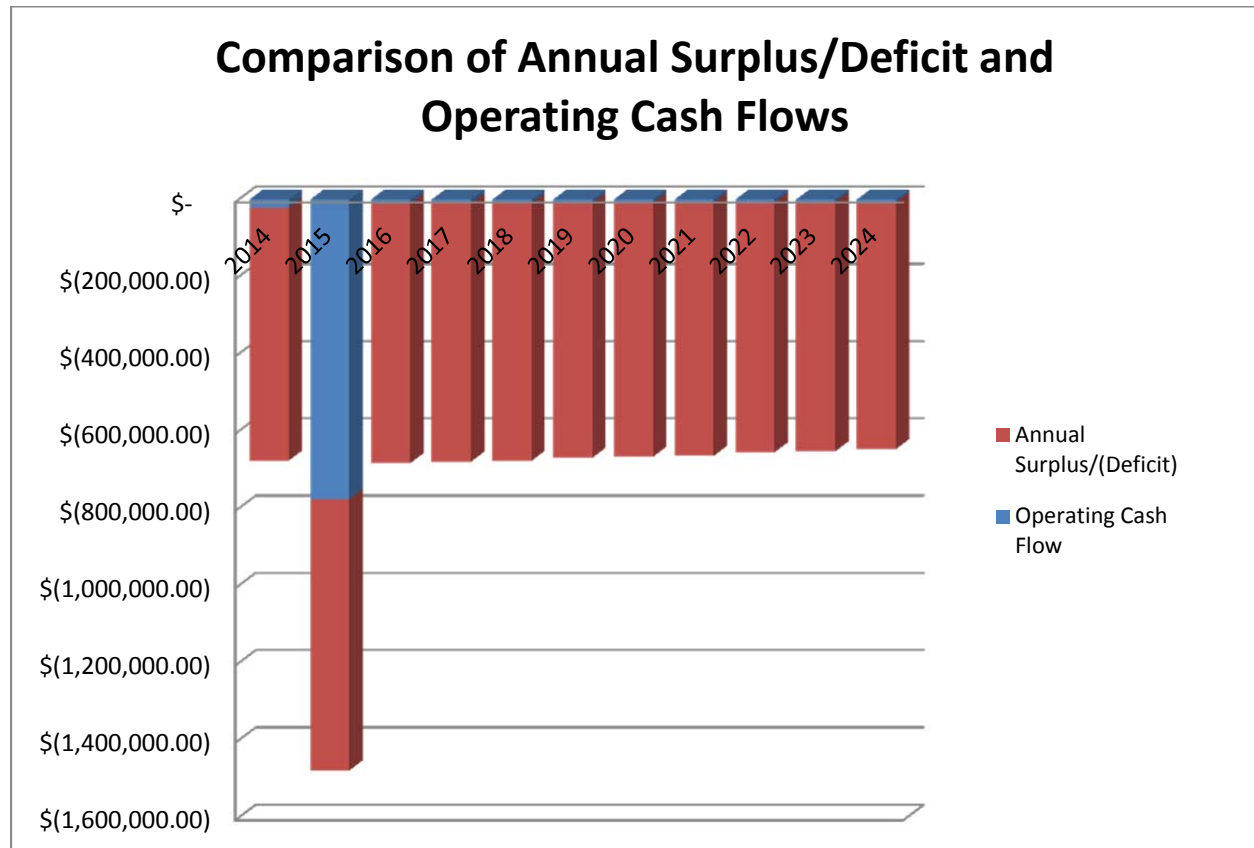


Figure 8-2 shows that the annual deficit increases sharply initially attributable to the large capital expenditure outlays in 2015 and then decreases gradually from approximately (\$656,039) in 2014 to

approximately (\$639,320) in 2024. 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 in 2015 than the annual surplus/deficit; however, this trend is reversed throughout the remainder of 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 2014-2024 (Unaudited)

		Forecast Period										
NOTES		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
REVENUE												
	1	14,335	14,622	14,915	15,213	15,517	15,827	16,144	16,467	16,796	17,132	17,475
		MRV water system										
		WTP - Solar energy revenue	7,657	7,810	7,966	8,125	8,288	8,454	8,623	8,795	8,971	9,333
		W&S - Water revenue	619,052	631,433	644,062	656,943	670,082	683,483	697,153	711,096	725,318	754,621
		Wawa water system	-	-	-	-	-	-	-	-	-	-
		Pinewood Drive water system	6,393	6,520	6,651	6,784	6,919	7,058	7,199	7,343	7,490	7,792
		Transfer from Reserve	-	-	-	-	-	-	-	-	-	-
Total Revenue		647,437	660,385	673,594	687,065	700,806	714,822	729,119	743,701	758,575	773,746	789,221
EXPENSES												
	2	510,428	522,793	522,899	535,637	548,696	562,076	575,797	589,864	604,285	619,066	634,223
		Operating Expenses										
	4	135,430	134,190	132,880	131,495	130,032	128,485	126,851	125,124	123,299	121,370	119,332
		Interest										
	3	657,618	705,545	689,353	688,357	688,607	683,696	683,946	684,196	677,962	678,212	674,986
		Depreciation										
Total Expenses		1,303,476	1,362,528	1,345,132	1,355,489	1,367,335	1,374,257	1,386,594	1,399,184	1,405,546	1,418,648	1,428,541
Annual surplus/ (deficit)		(656,039)	(702,143)	(671,538)	(668,424)	(666,529)	(659,435)	(657,475)	(655,483)	(646,971)	(644,902)	(639,320)
Accumulated surplus, beginning of period		8,719,521	8,063,482	7,361,339	6,689,802	6,021,378	5,354,848	4,695,413	4,037,938	3,382,455	2,735,485	2,090,582
Accumulated surplus, end of period		8,063,482	7,361,339	6,689,802	6,021,378	5,354,848	4,695,413	4,037,938	3,382,455	2,735,485	2,090,582	1,451,262
EXPENSE TO REVENUE RATIO		201%	206%	200%	197%	195%	192%	190%	188%	185%	183%	181%

See accompanying notes and assumptions to these projected financial statements

Table 9-2: Schedule of Operating Expenses 2014-2024 (Unaudited)

DETAILED OPERATING EXPENSES	NOTES	Forecast Period										
		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
MRV Water System												
Wages		16,740	17,192	17,657	18,133	18,623	19,126	19,642	20,172	20,717	21,276	21,851
Utilities/ taxes		11,290	11,516	11,746	11,981	12,220	12,465	12,714	12,968	13,228	13,492	13,762
Insurance		382	390	398	406	414	422	431	439	448	457	466
Materials/ supplies		4	4	4	4	4	4	4	4	5	5	5
Consulting		-	-	-	-	-	-	-	-	-	-	-
Wawa water system												
Advertising and promotion		517	531	545	560	575	590	606	623	640	657	675
Insurance		5,602	5,714	5,828	5,945	6,064	6,185	6,309	6,435	6,564	6,695	6,829
Materials/ supplies		787	811	835	860	886	912	940	968	997	1,027	1,058
Training/travel		4,058	4,168	4,280	4,396	4,515	4,636	4,762	4,890	5,022	5,158	5,297
Consulting		3,910	3,989	4,068	4,150	4,233	4,317	4,404	4,492	4,582	4,673	4,767
Pinewood Drive water system												
Wages		-	-	-	-	-	-	-	-	-	-	-
Materials/ supplies		-	-	-	-	-	-	-	-	-	-	-
Hydro		1,057	1,078	1,099	1,121	1,144	1,167	1,190	1,214	1,238	1,263	1,288
Consulting		-	-	-	-	-	-	-	-	-	-	-
Water purification												
Wages		3,265	3,354	3,444	3,537	3,633	3,731	3,831	3,935	4,041	4,150	4,262
Materials/ supplies		26,674	27,474	28,298	29,147	30,022	30,922	31,850	32,806	33,790	34,803	35,847
Filtration plant												
Materials/ supplies		2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,075	3,167	3,262	3,360
Consulting		2,500	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	3,047
Water treatment plant												
Wages		55,179	56,668	58,198	59,770	61,384	63,041	64,743	66,491	68,286	70,130	72,024
Utilities/ taxes		186,091	189,813	193,609	197,481	201,431	205,459	209,568	213,760	218,035	222,396	226,844
Insurance		5,719	5,834	5,950	6,069	6,191	6,314	6,441	6,569	6,701	6,835	6,972
Materials/ supplies		49,061	50,533	52,049	53,610	55,218	56,875	58,581	60,339	62,149	64,013	65,934
Consulting		9,460	9,650	9,843	10,039	10,240	10,445	10,654	10,867	11,084	11,306	11,532
Wawa lake pumphouse												
Wages		145	149	153	157	161	166	170	175	180	184	189
Utilities/ taxes		3,678	3,751	3,826	3,903	3,981	4,061	4,142	4,225	4,309	4,395	4,483
Insurance		192	196	200	204	208	212	216	221	225	230	234
Materials/ supplies		109	112	115	119	122	126	130	134	138	142	146
Consulting		-	-	-	-	-	-	-	-	-	-	-
Water distribution												
Wages		73,367	75,348	77,382	79,471	81,617	83,821	86,084	88,408	90,795	93,247	95,764
Insurance		29	30	30	31	32	32	33	33	34	35	36
Materials/ supplies		28,979	29,848	30,744	31,666	32,616	33,595	34,602	35,640	36,710	37,811	38,945
Consulting		12,074	12,315	-	-	-	-	-	-	-	-	-
Equipment rentals (owned)		7,054	7,195	7,339	7,486	7,636	7,788	7,944	8,103	8,265	8,430	8,599
Repairs & Maintenance		5	5	6	6	6	6	6	6	6	6	7
Total Operating Expenses	5	510,428	522,793	522,899	535,637	548,696	562,076	575,797	589,864	604,285	619,066	634,223

See accompanying notes and assumptions to these projected financial statements

Table 9-3: Statement of Cash Flow 2014-2024 (Unaudited)

		Forecast Period										
NOTES		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
OPERATING TRANSACTIONS												
Cash received from:												
	Revenues	647,437	660,385	673,594	687,065	700,806	714,822	729,119	743,701	758,575	773,746	789,221
Cash paid for:												
	Operating costs	510,428	522,793	522,899	535,637	548,696	562,076	575,797	589,864	604,285	619,066	634,223
	Finance charges	135,430	134,190	132,880	131,495	130,032	128,485	126,851	125,124	123,299	121,370	119,332
6	Total	645,858	656,983	655,779	667,132	678,728	690,561	702,648	714,988	727,584	740,436	753,555
7	Cash provided from operating transactions	1,579	3,402	17,815	19,933	22,078	24,261	26,471	28,713	30,991	33,310	35,666
CAPITAL TRANSACTIONS												
8	Dispositions of tangible capital assets											
9	Acquisition of tangible capital assets	-	(755,987)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
	Cash applied to capital transactions	-	(755,987)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
FINANCE TRANSACTIONS												
10	Proceeds from debt issues											
	Transfer from reserve											
11	Debt repayment	(21,836)	(23,076)	(24,386)	(25,771)	(27,234)	(28,781)	(30,415)	(32,142)	(33,967)	(35,896)	(37,934)
	Cash applied to financing transactions	(21,836)	(23,076)	(24,386)	(25,771)	(27,234)	(28,781)	(30,415)	(32,142)	(33,967)	(35,896)	(37,934)
	Increase/(decrease) in cash and cash equivalents	(20,257)	(775,661)	(11,571)	(10,838)	(10,156)	(9,520)	(8,944)	(8,429)	(7,976)	(7,586)	(7,268)
12	Cash and cash equivalents, beginning of period	859,736	839,479	63,818	52,247	41,409	31,253	21,733	12,789	4,360	(3,616)	(11,202)
	Cash and cash equivalents, end of period	839,479	63,818	52,247	41,409	31,253	21,733	12,789	4,360	(3,616)	(11,202)	(18,470)
	Cash as percentage of net fixed assets	9%	1%	1%	0%	0%	0%	0%	0%	0%	0%	-1%

See accompanying notes and assumptions to these projected financial statements

Table 9-4: Statement of Financial Position 2014-2024 (Unaudited)

		Forecast Period											
		NOTES	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
FINANCIAL ASSETS													
Bank	13		839,479	63,818	52,247	41,409	31,253	21,733	12,789	4,360	(3,616)	(11,202)	(18,470)
Liabilities													
Debt	14		2,401,941	2,378,865	2,354,479	2,328,708	2,301,474	2,272,693	2,242,278	2,210,136	2,176,169	2,140,273	2,102,339
Net financial assets (debt)			(1,562,462)	(2,315,047)	(2,302,232)	(2,287,299)	(2,270,221)	(2,250,960)	(2,229,489)	(2,205,776)	(2,179,785)	(2,151,475)	(2,120,809)
NON FINANCIAL ASSETS													
Tangible Capital Assets	15		9,625,944	9,676,386	8,992,033	8,308,676	7,625,069	6,946,373	6,267,427	5,588,231	4,915,269	4,242,057	3,572,071
ACCUMULATED SURPLUS/ (DEFICIT)			8,063,482	7,361,339	6,689,801	6,021,377	5,354,848	4,695,413	4,037,938	3,382,455	2,735,484	2,090,582	1,451,262

See accompanying notes and assumptions to these projected financial statements

Table 9-5: Statement of Changes in Net Financial Assets 2014-2024 (Unaudited)

	NOTES	Forecast Period										
		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Annual surplus/(deficit)		(656,039)	(702,143)	(671,538)	(668,424)	(666,529)	(659,435)	(657,475)	(655,483)	(646,971)	(644,902)	(639,320)
Amortization of tangible capital assets		657,618	705,545	689,353	688,357	688,607	683,696	683,946	684,196	677,962	678,212	674,986
Acquisition of tangible capital assets		-	(755,987)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
Change in net financial assets (debt)		1,579	(752,585)	12,815	14,933	17,078	19,261	21,471	23,713	25,991	28,310	30,666
Net financial assets (debt) position, beginning of period		859,736	839,479	63,818	52,247	41,409	31,253	21,733	12,789	4,360	(3,616)	(11,202)
Net financial asset (debt) position, end of period	16	861,315	86,894	76,633	67,180	58,487	50,514	43,204	36,502	30,351	24,694	19,464

See accompanying notes and assumptions to these projected financial statements

9.6 Notes to the Projected Financial Statements

1. Rate revenues increase by 2% 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. All acquisitions and dispositions are calculated at 50% of the normal rate for the asset for their first and last year of service.
4. Interest is based on the Amortizing Debenture Schedule provided by the Municipality.
5. Operating costs are assumed to increase by the following rates:
 - Wages – 2.7% per year
 - Utilities/taxes – 2% per year
 - Insurance – 2% per year
 - Materials/supplies – 3% per year
 - Training/travel – 2.7% per year
 - Hydro – 2% per year
6. Interest expenses on the debenture.
7. Operating transactions is the operating cash flow.
8. The value of the assets disposed.
9. The value of the assets acquired. An estimate of \$5,000 per year was used for 2016 forward.
10. No debt issues are projected.
11. Repayments of principal on debenture.
12. Cash and cash equivalents, beginning of period is the opening balance of the reserve fund provided by the Municipality including amounts for the capital reserve fund for capital assets purchased in 2015.
13. Cash is equal to the reserve fund balance at the end of the year.
14. The remaining debt is the total debenture less principal repayments.
15. Tangible capital assets are non-financial assets calculated as the net book value of the fixed assets plus any acquisitions made during the period.
16. The net financial assets (debt) position, end of period indicates that there is a net asset of \$861,315 in 2014. This amount decreases to about \$19,464 at the end of the forecast period.

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 Municipality 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 2024;
- Sizeable one-time government funding is projected to be received in the second year of the forecast period (2015) and subsequently current government funding programs are scheduled to end in the second year of the forecast period (2015);
- Amortization of the Water Treatment Plant commissioned in 2006 represents one of the largest projected expenses, and is on a comparable level with operating costs throughout the forecast period;
- There will be a continued requirement to finance the cost of the Water Treatment Plant for the duration of the forecast period. There are additional minor capital costs identified throughout the forecast period based on information provided by the consultant and ISD staff;
- The Financial Plan achieves a significant increase over the forecast period in the cash reserves. The annual rate increases result in sufficient revenue to cover the Municipality's annual operating costs and cash expenditures; and
- Annual rate increases are not projected to be significantly higher in order to achieve the revenue/ expenditure balance over the period included in the Financial Plans Regulation (O Reg 453/07) of 6 years. This results in a very slow rate of decline in the deficit over the planning period to 2024. The rate of deficit reduction could be improved by increasing the annual revenue above the 2% used in the financial statement. Another option which could be considered in addition to significantly increasing the annual revenue, as discussed with the Ministry of Municipal Affairs (MMAH), is increasing the study timeframe to extend to 2024. This would allow for a slightly reduced annual increase in revenues and would be acceptable to MMAH given the size of the municipality and the proportionally higher per residence rate charges. The reduced annual rate increases still result in an increase in the reserves and the ability to meet in future capital requirements however over a longer forecast period.

11 Council Resolution

A Council Resolution accepting the Financial Plan was passed at the regular meeting of Municipal Council held on March 1, 2016. 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 Municipality of Wawa'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

Moved by: _____

Seconded by: _____

WHEREAS the municipality of Wawa received a Municipal Drinking Water Licence #231-101 for the Wawa Drinking Water System dated August 4, 2011;

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 licence for the system was issued in compliance with Section 3 of 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 municipality and ratepayer to achieve a balanced budget within a six year planning period;

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;

NOW THEREFORE the Council of the Municipality of Wawa endorses Financial Plan 231-301 for the Wawa Drinking Water System which satisfies the requirements set out in Ontario Regulation 453/07;

AND FURTHER that the public will be notified that the Financial Plan is available without charge and that a copy will be submitted to the Ministry of Municipal Affairs and Housing;

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 and that financial assistance to help small communities must be provided.