



Town of Gore Bay

WATER AND WASTEWATER FINANCIAL PLAN

2015 - 2020

In accordance with O.Reg. 453/07



Project No. 14-1912

Aug 4th, 2015

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Annette Clarke
Town of Gore Bay
P.O. Box 590, 15 Water Street
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P0P 1H0

Re: Water Financial Plan

Dear Ms. Clarke:

We are pleased to submit our report for the above captioned report.

We appreciate the opportunity to be of assistance to the Town of Gore Bay with this undertaking and look forward to working again with you and your staff in the future.

Please call if you have any questions.

Yours truly,

ISI Infrastructure Solutions Inc.



Neil Roberts
President
ISI Infrastructure Solutions Inc.

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1 INTRODUCTION AND PROJECT SCOPE

1.1 OBJECTIVES

Infrastructure Solutions Inc. (“ISI”) was retained by the Town of Gore Bay to prepare a Water Financial Plan for the communal water system. The Financial Plan has been developed and prepared with a forward looking approach at the financial position of the Town’s water system. The plan is not audited, and it does contain various estimates and assumptions as explained in Section 5: “Notes to the Financial Plan”.

The Water Financial Plan fulfills one of the five submission requirements for the purposes of obtaining a municipal drinking water license as per the Safe Drinking Water Act 2002 (SDWA). The prescribed reporting requirements for a financial plan are defined by Ontario Regulation 453/07 (O. Reg.453/07). In general, a financial plan requires an in-depth analysis of capital and operating needs, a review of current and future demand versus supply, and consideration of available funding sources. The Financial Plan under O. Reg. 453/07 is required to cover a period of six (6) years, from 2015 to 2020 inclusive.

The Town of Gore Bay is a municipality with a population of approximately 850 according to the 2011 Canada census. The water users in Gore Bay are non-metered, with 414 customers and on a flat rate.

Under O. Reg 188/07, the Town is required to renew its Drinking Water System Licence (Licence No. 258-101). The licensing process dictates the preparation of a water system financial plan in accordance with O.Reg. 453/07, and submission to the Ministry of the Environment (MOE) within six (6) months of receiving the licence. The Town has undertaken this Water Financial Plan in order to ensure that sufficient funds will be in place to cover the short-term water system operating costs and full water system life-cycle asset renewal and replacement costs over a six (6) year period.

This Water and Wastewater Financial Plan carried out the following task:

- Compilation of the current and projected operating costs for the 2015-2020 period
- Projections of capital renewal and replacement costs to 2020
- Revenue projections
- Debt requirements and projections
- Tangible Capital Asset projections
- Statement of Financial Position, Statement of Operations, Statement of Change in Net Financial Assets/Debt, and Statement of Cash Flow

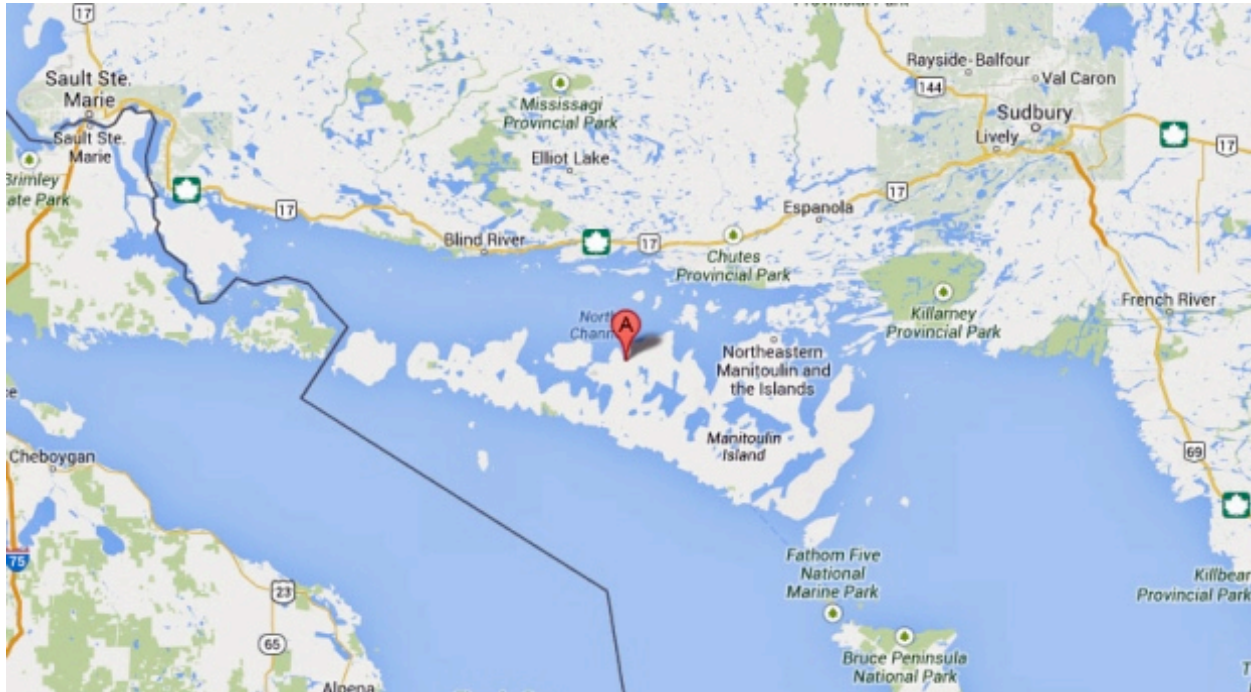
The intent of the project is to develop a sustainable financing plan that will fully meet the current financial needs, as well as make full provision for renewing all water system financial assets. The cost of renewing financial assets has been identified for the 2015 to 2020 period. For each year, from 2015-2020, user fees have been set such that funds will be available when needed to meet future projected capital renewal and replacement needs.

The costs of the identified short-term capital renewal needs have been combined with projections of the operating costs to produce an overall projection of the system costs. Various methods have been utilized to supply the necessary financial resources to pay for the operations & maintenance (O&M) and the capital projects. These include loans, if any, user fees and reserves. User fees are the key component of the financial plan as they pay down any loan and build up reserves. The current rate structure as per the 2015 ISI Rate Study generates sufficient funds to fully meet the projected needs of the financial plan. It is recommended that the rates be monitored annually to determine if projected revenues and expenditures are in line with expectations.

1.2 STUDY AREA

The Town of Gore Bay is a Town located on Manitoulin Island in Ontario, Canada. Located on Gore Bay, a bay of Lake Huron's North Channel, it is one of the two incorporated towns of Manitoulin District. It is surrounded by indented shorelines that rival natural formations anywhere. The Town is proud of its heritage of farming, fishing and timbering to its modern era of tourism.

Figure 1 - Study Area



1.3 WATER SYSTEM

The Gore Bay Drinking Water System comprises a membrane filtration surface water treatment plant and a drinking water distribution system. The water treatment plant consists of a 400 mm outside diameter HDPE intake; a low lift pumping station fitted with level monitoring, one intake isolation butterfly valve, two (2) 5 mm mesh manual pre-screens in series, and three (3) vertical turbine pumps; two (2) packaged membrane units, each with 32 microfiltration membrane modules; one (1) chlorine contact tank; one (1) clean water reservoir and one (1) high lift pumping station. The plant consists of various chemical feed systems and utilizes sodium hypochlorite for disinfection. Non-chemical membrane wash water is returned to Gore Bay while membrane wash water is neutralized and discharged to the sanitary sewer system. The Gore Bay drinking water distribution system consists of approximately 14.7 kilometers of distribution watermains of various diameters.

Source: Ministry of the Environment of Ontario; Gore Bay Drinking Water System Inspection Report, June 26, 2014, Shelley Baggio.

2 PROVINCIAL REQUIREMENTS

The Safe Drinking Water Act (SDWA) was passed in December, 2002 in order to address some of the recommendations made by the Walkerton Inquiry Part II report. One of the main requirements of the Act is the mandatory licensing of municipal water providers. Section 31 (1) specifically states,

“No person shall,

- a) establish a new municipal drinking water system or replace or carry out an alteration to a municipal drinking water system except under the authority of and in accordance with an approval under this Part or a drinking water works permit; or
- b) use or operate a municipal drinking water system that was established before or after this section comes into force except under the authority of and in accordance with an approval under this Part or municipal drinking water license.”

One of the main requirements of the SDWA is the mandatory licensing of municipal water providers, as per section 31 (1). In order to become licensed, a municipality must satisfy five key requirements as per section 44 (1):

1. Obtain a drinking water works permit.
2. Acceptance of the operational plan for the system based on the Drinking Water Quality Management Standard.
3. Accreditation of the Operating Authority.
4. Prepare and provide a financial plan.
5. Obtain a permit to take water.

The preparation of a financial plan is a key requirement for licensing and as such must be undertaken by all water providers.

2.1 FINANCIAL PLAN REQUIREMENTS – GENERAL

Under the SDWA, a financial plan is mandatory for water systems and encouraged for wastewater systems. The financial plans shall be for a period of at least six years, but longer planning horizons are encouraged. Once a water system is licensed, the Town’s Water Financial Plan is required to be updated every five (5) years, in conjunction with the application for license renewal. Financial plans may be amended, and additional information beyond what is prescribed can be included if deemed necessary.

2.2 FINANCIAL PLAN REQUIREMENTS – EXISTING SYSTEM

O. Reg. 453/07 provides details with regards to s.30 (1) part b of the SDWA for existing water systems:

- Financial plans must be approved by Council resolution (or governing body).
- Financial plans must include a statement that the financial impacts have been considered and apply for a minimum six year period (commencing when the system first serves the public, or at renewal starting with the year in which the license expires).
- Financial plans must include detail regarding proposed or projected financial operations itemized by total revenues, total expenses, annual surplus/deficit and accumulated surplus/deficit (i.e. the components of a “Statement of Operations” as per Public Sector Accounting Board (PSAB)) for each year in which the financial plans apply.
- Financial plans must present financial position itemized by total financial assets, total liabilities, net debt, non-financial assets, and tangible capital assets (i.e. the components of a “Statement of Financial Position” as per PSAB) for each year in which the financial plans apply.
- Gross cash receipts/payments itemized by operating transactions, capital transactions, investing transactions and financial transactions (i.e. the components of a “Statement of Cash Flow” as per PSAB) for each year in which the financial plans apply.
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system.
- Financial plans are to be made available to the public upon request and at no charge.

- If a website is maintained, financial plans are to be made available to the public through publication on the Internet at no charge.
- Notice of the availability of the financial plans is to be given to the public.
- Financial Plans are to be submitted to the Ministry of Municipal Affairs and Housing.

2.3 SUSTAINABLE FINANCIAL PLANNING

In general, sustainability refers to the ability to maintain a certain position over time. While the SDWA requires a declaration of the financial plan’s sustainability, it does not give a clear definition of what would be considered sustainable. Instead, the Ministry of the Environment released a guideline (“Towards Financially Sustainable Drinking-Water and Wastewater Systems”) that provides possible approaches to achieving sustainability. The Province’s Principles of Financially Sustainable Water and Wastewater Services are provided below:

- Principle #1:* Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system(s) to which they relate.
- Principle #2:* An integrated approach to planning among water, wastewater, and storm water systems is desirable given the inherent relationship among these services.
- Principle #3:* Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services.
- Principle #4:* Life-cycle planning with mid-course corrections is preferable to planning over the short-term, or not planning at all.
- Principle #5:* An asset management plan is a key input to the development of a financial plan.
- Principle #6:* A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs.
- Principle #7:* Ensuring that 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.

The principles help form the framework for a sustainable financial plan. The substance of the financial plan may be derived from SWSSA which will require, once in force, municipalities to assess the “full cost” of providing water and wastewater services. Full cost as defined in subsections 3(7) and 4(7), and includes:

“source protection, operating costs, financing costs, renewal and replacement costs and improvement costs associated with extracting, treating or distributing water to the public and collecting, treating or discharging waste water, and such other costs which may be specified by regulation.”

Furthermore, municipalities will be required to inventory and report their current infrastructure and how it will be maintained and managed going forward. Municipalities will then be required to report on the full cost of services and how these costs will be recovered and paid for. The principles of SWSSA ensure that a long-term plan for sustainable asset management is developed and that all costs for providing water and wastewater services are assessed so that there is sufficient funding for system needs.

Although SWSSA has not yet come into force, the Financial Plan has been prepared such that the Town will be both SDWA and SWSSA compliant.

3 KEY CONSIDERATIONS

This section presents the projections settled for key items over the six (6) year period and the assumptions made in order to prepare this Financial Plan. These include:

- Customer growth
- Operations & Maintenance (O&M)
- Capital budget forecasts;
- Revenue requirements
- Debt requirements and repayment
- Capital Reserves and operating reserve projections
- Tangible Capital Asset (TCA) projections

It should be noted that the Town does not have a current Water Rate Study. While this Financial Plan meets O. Reg. 453/7 requirements, to fully assess water/wastewater infrastructure it is necessary to undertake a comprehensive Rate Study that considers factors such as estimated useful life, asset replacement requirements, conservation, and reserve requirements over the long term to plan for sustainable for long-term water and wastewater infrastructure management.

3.1 CUSTOMER GROWTH & CONSUMPTION

The Town currently has 414 customers that are projected to consume approximately 231,037 m³ of water in 2014 which represents about 558 m³ per customer. Approximately 7% of the water treated is not consumed possibly due to system loss. One of the causes could be watermain failures. It is recommended that the Town consider a more detailed line conditions review to determine whether system losses can be reduced.

The number of customers has remained stagnant from 2012 to 2014. It is assumed that the Town is expected to grow about 1% per year. These customers are expected to be added to the Gore Bay Drinking Water System each year. Tables 3-1 and 3-2 summarize customer growth and consumption, raw water production and treated water volumes.

Table 3-1: Customer Growth & Consumption

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020
No. of Customers	414	414	414	415	416	417	418	419	420
% Increase		0%	1%	1%	1%	1%	1%	1%	1%
Consumption (m ³)	238,496	250,692	231,037	240,075	242,475	244,495	246,940	249,409	251,904
Consumption (m ³)/ Customer	576	605	558	578	582	586	590	595	599
Consumption Increase (%)		5%	-7%	1%	1%	1%	1%	1%	1%

Table 3-2: Raw Water vs. Treated Water

Description	2012	2013	2014
Raw Water (Production m ³)	250,156	268,916	248,166
Treated Water (Consumption m ³)	238,496	250,692	231,037
Non-Revenue Water (m ³)	11,660	18,224	17,129
Water Loss (%)	5%	7%	7%

3.2 OPERATING AND MAINTENANCE (O&M) COST PROJECTIONS

The Town's annual operating budget for water includes costs related to the following:

- Water systems operations and maintenance (contracted with OCWA)
- Debt repayments related to the water treatment plant
- Transfers to the water/sewer capital reserve referred to Water Capital Reserve fund
- Transfers to capital to undertake the annual capital program. The Town mostly follows a pay-as-you-go approach to capital financing, as capital programs are funded from the user rate revenues each year
- Transfers to the Filtration Reserve referred to Water Treatment Plant (WTP) Reserve fund

The following assumptions were made for projecting the gross costs and rate revenues over the six (6)-year period from 2015 to 2020 using 2015 as the base budget year (see Appendix G):

- The annual operating costs for water treatment and distribution would increase by 2.0% per year
- Hydro costs would increase by 3%
- The debt payments would be funded through annual transfers to operations from the water reserves. The special levies to users related to this debt would be collected and transferred to the WTP reserve
- The non-revenue was determined by adding the provincial revenue, filtration reserve, Ontario Small Waterworks Assistance (OSWAP), and transfer from water reserve
- Any year-end surplus would be transferred to the Operating Reserve at the end of the year and returned to the operating budget as revenue in the following year. Nevertheless, the Town may consider transferring a portion of the surplus to the Water Capital Reserve providing enough funds in the Operating Reserve
- The existing OSWAP funding of \$237,096 would end in 2014
- Capital projects for the water system in the 2015-2020 period are shown in Appendix F

Table 3.3 condenses the gross operating costs and net costs to be recovered from the annual flat user water rate and water capital rate.

Table 3-3: O&M Cost Projections (Water only)

Fiscal Years	2013	2014	2015	2016	2017	2018	2019	2020
Description	Actual		Forecasted					
Expenditures								
Water Operations	108,072	110,438	112,010	114,250	116,535	118,866	121,243	123,668
Additional Cost OCWA	27,509	25,567	28,000	28,560	29,131	29,714	30,308	30,914
Power and Pumping	47,600	38,191	42,000	43,260	44,558	45,895	47,271	48,690
Distribution	44,303	28,725	30,000	30,600	31,212	31,836	32,473	33,122
Administration	15,647	7,611	11,500	11,730	11,965	12,204	12,448	12,697
Audit	4,520	1,940	765	780	796	812	828	845
Equipment Rental		11,992	13,000	13,260	13,525	13,796	14,072	14,353
Materials	16,794	36,686	42,000	42,840	43,697	44,571	45,462	46,371
Insurance Claim		7,435						
Connection Fee		2,000						
Total Operating and Maintenance	264,445	270,586	279,275	285,280	291,418	297,692	304,105	310,660
Transfer to Capital		237,096						
Transfer to Capital (WTP)	33,332	23,175	58,650	45,106	6,511	8,636	15,249	313,649
Transfer to Water Capital		118,548						
Water Financial Plan			3,500					
Debt Repayment	146,900	146,900	146,900	146,900	146,900	146,900	146,900	146,900
Gross Annual Expenses	444,677	796,305	488,325	477,286	444,829	453,229	466,254	771,209
Transfer from Water Reserve	(44,242)	(33,646)	(94,209)	(94,209)	(94,209)	(94,209)	(94,209)	(94,209)

Building Canada Fund Provincial		(158,143)						
OSWAP		(237,096)						
Special Levy for WTP Loan Repayment	(33,332)	(23,175)	(58,650)	(45,106)	(6,511)	(8,636)	(15,249)	(313,649)
Non-Rate Revenues	(77,574)	(452,059)	(152,859)	(139,315)	(100,720)	(102,845)	(109,458)	(407,858)
Transfer from Water Reserve								
Transfer from WTP Reserve (for Loan Payment)	(146,900)	(146,900)	(146,900)	(146,900)	(146,900)	(146,900)	(146,900)	(146,900)
Transfer from Reserves	(146,900)	(146,900)	(146,900)	(146,900)	(146,900)	(146,900)	(146,900)	(146,900)
Net Operating Cost to be Recovered from Rates	220,203	197,346	188,566	191,071	197,209	203,484	209,896	216,451

3.3 CAPITAL FORECAST

The capital program includes amounts required for life cycle asset replacement or renewal. For the 2015-2020 period the TCA projects have been incorporated into the capital improvement plan. The capital needs have been inflated using the MCI of 4.17% (Appendix E).

3.4 REVENUE PROJECTIONS

Each year, the Town amends its fees and charges to customers such that the annual costs are recovered in the water system. The Town presently have 414 connections. The rates must be set to cover both operational and capital program expenditures.

The flat rate fees for 2015 to 2020 are shown in Table 3-4. In 2014, the rates were increased by approximately 5% in 2015. The rates for 2016 to 2020 were developed by applying 3% increase each year on the previous year's balance.

Table 3-4 Flat Rates Fees Inflated in \$ (2015-2020)

Description	2014	2015	2016	2017	2018	2019	2020
Residential - Single Family	378.00	397.00	409.00	421.00	434.00	447.00	460.00
Residential - Apartment	283.00	298.00	307.00	316.00	326.00	335.00	345.00
Commercial - Base	283.00	298.00	307.00	316.00	326.00	335.00	345.00
Commercial - Modified	566.00	595.00	613.00	631.00	650.00	670.00	690.00
Commercial - Specialized (Laundromat)	1,698.00	1,783.00	1,836.00	1,892.00	1,948.00	2,007.00	2,067.00
Commercial - Specialized (Car Wash)	1,698.00	1,783.00	1,836.00	1,892.00	1,948.00	2,007.00	2,067.00
Commercial - Specialized (Grocery Store)	1,132.00	1,189.00	1,225.00	1,261.00	1,299.00	1,338.00	1,378.00
Farm with Livestock	1,132.00	1,189.00	1,225.00	1,261.00	1,299.00	1,338.00	1,378.00
Food Service (Coffee Shop/Takeout)	566.00	595.00	613.00	631.00	650.00	670.00	690.00
Food Service (Restaurant Lounge)	1,132.00	1,189.00	1,225.00	1,261.00	1,299.00	1,338.00	1,378.00
Accommodation (Motel, Hotel, Lodge)	2,264.00	2,378.00	2,449.00	2,523.00	2,599.00	2,676.00	2,757.00
Bed & Breakfasts	378.00	397.00	409.00	421.00	434.00	447.00	460.00
Industrial (Manitoulin Transport)	5,660.00	5,943.00	6,121.00	6,305.00	6,494.00	6,689.00	6,890.00
Institutional - Nursing Home	9,056.00	9,509.00	9,794.00	10,088.00	10,391.00	10,702.00	11,024.00
Institutional - Public School	5,660.00	5,943.00	6,121.00	6,305.00	6,494.00	6,689.00	6,890.00
Government - Low	283.00	298.00	307.00	316.00	326.00	335.00	345.00
Government - Medium	566.00	595.00	613.00	631.00	650.00	670.00	690.00
Government - High	1,698.00	1,783.00	1,836.00	1,892.00	1,948.00	2,007.00	2,067.00
Town Owned Buildings - Modified	566.00	595.00	613.00	631.00	650.00	670.00	690.00
Town Owned Buildings - Marina	1,698.00	1,783.00	1,836.00	1,892.00	1,948.00	2,007.00	2,067.00
Town Owned Buildings - Comm. Hall/Arena	1,132.00	1,189.00	1,225.00	1,261.00	1,299.00	1,338.00	1,378.00
Private Clubs	1,132.00	1,189.00	1,225.00	1,261.00	1,299.00	1,338.00	1,378.00
Legion	566.00	595.00	613.00	631.00	650.00	670.00	690.00

The following rates were taken from the water By-Law Schedule “A”. The apartment’s rate charges 75% of residential rate. The base commercial rate is the same as apartment rate and includes Stores, Shops, Offices, Banks, Churches and Masonic Lodge. For the modified commercial rate, the Town charges two (2) times base commercial rate and includes the Salon, Spa, Barber, Garage, Doctor, Dentist, Funeral Home and Market Gardens. Also, for bed and breakfasts rate, the Town charges the residential rate plus 25% of apt/unit.

For the Food Service Rate, the Town charges the modified commercial rate to Coffee Shop and Takeout. Also, the Town charges two (2) times the modified commercial rate to Restaurant/ Lounge. Last but not least, the “low” charges for government customers include Post Office, Service Ontario and LCBO. The “Medium” charges for government customers include OPP, MTO, and Ambulance. Finally, the “High” charges for government customers include the Courthouse.

The annual revenue requirements and project annual surplus/(deficit) are summarized in Table 3-5. For the period 2016-2020, a flat user rate increase of 3% is applied, compared to the previous year. The annual revenue for each was projected by increasing prior year’s flat rate user fees to offset the annual costs plus annual surplus each year.

Table 3-5 Revenue Projections Water (2015-2020)

Description	Actuals		Forecasted					
	2013	2014	2015	2016	2017	2018	2019	2020
Net Cost to Be Recovered from Rates	220,203	197,346	247,216	236,177	203,720	212,119	225,145	274,309
Water Revenue from flat user Rates	235,120	220,981	232,030	241,311	250,964	261,002	271,442	282,300
Required Annual Increase in Rates		-6%	5%	3%	3%	3%	3%	3%
Surplus/(Deficit)	\$14,917	\$23,635	\$43,464	\$47,920	\$48,951	\$50,062	\$51,256	\$52,535

A water operating surplus of \$43,464 is projected for 2015. This is also the case for the following years through 2020 where surplus of \$52,535 is anticipated.

3.5 WATER/WASTEWATER BILL COMPARISON WITH OTHER COMMUNITIES

The projected water/wastewater bills for Gore Bay are compared with bills for a number of communities in the vicinity, and to water/wastewater systems further away. The bill comparisons are set out in Table 3-6. The data show water bills based on 2014 and 2015 rates with different rate systems. It is possible that many of those with relatively low 2014 rates listed below, will also be forced to raise rates in the near future. Gore Bay’s rates are for June 1st 2015, and they are the second least expensive in the table. Many communities, that have less expensive water now, may have to make major investments in new capital soon, which will drive rate increases to build the necessary reserves to manage future capital expenditures.

Table 3-6 Water/Wastewater Bill Comparisons

Bill Comparisons in the North Region of Ontario, based on different rate structures		
Water/Wastewater (Residential)	Rate Structures (Only Residential)	Water/Wastewater Bill (Annual)
Elliot Lake	Flat Rate	\$ 564.00
Gore Bay	Flat Rate	\$ 715.00
Marathon	Flat Rate	\$ 617.40
Sault Ste. Marie (2015)	Metered	\$ 795.60
Timmins (2014)	Flat Rate	\$ 835.42
Red Rock (2015)	Two-Part Rate	\$ 863.55
North Bay (2015)	Flat Rate	\$ 922.42
Manitouwadge (2015)	Two-Part Rate	\$ 938.00
Schreiber (2014)	Flat Rate	\$ 962.76
Sudbury (2015)	Metered	\$ 1,023.17

Thunder Bay (2015)	Two-Part Rate	\$ 1,047.54
Kenora (2014)	Two-Part Rate	\$ 1,121.00
Greenstone (2015)	Flat Rate	\$ 1,437.72
<i>Note: Based on Water Rate bylaw for each Municipality</i>		

Figure 2 – Water and Wastewater Annual Charges**3.6 DEBT REPAYMENT**

The Town has an existing debt related to Water Treatment Plant in the OSIFA contract identified in By-Law Number 2006. The original debenture amount is \$2,097,858. The annual payments and remaining debt balance for the 2015-2020 period is show in Table 3-7. No future debt would be incurred during the forecasted period for capital projects.

Table 3-7 Debt Repayment Schedule (2015-2020)

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Annual Debt Charges	146,900	146,900	146,900	146,900	146,900	146,900	146,900	146,900	146,900
Total Annual Interest	90,754	87,952	85,010	81,921	78,678	75,273	71,698	67,945	64,004
Total Annual Principal Repayments	56,146	58,948	61,890	64,979	68,222	71,626	75,201	77,955	82,895
New Debt	-	-	-	-	-	-	-	-	-
Total Annual Outstanding Debt	1,798,567	1,739,619	1,677,729	1,612,750	1,544,528	1,472,900	1,397,699	1,318,745	1,235,850

3.7 RESERVE BALANCES

As noted, the revenue increases over the period are set to scope an annual surplus that would be transferred to the water operating reserves at year-end and returned to the operating budget as revenue in the following year.

There are three (3) main water reserve funds for the water system:

- The Water Treatment Plant Reserve (Filtration Reserve)
- The Water Capital Reserve (shared with sewer and assumed at 50% of the fund balance)
- The Operations Reserve (shared with sewer and assumed at 50% of the fund balance)

The opening balance of the Water Treatment Plant Reserve or Water Filtration Reserve at December 31, 2013 is \$742,813. Also, the opening balance for the Water/Sewer Capital Reserve at December 31, 2013 is \$1,069,899 and only 50% is allocated to the water. Last but not least, the Operations Reserve unaudited for 2014 is \$893,958.12 and only 50% is allocated to the water.

The projected transfer to and from the WTP Reserve, the Water Capital Reserve and the Operating Reserve are presented in Tables 3-8, 3-9 and 3-10 respectively.

Table 3-8 Water Treatment Plant Reserve

Description	2014	2015	2016	2017	2018	2019	2020
Opening Balance	742,813	626,827	545,309	449,058	312,258	176,442	45,351
Transfer from Operating	23,175	58,650	45,106	6,511	8,636	15,249	313,649
Transfer to Capital	-	-	-	-	-	-	-
Transfer to Operating	146,900	146,900	146,900	146,900	146,900	146,900	146,900
Closing Balance	619,088	538,577	443,514	308,669	174,264	44,791	212,100
Interest	7,739	6,732	5,544	3,858	2,178	560	2,651

Table 3-9 Water Capital Reserve

Description	2014	2015	2016	2017	2018	2019	2020
Opening Balance	534,950	313,542	339,465	367,968	397,349	427,659	458,953

Transfer from Operating	11,817	21,732	23,960	24,476	25,031	25,628	26,268
Transfer to Capital	237,096	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-
Closing Balance	309,671	335,274	363,425	392,443	422,380	453,287	485,221
Interest	3,871	4,191	4,543	4,906	5,280	5,666	6,065

Table 3-10 Water Operating Reserve

Description	2014	2015	2016	2017	2018	2019	2020
Opening Balance	390,720	402,537	424,269	448,229	472,705	497,736	523,364
Operating Budget to Offset Surplus	11,817	21,732	23,960	24,476	25,031	25,628	26,268
Contributions from Operating Budget	-	-	-	-	-	-	-
Operating Reverse Closing Balance	402,537	424,269	448,229	472,705	497,736	523,364	549,631

The interest earned on all reserve balance is 1.25% per annum.

3.8 TANGIBLE CAPITAL ASSET (TCA) ANALYSIS

The Town's PSAB 3150 TCA data was used to develop the financial material related to the water assets which include the following:

- Treatment plant assets including the land, buildings and equipment. In terms of the equipment, a breakdown of the water treatment plant is necessary to determine the depreciation expense of every component instead of taking one historical cost. For example, in the TCA policy, a pumphouse for the water category has a useful life of 20 years. Therefore, it is not right to depreciate this asset in its useful life when there are other components that have less remaining useful years.
- Also, linear assets such as watermains, valves, hydrants and service connections were taken into consideration.
- The useful life of the assets was taken from the TCA policy and corroborated with engineering experience.
- TCA policy was followed for the amortization of new assets and straight line depreciation was used at the beginning of the year of acquisition.
- Fully depreciated assets are being used with no asset removals.
- New assets were acquired for the water system in 2015-2020 period.
- Some future projects are deemed to be operational because they do not meet the definition of the TCA. Therefore, they are considered as operational expense in the financial statements.

Table 3-11 TCA (Water Only)

TCA	2013	2014	2015	2016	2017	2018	2019	2020
Historical Cost	7,220,318	7,220,318	7,457,414	7,516,064	7,561,170	7,567,681	7,576,317	7,591,566
Acquisitions		237,096	43,400	29,480	3,907	5,313	8,478	308,129
Disposals								
Closing TCA balance (HC)	7,220,318	7,457,414	7,500,814	7,530,294	7,534,201	7,539,513	7,547,992	7,856,121
Accumulated Amortization (Beginning)	1,945,070	2,180,520	2,415,970	2,657,347	2,901,252	3,146,732	3,392,392	3,638,287
Amortization Expense	235,450	235,450	241,377	243,905	245,480	245,660	245,895	246,555
Amortization on Disposal								
Accumulated Amortization (Ending)	2,180,520	2,415,970	2,657,347	2,901,252	3,146,732	3,392,392	3,638,287	3,884,842
Net Book Value	5,039,798	4,804,348	4,800,067	4,599,562	4,383,562	4,141,809	3,901,226	3,663,150

The TCA consolidated information is summarized in Table 3-11. The current book value of the water assets is about \$4,800,067 decreasing to approximately \$3,663,150 by 2020. Therefore, the water system would be 47% depreciated by 2020. This suggests the assets are approaching to half of their useful life expectancies.

3.9 LEAD PIPE REPLACEMENT

The Town water supply system has no lead pipes. The water system is constantly tested for lead and other impurities and tests results show no lead contamination exists in the system. However, if the test results indicate lead levels in your water, water service connections will be replaced at the earliest convenience with other-water-related repairs. Therefore, there are no noteworthy financial costs linked to lead pipe replacement.

4 WATER FINANCIAL PLAN

The financial plan guidelines were used to select the method for preparing the Town of Gore Bay Drinking Water. These steps include the determination of the current period expenses and forecast future period expense; determination and forecasting capital expenditure needs; the identification of all current revenue sources and forecast revenues; and the preparation of the financial statements.

For the current expenses, three categories were included for the purpose of this financial plan: operating costs, interest, and amortization. The current period operating expenses were determined from the Town's 2015 unofficial budget, which also included expense details for the years 2013, and 2014. Further information relating to the assumed rates of increase for future operating expenses can be found in the Notes to the Financial Plan.

In the event that the Town should determine that there is a need to incur new debt, then the forecasted interest expense will require revision. The annual amortization expenses were calculated using the straight-line method and were based on PSAB information provided by the Municipality, as well as the estimated useful lives and historic costs of the assets. Last but not least, the capital expenditures and the useful lives of all the assets included in the projections were provided by the Town.

4.1 STATEMENT OF FINANCIAL POSITION

The Statement of Financial Position shows the assets, liabilities, and accumulated surplus of the Town's water system. The net financial assets/debt is defined as the difference between financial assets and liabilities; this indicator provides an indication of the system's future revenue requirement. Appendix A indicates that from 2015 to 2020, the net debt position of the Town's water system is expected to increase from \$782,697 in 2015 to a net debt position of \$889,752 in 2020. In addition to this, the total change in net financial asset has a debt position of \$141,833. A net financial debt position means that the financial assets are less than liabilities, and it implies that not enough resources exist in the system to finance future operations.

The tangible capital asset balance is another important indicator. Generally, an increase in the tangible capital asset balance indicates the acquisition of assets either through purchase by the municipality or contribution/donation by a third party. A decrease in the tangible capital asset balance can indicate a disposal, write down, or use of assets. A use of assets usually results in an increase in accumulated amortization where annual amortization expenses arise as a result of allocating the cost of the asset to operations over the asset's useful life.

4.2 STATEMENT OF OPERATIONS

The Statement of Operations is a summary of the revenues and expenses generated by the water system for a given period. The annual surplus/deficit determines whether the revenues generated were enough to meet the expenses incurred and in turn, whether net financial assets have been maintained or depleted. The Statement of Operations (Appendix B) shows an annual

deficit in 2015 of \$ 232,934 growing to an annual surplus of \$50,106 in 2020. Similarly, accumulated end of year surplus is projected to decrease from 2015 to 2020. An annual deficit does not provide sufficient funding to manage non-expense costs such as tangible capital asset acquisitions, reserve/reserve fund transfers and debt principal payments.

The accumulated surplus/deficit is a significant indicator that measures whether the available net resources are enough to provide future water services. An accumulated deficit means that resources are insufficient to provide for such services. As a result, borrowing or rate increases are needed to finance annual deficits. From Appendix B, it can be seen that the water financial plan proposes to add a deficit of \$1.21 million to a 2015 accumulated surplus of \$4.29 million over the forecasted period. This accumulated surplus, as indicated in Appendix B, primarily comprises reserve and reserve fund balances as well as historic investments in tangible capital assets.

The accumulated surplus/deficit is a significant indicator that measures whether the available net resources are enough to provide future water services. An accumulated deficit means that resources are insufficient to provide for such services. As a result, borrowing or rate increases are needed to finance annual deficits.

4.3 STATEMENT OF CHANGE IN NET FINANCIAL ASSETS/DEBT

The Statement of Change in Net Financial Assets/Debt indicates whether the revenue generated was sufficient to provide for operating and non-financial asset costs such as prepaid expenses, inventory supplies, tangible capital assets, etc. This Statement explains the variance between the annual surplus/deficit and the change in net financial assets/debt for the period. The Statement of Change in Net Financial Position (Appendix C) indicates that tangible capital asset acquisitions (net of amortization) exceeds the forecasted accumulated annual surplus for 2020, resulting in a decrease in net financial assets. A decrease in the net financial assets decreases the opportunity for a long term plan of funding tangible capital asset acquisitions through accumulated surplus (i.e. reserves and reserve funds). As noted in the Statement of Financial Position, the total change in net financial asset has a net debt position of \$141,833. This implies that not enough resources exist in the system to finance future operations through an accumulated surplus such as revenues or reserve funds.

4.4 STATEMENT OF CASH FLOW

The Statement of Cash Flow is a summary of the way in which the water system is projected to generate and use cash resources during the planning period. The transactions that provide/use cash are categorized such as operating, capital, investing, and financing activities as shown in Appendix D. Since this statement focuses on the cash aspect of these transactions it is the linkage between cash and accrual based reporting. Appendix D illustrates that cash from operations will fund capital transactions (i.e. tangible capital asset acquisitions), pay down any debt, and build enough reserve funds by 2020. The financial plan projects the cash position of the Town's water system to decrease from a balance of \$940,368 at the beginning of 2015, to just under \$360,000 by the end of 2020.

5 NOTES TO FINANCIAL PLAN

The financial plan format above approximate the full accrual format, however the financial plan is not an audited document and contains various estimates. In order to show a balanced financial plan in full accrual format for the Town, some items have been estimated. The assumptions used have been documented below.

5.1 CASH, RECEIVABLES AND PAYABLES

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

Ending Reserve/Reserve Fund Balance	(Water Treatment Plant Reserve)
<u>Plus: Ending Accounts Payable Balance</u>	<u>(Water Capital Reserve)</u>
<i>Equals:</i>	Approximate Ending Cash Balance

Historical water account receivables and payables were identified by the Town’s staff, which were used to project system cash, receivable and payable balances throughout the forecast period. The account receivable for water at the end of 2014 was \$16,277.

A multiplier equal to the average 2015 and 2014 ending Accounts Receivable balances as a percentage of revenues was calculated and then applied to projected revenues in each year of the forecast period to determine annual Accounts Receivable balances. Similarly, projected accounts payable were valued based on a multiplier equal to the average 2015 and 2014 ending Account Payable balances as a percentage of expenditures.

5.2 DEBT

The outstanding water related debt at the end of 2015 was determined to be \$1,612,750. Principal repayments for existing debt over the forecast period is scheduled in Table 3-7.

5.3 DEFERRED REVENUE

Deferred revenue is made up of gas tax reserve and water development charge reserve fund balances which are considered to be a liability for financial reporting purposes until the funds are used to emplace the works for which they have been collected.

5.4 TANGIBLE CAPITAL ASSETS (TCA)

The amortization of existing assets is a non-cash annual cost that mirrors the annual use of assets until the end of their respective useful lives. It should be distinguished that since depreciation is based on the historical cost at the time the asset was placed in service, it does not account for inflation since the year of installation. Therefore replacement cost estimates based on indexing historical costs to the replacement year are used for projecting future asset replacement costs.

The Town’s PSAB 3150 TCA data was used to develop the financial information an asset replacement forecasts related to the Water system. The TCA projections are based on the following:

- Amortization is calculated based on using the straight-line approach with no amortization in the year amortization in the year of acquisition or construction.
- The Town staff provided the useful life on acquisitions.
- Write-offs are assumed to equal \$0 for each year in the forecast period.
- Tangible capital assets are shown on a net basis. It is assumed that disposal occur when the asset is being replaced.
- Gains/losses on disposal are assumed to be \$0.
- Residual value is assumed to be \$0 for all assets contained within the forecast period.
- Contributed Assets, are deemed to be insignificant or unknown during the forecast period and are therefore assumed to be \$0.

- Some future projects are deemed to be operational if they do not meet the definition of a Tangible Capital Assets. Therefore, these projects are considered as operating expense in the financial statements.
- The summary of balance of tangible capital assets is presented in Table 3.11.

5.5 INTEREST EARNED

Interest earned, represents the interest earned on the Town's bank account.

5.6 OPERATING EXPENSES

Capital expenditures not meeting the definition of tangible capital assets are classified as operating expenses and are expensed in the year in which they occur.

6 PROCESS FOR APPROVAL AND SUBMISSION

The requirement to prepare the Financial Plan is provided in Section 32 (5) 2 ii of the SDWA. Proof of the preparation of a financial plan is one of the submission requirements for municipal drinking water licensing, and upon completion must be submitted to the Ministry of the Environment. As part of O. Reg. 453/07. The process established for approval of the plan, public circulation, and filing is provided as follows:

1. The financial plan must be approved by resolution of the municipality who owns the drinking water system, or the governing body of the owner (O. Reg. 453/07, Section 3 (1) 1).
2. The owner of the drinking water system must provide a notice advertising the availability of the financial plan. The plan must be made available to the public upon request and free of charge. The plan must also be made available to the public on the municipality's website (O. Reg. 453/07, Section 3 (1) 5).
3. The owner of the drinking water system must provide a copy of the financial plan to the Director of Policy Branch, Ministry of Municipal Affairs and Housing (O. Reg. 453/07, Section 3 (1) 6).
4. The Council Resolution approving the financial plan shall be submitted to the Ministry of the Environment as part of the application for a municipal drinking water license (SDWA, Section 32 (5) 2 ii).

All of which is respectfully submitted,

Infrastructure Solutions Inc. Per:



Neil Roberts
President

7 RECOMMENDATIONS

Our recommendations are as follows:

- The Town approve this Water Financial Plan to provide a self-sustainable water infrastructure consistent with O.Reg 453/07 and SWSSA.
- The Town continue to revise the Water Rate By-Law every five years as per the provincial requirements.
- The Town promote consumption and efficient water usage which reduces operating costs and capital investment needs over time.
- The Town requires a Water Rate Study. A Water Financial Plan does not effectively determine major capital expenditures and reserve requirements outside the 6 year window of the Plan. A Rate Study examines all major water components over a 40-60 year timeframe to determine future rates taking into consideration factors such as estimated useful life, asset replacement requirements, conservation, equity, and so on. These factors significantly impact full cost recovery and allow sustainable long-term water infrastructure management.

APPENDIX A: STATEMENT OF FINANCIAL POSITION

Town of Gore Bay Statement of Financial Position (Water) Unaudited: For Financial Planning Purposes Only 2015-2020

Water System	Notes	Forecasted					
		2015	2016	2017	2018	2019	2020
Financial Assets							
Cash and Cash Equivalents		841,010	742,636	645,323	549,151	454,204	360,570
Accounts Receivable		16,765	17,268	17,786	18,320	18,870	19,436
Due from Federal Government - GST		-	-	-	-	-	-
Due from Town		-	-	-	-	-	-
Investments		-	-	-	-	-	-
Inventory for resale		-	-	-	-	-	-
Total Financial Assets		857,776	759,905	663,109	567,470	473,073	380,006
Liabilities							
Accounts Payable		27,722	28,831	29,984	31,184	32,431	33,728
Long-Term Liabilities (principal only)	See Table 3-7	1,612,750	1,544,528	1,472,900	1,397,699	1,318,745	1,235,850
Deferred revenue - obligatory reserves		-	-	-	-	-	-
Deferred revenue - other		-	-	-	-	-	-
Other (Development Charge Reserves-Deferred Revenue)		-	-	-	-	-	-
Total Financial Liabilities		1,640,472	1,573,359	1,502,884	1,428,883	1,351,176	1,269,578
Net Financial Assets/(Net Debt)		(782,697)	(813,454)	(839,775)	(861,412)	(878,103)	(889,572)
Non-Financial Assets							
Tangible Capital Assets		7,500,814	7,530,294	7,534,201	7,539,513	7,547,992	7,856,121
Accumulated Amortization		(2,657,347)	(2,901,252)	(3,146,732)	(3,392,392)	(3,638,287)	(3,884,842)
Total Non-Financial Assets		4,843,467	4,629,042	4,387,468	4,147,121	3,909,705	3,971,279
Accumulated Surplus / (Deficit)		4,060,770	3,815,587	3,547,693	3,285,709	3,031,602	3,081,707

Financial Indicators	Total Change	2015	2016	2017	2018	2019	2020
1) Increase/(Decrease) in Net Financial Assets	(141,833)	(34,957)	(30,758)	(26,322)	(21,638)	(16,689)	(11,469)
2) Increase/(Decrease) in Tangible Capital Assets	(1,070,165)	(197,977)	(214,425)	(241,573)	(240,347)	(237,417)	61,574
3) Increase/(Decrease) in Accumulated Surplus	(1,211,998)	(232,934)	(245,183)	(267,895)	(261,985)	(254,106)	50,106

Net Financial Assets /(Debt) for 2014	(747,740)
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Accounts Receivable, ending 2014	16,277
Accounts Payable & Accrued Liabilities, ending 2014	26,656

APPENDIX B: STATEMENT OF OPERATIONS

**Town of Gore Bay
Statement of Operations (Water)
Unaudited: For Financial Planning Purposes Only
2015-2020**

Water System	Notes	Forecasted					
		2015	2016	2017	2018	2019	2020
Revenue							
Water User Fees		232,030	238,991	246,161	253,545	261,152	268,986
Earned Deferred Revenue		-	-	-	-	-	-
Other Revenue		152,859	139,315	100,720	102,845	109,458	407,858
Total Revenues		384,889	378,306	346,881	356,390	370,610	676,844
Expenses							
Operating Expenditures	See Table 3-3 (O&M)	294,525	300,906	294,023	301,016	310,876	316,180
Interest on Debt		81,921	78,678	75,273	71,700	67,945	64,004
Amortization		241,377	243,905	245,480	245,660	245,895	246,555
Loss on Sale of Tangible Capital Assets		-	-	-	-	-	-
Other		-	-	-	-	-	-
Total Expenses		617,823	623,489	614,776	618,376	624,716	626,739
Annual Surplus / (Deficit)		(232,934)	(245,183)	(267,895)	(261,985)	(254,106)	50,106
Accumulated Surplus / (Deficit), beginning of year		4,293,704	4,060,770	3,815,587	3,547,693	3,285,709	3,031,602
Accumulated Surplus / (Deficit), end of year		4,060,770	3,815,587	3,547,693	3,285,709	3,031,602	3,081,707
Financial Indicator							
Total Change							
Increase/(decrease) in Accumulated Surplus	(1,211,998)	(232,934)	(245,183)	(267,895)	(261,985)	(254,106)	50,106
Expense to Revenue Ratio		161%	165%	177%	174%	169%	93%

APPENDIX C: STATEMENT OF CHANGE IN NET FINANCIAL POSITON

Town of Gore Bay
Statement of Changes in Net Financial Assets/(Debt) (Water)
Unaudited: For Financial Planning Purposes Only
2015-2020

Water System	Notes	Forecast					
		2015	2016	2017	2018	2019	2020
Annual Surplus/(Deficit)		(232,934)	(245,183)	(267,895)	(261,985)	(254,106)	50,106
Less: Acquisition of Tangible Capital Assets		(43,400)	(29,480)	(3,907)	(5,313)	(8,478)	(308,129)
Add: Amortization of Tangible Capital Assets		241,377	243,905	245,480	245,660	245,895	246,555
(Gain)/Loss on disposal of Tangible Capital Assets (exceptions provided by staff)		-	-	-	-	-	-
Add: Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-
Subtotal		(34,957)	(30,758)	(26,322)	(21,638)	(16,689)	(11,469)
Less: Acquisition of supplies inventory		-	-	-	-	-	-
Less: Acquisition of prepaid expenses		-	-	-	-	-	-
Add: Consumption of supplies inventory		-	-	-	-	-	-
Add: Use of prepaid expenses		-	-	-	-	-	-
Subtotal		-	-	-	-	-	-
Increase/(Decrease) in Net Financial Assets/(Net Debt)		(34,957)	(30,758)	(26,322)	(21,638)	(16,689)	(11,469)
Net Financial Assets/(Net Debt), beginning of year		(747,740)	(782,697)	(813,454)	(839,775)	(861,412)	(878,103)
Net Financial Assets/(Net Debt), end of year		(782,697)	(813,454)	(839,775)	(861,412)	(878,103)	(889,572)

Net Financial Assets/(Net Debt), end of year for 2014	(747,740)
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Financial Indicators	2015	2016	2017	2018	2019	2020
1) Acquisition of Tangible Capital Assets (Cumulative)	43,400	72,880	76,787	82,099	90,578	398,707
2) Annual Surplus(Deficit) before Amortization (Cumulative)	8,443	7,165	(15,250)	(31,575)	(39,786)	256,874

APPENDIX D: STATEMENT OF CASH FLOW

Town of Gore Bay
Statement of Cash Flow (Water)
Unaudited: For Financial Planning Purposes Only
2015-2020

Water System	Notes	Forecast					
		2015	2016	2017	2018	2019	2020
Cash provided by:							
Operating Activities							
Annual Surplus/Deficit		(232,934)	(245,183)	(267,895)	(261,985)	(254,106)	50,106
Non-Cash Items							
Add: Amortization of TCA's		241,377	243,905	245,480	245,660	245,895	246,555
Change in A/R (Increase)/(Decrease)		(488)	(503)	(518)	(534)	(550)	(566)
Change in A/P (Increase)/(Decrease)		1,066	1,109	1,153	1,199	1,247	1,297
Less: Interest Proceeds							

Town of Gore Bay – Water Financial Plan Private and Confidential

Net Change in Cash Provided by Operating Activities		9,021	(672)	(21,780)	(15,660)	(7,513)	297,392
Capital Activities							
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-
Less: Cash used to acquire Tangible Capital Assets		(43,400)	(29,480)	(3,907)	(5,313)	(8,478)	(308,129)
Net Change in Cash Used in Capital Activities		(43,400)	(29,480)	(3,907)	(5,313)	(8,478)	(308,129)
Investing Activities							
Proceeds from investments		-	-	-	-	-	-
Less: Cash used to acquire investments		-	-	-	-	-	-
Net Change in Cash Used in Investing Activities		-	-	-	-	-	-
Financing Activities							
Proceeds from Debt Issue		-	-	-	-	-	-
Less: Debt Repayment (principal only)		(64,979)	(68,222)	(71,627)	(75,200)	(78,955)	(82,896)
Net Change in Cash Used in Financing Activities		(64,979)	(68,222)	(71,627)	(75,200)	(78,955)	(82,896)
Net Change in Cash and Cash Equivalents		(99,358)	(98,374)	(97,313)	(96,172)	(94,947)	(93,634)
Cash and Cash Equivalents, beginning of year		940,368	841,010	742,636	645,323	549,151	454,204
Cash and Cash Equivalents, end of year		841,010	742,636	645,323	549,151	454,204	360,570

Cash and Cash Equivalents, end of year 2014	940,368
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APPENDIX E: MUNICIPAL COST INDEX

MCI (Region 5)								
COMPONENTS	Weights	Inflators for Each Component						
		2007	2008	2009	2010	2011	2012	2013
Wages and Salaries and Benefits	21.68%	0%	5%	-17%	8%	4%	8%	3%
Interest on Long Term Debt	1.12%	41%	29%	-12%		-21%		
Materials	23.35%	-3%	13%	32%	-4%	4%		
Contracted Services	18.88%	29%		-3%	3%	9%	10%	9%
Rents and Financial Expenses	6.17%							
External Transfers	16.56%		-2%	19%		-14%		1%
Amortization	11.94%				13%	4%	2%	3%
Average MCI		4.17%						

Notes:

- Municipal Cost Index, is calculated to better represent the municipal purchasing power and cost experience, so ISI will use 4.17% as the compounding/inflationary factor up until 2013;
- Municipal Cost Index represents the basket of goods and services which is consumed/used by municipalities and represents the operational/working capital needs on an on-going basis;
- Assigned weights represents the percentage of services/goods consumed out of total spending;
- Inflators represent the year to year changes in the components;
- Components' weight and inflators, sum of all represents the overall cost experience for the Towns/region as compared to CPI;
- MCI is created as to minimize the variation/deviations of cost/purchasing experience in the region;
- The source of Municipal Cost Index are the Financial Statements for your specific region;
- Outliers have been removed from the data for Municipal Cost Index calculation to average out/standardize data.

APPENDIX F: WATER CAPITAL PROJECTS (2015-2020)

Item	System Description	Historical	2015	2015	2016	2017	2018	2019	2020	Definition
	SCADA		Budget	Forecast						
1	Update SCADA Tower (2)	SCADA computers(2)	42,000	21,000	21,000	1,100	1,100	1,200	1,200	TCA
	Administrative									
2	DWQMS on site and desk top audits		2,200	2,200	5,000	2,400	2,540	5,750	2,700	Non-TCA
	Pumps									
3	VFD on small high lift pumps (2)	save energy	12,750	12,750						TCA
	General Building Maintenance & Equipment									
4	Repair kit for plant pressure relief valve	no parts in stock	750	750						TCA
5	Require spare variable feed valve for filtration units	require 2 units	2,600	2,600						TCA
6	Install building alarm system		2,500	2,500						TCA
7	Replace plant UPS batteries	powers PLC controller						6,000		TCA
8	Replace filter train UPS batteries (2)	powers filter PLC	800	800						TCA
	Chemical Feed Systems									
9	Replace chemical tubing - trim chlorine line	original to plant, starting to get more leaks every year	850	850						TCA
	Filter Train									
10	Replace membrane filters								250,000	TCA
11	Rebuild filtrate pump	1 pump per filter unit				2,500	2,500			TCA
12	New air control valves	spare units have been consumed, purchase 4	3,200	1,600	1,600					TCA
	Instrumentation-Equipment									
13	Replace contact tank analyzer	probes good for 5 years			3,200					TCA
14	Rebuild kits for Hach chlorine analyzers		200							TCA
15	Replace chemical tubing - chlorine system		700							TCA
	Main Plant Electrical/Building									
18	Upgrade controller on diesel pump	No gauges on unit	2,500		2,500					TCA
19	Vibration on diesel pump investigation	cracks are forming on concrete pump base	3,000	3,000						Non-TCA
20	Load test generator		1,900	Free			1,100			TCA
21	Change diesel pump		550	550						TCA
	Other									
22	Raw water quality analysis	Every 5 years	1,500						1,800	Non-TCA
23	Replace generator battery	Every 3 years	350	350			400			Non-TCA
	Intake									
24	Intake Inspection	Every 5 years		4,700						Non-TCA
	Distribution System									
25	SWOB distribution system	every 5 years	10,000		10,000					Non-TCA
26	Distribution Parts for emergency repair	Replenish parts and ensure stock on hand	5,000	5,000						Non-TCA
Total Water Capital Projects			93,350	58,650	43,300	6,000	7,640	12,950	255,700	
Total Water Capital Projects (inflated in dollars)			93,350	58,650	45,106	6,511	8,636	15,249	313,649	

APPENDIX G: UNOFFICIAL FINANCIAL BUDGET (2015)

		2015 Budget	2014 Actual
Expenditures			
Water Operations			
	Audit	765.00	1,940.40
	Administration	11,500.00	7,611.49
	OCWA Contract	112,009.71	110,438.38
	Additional Cost OCWA	28,000.00	25,567.15
	Hydro	42,000.00	38,191.00
	Salaries - Distribution	30,000.00	28,725.08
	Equipment Rental	13,000.00	11,991.77
	Materials	42,000.00	36,685.94
	Insurance Claim		7,435.15
	Connection Fee	1,700.00	2,000.00
	Taxes		1,642.25
Water Capital	OSWAP	3,500.00	237,095.51
	OCWA	58,650.00	
Contribution Reserve			
Treatment Plant	Debt Repayment	146,900.00	146,899.86
	Contribution to Reserve	24,732.00	23,174.84
	OCWA Contract	63,428.19	61,745.04
	OCWA Additional Costs	7,000.00	6,560.95
	Maintenance	10,000.00	8,795.65
	Salaries - Distribution	1,500.00	1,246.89
	Hydro	22,000.00	19,905.63
	Taxes	5,352.00	3,312.00
	Alarm Phone	1,152.00	474.58
	Capital	132,640.00	
	Contribution to Reserve		
		\$ 757,828.90	\$ 781,439.56
Revenue			
	Water Connection Charge		2,000.00
	Sale of Water (user fees)	232,030.00	220,980.95
	Sewer User Charge	160,481.00	152,838.98
	Contribution from Reserve	188,417.90	67,291.63
	Other Revenue	5,000.00	5,221.99
	Provincial Revenue		158,142.68
	From Filtration Reserve	146,900.00	146,899.86
	Interest Filtration Reserve	5,000.00	4,975.52
	Recovery Capital Costs	20,000.00	23,087.95
		\$ 757,828.90	\$ 781,439.56