



OS-10-068-12-OS

March 22, 2011

Matt Prentice
Water and Wastewater Superintendent
City of Owen Sound
1900 20th Street East,
Owen Sound, ON N4K 5N3

**Re: City of Owen Sound Wastewater System Financial Plan
Final Report**

Dear Mr. Prentice:

We are pleased to submit our final report on the Financial Plan for the City of Owen Sound Wastewater System for your review.

We trust that this report meets your requirements and we look forward to any comments you may have.

Yours truly,
GENIVAR Inc.

Rakesh Sharma, P. Eng.
Project Manager

/fk

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1. Introduction

1.1 Background

As a result of the Justice O'Connor's Part II Walkerton Inquiry Report (2000) and the passing of Ontario's Safe Drinking Water Act (2002), the Province has introduced and is implementing a new Municipal Drinking Water Licensing Program. One of the requirements of the licensing program is an approved Financial Plan for a Water System, as required under the Financial Plans Regulation (O. Reg. 453/07).

The City of Owen Sound received their water licence on October 14th, 2010. The Financial Plan for their Drinking Water System is a requirement through a condition of this licence. The Financial Plan requirement is only applicable to the Drinking Water System; however, the City has decided to implement a similar plan for its wastewater system also to ensure planning for financial sustainability.

1.2 Study Area

The City of Owen Sound is located on the southern shores of Georgian Bay in a valley below the rock cliffs of the Niagara Escarpment. A map of the study area is included as Figure 1.1.

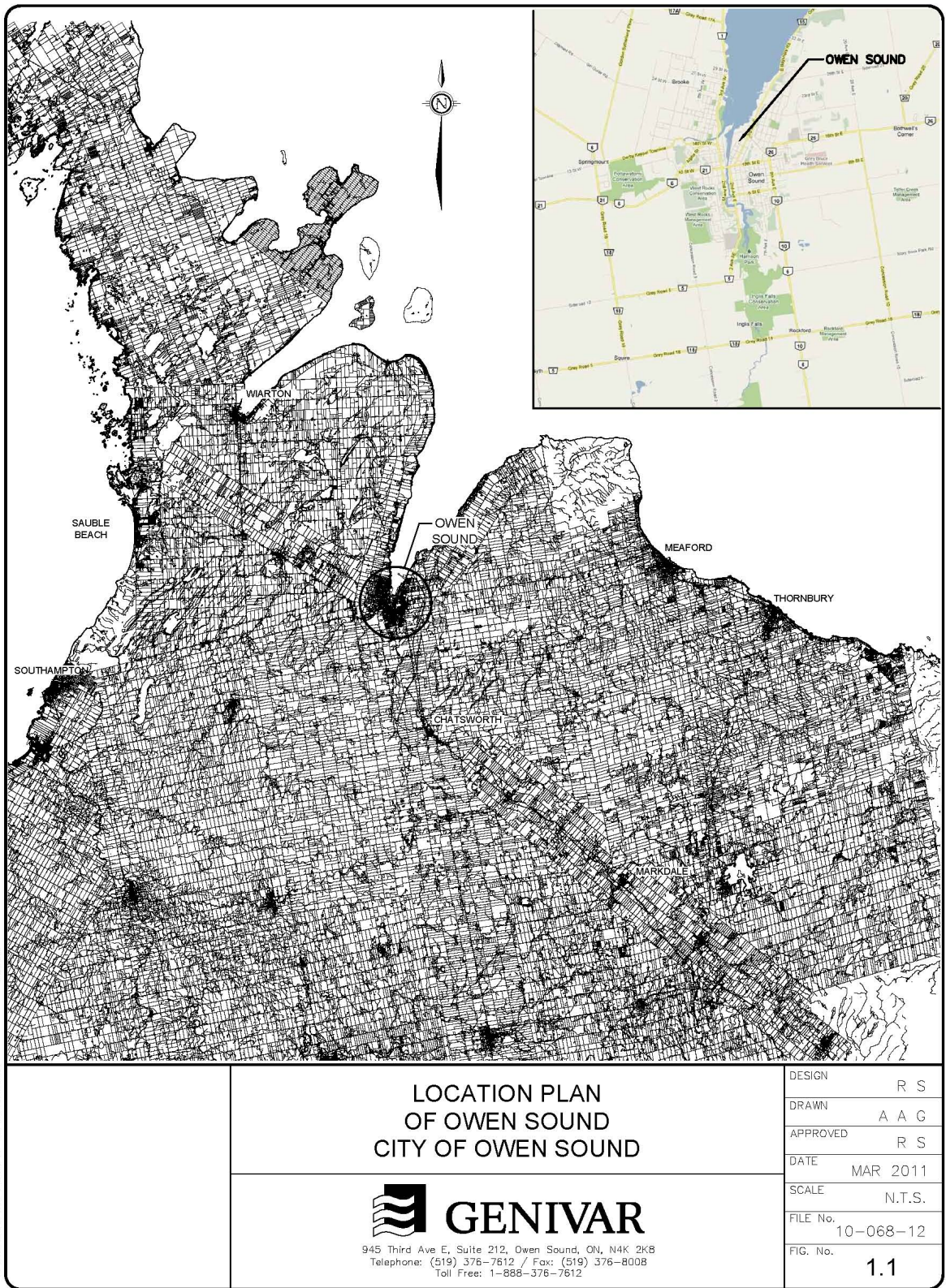
The City of Owen Sound owns and maintains a wastewater collection system servicing a population of approximately 22,000. In addition to residences, it also services industrial, institutional, and commercial users. The total number of wastewater services is approximately 7,000. The wastewater collection system includes approximately 165 km of sanitary sewers and two sewage pumping stations. The West Side Sewage Pumping Station includes approximately 1000 m³ capacity detention tank to prevent raw sewage overflow to Pottawatomi River.

The Wastewater Treatment Plant is a primary treatment plant and is operated by Veolia Inc. under an Operations Contract. The headworks at the treatment plant were recently upgraded in 2009/10 under the COMRIF funding programme.

1.3 Study Objective

The City of Owen Sound owns and operates the wastewater system. GENIVAR was retained by the City to prepare a Financial Plan for its wastewater system to ensure planning for financial sustainability. The objective of this report is therefore to present the Financial Plan for the City of Owen Sound Wastewater System.

Figure 1.1 Study Area



2. Financial Plan Requirements and Guidelines

2.1 Financial Plan Regulation

The Financial Plan Regulation is only applicable to drinking water systems; however, it has been used as a guideline in the preparation of this Financial Plan for the City of Owen Sound Wastewater System. Hence, the key points of the Financial Plan Regulation (O. Reg. 453/07) are presented in this section.

2.1.1 General Requirements

The following general requirements are outlined in O. Reg. 453/07 and apply to both new and existing systems:

- Declaration: The Financial Plan must include a statement that the financial impacts of the 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 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 system.
- Approval: The Financial Plan must be approved by a council resolution that indicates that the 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.

2.1.2 New System Requirements

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

2.1.3 Existing System Requirements

In addition to the above requirements, the Financial Plan of an existing system must include the following details:

- Details of the projected financial position, itemized by:
 - a. Total financial assets
 - b. Total liabilities

- c. Net debt
- d. Non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies, and prepaid expenses
- e. Changes in tangible capital assets that are additions, donations, write downs, and disposals

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

→ Details of the projected gross cash receipts and payments, 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 year in which the existing licence expires, or in the case of a condition to licence, the first year is the latest of 2010 and the year in which the first licence was issued.

If two or more systems are solely owned by the same owner, then the Financial Plan can be prepared by treating those systems together as if they were one water system.

2.2 Financial Plan Guidelines

To assist municipalities in preparing the Financial Plan under O. Reg. 453/07, the Ministry of Environment released a document titled “Toward Financially Sustainable Drinking-Water and Wastewater Systems” (August, 2007). This document applies to wastewater systems as well.

These guidelines set out the following nine principles to help develop 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 stormwater 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.

2.3 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 that 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. Approach

The Financial Plan guidelines were used to select the approach for preparing the City of Owen Sound Wastewater System Financial Plan.

The following steps summarize the general approach:

- Determine current period expenses and forecast future period expenses
- Determine and forecast capital expenditure needs
- Identify all sources of current revenues and forecast revenues with a minimal increase of 1% to show some growth
- Assess the suitability of the existing revenues (with an increase of 1%)
- Identify funding requirements and determine the required (new) revenues
- Prepare the following statements based on the required (new) revenues:
 - Statement of Operations
 - Statement of Cash Flow
 - Statement of Financial Position

4. Expenses

4.1 Data Sources and Assumptions

Expenses were divided into three categories: operating, interest, and amortization.

The current period operating expenses were determined from the City's 2010 budget, which also included expense details for the years 2008 and 2009. The list of operating expenses and the budget details provided by the City is available in Appendix A.

The future period operating expenses were assumed to increase by the assumed rate of inflation, which is 3% per annum.

The current debts, interest rates, and repayment plans were provided by the City. No other debts were projected for future periods. However, after the evaluation of the existing revenues, which is presented in Section 7, if a need to incur debt is identified then the forecasted interest expenses will be revised.

Normally the PSAB information provides a detailed list of assets with each asset's historical cost, expected useful life, and replacement cost. Using this information, the annual amortization expenses are calculated based on the historic cost of assets, which is apportioned over the useful life of the asset using the straight-line depreciation method. In this case, a detailed list of assets was not available, hence, the amortization expenses were used as provided from the PSAB tables, which lumped assets together. The amortization expenses are discussed further in Section 4.4.

4.2 Operating Expenses

Operating expenses are generally ongoing expenses related with providing service. These are expenses that are needed to keep the operation running on a day-to-day basis. Items included in operating expenses typically include wages, benefits, materials, supplies, maintenance, pagers, equipment fuel, utilities, mileage, etc. A list of the operating expenses is provided in Appendix A.

The projected operating expenses are shown in Figure 4.1. As previously mentioned, the operating expenses have been projected based on 3% inflation per year.

Figure 4.1 Projected Operating Expenses

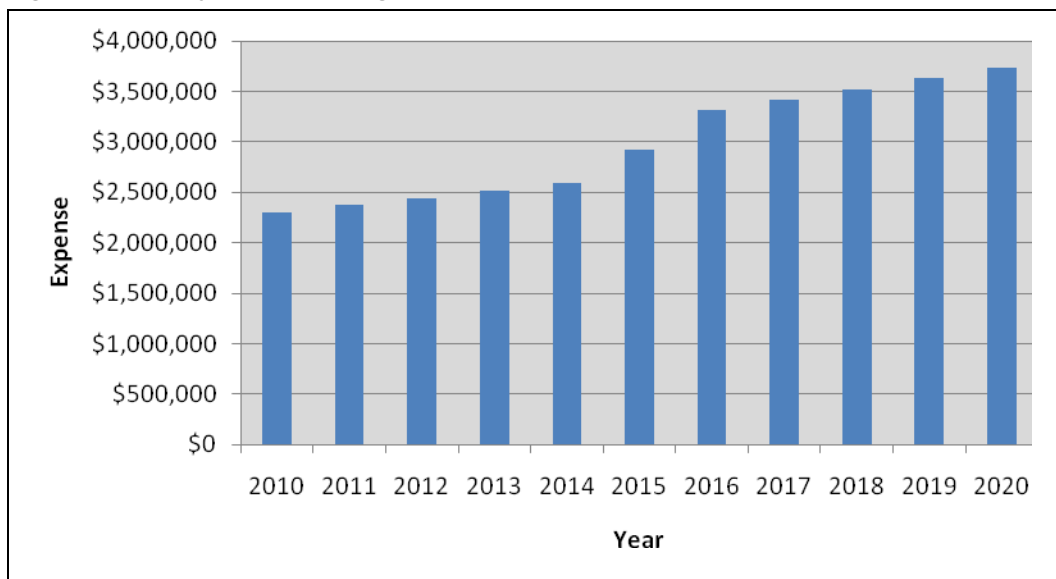


Figure 4.1 shows that the operating expenses are projected to increase from approximately \$2,303,827 in 2010 to \$3,738,488 in 2020, based on an increase of 3% per year due to inflation with exceptions in 2015 and 2016. The operating expenses for the sewage plant alone are projected to increase by 22% and 26% in 2015 and 2016 respectively, due to the secondary upgrade, as forecasted by the City. This explains the greater increases in expenses shown in Figure 4.1 for the years 2015 and 2016.

4.3 Interest Expenses

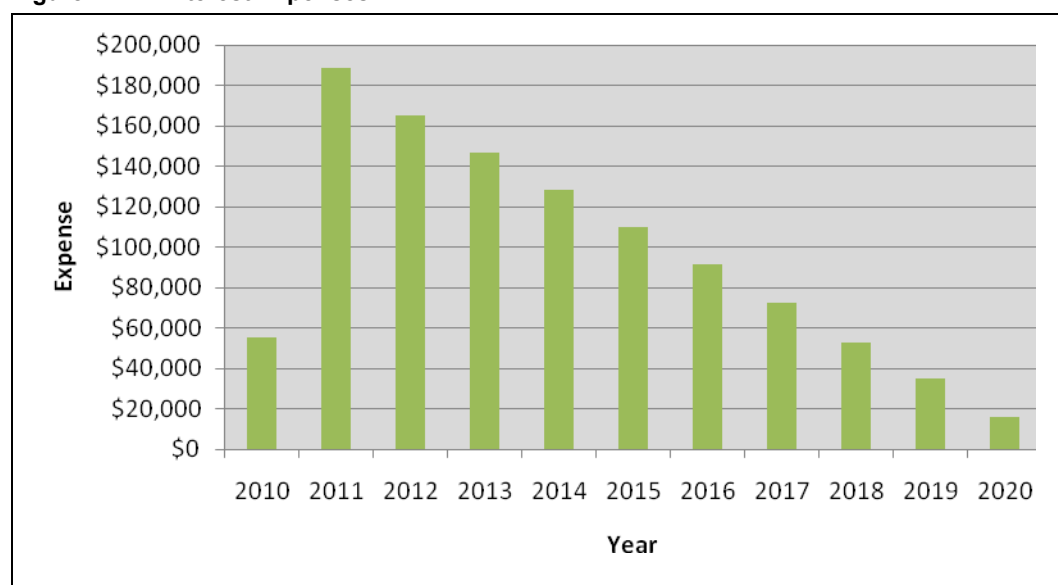
The current loans and associated details, as provided by the City are shown in Table 4-1.

Table 4-1 Current Loans

Debt # and Project	Interest Rate	Yearly Payment and Duration
2005-181 WW Separation	2.27%	\$33,140 from 2006 to 2014; \$16,571 in 2005 and 2015
2006-134 WW Works Building	4.50%	\$21,891 from 2006 to 2013
2002-157 WW Various	6.00%	\$85,228 from 2002 to 2011
2003-128 WW Various	5.50%	\$24,259 from 2003 to 2012
2007-171 WW Various	5.48%	\$43,866 from 2008 to 2017
2009-015 WW Various	4.00%	\$59,688 from 2010 to 2018; \$29,844 in 2009 and 2019
2010-146 WW Effluent Works	3.87%	\$457,014 from 2011 to 2020

The resulting interest expenses are shown in Figure 4.2. As mentioned previously, no other debts were projected for future periods. However, after the evaluation of the existing rates, which is presented in Section 7, if a need to incur debt is identified then the forecasted interest expenses will be revised.

Figure 4.2 Interest Expenses



As shown in Figure 4.2, the interest expenses are generally decreasing. Although the projection period ends in 2020, it is important to note that there are no interest expenses beyond 2020 since all the loans will be paid off by 2020.

4.4 Amortization Expenses

Amortization is a non-cash expense, which indicates the gradual wear of tangible capital assets (TCAs). The annual expense is based on the asset's historic cost, and apportioned over the useful life of the asset using a straight-line depreciation method. It is important to note that the old municipal accounting practice

was different, as it recorded expenditures on TCAs as current period expenditures, and then disappeared from subsequent financial statements.

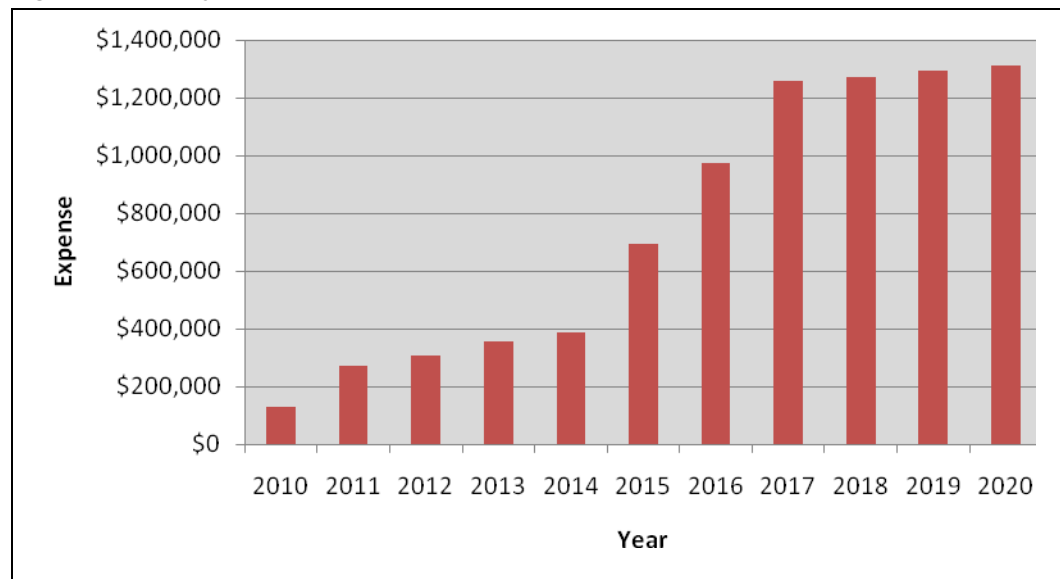
Table 4-2 lists amortization expenses for assets lumped together, as provided in the PSAB tables. The PSAB tables did provide a breakdown for some of the items in Table 4-2; however, a breakdown of the assets within those items was not available. For example, Item 4, Wastewater Treatment Plant was broken down into Plant and Building, but individual assets within those categories was not available.

Item #	Description	Expense
1	200 Gator Cam Sewer Camera	\$618
2	1996 Dodge RPC One Ton Truck	\$0
3	Sewer Rodding Machine	\$1,772
4	Wastewater Treatment Plant	\$0
5	Sanitary Sewers	\$78,540
6	Wastewater Pumping Stations	\$50,053

In addition to the amortization expenses provided in Table 4-2, annual expenses for capital expenditures (presented in Section 5) were apportioned over the useful life of the asset using a straight-line depreciation method. The historical costs were assumed as the cost of the capital expenditure, and the useful lives were assumed based on standard industry practice.

The projected amortization expenses are shown in Figure 4.3.

Figure 4.3 Projected Amortization Expenses



The increase in amortization expenses shown in Figure 4.3 is due to the capital expenditures. For example, the bulk of the WWTP secondary upgrading is scheduled for 2014, 2015, and 2016. Hence, the amortization expenses for these expenditures begin in the following years i.e. 2015, 2016, and 2017. This explains the significant increases in amortization expenses shown in Figure 4.3 for 2015, 2016, and 2017.

4.5 Total Expenses

The total expenses are the sum of the operating, amortization, and interest expenses. The projected total expenses i.e. including operating, amortization, and interest are shown in Figure 4.4.

Figure 4.4 Projected Total Expenses

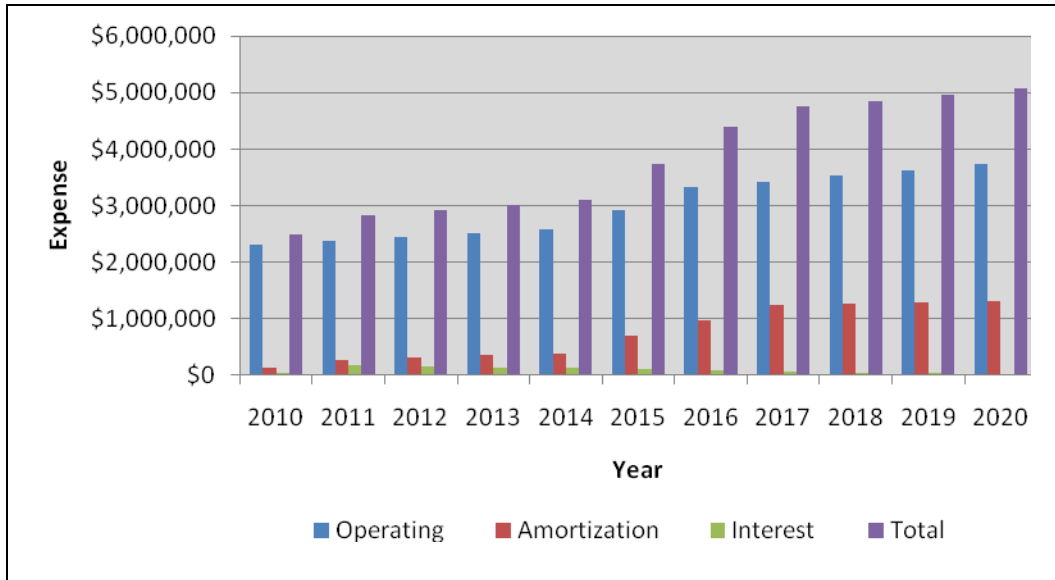


Figure 4.3 shows that the total annual expenses increase to over \$5,000,000 by 2020. This is due to the increasing operating costs due to inflation, and the generally increasing amortization expenses due to the capital expenditures.

5. Capital Expenditure

5.1 Data Sources and Assumptions

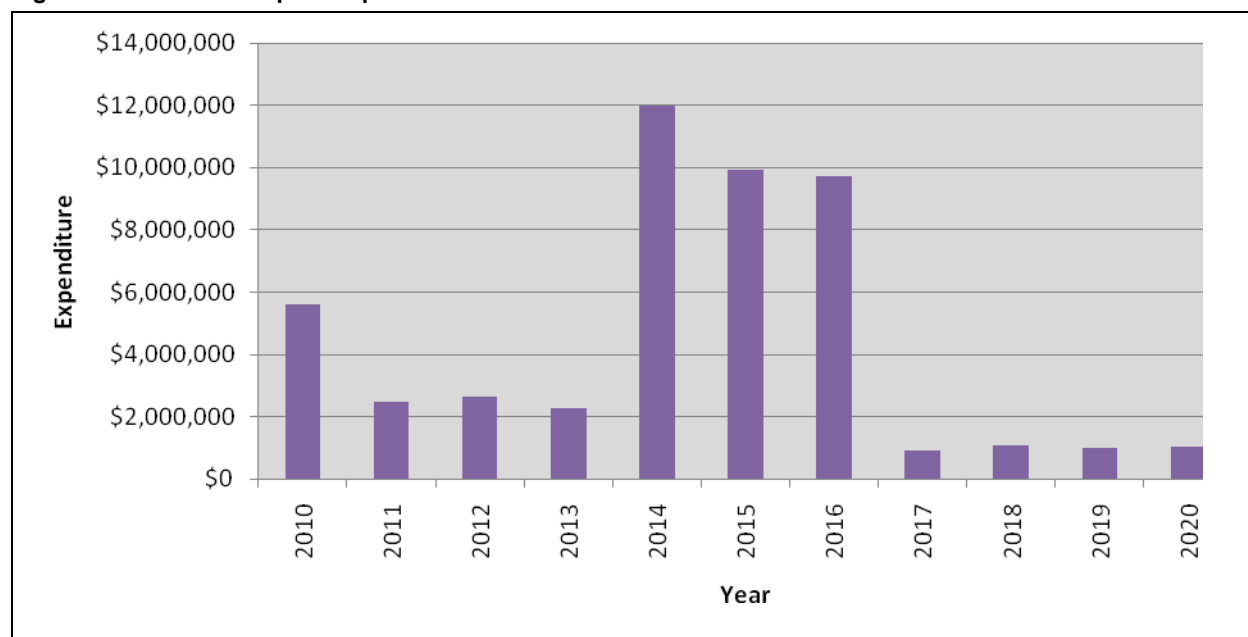
Normally the PSAB information provides a detailed list of assets with each asset's expected useful life and replacement cost. This information is then used to determine the capital expenditures based on the assets that have reached the end of their useful lives. In addition, the system's capital expenditure plan is also used as some assets require replacement before the end of the useful lives and/or new assets are scheduled to be acquired. In this case, since the information from the PSAB tables was not available for individual assets, only the City's capital expenditure plan was used. A list of all the capital expenditures, along with the capital expenditure plan provided by the city is included in Appendix B.

At the time the Financial Plan was prepared, it was assumed that there are no significant inventories of supplies and no pre-paid expenses.

5.2 Future Capital Needs

The future capital needs of the Owen Sound Wastewater System are shown in Figure 5.1.

Figure 5.1 Future Capital Expenditure



The high capital expenditures shown in 2014, 2015, and 2016 are mainly due to the wastewater treatment plant secondary upgrades. Table 5-1 provides general details on the capital expenditures shown in Figure 5.1. The estimated amounts shown in Table 5-1 are in current dollars adjusted for inflation for the proposed year. A list of all the capital expenditures is provided in Appendix B.

Table 5-1 Planned Capital Expenditure

Year	Asset	Amount
2010	WWTP Asset Replacements Sewer Replacements Collection System – Standby Emergency Generator WWTP Influent Works Upgrading Downtown Roof Water Separation	\$5,596,000

Table 5-1 Planned Capital Expenditure

Year	Asset	Amount
2011	WWTP Secondary Upgrading Class EA	
	WWTP Secondary Upgrading Construction	
2012	Sewer Replacements	\$2,478,500
	Downtown Roof Water Separation	
2013	WWTP Secondary Upgrading Construction	
	Sewer Replacements	\$2,634,000
2014	WWTP Secondary Upgrading Construction	
	Sewer Inspection	
2015	Sewer Replacements	\$2,264,680
	WWTP Secondary Upgrading Construction	
2016	Sewer Inspection	
	Sewer Replacements	\$11,987,045
2017	Sydenham Heights Trunk Servicing Extension – Phase II	
	WWTP Secondary Upgrading Construction	
2018	Sewer Inspection	
	Sewer Replacements	\$9,940,102
2019	WWTP Secondary Upgrading Construction	
	Sewer Inspection	
2020	Sewer Lining	
	Sewer Replacements	\$9,713,000
2021	WWTP Secondary Upgrading Construction	
	Sewer Lining	
2022	Sewer Replacements	\$900,675
	Sewer Lining	
2023	Sewer Replacements	\$1,069,545
	Sewer Lining	
2024	Sewer Replacements	\$976,632
	Sewer Lining	
2025	Sewer Replacements	\$1,044,456
	Sewer Lining	

It may be noted that the City's current capital plan provides capital projects for only up to year 2014. This plan was updated to include CCTV inspection of sewers for five years to collect useful information about sewers and laterals, and then commence the lining of sewers to improve the sewer conditions.

6. Revenues

6.1 Data Sources and Assumptions

Information on revenues was obtained from the City's 2010 budget, which also included actual details for the 2008-2009 period. The budget details are provided in Appendix A.

6.2 Existing Revenues

The operating revenues for 2009 and the budgeted operating revenues for 2010, as provided by the Municipality are shown in Table 6-1.

Item	Actual 2009	Budget 2010
Sewer Frontage Charge	\$996	\$1,000
Sewer Surcharge	\$3,308,957	\$3,550,076
Collection System Revenue	\$7,632	\$7,000
Gain on Disposal of Fixed Assets	\$0	\$41,965
Equipment Rental Charge	\$21,233	\$17,000
Total	\$3,338,818	\$3,617,041

The total 2010 budget shown in Table 6-1 increased by approximately 8% from the actual 2009 revenues.

6.3 Projected Revenues based on Existing Revenues

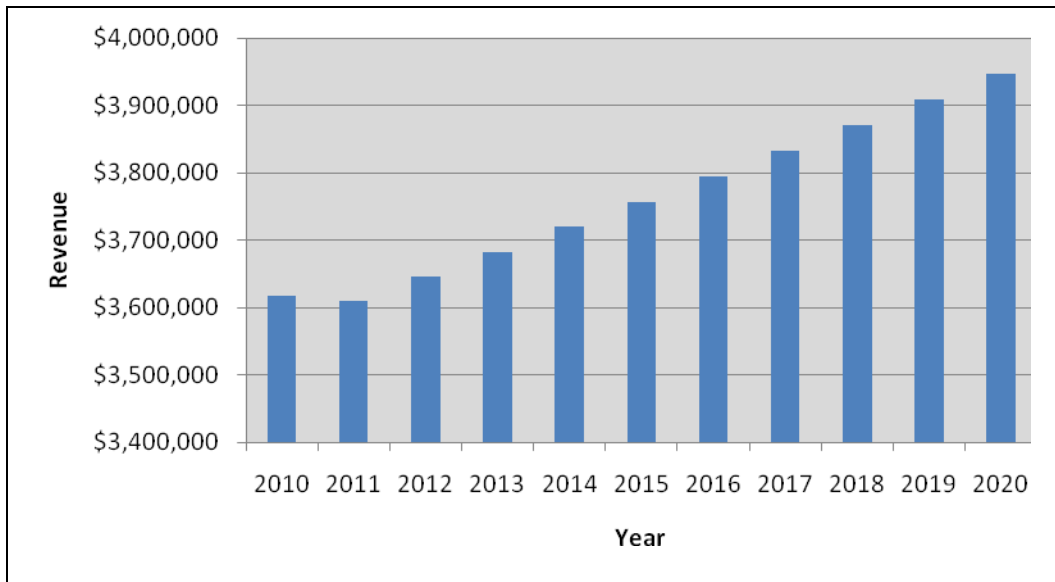
Initially, it has been assumed that there will be an increase of 1% in revenues every year for the projection horizon, to show some growth. The projected revenues based on the 1% growth will be assessed in Section 7 to determine if the percent increase in revenues need to be increased.

In order to project the revenues, the following assumptions are made in addition to the 1% increase per year:

- The Gain on Disposal of Fixed Assets does not extend beyond 2010
- As a conservative estimate, it has been assumed that there will be no increase in the revenues from Equipment Rental Charge

The projected revenues for the Owen Sound Wastewater System are shown in Figure 6.1.

Figure 6.1 Projected Revenues



The slight decrease in projected revenues from 2010 to 2011 is due to the absence of the Gain on Disposal of Fixed Assets, which was assumed to not extend beyond 2010. Thereafter the projected revenues increase by 1%, with the exception of the Equipment Rental Charges, which remains constant. As shown in Figure 6.1, the revenues are projected to increase to over \$3.9 million by 2020, as compared to the anticipated operating expenses of about \$3.7 million in 2020.

7. Evaluation of Existing Revenues

7.1 Introduction

The existing rates need to be evaluated to determine if they are sufficient to cover the operating expenses and capital expenditures. In this section, the following will be determined to evaluate whether revenues from existing rates are sufficient:

- Operating Cash Flow: This is an important identity that determines whether the revenues from the existing rates are sufficient to cover operating costs, from a cash perspective. This is explained further in Section 7.2.
- Capital Expenditure Balance: This identity determines the amount of cash available for the planned capital expenditures. This is further described in Section 7.3.
- Annual Surplus/Deficit: This identity measures whether the revenues generated were sufficient to cover the expenses incurred and in turn, whether net financial assets have been maintained or depleted. Section 7.3 provides further details on this identity.

7.2 Operating Cash Flow

The operating cash flow 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. The operating cash flow equation is as follows:

$$\text{Operating Cash Flow} = \text{Revenues} - \text{Operating expenses} - \text{Debt Service}$$

The revenues in the equation above are the projected revenues based on existing rates, as described in Section 6.4 and shown in Figure 6.1. The operating expenses are the expenses described in Section 4.2 and shown in Figure 4.1. It is important to note that the amortization expenses are not included in the equation above, since the operating cash flow offers a cash perspective and the amortization expenses are non-cash expenses.

The operating cash flow for 2010 can be calculated as follows:

$$\text{Revenues} = \$3,617,041 \text{ (also shown in Figure 6.1)}$$

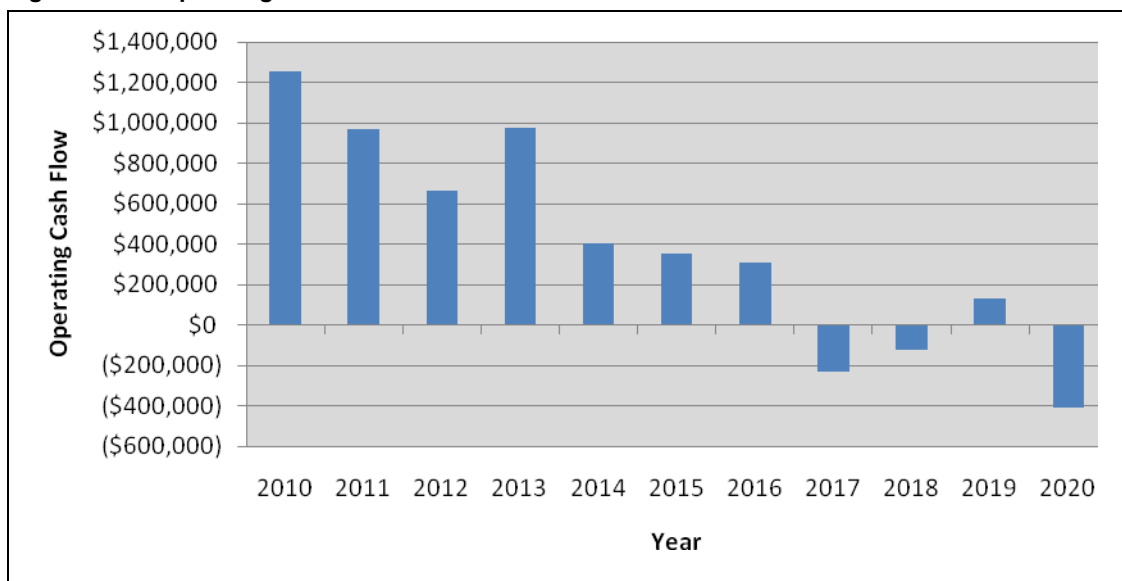
$$\text{Operating Expenses} = \$2,303,827 \text{ (also shown in Figure 4.1)}$$

$$\text{Interest Expenses} = \$55,329 \text{ (also shown in Figure 4.2)}$$

$$\text{Operating Cash Flow} = \$3,617,041 - \$2,303,827 - \$55,329 = \$1,257,885$$

The operating cash flow for the subsequent years was determined in a similar manner. The operating cash flow, based on the existing revenues, for the projection horizon is shown in Figures 7.1.

Figure 7.1 Operating Cash Flow



It can be seen from Figure 7.1 that the operating cash flow remains positive only up to 2016, but at a decreasing rate. Beginning 2017, the operating cash flow is negative, with the exception of 2019. The operating cash flow is positive in 2019, because most of the loans have been repaid and therefore the interest expenses are reduced.

7.3 Capital Expenditure Balance

Another important calculation is the amount of cash available for capital expenditures. This amount is called the cash expenditure balance. The cash expenditure balance is the sum of operating cash flow, new debt minus debt payments, and net contributions from reserve funds.

Figure 7.2 shows a comparison of the amount of cash available for capital expenditure (capital expenditure balance) and the amount of cash required for the planned capital expenditure. As mentioned previously, the amount of cash available (capital expenditure balance) is the sum of the operating cash flow, new debt (minus debt payment), and the reserve balance. The planned capital expenditure is based on the future capital needs, previously discussed in Section 5.2 and presented in Table 5-1 and Figure 5.1.

In 2010, the capital expenditure balance can be calculated as follows:

Operating Cash Flow = \$1,257,885 (also shown in Figure 7.1)

New Debt = \$3,706,821

Previous Debt Payment = (\$212,743)

Reserve Fund Balance = \$2,207,573

Capital Expenditure Balance = \$1,257,885 + \$3,706,821 + (\$212,743) + \$2,207,573 = \$6,959,536

The capital expenditure balance for the subsequent years was determined in a similar manner.

The planned capital expenditure for 2010 is \$5,596,000 (provided in Appendix B).

Figure 7.2 Capital Expenditure

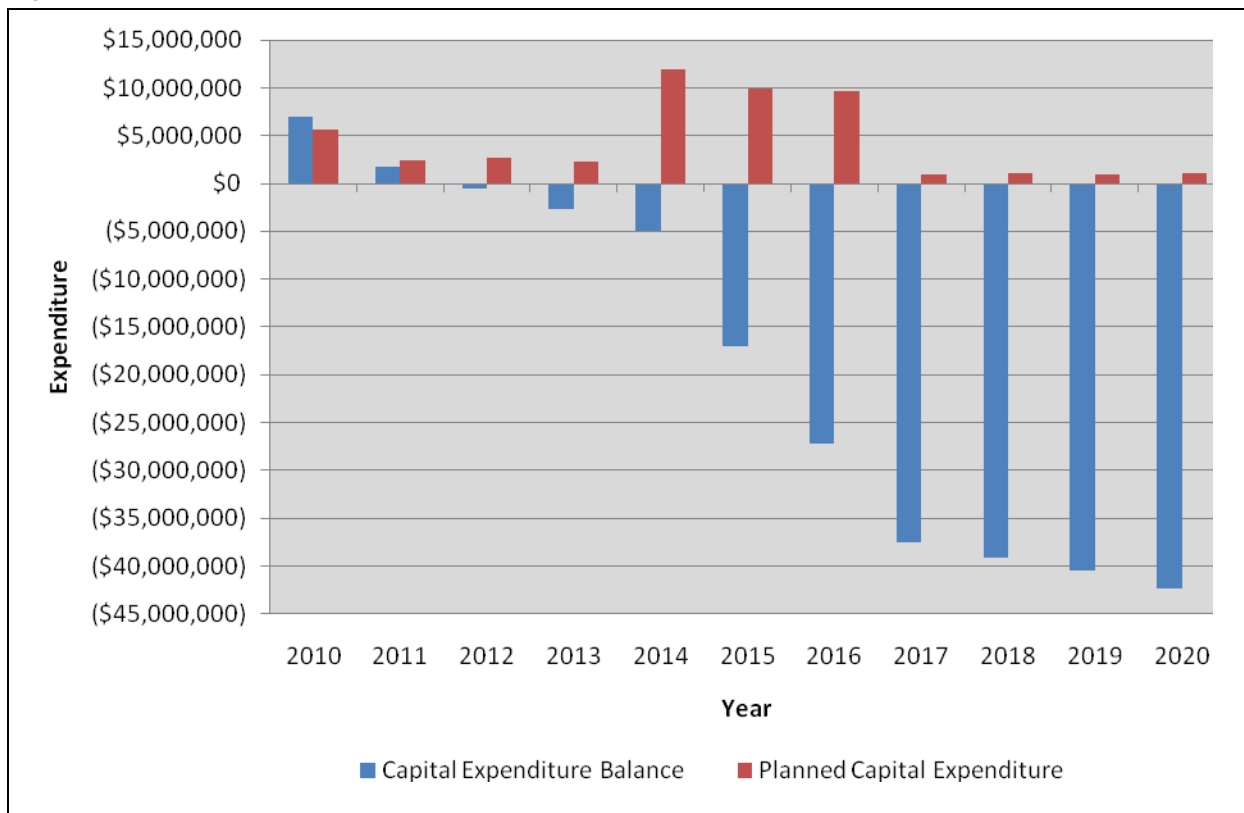


Figure 7.2 shows that Owen Sound will not have sufficient cash available for the planned capital expenditures beginning 2011. Also, the reserve funds will have been depleted by then.

7.4 Annual Surplus/Deficit

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. An annual surplus is required to ensure that there is sufficient funding available for costs such as tangible capital asset acquisitions, reserve funds, and debt principal payments.

The annual surplus is equal to the revenues minus total expenses. It is important to note that the annual surplus is different from the operating cash flow, which did not take into account the amortization expenses. The annual surplus takes into account total expenses, which include amortization expenses. The annual surplus for 2010 is calculated as follows:

Revenues = \$3,617,041 (also shown in Figure 6.1)

Total Expenses = \$2,489,522 (also shown in Figure 4.4)

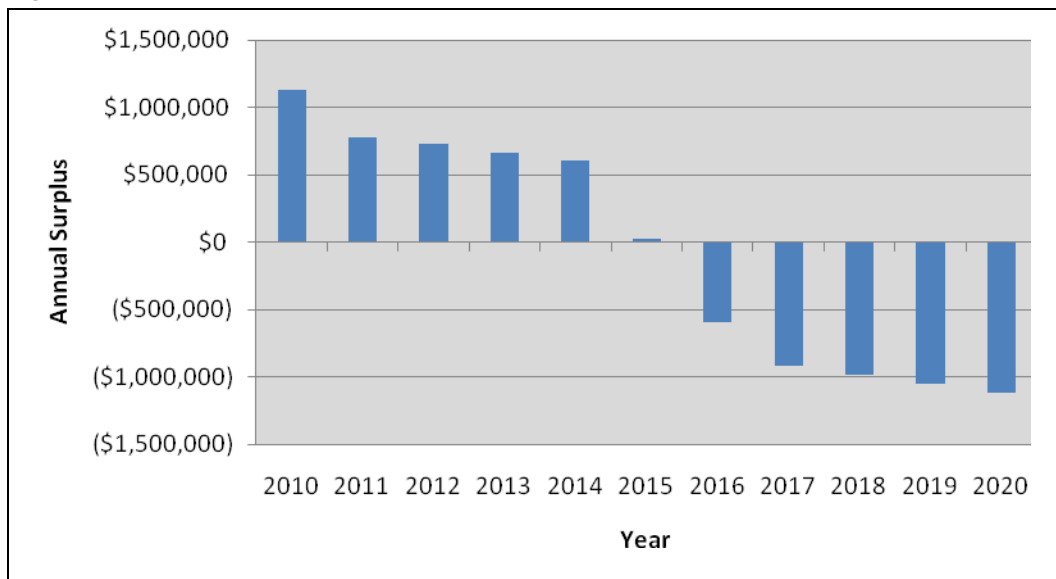
Annual Surplus = \$3,617,041 - \$2,489,522 = \$1,127,519

The annual surplus/deficit for subsequent years was determined in a similar manner.

Because the annual surplus takes into account the amortization expenses, it is much lower than the operating cash flow. For example, the 2010 annual surplus of \$1,127,519 is lower than the operating cash flow of \$1,257,885, from Section 7.2.

Figure 7.3 shows the annual surplus/deficit for the projection horizon.

Figure 7.3 Annual Surplus/Deficit



It can be seen from Figure 7.3 that there is an annual deficit beginning 2016. For comparison, the operating cash flow in 2016 from Figure 7.1 is positive. This is because the annual surplus/deficit takes into account the amortization expenses, and the operating cash flow does not.

7.5 Discussion

The information presented in Section 7 highlights the following:

- Operating Cash Flow: As observed in Figure 7.1, the operating cash flow is positive only up to 2016, after which it is negative for the remainder of the projection horizon (with the exception of 2019).
- Capital Expenditure Balance: In spite of using the reserve funds, there is insufficient cash available for the planned capital expenditures beginning 2011. This is shown in Figure 7.2.
- Annual Surplus/Deficit: The revenues do not fully cover operating expenses plus amortization, and are thus below acceptable levels. An annual deficit is anticipated beginning 2016.

Therefore, it is necessary to increase the revenues to provide sufficient cash for planned capital expenditure and cover total expenses. Furthermore, it is desirable to generate sufficient revenues to not only have a positive operating cash flow, but also one that is consistent and is not at a decreasing rate.

8. New Revenues

8.1 Introduction

As discussed in Section 7.5, additional revenues are necessary to provide sufficient cash for planned capital expenditure and cover total expenses. In consultation with the City, the following increases in revenues and loans were considered:

- An increase of 11% in revenues from 2011 to 2015
- An increase of 6% in revenues from 2016 to 2020
- A loan in the amount of \$2,500,000 in 2011, 2012, and 2013 at an assumed interest rate of 4% to be repaid in 10 years
- A loan in the amount of \$10,500,000 in 2014, 2015, and 2016 at an assumed interest rate of 4% to be repaid in 20 years

The following sections will show the sufficiency of the new revenues together with the additional loans for the following identities:

- Operating Cash Flow
- Capital Expenditure Balance
- Annual Surplus/Deficit

8.2 Operating Cash Flow

The operating cash flow resulting from the increases in revenues and loans described in Section 8.1 is shown in Figure 8.1.

For example, the operating cash flow for 2011 can be calculated as follows:

Revenues = \$3,966,464 (11% increase in revenues from 2010)

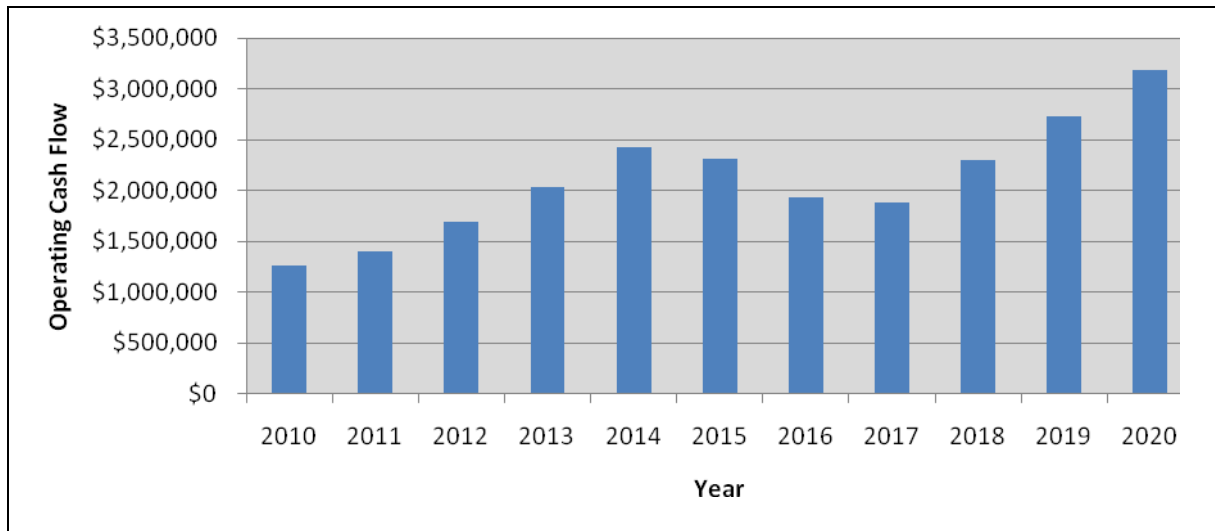
Operating Expenses = \$2,372,942 (also shown in Figure 4.1)

Interest Expenses = \$188,435 (also shown in Figure 4.2)

Operating Cash Flow = \$3,966,464 - \$2,372,942 - 188,435 = \$1,405,087

The operating cash flow for subsequent years was determined in a similar manner. The operating cash flow, based on the new revenues, for the projection horizon is shown in Figures 8.1.

Figure 8.1 Operating Cash Flow



It can be seen from Figure 8.1 that the operating cash flow resulting from the increase in revenues is positive throughout the projection horizon and does not have the overall decreasing trend that was previously observed. The operating cash flow decreases in 2015/2016/2017 due to the large interest payments for all the loans.

8.3 Capital Expenditure Balance

As explained in Section 7.3, the capital expenditure balance is the amount of cash available for capital expenditures. It is calculated as the sum of operating cash flow, new debt, and net contributions from reserve funds. The capital expenditure balance sample calculation for 2011 is shown below.

Operating Cash Flow = \$1,405,087 (also shown in Figure 7.1)

New Debt = \$2,500,000

Previous Debt Payment = (\$536,651)

Reserve Fund Balance = \$1,363,536

Capital Expenditure Balance = \$1,405,087 + \$2,500,000 + (\$536,651) + \$1,363,536 = \$4,731,973

The planned capital expenditure is \$2,478,500 (provided in Appendix B).

The capital expenditure balance for subsequent years was determined in a similar manner. A comparison of the capital expenditure balances based on the existing and new revenues is provided in Figure 8.2.

Figure 8.2 Capital Expenditure Balance

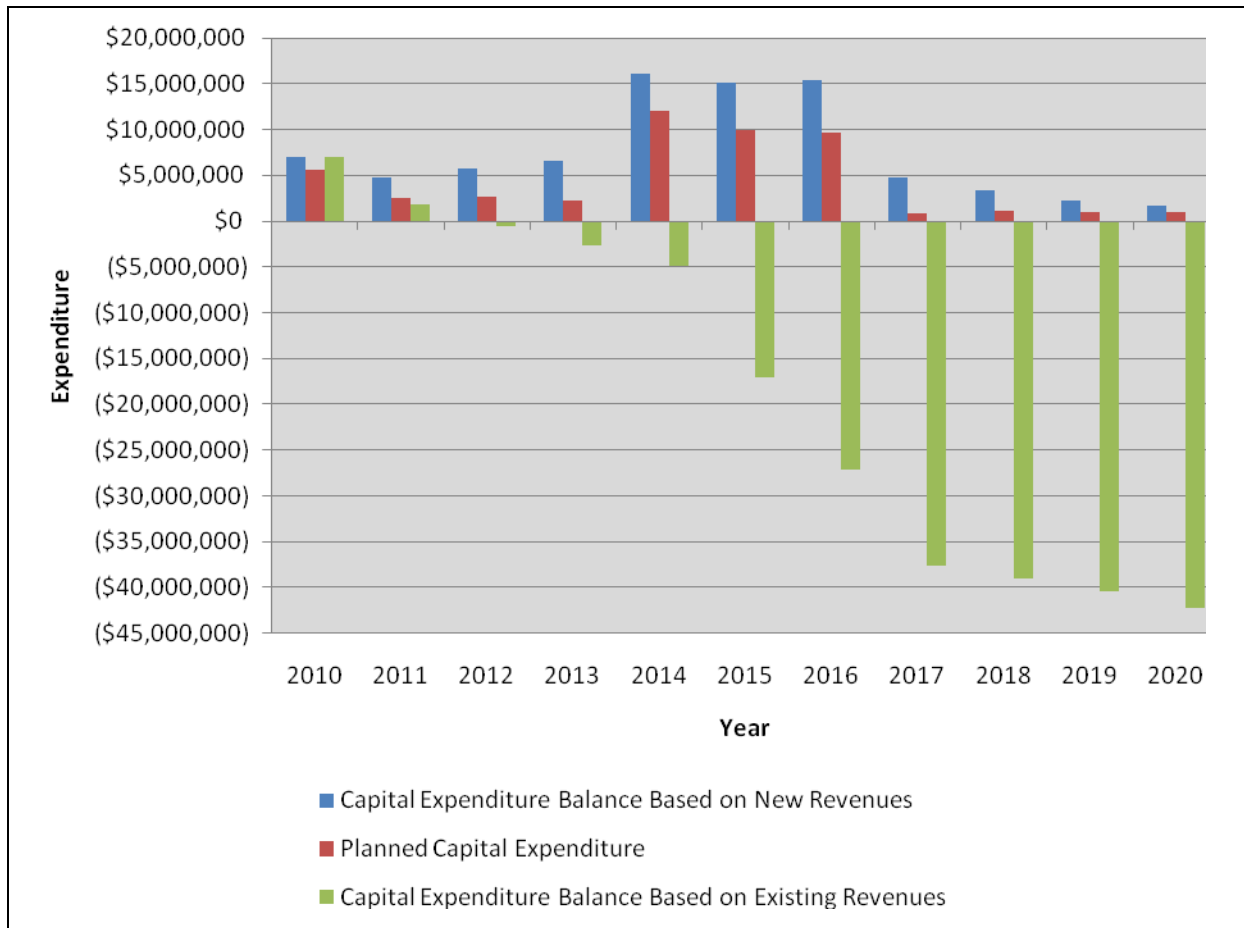


Figure 8.2 shows that with the new revenues, Owen Sound will have sufficient cash available for the planned capital expenditure, a positive reserve balance every year. Furthermore, the new revenues will increase the reserve fund balance at the end of 2020 to \$649,269.

8.4 Annual Surplus

The annual surplus/deficit resulting from the new revenues is shown in Figure 8.3, along with the annual surplus/deficit based on existing revenues, for the purposes of comparison. The annual surplus/deficit sample calculation for 2011 is shown below.

Revenues = \$3,617,041 (also shown in Figure 6.1)

Total Expenses = \$2,833,720 (also shown in Figure 4.4)

Annual Surplus = \$3,617,041 - \$2,833,720 = \$1,132,744

Figure 8.3 Annual Surplus/Deficit

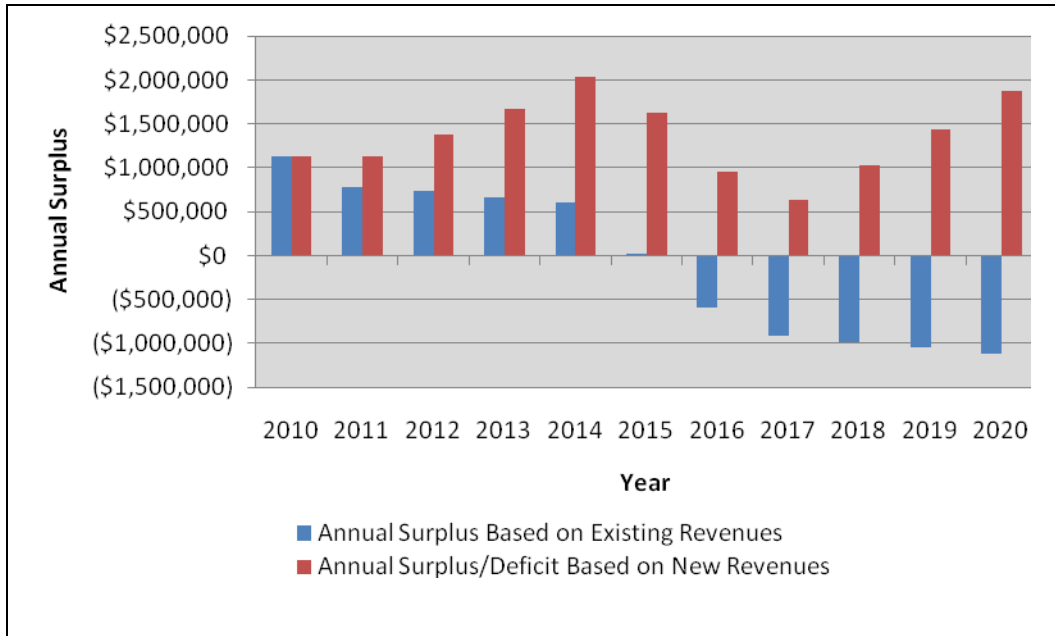


Figure 8.3 shows that the deficit beginning 2016 due to the existing revenues is now a surplus as a result of the new revenues.

9. Financial Plan

9.1 Introduction

The Financial Plan, as required by Regulation, consists of the following statements:

- Statement of Operations
- Statement of Cash Flow
- Statement of Financial Position

These statements are based on the new revenues described in Section 8. It considers the following:

- An increase of 11% in revenues from 2011 to 2015
- An increase of 6% in revenues from 2016 to 2020
- A loan in the amount of \$2,500,000 in 2011, 2012, and 2013 at an assumed interest rate of 4% to be repaid in 10 years
- A loan in the amount of \$10,500,000 in 2014, 2015, and 2016 at an assumed interest rate of 4% to be repaid in 20 years

The following subsections present the statements mentioned above.

9.2 Statement of Operations

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. Annual surplus is required to ensure funding is available to non-expense costs such as tangible capital asset acquisitions, reserve fund transfers, and debt principal payments.

The Statement of Operations for the 10-year projection horizon i.e. up to 2020 is provided in Table 9-1.

Table 9-1 Statement of Operations

Line	Item	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1	Revenue	\$3,617,041	\$3,966,464	\$4,400,905	\$4,883,135	\$5,418,410	\$6,012,565	\$6,372,299	\$6,753,617	\$7,157,814	\$7,586,263	\$8,040,418
2	Expenses											
a	Operating	\$2,303,827	\$2,372,942	\$2,444,130	\$2,517,454	\$2,592,978	\$2,928,105	\$3,321,598	\$3,421,246	\$3,523,883	\$3,629,600	\$3,738,488
b	Amortization	\$130,365	\$272,343	\$308,440	\$355,846	\$388,163	\$692,693	\$973,642	\$1,256,315	\$1,273,396	\$1,292,564	\$1,310,919
c	Interest	\$55,329	\$188,435	\$265,415	\$336,472	\$398,084	\$769,942	\$1,120,288	\$1,449,426	\$1,336,826	\$1,225,803	\$1,113,716
d	Total Expenses	\$2,489,522	\$2,833,720	\$3,017,985	\$3,209,773	\$3,379,225	\$4,390,740	\$5,415,528	\$6,126,987	\$6,134,105	\$6,147,967	\$6,163,123
3	Annual surplus (deficit)	\$1,127,519	\$1,132,744	\$1,382,920	\$1,673,362	\$2,039,185	\$1,621,825	\$956,771	\$626,630	\$1,023,709	\$1,438,296	\$1,877,296
4	Accumulated surplus, beginning of period	\$7,205,050	\$8,332,569	\$9,465,313	\$10,848,233	\$12,521,596	\$14,560,781	\$16,182,606	\$17,139,377	\$17,766,007	\$18,789,716	\$20,228,012
5	Accumulated surplus, end of period	\$8,332,569	\$9,465,313	\$10,848,233	\$12,521,596	\$14,560,781	\$16,182,606	\$17,139,377	\$17,766,007	\$18,789,716	\$20,228,012	\$22,105,308

Line 1: Revenues.

Line 2: Includes a) operating, b) amortization, and c) interest expenses; the sum of which is shown on Line 2d.

Line 3: Annual Surplus (Deficit) = Revenues (Line 1) – Total Expenses (Line 2d)

Line 4: Accumulated surplus, beginning of period = Accumulated surplus, end of the previous period; For the first year i.e. 2010 it was calculated as the sum of the 2009 Fixed Assets (\$4,997,477) and the 2009 Reserve Balance (\$2,207,573)

Line 5: Accumulated surplus, end of period = Accumulated surplus, beginning of period (Line 4) + Annual Surplus/Deficit (Line 3)

Line 3 in Table 9-1 shows that there is an annual surplus for the entire projection horizon. The accumulated surplus at the end of the 2015 period is \$16,182,606; it increases to about \$20,228,012 at the end of the projection horizon i.e. 2020.

9.3 Statement of Cash Flow

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.

The Statement of Cash Flow for the 10-year projection horizon i.e. up to 2020 is provided in Table 9-2.

Table 9-2 Statement of Cash Flow

Line	Item	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Operating Transactions												
<i>Cash received from:</i>												
1	Revenues	\$3,617,041	\$3,966,464	\$4,400,905	\$4,883,135	\$5,418,410	\$6,012,565	\$6,372,299	\$6,753,617	\$7,157,814	\$7,586,263	\$8,040,418
<i>Cash paid for:</i>												
2	Operating Costs	(\$2,303,827)	(\$2,372,942)	(\$2,444,130)	(\$2,517,454)	(\$2,592,978)	(\$2,928,105)	(\$3,321,598)	(\$3,421,246)	(\$3,523,883)	(\$3,629,600)	(\$3,738,488)
3	Finance Charges	(\$55,329)	(\$188,435)	(\$265,415)	(\$336,472)	(\$398,084)	(\$769,942)	(\$1,120,288)	(\$1,449,426)	(\$1,336,826)	(\$1,225,803)	(\$1,113,716)
4	Total Costs	(\$2,359,157)	(\$2,561,377)	(\$2,709,546)	(\$2,853,926)	(\$2,991,062)	(\$3,698,047)	(\$4,441,886)	(\$4,870,671)	(\$4,860,709)	(\$4,855,403)	(\$4,852,204)
<i>Cash provided from:</i>												
5	Operating Transactions	\$1,257,885	\$1,405,087	\$1,691,360	\$2,029,209	\$2,427,348	\$2,314,518	\$1,930,413	\$1,882,945	\$2,297,105	\$2,730,860	\$3,188,215
Capital Transactions												
6	Acquisition of tangible capital assets	(\$5,596,000)	(\$2,478,500)	(\$2,634,000)	(\$2,264,680)	(\$11,987,045)	(\$9,940,102)	(\$9,713,000)	(\$900,675)	(\$1,069,545)	(\$976,632)	(\$1,044,456)
7	Cash applied to capital transactions	(\$5,596,000)	(\$2,478,500)	(\$2,634,000)	(\$2,264,680)	(\$11,987,045)	(\$9,940,102)	(\$9,713,000)	(\$900,675)	(\$1,069,545)	(\$976,632)	(\$1,044,456)
Finance Transactions												
8	Proceeds from debt issues	\$3,706,821	\$2,500,000	\$2,500,000	\$2,500,000	\$10,500,000	\$10,500,000	\$10,500,000	\$0	\$0	\$0	\$0
9	Debt repayment	(\$212,743)	(\$536,651)	(\$724,443)	(\$969,127)	(\$1,215,624)	(\$1,742,197)	(\$2,269,280)	(\$2,813,142)	(\$2,788,876)	(\$2,777,055)	(\$2,766,298)
10	Cash applied to financing transactions	\$3,494,079	\$1,963,349	\$1,775,557	\$1,530,873	\$9,284,376	\$8,757,803	\$8,230,720	(\$2,813,142)	(\$2,788,876)	(\$2,777,055)	(\$2,766,298)
11	Increase/ (decrease) in cash and cash equivalents	(\$844,037)	\$889,936	\$832,917	\$1,295,402	(\$275,321)	\$1,132,220	\$448,133	(\$1,830,872)	(\$1,561,316)	(\$1,022,826)	(\$622,539)
12	Cash and cash equivalents, beginning of period	\$2,207,573	\$1,363,536	\$2,253,473	\$3,086,390	\$4,381,791	\$4,106,470	\$5,238,690	\$5,686,823	\$3,855,951	\$2,294,634	\$1,271,808
13	Cash and cash equivalents, end of period	\$1,363,536	\$2,253,473	\$3,086,390	\$4,381,791	\$4,106,470	\$5,238,690	\$5,686,823	\$3,855,951	\$2,294,634	\$1,271,808	\$649,269
14	Cash as percentage of net fixed assets	13.0%	17.8%	20.6%	25.9%	14.4%	13.9%	12.2%	8.4%	5.0%	2.8%	1.4%

Line 1: Revenues increased at a rate of 11% per year from 2011 to 2015 and 6% from 2015 to 2020

Line 2: Operating expenses increase at a rate of 3% per year

Line 3: Interest Expenses on Loans

Line 4: Total costs = Line 2 + Line 3

Line 5: Operating transactions is the operating cash flow i.e. Line 1 + Line 4

Line 6: The value of the assets acquired

Line 7: Cash used for the capital expenditure

Line 8: There are no debts

Line 9: Debt repayments

Line 10: Cash applied to financing transactions = Line 8 + Line 9

Line 11: Increase (decrease) in cash = Line 5 + Line 7 + Line 10

Line 12: Cash beginning of period is the reserve fund balance

Line 13: Cash end of period = Line 11 + Line 12

Line 14: Cash as % net fixed assets = Line 13 / fixed assets for that year

Line 13 in Table 9-2 shows that there is a reserve fund balance of \$5,238,690 at the end of 2015. This value decreases to about \$649,269 at the end of the projection horizon i.e. 2020, and is 1% of net fixed assets.

9.4 Statement of Financial Position

The Statement of Financial Position provides information that describes the assets, liabilities, net financial assets, and tangible capital assets of the Municipality's water system.

The Statement of Financial Position for the 10-year projection horizon is provided in Table 9-3.

Table 9-3 Statement of Financial Position

Line	Item	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<i>Financial Assets</i>												
1	Cash	\$1,363,536	\$2,253,473	\$3,086,390	\$4,381,791	\$4,106,470	\$5,238,690	\$5,686,823	\$3,855,951	\$2,294,634	\$1,271,808	\$649,269
<i>Liabilities</i>												
2	Debt	\$4,738,114	\$6,701,463	\$8,477,020	\$10,007,893	\$19,292,269	\$28,050,072	\$36,280,792	\$33,467,650	\$30,678,774	\$27,901,719	\$25,135,421
3	Net Financial Assets (Debt)	(\$3,374,577)	(\$4,447,990)	(\$5,390,630)	(\$5,626,102)	(\$15,185,799)	(\$22,811,383)	(\$30,593,969)	(\$29,611,699)	(\$28,384,140)	(\$26,629,911)	(\$24,486,152)
<i>Non-Financial Assets</i>												
4	Tangible Capital Assets	\$10,463,112	\$12,669,269	\$14,994,829	\$16,903,662	\$28,502,545	\$37,749,954	\$46,489,312	\$46,133,671	\$45,929,821	\$45,613,888	\$45,347,425

Line 1: Cash is the reserve fund balance at the end of the year, similar to Line 13 of the Statement of Cash Flow

Line 2: The remaining debt is the total loan minus any loan repayments

Line 3: Net financial assets (debt) = Line 1 - Line 2

Line 4: Tangible capital assets are non-financial assets calculated as follows: Previous period fixed assets – amortization costs + acquisition of assets. For example for 2010: Tangible capital assets = 2009 fixed assets (minus amortization expenses) (\$4,997,477) – 2010 amortization costs (\$130,365) + acquisition of assets (\$5,596,000) = \$10,463,112.

The net financial assets (debt) as indicated on Line 3 show that there is an increasing net debt. The net debt remains throughout the projection horizon, but at a decreasing rate. This means that the system will have the resources in the near future (when there is no net debt) to finance future operations, but not within the projection horizon.

10. Conclusions

The main conclusions of this report are as follows:

1) Evaluation of the Existing Revenues (1% Increase)

- i. The revenues are sufficient for meeting operating expenses only up to 2016.
- ii. In spite of using the reserve funds, there is insufficient cash available for the planned capital expenditures beginning 2011.
- iii. The revenues do not fully cover operating expenses plus amortization, and are thus below acceptable levels. An annual deficit is anticipated beginning 2016.
- iv. Therefore, it is necessary to increase the revenues to provide sufficient cash for planned capital expenditure and cover total expenses. Furthermore, it is desirable to generate sufficient revenues to not only have a positive operating cash flow, but also one that is consistent and not at a decreasing rate.

2) Actions associated with the New Revenues

- i. An increase of 11% in revenues from 2011 to 2015
- ii. An increase of 6% in revenues from 2016 to 2020
- iii. A loan in the amount of \$2,500,000 in 2011, 2012, and 2013 at an assumed interest rate of 4% to be repaid in 10 years
- iv. A loan in the amount of \$10,500,000 in 2014, 2015, and 2016 at an assumed interest rate of 4% to be repaid in 20 years

3) New Rate Structure

- i. The revenues are sufficient for meeting operating expenses throughout the projection horizon.
- ii. Together with the use of the reserve funds, there is sufficient cash available for the planned capital expenditures..
- iii. There is an annual surplus throughout the projection horizon.

4) Statement of Operations

- i. There is an annual surplus throughout the projection horizon.
- ii. The accumulated surplus (includes fixed asset cost) at the end of the 2015 period is \$16,182,606; it increases to about \$20,228,012 at the end of the projection horizon i.e. 2020.

5) Statement of Cash Flow

- i. There is a positive reserve fund balance throughout the projection horizon.
- ii. The reserve fund balance at the end of 2020 is \$649,269.

6) Statement of Financial Position

- i. The net financial assets value is negative throughout the projection horizon, but the debt appears to be decreasing.

11. Council Resolution

A council resolution, dated March 14th 2011, was passed as a result of the council meeting held on March 7th 2011. The Council Resolution is provided in Appendix C.

12. Next Steps

The following next steps are recommended:

1. Notice of the availability of the Financial Plan 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 wastewater system
3. The Financial Plan be made available on the City of Owen Sound's website without charge
4. The Financial Plan be updated and approved every five years

Appendix A

Expenses, Revenues, and Budget Details

Amortization Expenses

Item No.	Asset Name	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1	200 Gator Cam Sewer Camera	\$618	\$0	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700
2	1996 Dodge RPC One Ton Truck	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Sewer Rodding Machine	\$1,772	\$1,772	\$1,772	\$1,772	\$1,772	\$1,772	\$1,772	\$0	\$0	\$0	\$0	\$0
4	Wastewater Treatment Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Sanitary Sewers	\$78,540	\$78,540	\$78,540	\$78,540	\$78,540	\$78,540	\$78,540	\$78,540	\$78,540	\$78,540	\$78,540	\$78,540
6	Wastewater Pumping Stations	\$50,053	\$50,053	\$50,053	\$50,053	\$50,053	\$50,053	\$50,053	\$50,053	\$50,053	\$50,053	\$50,053	\$50,053
WW Coll.	Collection System Sewer Replacement	\$0	\$0	\$2,222	\$4,444	\$6,667	\$8,889	\$11,111	\$11,110	\$11,110	\$11,110	\$11,110	\$11,110
WW Coll.	Pump Station Annual Cap. Maint.	\$0	\$0	\$800	\$1,600	\$2,400	\$3,200	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
WW Coll.	Standby Emergency Generator	\$0	\$0	\$1,167	\$1,167	\$1,167	\$1,167	\$1,167	\$1,167	\$1,167	\$1,167	\$1,167	\$1,167
WWTP	Annual Cap. Maint.	\$0	\$0	\$2,500	\$5,000	\$7,500	\$10,000	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500
WWTP	Clarifier #4 Chain/Flytt Replacement	\$0	\$0	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
WWTP	Clarifier #4 Chain Cross Collector Gear Box	\$0	\$0	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250
WWTP	Clarifier #1 Chain/Flytt Replacement	\$0	\$0	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250
WWTP	Infrared Camera for Hot Spot Identification	\$0	\$0	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
WWTP	Old Switch for Gas Compressor	\$0	\$0	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400	\$400
WWTP	Utility Tractor	\$0	\$0	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250
WWTP	Second Sludge Pump and Motor	\$0	\$0	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350	\$350
A1	10 St E & 9th Ave E Intersection	\$0	\$0	\$0	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167
B1	9th Street - 2nd Ave E to 2nd Ave W	\$0	\$0	\$2,361	\$2,361	\$2,361	\$2,361	\$2,361	\$2,361	\$2,361	\$2,361	\$2,361	\$2,361
B2	4th Avenue East - 6th Street to 7th Street East	\$0	\$0	\$0	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250	\$2,250
B3	3rd Ave E/Grey Rd 15 - 18th Street to 28th Street East	\$0	\$0	\$139	\$5,694	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750	\$13,750
B4	4th Avenue West - Moore's Hill to 7th Street West	\$0	\$0	\$0	\$2,889	\$5,778	\$5,778	\$5,778	\$5,778	\$5,778	\$5,778	\$5,778	\$5,778
B5	12th Street West - 4th Avenue to 6th Avenue West	\$0	\$0	\$0	\$0	\$0	\$3,139	\$3,139	\$3,139	\$3,139	\$3,139	\$3,139	\$3,139
B6	2nd Avenue East - 11th Street to 18th Street East	\$0	\$0	\$0	\$0	\$0	\$8,611	\$17,222	\$17,222	\$17,222	\$17,222	\$17,222	\$17,222
B7	3rd Avenue "A" West & 22nd Street West	\$0	\$0	\$0	\$0	\$0	\$0	\$778	\$778	\$778	\$778	\$778	\$778
B8	12th Street East - 3rd Avenue East to 4th Avenue East	\$0	\$0	\$0	\$0	\$0	\$0	\$1,389	\$1,389	\$1,389	\$1,389	\$1,389	\$1,389
B9	8th Street East - 5th Avenue East to 7th Avenue East	\$0	\$0	\$0	\$0	\$0	\$0	\$4,139	\$4,139	\$4,139	\$4,139	\$4,139	\$4,139
C1	3rd Avenue West - (9th St W to 10th St W) & (11th St W to 12th St W)	\$0	\$0	\$0	\$0	\$0	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500
C2	Queen's Park - 1st Avenue West Upgrading	\$0	\$0	\$0	\$0	\$0	\$0	\$1,694	\$1,694	\$1,694	\$1,694	\$1,694	\$1,694
C4	16th Street East - 12th Avenue East to 16th Avenue East	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$722	\$722	\$722	\$722	\$722
C5	27th Street West - 4th Avenue West to 8th Avenue West	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$583	\$583	\$583	\$583
C7	14th Street West - Alpha Street to 6th Avenue West	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,167	\$1,167	\$1,167
C8	Alpha Street - 9th Avenue West to 6th Avenue West	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,778	\$2,778
C9	16th Street West - 4th Avenue to 8th Avenue West	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,472
C10	4th Avenue West (southend block) & 1st Street SW (1 block)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D4	16th Avenue East (14th St to 16th St E - Lower Sanitary Sewer)	\$0	\$0	\$0	\$833	\$833	\$833	\$833	\$833	\$833	\$833	\$833	\$833
D5	9th Avenue East - 21st St to 23rd St East (for Adasha Place Sub.)	\$0	\$0	\$0	\$0	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
D6	16th Avenue East (17th St E to 20th St E)	\$0	\$0	\$0	\$0	\$0	\$444	\$444	\$444	\$444	\$444	\$444	\$444
D9	Sydenham Heights Trunk Servicing Extension - Phase II	\$0	\$0	\$0	\$0	\$0	\$0	\$10,417	\$10,417	\$10,417	\$10,417	\$10,417	\$10,417
E1	9th Street Bridge	\$0	\$0	\$889	\$889	\$889	\$889	\$889	\$889	\$889	\$889	\$889	\$889
F1	WWTP Influent Works Upgrading - Completion	\$0	\$0	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000	\$112,000
F2	Downtown Roof Water Separation - Grant Programme	\$0	\$0	\$5,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000
F6	WWTP Secondary Upgrading - Construction	\$0	\$0	\$8,700	\$17,580	\$46,020	\$57,120	\$329,100	\$596,100	\$862,740	\$862,740	\$862,740	\$862,740
	Sewer Lining	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$30,450	\$46,364	\$62,754	\$79,637
	TOTAL	\$130,983	\$130,365	\$272,343	\$308,440	\$355,846	\$388,163	\$692,693	\$973,642	\$1,256,315	\$1,273,396	\$1,292,564	\$1,310,919

Owen Sound Wastewater System Financial Plan

Operating Expenses

Item No.	Description 1	Description 2	2008	2009	2010
1	Sewer Surcharge Rebate	PWNT Waste Water General	\$254	\$47,973	\$10,000
2	Wages - Full Time	PWNT Waste Water General	\$0	\$22,723	\$21,804
3	Payroll Benefit Overhead	PWNT Waste Water General	\$0	\$1,569	\$5,015
4	Materials and Supplies	PWNT Waste Water General	\$219	\$150	\$100
5	Non-Capital Equipment	PWNT Waste Water General	\$147	\$384	\$400
6	Insurance	PWNT Waste Water General	\$98,341	\$68,408	\$72,000
7	Insurance - Deductable	PWNT Waste Water General	\$5,105	\$3,027	\$5,000
8	Waste Transfer Tipping Fees	PWNT Waste Water General	\$0	\$3,204	\$3,500
9	Legal Fees	PWNT Waste Water General	\$35	\$5,000	\$3,000
10	Audit Fees	PWNT Waste Water General	\$0	\$7,500	\$10,000
11	Consultant Fees	PWNT Waste Water General	\$7,125	\$17,098	\$25,000
12	Service Agreements	PWNT Waste Water General	\$2,341	\$4,900	\$6,166
13	Emp Earnings Reallocation	PWNT Waste Water General	\$518,986	\$669,458	\$601,748
14	Sewage Maintenance Exp	PWNT Waste Water General	\$0	\$19	\$0
15	Wrks Direct Labour Charge	Collection System	\$115,960	\$118,205	\$119,242
16	Water Direct Labour	Collection System	\$516	\$621	\$160
17	Stand By	Collection System	\$0	\$9,669	\$9,000
18	Payroll Downtime Burden	Collection System	\$44,135	\$43,933	\$31,253
19	Payroll Benefit Overhead	Collection System	\$26,736	\$35,098	\$27,426
20	Clothing & C. Allowance	Collection System	\$761	\$594	\$1,000
21	Professional Development	Collection System	\$0	\$0	\$2,000
22	Memberships	Collection System	\$495	\$0	\$150
23	Materials and Supplies	Collection System	\$40,244	\$29,205	\$35,000
24	Telephones & Line Leases	Collection System	\$4,659	\$5,348	\$5,000
25	Repairs	Collection System	\$0	\$5,200	\$0
26	Light & Power	Collection System	\$5,639	\$4,774	\$5,000
27	Other Professional Fees	Collection System	\$0	\$0	\$1,000
28	Contractors Payments	Collection System	\$25,617	\$16,108	\$20,000
29	Equipment Rental Charge	Collection System	\$91,603	\$79,474	\$80,000
30	Equipment Lease Rental	Collection System	\$1,611	\$2,476	\$2,000
31	Wrks Direct Labour Charge	Sewage Plant	\$0	\$413	\$0
32	Payroll Downtime Burden	Sewage Plant	\$0	\$92	\$0
33	Payroll Benefit Overhead	Sewage Plant	\$0	\$87	\$0
34	Collection Costs	Sewage Plant	\$0	\$907	\$0
35	Light & Power	Sewage Plant	\$93,361	\$118,539	\$150,000
36	Taxes	Sewage Plant	\$54,754	\$49,313	\$56,000
37	Legal Fees	Sewage Plant	\$0	\$770	\$0
38	Consultant Fees	Sewage Plant	\$158	\$0	\$1,000
39	Contract Services	Sewage Plant	\$649,413	\$604,225	\$720,000
40	Equipment Rental Charge	Sewage Plant	\$0	\$612	\$0
41	Emp Earnings Reallocation	Sewage Plant	\$69,575	\$135,219	\$130,010
42	Sewage Billing Costs	Sewage Plant	\$130,000	\$135,000	\$140,000
99	Wrks Direct Labour Charge	Equipment	\$1,167	\$1,754	\$2,624
100	Payroll Downtime Burden	Equipment	\$498	\$326	\$688
101	Payroll Benefit Overhead	Equipment	\$205	\$287	\$604

Owen Sound Wastewater System Financial Plan

104	Licence	Equipment	\$124	\$0	\$130
105	Fuel	Equipment	\$2,540	\$2,779	\$2,500
106	Oil	Equipment	\$1,461	\$992	\$1,007
107	Parts/Material	Equipment	\$963	\$2,496	\$4,500
108	Repairs	Equipment	\$5,544	\$1,384	\$2,000
109	Insurance	Equipment	\$708	\$743	\$800
111	Trucks	Equipment	\$0	\$0	\$0
	Total		\$2,000,744	\$2,210,081	\$2,303,827

Owen Sound Wastewater System Financial Plan

Revenues

Item No.	Description	2008	2009	2010
1	Sewage Frontage Charge	\$500	\$996	\$1,000
2	Sewage Surcharge	\$3,152,987	\$3,308,957	\$3,550,076
3	Collection System Revenue	\$8,142	\$7,632	\$7,000
4	Gain on Disp of Fixed Assets	\$0	\$0	\$41,965
5	Equipment Rental Charge	\$21,735	\$21,233	\$17,000
	Total	\$3,183,364	\$3,338,818	\$3,617,041

Appendix B

Capital Expenditures

Owen Sound Wastewater System Financial Plan

Capital Expenditure

Item No.	Asset Name	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WW Coll.	Collection System Sewer Replacement	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000						
WW Coll.	Pump Station Annual Cap. Maint.	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000						
WW Coll.	Standby Emergency Generator	\$35,000										
WW Coll.	Replacement of 438008 - Sewer Camera	\$14,000										
WWTP	Annual Cap. Maint.	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000						
WWTP	Clarifier #4 Chain/Flytt Replacement	\$10,000										
WWTP	Clean out Sludge Holding Tank	\$180,000										
WWTP	Remove chimney at WSPS	\$1,000										
WWTP	Clarifier #4 Chain Cross Collector Gear Box	\$5,000										
WWTP	Clarifier #1 Chain/Flytt Replacement	\$45,000										
WWTP	Infrared Camera for Hot Spot Identification	\$5,000										
WWTP	Old Switch for Gas Compressor	\$4,000										
WWTP	Utility Tractor	\$25,000										
WWTP	Second Sludge Pump and Motor	\$7,000										
A1	10 St E & 9th Ave E Intersection		\$375,000									
B1	9th Street - 2nd Ave E to 2nd Ave W	\$212,500										
B2	4th Avenue East - 6th Street to 7th Street East		\$202,500									
B3	3rd Ave E/Grey Rd 15 - 18th Street to 28th Street East	\$12,500	\$500,000	\$725,000								
B4	4th Avenue West - Moore's Hill to 7th Street West		\$260,000	\$260,000								
B5	12th Street West - 4th Avenue to 6th Avenue West				\$282,500							
B6	2nd Avenue East - 11th Street to 18th Street East				\$775,000	\$775,000						
B7	3rd Avenue "A" West & 22nd Street West					\$70,000						
B8	12th Street East - 3rd Avenue East to 4th Avenue East					\$125,000						
B9	8th Street East - 5th Avenue East to 7th Avenue East					\$372,500						
C1	3rd Avenue West - (9th St W to 10th St W) & (11th St W to 12th St W)				\$315,000							
C2	Queen's Park - 1st Avenue West Upgrading					\$152,500						
C4	16th Street East - 12th Avenue East to 16th Avenue East						\$65,000					
C5	27th Street West - 4th Avenue West to 8th Avenue West							\$52,500				
C7	14th Street West - Alpha Street to 6th Avenue West								\$105,000			
C8	Alpha Street - 9th Avenue West to 6th Avenue West									\$250,000		
C9	16th Street West - 4th Avenue to 8th Avenue West										\$132,500	

Owen Sound Wastewater System Financial Plan

Item No.	Asset Name	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
C10	4th Avenue West (southend block) & 1st Street SW (1 block)											\$175,000
D4	16th Avenue East (14th St to 16th St E - Lower Sanitary Sewer)		\$75,000									
D5	9th Avenue East - 21st St to 23rd St East (for Adasha Place Sub.)			\$225,000								
D6	16th Avenue East (17th St E to 20th St E)				\$40,000							
D9	Sydenham Heights Trunk Servicing Extension - Phase II					\$937,500						
E1	9th Street Bridge	\$80,000										
F1	WWTP Influent Works Upgrading - Completion	\$4,000,000										
F2	Downtown Roof Water Separation - Grant Programme	\$250,000	\$300,000									
F3	WWTP Secondary Upgrading - Class EA - Completion	\$150,000										
F6	WWTP Secondary Upgrading - Construction	\$290,000	\$296,000	\$948,000	\$370,000	\$9,066,000	\$8,900,000	\$8,888,000				
	Sewer Lining						\$750,000	\$772,500	\$795,675	\$819,545	\$844,132	\$869,456
	Sewer Inspection		\$200,000	\$206,000	\$212,180	\$218,545	\$225,102					
	TOTAL	\$5,596,000	\$2,478,500	\$2,634,000	\$2,264,680	\$11,987,045	\$9,940,102	\$9,713,000	\$900,675	\$1,069,545	\$976,632	\$1,044,456

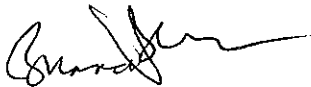
Appendix C

Council Resolution

DATE: March 14, 2011
TO: J. Johnston **DIV:** **DEPT:** Operations
FROM: B. Bloomfield **DIV:** Clerk's **DEPT:** Corporate Services
SUBJECT: **WATER AND SEWER FINANCIAL PLAN**

COMMENTS: City Council, at its meeting held on March 7, 2011 considered the above noted matter and the following resolution was adopted:

"THAT in consideration of the March 2, 2011 report from the Director of Operations and the March 7, 2011 financial presentation by the City Consultant, Genivar, Council hereby approves the water and sewer Financial Plans and directs staff to submit these Plans to the Ministry of Municipal Affairs and Housing in accordance with the requirements of the Safe Drinking Water Act."



Briana Bloomfield,
Acting Deputy Clerk

/bb

c: W. Ritchie, Director of Financial Services
C. Webb, Manager of Engineering Services
M. Prentice, Water and Wastewater Superintendent