



The Municipality of Northern Bruce Peninsula

Lion's Head
Drinking Water System

Financial Plan # 250-301

December 2015

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1. Introduction

The Corporation of the Municipality of Northern Bruce Peninsula (the Municipality) has retained the Ontario Clean Water Agency (OCWA) to develop a Financial Plan for the Lion's Head Drinking Water System (DWS) in order to comply with the financial plan regulation (O. Reg. 453/07) made under the Safe Drinking Water Act.

The financial plan contained herein has been prepared in accordance with O. Reg. 453/07, as well as the provisions of the financial planning guidelines published by the Ministry of the Environment (MOE) in August 2007 entitled "Toward Financially Sustainable Drinking-Water and Wastewater Systems".

The financial plan was prepared for the Lion's Head DWS based on information supplied by the Municipality and operational staff, including future capital and major maintenance projects, water system financial information, as well as tangible capital asset information that the Municipality generated in accordance with the Public Sector Accounting Board (PSAB) standard PS 3150 requirements.

The information supplied by the Municipality was used to generate a financial operating plan that forecasted future annual expenditure requirements from the year 2015 through to 2022. A revenue plan, relying mostly on user fees was generated to support the expenditure requirements outlined in the operating plan. The information generated in the operating and revenue plans along with the tangible capital asset information was used to develop a financial plan for the Lion's Head DWS covering a study period from 2015 to 2022 in accordance with O.Reg. 453/07 requirements (minimum 6 year study period).

1.1 Legislative Context to Financial Planning

There have been a number of legislative initiatives affecting water system management and operations over the past decade. These initiatives were a result of the water borne illness tragedy in Walkerton in 2000. Following this event, the Government of Ontario established a public inquiry chaired by the Honourable Dennis O'Connor to look into the tragedy. The Inquiry Report recommended a comprehensive approach to the delivery of safe drinking water in Ontario.

The MOE has responded to the Inquiry recommendations by making legislative changes. One change directly related to the development of this Financial Plan was the passage of the Safe Drinking Water Act, 2002 (SDWA). It requires owners of a municipal drinking water system to apply for and obtain a Municipal Drinking Water License. There are five elements that must be in place in order for the owner of a drinking water system to obtain a license:

- 1) A Drinking Water Works Permit to establish or alter a drinking-water system.
- 2) An accepted Operational Plan. The Drinking Water Quality Management Standard (DWQMS) is the standard upon which operational plans are based. The plan documents an operating authority's quality management system (QMS).

- 3) An Accredited Operating Authority. A third party audit of an operating authority's QMS will be the basis for accreditation.
- 4) A Permit to Take Water.
- 5) A Financial Plan that must be prepared and approved in accordance with the prescribed requirements in the Financial Plans Regulation.

Under section 30 of the SDWA, the Financial Plan element of the license program must either be prepared in accordance with the Sustainable Water and Sewage System Act, 2002 (SWSSA) or in accordance with the requirements set by the Minister of the Environment. SWSSA regulations have not been published. Accordingly, the requirements set by the Minister of Environment apply as per the 2007 MOE guidelines.

Regulation 453/07 of the Safe Drinking Water Act was passed in 2007 and contains two key provisions that apply to an existing water system:

1. A person who makes an application under the Act for a municipal drinking water license shall, before making the application, prepare and approve financial plans for the system that satisfy the requirements of Reg. 453/07. O. Reg. 453/07, S. 1(1).
2. As a condition in a municipal drinking water license that is issued in response to an application made under section 33 of the Act for a municipal drinking water license, the Director shall include a requirement that the owner of the drinking water system, by the later of July 1, 2010 and the date that is six months after the date the first license for the system is issued, prepare and approve financial plans for the system that satisfy the requirements prescribed Reg. 453/07. O. Reg. 453, S. 1(3).

Several other provisions are also set out in the regulation that must be met by a municipality operating a water system:

- The financial plan must be approved by a resolution that is passed by the Council of the municipality.
- The financial plan must apply to a period of at least six years.
- The first year to which the financial plan must apply must be the later of July 1, 2010 or six months after the first license for the system was issued (for initial Financial Plan).
- The financial plan must be available, upon request, to members of the public at no charge and posted on the internet (if the municipality maintains a website).
- The municipality must provide notice as deemed appropriate to advise the public of the availability of the financial plan.

Once a system is licensed, the municipality's Financial Plan is required to be updated every five years, in conjunction with every application for license renewal. A full documentation of the financial plan regulation, O.Reg. 453/07 can be found in Attachment 1.

In June 2006, the Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered accountants approved new municipal financial accounting and reporting standards requiring that tangible capital assets (TCA), including the assets of drinking water systems, be included in municipal financial statements. Stat 3150 came into effect on January 1, 2009.

The Clean Water Act, 2006 targets the protection of drinking water supplies through the development of collaborative, locally driven, science and watershed based source protection plans. According to the MOE financial planning guidelines, Financial Plans should include source water protection costs related to the provision of water services. Utilities are encouraged to have, at minimum, estimates of any current source protection costs as a separate cost item by the time that their Financial Plans are required in order to effectively align with the anticipated approval timelines for source protection plans (2010-2012).

In June 2007, the government of Ontario proposed a lead action plan. The Financial Plans regulation requires municipalities' Financial Plans to include the costs associated with replacing lead service pipes that are part of their drinking water system.

1.2 Municipality of Northern Bruce Peninsula – Drinking Water System

The Lion's Head DWS is located in the Municipality of Northern Bruce Peninsula and is owned by the Corporation of the Municipality of Northern Bruce Peninsula. The DWS is operated by the Ontario Clean Water Agency (OCWA). Northern Bruce Peninsula is located in mid-western Ontario, just south of the Manitoulin Islands on the main land.

Lion's Head Drinking Water System

The DWS draws water through a raw water intake pipe from the low lift station into Isthmus Bay. One of three (3) centrifugal low lift pumps transfers water from the low lift station to the water treatment plant (WTP).

The WTP has a rated capacity of 1351 m³/day and contains two (2) membrane filtration package systems complete with controls and instrumentation. The membrane system has a membrane backwash and clean-in-place system including a hot water and compressed air system as well as sodium hypochlorite, acid and caustic injection capabilities. On site storage is provided by two (2) 96 m³ chlorine contact tanks and one (1) 487 m³ reservoir with water flowing to a common high lift well. There are five (5) vertical turbine high lift pumps pumping water to a 384 m³ high lift well. Chlorine is added to the raw water intake mouth for zebra mussel control, at the outlet of the filters for primary disinfection and at the high lift pump discharge header for trim chlorination. The WTP is equipped with one (1) 230 kW diesel generator for backup power and all process control and monitoring equipment for the Lion's Head DWS.

2. Financial Operating Plan

The financial operating plan includes the full costs of operating the Lion's Head DWS on an ongoing basis and includes capital investments, operating costs, maintenance costs, administration costs, debt repayment and interest charges (if any).

A financial operating plan for the Lion's Head DWS was developed using historical financial information and projecting the information forward to forecast the annual expenditure requirements, while taking into account inflation and any growth forecast.

2.1 Operating Expenses

Recurring operating expenses for the Lion's Head DWS consists of wages for OCWA operators, utility costs, major maintenance and repair items for the upkeep of the drinking water system as well as other miscellaneous costs such as telephone bills, insurance, memberships and training costs. All operating costs are projected to increase on an annual basis at a rate of 2% per year up to the end of the study period. Hydro/Utility costs however, are projected to increase at a rate of 5% per year over the study period. The total water operating expenses (excluding capital items and amortization) for the Lion's Head DWS were \$341,525 in 2015. The projected operating expenses for the remainder of the study period fall between \$310,000 and \$355,000, fluctuating according to the variance in major maintenance costs. By the end of 2022, the operating expenses are expected to have reached \$343,697.

2.2 Capital Costs

Although ongoing yearly maintenance and repair of the Lion's Head DWS is forecasted, most of these costs will be considered an expense. There are however several items that will be capitalized during the study period. These include:

- Replacement of low lift pumps in 2017 and 2020 (\$5,000 each);
- Replacement of high lift pumps in 2017 and 2021 (\$30,000 and \$32,000 respectively);
- Purchase replacement modules for the membrane filtration system in 2017, 2019 and 2021 (\$11,000 each);
- Replacement of 6-inch gate valve in 2022 (\$10,000 each);
- Replacement of two residual management supernatant pumps in 2021 (\$7,500 each);

All capital and major maintenance cost estimates include a 15% contingency from the year 2016 onwards.

2.3 Debt Management

The Lion's Head DWS had a debt principal of \$1,096,161 at year end in 2014. The debt principal is expected to decrease throughout the study period with a resulting principal of \$471,677 by year end 2022. No additional debt is forecasted to be added to the existing debt during the study period.

2.4 Lead Pipe Replacement Costs

There are no costs associated with lead pipe replacement for the Lion's Head DWS.

2.5 Source Water Protection Costs

There are no costs associated with source water protection for the Lion's Head DWS.

3. Funding Plan

A funding plan was developed to ensure that the annual expenditures forecasted in the financial operating plan can be sustained over the study period. The funding plan relies on operating revenues from the direct users of the drinking water system through water rates, water hook ups and vacant lot charges in combination with an annual municipal contribution of \$63,960 to cover the remaining capital and operating costs. There are also federal and provincial grants along with insurance claims that have contributed to the funding plan in the past.

3.1 Water Rates

The Lion's Head DWS currently (in 2015) services approximately 366 connections in the Northern Bruce Peninsula area. The 366 connections are comprised of residential, industrial and commercial users varying in size and usage. The majority of these connections however are residential users with 5/8" or 3/4" connections. All users of the DWS are charged a base flat rate as well as a metered rate (per m³). It has been assumed for this financial plan that the same rate structure will be applied for the duration of the study period.

The proposed water flat and metered rates charged to consumers can be found in Figure 1.1. It includes historical costing from the past few years as well as the proposed rates moving forward. There were no rate increases from 2013 to 2015. After discussions with municipal staff and evaluation of the system's financial needs, 2.75% rate increases will occur from 2016 to the end of the study period.

Figure 1.1 – Water Flat Rate Charge per Year

Type of Unit	Water Rate per Year/ % Increase Over Previous Year								
	Historic			Proposed					
	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential/ Commercial	\$525.00	\$525.00	\$525.00	\$539.44	\$554.27	\$569.51	\$585.18	\$601.80	\$617.80
	0.0%	0.0%	0.0%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%

Figure 1.2 – Water Metered Rate Charge per Year

Type of Unit	Water Rate per Year/ % Increase Over Previous Year								
	Historic			Proposed					
	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential/ Commercial	\$2.25	\$2.25	\$2.25	\$2.31	\$2.38	\$2.44	\$2.51	\$2.58	\$2.65
	0.0%	0.0%	0.0%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%

3.2 Debt and Cash Reserves

At year-end 2014, the Municipality carried a debt for the water system of \$1,096,191. This debt was provided by OSIFA in February of 2007 with a principal amount of \$1.5M, having a loan term of 20 years and an annual interest rate of 4.84%. The Municipality will be paying off the debt semi-annually until 2027. The principal amount by the end of 2022 is expected to be \$471,677.

Based on the current revenue and expenditure forecasts for the study period, there will be no requirement to raise any additional funds through borrowing as any additional revenue required will be taken from the reserve. The Lion's Head DWS reserve had a balance of \$376,236 at the end of 2014 and is expected to decrease over the next several years to a final balance of \$39,123 by the end of 2022.

3.3 Government Grant

In the past, the Municipality had received funding from the Ontario Small Waterworks Assistance Program (OSWAP) in 2011 (\$22,940) and 2012 (\$22,940) to assist in covering operating expenses. They had also received provincial funding in 2011 (\$6,015), 2012 (\$398,066), 2013 (\$85,794) and 2014 (\$41,733). There are no other grants anticipated for the remainder of the study period as it is unknown what funding programs will become available in the next few years.

4. Financial Plan Summary – Northern Bruce Peninsula

This section provides a summary of principal features concerning the current and projected future state of the Lion's Head DWS. The financial information is contained in financial statements covering at least six years (2015-2022) in compliance with O. Reg. 453. Detailed financial statements are set out in

tabular form in Section 4. Notes regarding the financial statements are presented at the end of the financial statement section of this report.

4.1 Statement of Financial Position

An important feature of a water system is its net financial assets. A positive net financial asset indicates that the system has resources to deal with future capital and other needs. A negative number indicates that past capital and other investments must be financed from future revenues. The Lion's Head DWS's net financial assets are shown in Figure 4.1 below.

Figure 4.1 – Northern Bruce Peninsula Net Financial Assets

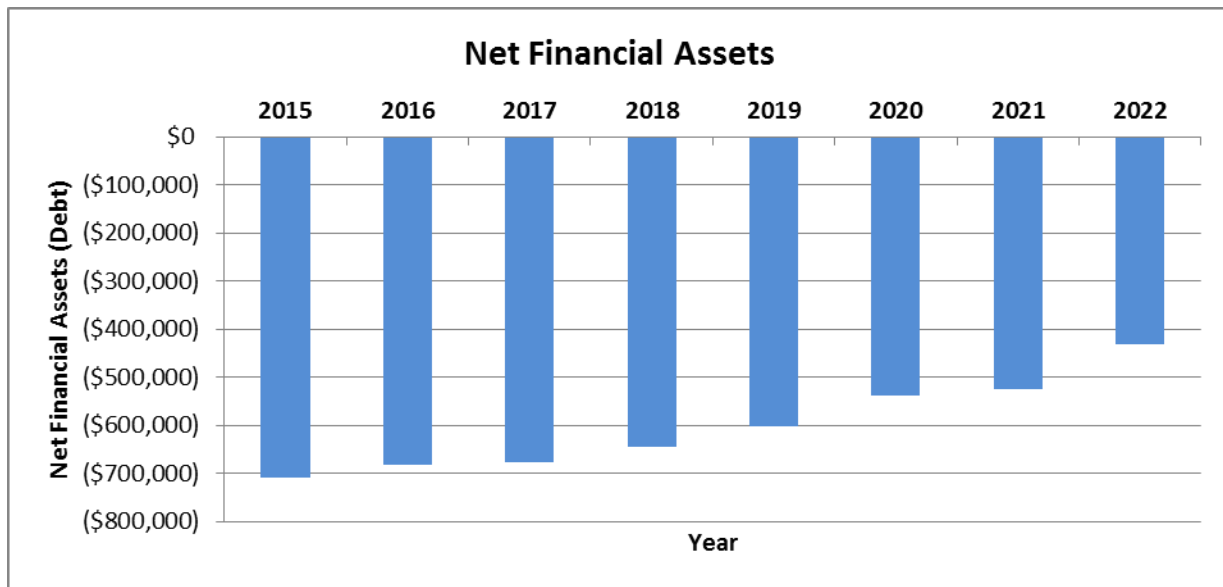


Figure 4.1 shows that negative, but growing net financial assets are projected up to the year 2022. The negative financial asset position is attributed to a large debt originally taken in 2007. The negative, but growing net financial assets indicates that although the position of the Municipality is negative, it is improving as the debt is being repaid over time without additional debt being incurred. However, it should be noted that the water system reserve is being utilized to finance any shortcomings in terms of operating and maintenance expenses.

A second feature of the water system is the total value of the system's tangible capital assets (plant equipment, watermains). Consideration of the value of tangible capital assets (TCA) is part of PSAB compliance. The current value of the capital assets is termed net book value (NBV). NBV is the difference between the original cost of an asset less the accumulated amortization.

Water systems have a great deal of resources tied up in tangible capital assets and managing these assets is critical to maintaining current and future levels of service. Tangible capital assets, once installed, are being used and are decreasing in value. An increase in net book value of tangible capital assets is an indication that assets have been renewed faster than they were used. A decrease in net

book value indicates that assets are being used, or amortized, faster than they are renewed. The net book value of the assets is set out in Figure 4.2. As shown in the figure, the TCA NBV decreased from 2015 to 2022 since the yearly amortization was greater than the capital additions each year. The assets decrease linearly according to the yearly amortization until the end of the study period.

Figure 4.2 – Northern Bruce Peninsula Tangible Capital Assets

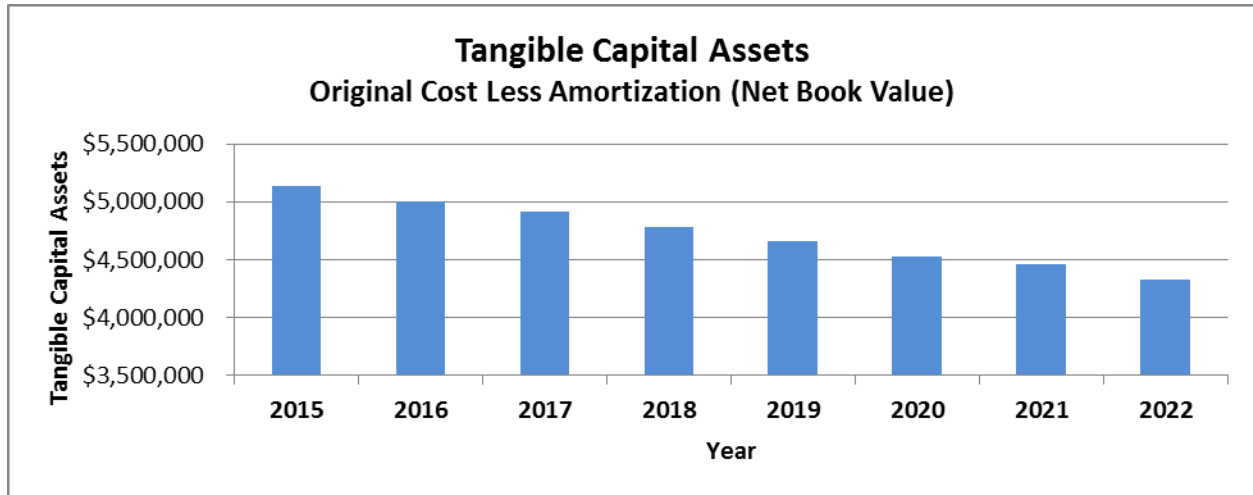
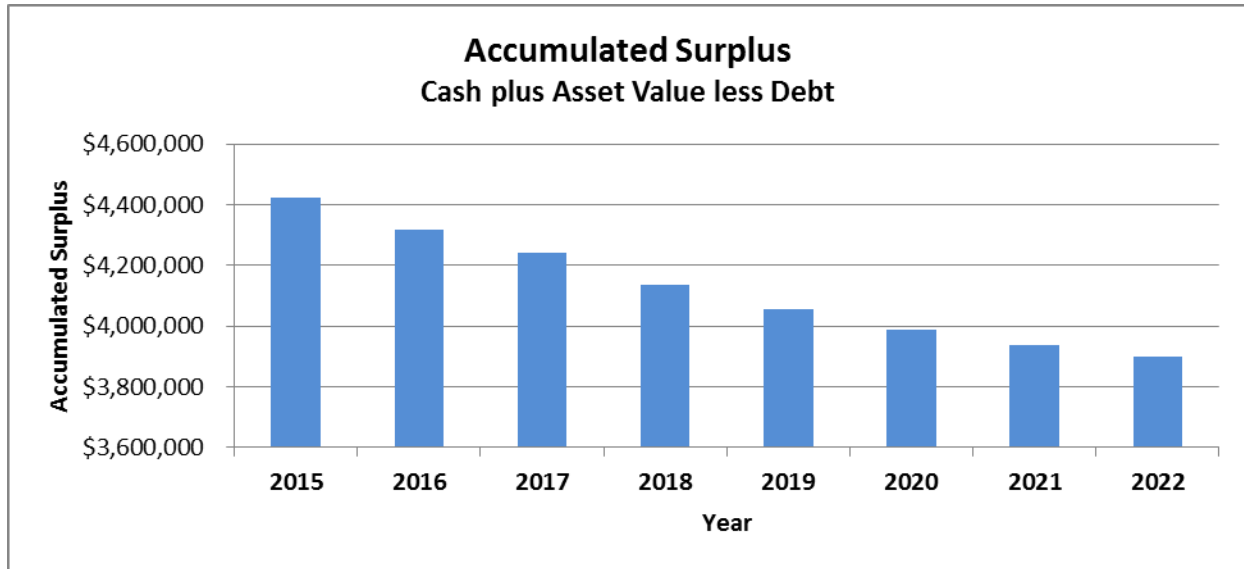


Figure 4.3 sets out the accumulated surplus, which represents cash on hand plus the net book value of tangible capital assets less debt. The water system is projected to show a decrease in accumulated surplus from 2015 to 2022. The decrease in the first portion of the study period is due to a decrease in the water reserve balance required for funding capital a major maintenance works, combined with amortization expenses each year. As the water rates increase over the study period to catch up with the expenses of the water system, the rate at which the accumulated surplus decreases becomes slower. Overall, this is showing that the combined cash and asset position is strengthening over time; however the expenses remain greater than the revenues for the study period. The Municipality also has significant debt and a working deficit in place, but it is being paid off throughout the study period. The assets added through the betterments and additions, combined with the repayment of debt, increase the value of the assets in the system. Overall, the elimination of debt and addition of assets is occurring at a faster rate than the amortization or loss of value of the asset by the end of the study period.

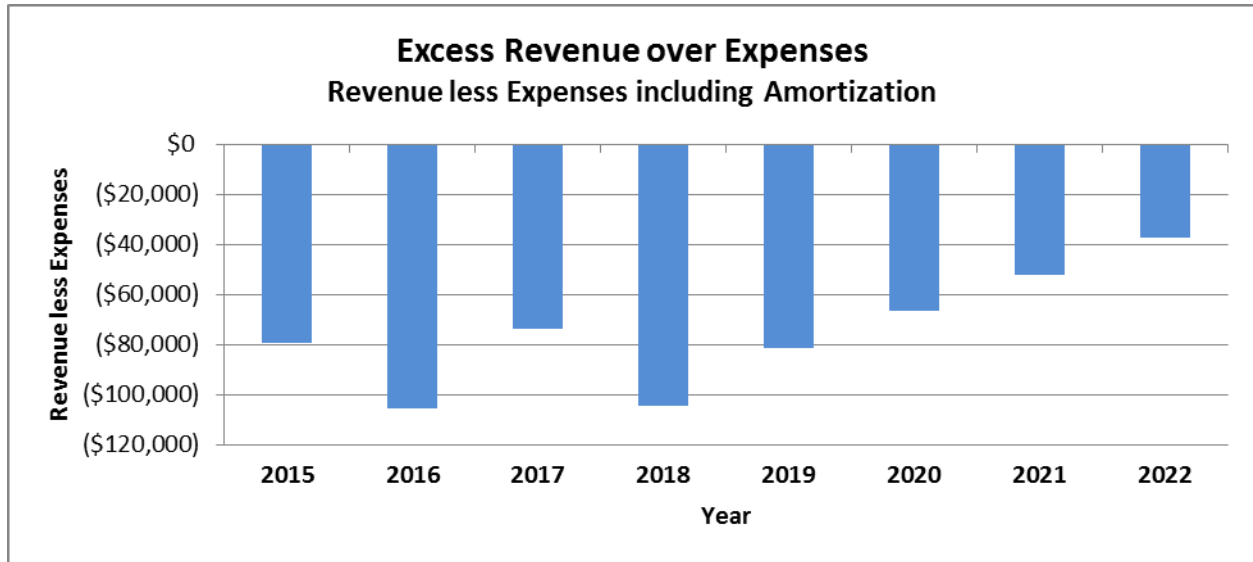
Figure 4.3 – Northern Bruce Peninsula Accumulated Surplus



4.2 Statement of Operations

This statement summarizes revenues and expenditures. Revenue includes revenues from connected users, government grants, and contributions from general revenue. Expenditures include ongoing operating costs, debt repayment, and asset amortization. Figure 4.4 projects that the system’s excess of revenues over expenses, including amortization, has negative values throughout the study period. It must be noted that there is an annual municipal contribution of \$63,960 to assist in ongoing operating and capital costs. With annual amortization expenses over \$130,000 each year, the system continuously has higher expenses compared to revenues from 2016 to 2022. It is not yet known whether funding can be obtained through a funding program for some of the major capital works. Without the municipal contribution or some assistance from government funding, the DWS will not be able to sustain itself based on the projected capital and major maintenance items.

Figure 4.4 – Northern Bruce Peninsula Excess Revenue over Expenses



4.3 Continuous Improvement

The SDWA requires renewal of Municipal Drinking Water Licenses every five (5) years. The Financial Plan regulation requires the preparation and approval of a financial plan before making an application for renewal of a Drinking Water License. Thus each Financial Plan will require updating at a minimum frequency of every five years. This on-going update will assist in revisiting the assumptions made in the original financial plan, to develop the operating and funding plans as well as re-assessing the need for capital renewal and major maintenance expenditures.

4.4 Conclusion

Based on the proposed rates, the Lion's DWS is slowly moving towards becoming a self-sustaining system financially. However, the DWS relies on an annual municipal contribution and funds from the water system reserve to cover operating and maintenance costs. These contributions from sources other than the rate payers are crucial for the drinking water system. By the end of the study period, there will be less reliance on these miscellaneous contributions as the rates catch up to the expenses incurred by the system. Nevertheless, with the application of municipal contributions, the financial statements reveal that the Lion's Head DWS is projected be in better financial shape (assuming funding from the municipal contribution continues) as time progresses and there is no need for borrowing over the next few years.

In reviewing these statements, it is important to keep in mind that a number of assumptions have been made concerning inflation, interest rates, and growth projections. Actual numbers may significantly deviate from these over time. In addition, capital and major maintenance cost estimates and schedule may vary from current projections. There is a need to monitor the progress of this plan and make adjustments as needed.

The detailed financial statements are set out in tabular form in the following Section and were the basis for the above summary.

5. Financial Statements

The detailed financial statements are set out in the following tables. Section 6 details the notes that correspond to the “notes” numbers on the right side of the tables.

Table 5.1 – Statement of Financial Position

Statement of Financial Position	2015	2016	2017	2018	2019	2020	2021	2022	Notes
Financial Assets									
Cash/Cash Equivalents									
System Reserve	\$321,271	\$279,083	\$213,637	\$169,284	\$131,236	\$111,893	\$38,913	\$39,123	1
other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Cash/Cash Equivalents	\$321,271	\$279,083	\$213,637	\$169,284	\$131,236	\$111,893	\$38,913	\$39,123	
Investments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Accounts Receivable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Financial Assets	\$321,271	\$279,083	\$213,637	\$169,284	\$131,236	\$111,893	\$38,913	\$39,123	
Liabilities									
Accounts Payable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Debt Principal	\$1,030,526	\$961,676	\$889,454	\$813,694	\$734,222	\$650,858	\$563,409	\$471,677	2
Working Deficit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Other liabilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Liabilities	\$1,030,526	\$961,676	\$889,454	\$813,694	\$734,222	\$650,858	\$563,409	\$471,677	
Net Financial Assets (Debt)	(\$709,256)	(\$682,594)	(\$675,817)	(\$644,410)	(\$602,986)	(\$538,965)	(\$524,497)	(\$432,554)	
Non Financial Assets									
Tangible Capital Asset Cost (Closing)	\$7,025,319	\$7,025,319	\$7,080,356	\$7,080,356	\$7,094,049	\$7,100,397	\$7,175,512	\$7,188,722	3,4
Changes in Tangible Capital Assets - Additions	\$0	\$0	\$55,037	\$0	\$13,693	\$6,348	\$75,115	\$13,210	5
Changes in Tangible Capital Assets - Betterments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Changes in Tangible Capital Assets - Disposals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Accumulated Amortization (closing)	\$1,894,932	\$2,027,044	\$2,162,826	\$2,298,608	\$2,435,302	\$2,572,420	\$2,714,545	\$2,857,199	4
Total Non Financial Assets	\$5,130,387	\$4,998,274	\$4,917,530	\$4,781,748	\$4,658,746	\$4,527,977	\$4,460,967	\$4,331,523	
Accumulated Surplus(deficit)	\$4,421,131	\$4,315,681	\$4,241,713	\$4,137,338	\$4,055,761	\$3,989,012	\$3,936,470	\$3,898,969	

Note: Unaudited for Planning Purposes Only – Actual results will differ from the above and these difference could be material.

Table 5.2 – Statement of Financial Operation

Statement of Financial Operations		2015	2016	2017	2018	2019	2020	2021	2022	
Total Revenues										
	Revenue from Users									
	Transfer from LH Marina	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	6
	Transfer from Campground	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	7
	Water Charges - Direct Billings	\$300,000	\$294,972	\$302,932	\$311,196	\$322,680	\$334,560	\$346,849	\$359,562	8
	Water Hookups	\$3,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	9
	Municipal Contribution	\$63,960	\$63,960	\$63,960	\$63,960	\$63,960	\$63,960	\$63,960	\$63,960	10
	Other	\$59,600	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	11
	Total Revenue from Users	\$446,560	\$410,432	\$418,392	\$426,656	\$438,140	\$450,020	\$462,309	\$475,022	
	Interest									
	System Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1
	Grants									
	Provincial Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	Federal Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	Total Grants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	Total Revenues	\$446,560	\$410,432	\$418,392	\$426,656	\$438,140	\$450,020	\$462,309	\$475,022	
Expenses										
	OCWA Service Agreement	\$288,000	\$293,760	\$299,635	\$305,628	\$311,740	\$317,975	\$324,335	\$330,821	12
	Telephone	\$6,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	13
	Hydro	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	Propane	\$3,500	\$3,675	\$3,859	\$4,052	\$4,254	\$4,467	\$4,690	\$4,925	
	Engineering Fees	\$5,000	\$5,100	\$5,202	\$5,306	\$5,412	\$5,520	\$5,631	\$5,743	14
	Insurance	\$6,225	\$6,350	\$6,476	\$6,606	\$6,738	\$6,873	\$7,010	\$7,151	15
	Other	\$32,300	\$7,430	\$7,563	\$7,698	\$7,836	\$7,977	\$8,120	\$8,266	16
	Major Maintenance and Service Rebate	\$0	(\$25,000)	(\$25,000)	(\$25,000)	(\$25,000)	(\$25,000)	(\$25,000)	(\$23,117)	17
	Major Maintenance	\$0	\$43,401	\$13,161	\$48,816	\$33,610	\$27,298	\$17,484	\$9,907	18
	Expenses before interest and amortization	\$341,525	\$334,716	\$310,896	\$353,105	\$344,590	\$345,110	\$342,270	\$343,697	
	Debt Interest	\$52,270	\$49,054	\$45,682	\$42,144	\$38,433	\$34,540	\$30,456	\$26,172	2
	Amortization	\$132,113	\$132,113	\$135,782	\$135,782	\$136,695	\$137,118	\$142,125	\$142,654	4
	Total Expenses	\$525,907	\$515,882	\$492,359	\$531,031	\$519,718	\$516,768	\$514,851	\$512,523	
	Excess of Revenues over Expenses	(\$79,347)	(\$105,450)	(\$73,968)	(\$104,375)	(\$81,578)	(\$66,748)	(\$52,542)	(\$37,502)	
	Excess of Revenues over Expenses	(\$79,347)	(\$105,450)	(\$73,968)	(\$104,375)	(\$81,578)	(\$66,748)	(\$52,542)	(\$37,502)	
	Annual Surplus (Deficit) Beginning of year	\$4,500,478	\$4,421,131	\$4,315,681	\$4,241,713	\$4,137,338	\$4,055,760	\$3,989,012	\$3,936,470	
	Accumulated Surplus (Deficit) End of Year	\$4,421,131	\$4,315,681	\$4,241,713	\$4,137,338	\$4,055,760	\$3,989,012	\$3,936,470	\$3,898,968	

Note: Unaudited for Planning Purposes Only – Actual results will differ from the above and these difference could be material.

Table 5.3 – Statement of Change in Cash Flow

Statement of Cash Flow	2015	2016	2017	2018	2019	2020	2021	2022	
Operating Transactions									
Cash received from Revenues	\$446,560	\$410,432	\$418,392	\$426,656	\$438,140	\$450,020	\$462,309	\$475,022	
Cash paid for Operating Expenses	\$341,525	\$334,716	\$310,896	\$353,105	\$344,590	\$345,110	\$342,270	\$343,697	
Cash paid for Financing Charges (Debt Interest)	\$52,270	\$49,054	\$45,682	\$42,144	\$38,433	\$34,540	\$30,456	\$26,172	2
Excess of Operating Revenues Over Operating Expenses	\$52,765	\$26,662	\$61,814	\$31,407	\$55,117	\$70,370	\$89,583	\$105,152	
Working Capital Items									
Accounts Receivable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Capital Work in Progress	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cash provided by Operating Transactions	\$52,765	\$26,662	\$61,814	\$31,407	\$55,117	\$70,370	\$89,583	\$105,152	
Capital									
Acquisition of TCAs	\$0	\$0	(\$55,037)	\$0	(\$13,693)	(\$6,348)	(\$75,115)	(\$13,210)	5
Proceeds on Disposal of TCA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cash used in Capital Transactions	\$0	\$0	(\$55,037)	\$0	(\$13,693)	(\$6,348)	(\$75,115)	(\$13,210)	
Investing									
Cash (used in)/Provided by Investing Activities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1
Increase (decrease) Cash Provided by Investing Activities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Financing									
Forecasted deficit contributions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Repayment of Long Term Debt (principal)	(\$65,635)	(\$68,850)	(\$72,223)	(\$75,760)	(\$79,472)	(\$83,365)	(\$87,448)	(\$91,732)	2
Cash Provided by (used) in Financing Activities	(\$65,635)	(\$68,850)	(\$72,223)	(\$75,760)	(\$79,472)	(\$83,365)	(\$87,448)	(\$91,732)	
Increase (decrease) in Cash Equivalents	(\$12,869)	(\$42,188)	(\$65,446)	(\$44,353)	(\$38,048)	(\$19,343)	(\$72,980)	\$211	
Cash and Cash Equivalents at the beginning of the Year	\$334,140	\$321,271	\$279,083	\$213,637	\$169,284	\$131,236	\$111,893	\$38,913	
Cash and Cash Equivalents at the End of the Year	\$321,271	\$279,083	\$213,637	\$169,284	\$131,236	\$111,893	\$38,913	\$39,123	

Note: Unaudited for Planning Purposes Only – Actual results will differ from the above and these difference could be material.

6. Notes on the Lion's Head DWS Financial Plan

The Lion's Head DWS Financial Plan represents a forecast of the financial performance of the drinking water system over a study period starting in 2015 through to 2022. The following notes are intended to document and/or clarify some of the assumptions made in generating the financial information contained in the tables. The reader is cautioned that the financial plan contains un-audited financial information and is subject to change.

1. The DWS had a reserve balance of \$376,236 at the beginning of 2015. The reserve decreased throughout most of the study period with a final balance of \$39,123 by the end of 2022.
2. The DWS had a debt principal of approximately \$1,030,526 at year end 2015. The debt principle decreases each year until 2022 when it reaches a value of \$471,677.
3. Tangible Capital Assets Cost (Closing) includes changes (additions, betterments, disposals, write-downs) in tangible capital assets during the year.
4. Tangible Capital Assets (TCA) are assumed to have no residual value when they have reached the end of their projected useful life. The projected future costs of capital items include a 15% contingency for items occurring in 2016 or later. Amortization was determined using the straight line method. The calculation of Amortization begins the year that the asset is put into service.
5. TCA Additions – There are nine (9) capital projects, including replacement of low lift pumps, high lift pumps, supernatant pumps of the residual waste management system, 6-inch gate valves in the distribution system and acquisition of membrane modules.
6. Transfer from LH Marina – Annual revenue of \$10,000 from the Marina that is expected to stay constant throughout the study period.
7. Transfer from Campground – Annual revenue of \$10,000 from a local Campground that is expected to stay constant throughout the study period.
8. Water Charges – Direct Billings – Water Meters – There are 366 connections that are comprised of residential, industrial and commercial users varying in size and usage. The majority of these connections however are residential users with 5/8" or 3/4" connections. All users of the DWS are charged a base flat rate as well as a metered rate (per m³).
9. Water Hookups – A flat rate of \$3,000 is charged for each new connection to the DWS. Five (5) new hookups have been assumed for each year between 2016 and 2022.
10. Municipal Contribution – The DWS receives an annual municipal contribution in the amount of \$63,960 to help fund ongoing operating costs and is expected to continue throughout the study period.

11. Other – Miscellaneous revenue for the DWS including water certificates, turn water on/off charges, water meter charges, water repair fees, vacant lot charges and OCWA telephone charges.
12. OCWA Service Agreement – OCWA's service agreement is estimated to increase at 2% per year.
13. Telephone – Telephone costs are estimated to increase at 2% per year.
14. Engineering Fees – Miscellaneous engineering fees for the DWS are budgeted at \$5,000 in 2015 and projected to increase at 2% per year.
15. Insurance – Insurance costs are anticipated to be \$6,225 in 2015 and expected to increase at 2% per year for any future increase in insurance costs.
16. Other – Includes municipal wages, memberships, training, and machine time.
17. Major Maintenance and Service Rebate – According to OCWA's Service Agreement, OCWA is to pay first \$20K of capital (it is assumed that OCWA will use the full \$20K each year), and first \$5K of Service breaks and all routine maintenance (it is assumed that OCWA will use the full \$5K each year) for a total of a \$25,000 rebate each year.
18. Major Maintenance – Major Maintenance costs up to the year 2015 fall under the general ledger categories "Materials and Supplies". "OCWA Additional Charge", and "Repairs and Maintenance". From 2016 onward, major maintenance costs are derived from the capital and major maintenance plan that was created by OCWA and the municipality.

Attachment 1

Ontario Regulation 453/07

Safe Drinking Water Act, 2002
ONTARIO REGULATION 453/07
FINANCIAL PLANS

Consolidation Period: From April 1, 2008 to the [e-Laws currency date](#).

Last amendment: O. Reg. 69/08.

This is the English version of a bilingual regulation.

Requirement to prepare financial plans

1. (1) A person who makes an application under clause 32 (1) (b) of the Act for a municipal drinking water licence shall, before making the application, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 2. O. Reg. 453/07, s. 1 (1).

(2) A person who makes an application under subsection 32 (4) of the Act for the renewal of a municipal drinking water licence shall, before making the application, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 3. O. Reg. 453/07, s. 1 (2).

(3) As a condition in a municipal drinking water licence that is issued in response to an application made under section 33 of the Act for a municipal drinking water licence, the Director shall include a requirement that the owner of the drinking water system, by the later of July 1, 2010 and the date that is six months after the date the first licence for the system is issued, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 3. O. Reg. 453/07, s. 1 (3).

(4) The Director shall include, as a condition in a municipal drinking water licence, the requirement set out in subsection (3) in any amendments to a license made after the application, if the condition is not satisfied at the time when the amendment is made. O. Reg. 453/07, s. 1 (4).

Financial plan requirements; new systems

2. For the purposes of clause (b) of the definition of “financial plans” in subsection 30 (1) of the Act, the following requirements are prescribed for financial plans that are required by subsection 1 (1) to satisfy the requirements of this section:

1. The financial plans must be approved by a resolution that indicates that the drinking water system is financially viable and that is passed by,
 - i. the council of the municipality, if the owner of the drinking water system is a municipality, or
 - ii. the governing body of the owner, if the owner of the drinking water system has a governing body and is not a municipality.
2. The financial plans,
 - i. must include a statement that the financial impacts of the drinking water system have been considered, and
 - ii. must apply for a period of at least six years.
3. The first year to which the financial plan must apply is the year in which the drinking water system is expected to first serve the public.
4. For each year in which the financial plans apply, the financial plans must include details of the proposed or projected financial operations of the drinking water system itemized by,
 - i. total revenues, further itemized by water rates, user charges and other revenues,
 - ii. total expenses, further itemized by amortization expenses, interest expenses and other expenses,
 - iii. annual surplus or deficit, and
 - iv. accumulated surplus or deficit.
5. The owner of the drinking water system must,
 - i. make the financial plans available, on request, to members of the public who are served by the drinking water system without charge,
 - ii. make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet, and

- iii. provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring the notice to the attention of members of the public who are served by the drinking water system.
6. The owner of the drinking water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing. O. Reg. 453/07, s. 2.

Financial plan requirements; licence renewal

3. (1) For the purposes of clause (b) of the definition of “financial plans” in subsection 30 (1) of the Act, the following requirements are prescribed for financial plans that are required by subsection 1 (2) or a condition that is included in a municipal drinking water licence under subsection 1 (3) to satisfy the requirements of this section:

1. The financial plans must be approved by a resolution that is passed by,
 - i. the council of the municipality, if the owner of the drinking water system is a municipality, or
 - ii. the governing body of the owner, if the owner of the drinking water system has a governing body and is not a municipality.
2. The financial plans must apply to a period of at least six years.
3. The first year to which the financial plans must apply must be the year determined in accordance with the following rules:
 - i. If the financial plans are required by subsection 1 (2), the first year to which the financial plans must apply must be the year in which the drinking water system’s existing municipal drinking water licence would otherwise expire.
 - ii. If the financial plans are required by a condition that was included in a municipal drinking water licence under subsection 1 (3), the first year to which the financial plans must apply must be the later of 2010 and the year in which the first licence for the system was issued.
4. Subject to subsection (2), for each year to which the financial plans apply, the financial plans must include the following:
 - i. Details of the proposed or projected financial position of the drinking water system 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, and
 - E. changes in tangible capital assets that are additions, donations, write downs and disposals.
 - ii. Details of the proposed or projected financial operations of the drinking water system itemized by,
 - A. total revenues, further itemized by water rates, user charges and other revenues,
 - B. total expenses, further itemized by amortization expenses, interest expenses and other expenses,
 - C. annual surplus or deficit, and
 - D. accumulated surplus or deficit.
 - iii. Details of the drinking water system’s proposed or projected gross cash receipts and gross cash payments itemized by,
 - A. operating transactions that are cash received from revenues, cash 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, and
 - F. cash and cash equivalents at the beginning and end of the year.

- iv. Details of the extent to which the information described in subparagraphs i, ii and iii relates directly to the replacement of lead service pipes as defined in section 15.1- 3 of Schedule 15.1 to Ontario Regulation 170/03 (Drinking Water Systems), made under the Act.
5. The owner of the drinking water system must,
 - i. make the financial plans available, on request, to members of the public who are served by the drinking water system without charge,
 - ii. make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet, and
 - iii. provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring the notice to the attention of members of the public who are served by the drinking water system.
6. The owner of the drinking water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing. O. Reg. 453/07, s. 3 (1).

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

1. Sub-subparagraphs 4 i A, B and C of subsection (1).
2. Sub-subparagraphs 4 iii A, C, E and F of subsection (1). O. Reg. 453/07, s. 3 (2).

Alternative requirements for two or more drinking water systems

4. If section 3 applies to the financial plans of two or more drinking water systems that are solely owned by the same owner, the requirements prescribed by the section may, as an alternative, be satisfied by financial plans that comply with the section but treat those systems as if they were one drinking water system. O. Reg. 453/07, s. 4.

Amendment of financial plans

5. Sections 2 and 3 do not prevent financial plans from being amended. O. Reg. 453/07, s. 5.

Additional information

6. The requirements of this Regulation do not prevent a person from providing additional information in financial plans prepared for the purpose of meeting the requirements of the Act. O. Reg. 453/07, s. 6.