

**TOWNSHIP OF ALFRED AND
PLANTAGENET**

**ALFRED-LEFAIVRE DRINKING WATER
SYSTEM**

FINANCIAL PLAN # 169-301

SUBMITTED BY

Ontario Clean Water Agency
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Mississauga, ON L5A 4G1

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STATEMENT OF CONFIDENTIALITY

OCWA's Report to The Township of Alfred and Plantagenet for the Drinking Water System Financial Plan

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Appendix A: Ontario Regulation 453/07

1 Introduction

The Corporation of the Township of Alfred and Plantagenet (the Township) has retained the Ontario Clean Water Agency (OCWA) to update the Financial Plan for the Township's Drinking Water System (DWS) in order to comply with the Financial Plan regulation (O. Reg. 453/07) made under the Safe Drinking Water Act.

This Financial Plan 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), now Ministry of the Environment, Conservation, and Parks (MECP), in August 2007 entitled "Toward Financially Sustainable Drinking-Water and Wastewater Systems".

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

The information supplied by the Township and operational staff was used to generate an operating plan that forecasted future annual expenditure requirements from 2021 to 2027. A revenue plan relying primarily 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 Township's DWS covering a study period from 2021 to 2027 in accordance with O. Reg. 453/07 requirements (minimum six 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 waterborne illness tragedy in Walkerton in 2000. Following this incident, 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 MECP 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 Licence. There are five elements that must be in place in order for the owner of a drinking water system to obtain a Licence:

- 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 to 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 licence 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 MECP 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 licence 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 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 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 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 licenced, the municipality's Financial Plan is required to be updated every five years, in conjunction with every application for license renewal. 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 MECP 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 Township of Alfred and Plantagenet - Drinking Water System

The Drinking Water System (DWS), located in the Township, is owned by the Corporation of the Township of Alfred and Plantagenet and operated by the Ontario Clean Water Agency under contract. The Municipality is located in Eastern Ontario, at the confluence of the Ottawa River and the South Nation River.

The Township comprises of two (2) Drinking Water Systems:

- The Alfred-Lefaiivre Drinking Water System (Plant Rated Capacity 6,277 m³/day);
- The Wendover Drinking Water System (1,806 m³/day for raw water higher than 1 degree Celsius and 1517 m³/day for raw water temperatures below 1 degree Celsius).

The Alfred-Lefaiivre Drinking Water System is considered a large municipal residential system under O. Reg. 170/03 with approximately 1,330 commercial and residential service connections.

Alfred-Lefaiivre Drinking Water System

The Alfred-Lefaiivre DWS services a population of approximately 4,500 set in three different locations within the Township: the Villages of Alfred, Lefaiivre, and Plantagenet. The System also services a village within a neighbouring Municipality, the Village of St. Isidore in the Municipality of The Nation.

The Alfred-Lefaiivre Drinking Water System consists of a surface water treatment plant (Lefaiivre WTP) that draws water from the Ottawa River. The Lefaiivre WTP is a conventional filtration plant with two process trains. One train utilizes an Actiflow® process package plant with a Dusenflow® filtration system and the other train utilizes a reactor type clarifier/flocculator with dual media filters. The Lefaiivre WTP also includes pH control, UV and chlorination disinfection system, onsite storage, high lift pumping and standby power. The distribution system includes two (2) elevated storage tanks (one in Alfred and the other in Plantagenet) and one (1) grade level reservoir.

2 Financial Operating Plan

The financial operating plan includes the full costs of operating the Alfred-Lefavre DWS on an on-going basis and includes capital investments, operating costs, maintenance costs, administration costs, and other miscellaneous costs.

A financial operating plan for the Alfred-Lefavre DWS was developed using historical financial statements, forecasted capital and major maintenance expenditures and tangible capital asset information. These aforementioned elements were used to forecast the annual expenditure requirements while taking into account contingency costs, inflation and any growth expected.

2.1 Operating Expenses

Recurring operating expenses for the Alfred-Lefavre DWS consist of wages and benefits for OCWA operators, materials and supplies, and major maintenance/capital repair items for the upkeep of the drinking water system. 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. The total water operating expenses (excluding capital items and amortization) for the Alfred-Lefavre DWS was \$884,233 in 2020. The projected operating expenses for the remainder of the study period fall between \$600,620 and \$674,232 fluctuating according to the variance in major maintenance. By the end of 2027, the operating expenses are expected to have reached \$693,205.

2.2 Capital Costs

Yearly maintenance/repair expenditures refer to the cost to upkeep certain assets to prolong their level of service. Capital expenditures are the costs involved in upgrading or acquiring an asset to be used in order to provide a service.

As part of the development of this Financial Plan, the existing capital and major maintenance plan was updated to identify future capital and maintenance needs during the study period. All capital costs were obtained from OCWA's capital and major maintenance plan from 2021 to 2026 and for 2027 costs associated with the following items were assumed constant: WTP process equipment repairs, distribution system emergency repairs and distribution hydrant emergency repairs.

For the purpose of the financial plan, anything equal or less than \$5,000 was considered major maintenance, including water meter installations (\$425 per meter). Some of the major expenditures that will be capitalized during the Financial Plan study period (2021-2027) include the following:

- New SCADA System in 2021 (\$60,000);
- New air conditioning units in 2021 (\$7,500);
- Chemical feed pumps in 2021 (\$10,000);
- Replacement of valve boxes in 2021 (\$60,000);
- New high lift pump motor in 2021 and 2023 (\$6,000);
- Replacement of flow meters in 2022 (\$10,000);
- New combined chlorine analyzer in 2023 (\$10,000);

- WTP process equipment repairs 2021-2027 (\$20,000/yr);
- Distribution system emergency repairs 2021-2027 (\$10,000/yr);
- Distribution hydrant emergency repairs 2021-2027 (\$10,000/yr).

All capital and major maintenance cost estimates do not include contingency and are “Class 5” estimates (-50% to +100%) according to AACE standards based upon parametric or analogous models. The timing of future projects is subject to adjustment based on changing asset performance information.

2.3 Debt Management

The Alfred-Lefavre DWS had financial charges of \$17,809 at year-end in 2020 due to a 20-year loan. The Township is expected to pay a fixed amount of about \$18,000 a year until 2037. No additional debt is forecasted to be added to the existing debt during the study period.

2.4 Lead Pipe Replacement Cost

There are no costs associated with lead pipe replacement for the Alfred-Lefavre DWS.

2.5 Source Water Protection Costs

There are no costs associated with source water protection for the Alfred-Lefavre 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 mainly on the revenues generated from the direct users of the DWS through water rates and late payment charges, in combination with interest generated on the reserve, and other revenues to cover forecasted capital and operating costs. The plan also considers potential infrastructure and federal/provincial grants that would help fund expenditures for the study period.

3.1 Water Rates

The Alfred-Lefavre DWS currently services approximately 1330 residential and commercial service connections in the Alfred Lefavre region. An organic growth of four (4) units per year has been assumed from 2021 to the end of the study period. This growth is based on the Town’s projection for the next six (6) years.

Since there are several communities that are connected to the WTP located in Alfred-Lefavre, the Township charges these communities an amount that is based on the water used by each community. These charges help pay for the operating and maintenance costs described in Section 2.1 that are associated with the upkeep of the DWS. The Village of Plantagenet in 2021 is anticipated to cover 23.10% of these costs, while the Nation Municipality, Village of St. Isidore, is anticipated to cover 21.90% of these costs. The remainder of the costs will be paid for by Alfred-Lefavre (55%).

Users of the DWS are charged a yearly flat rate as well as a metered rate (per m³) and it has been assumed for this financial plan that this rate structure will continue for the duration of the study period.

The past and proposed annual water rates charged to consumers can be found in Table 3.1. As shown, there was approx. a 5% annual rate increase from 2017 to 2020 followed by an increase of approx. 2% for both flat and metered rates in 2021. The average rate increase between 2017 and 2020 for flat rates and metered rates is 4.93% and 5.27%, respectively. The future water charges through direct billings were calculated by projecting forward from 2021 while increasing the number of units by four (4) and applying an average rate increase of 4.93% and 5.27% from 2022 to 2027. For the purpose of consistency, 2021 water rates have been excluded from the average rate calculations as they represent an anomaly compared to previous years.

Table 3.1 – Annual Water Rates Charge for Residential (Single) Category

Type of Unit	Water Rate per Year/ % Increase Over Previous Year								
	Historic			Proposed					
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Flat Rate	\$250.00	\$262.00	\$267.00	\$280.15	\$293.96	\$308.44	\$323.64	\$339.58	\$356.31
	5.08%	4.80%	1.91%	4.93%	4.93%	4.93%	4.93%	4.93%	4.93%
Metered Rate	\$0.93	\$0.98	\$1.00	\$1.05	\$1.11	\$1.17	\$1.23	\$1.29	\$1.36
	5.68%	5.38%	2.04%	5.27%	5.27%	5.27%	5.27%	5.27%	5.27%

It is anticipated that based on the forecasted water rates, the system will be financially sustainable by 2023.

3.2 Debt and Cash Reserves

At year-end 2020, the Township carried debt for the water system of \$229,031 which was calculated based on an interest rate of 3.43%. This debt was provided in 2017 with a principal amount of \$257,412, having a loan term of 20 years. The Municipality will be paying off the debt until 2037. The principal amount at the end of 2027 is expected to be \$150,384

There is a reserve fund for the Alfred-Lefavre system that had a balance of \$492,001 at the beginning of 2020. This reserve fund is expected to increase in size each year due to user rates and connection fees generating larger revenue than the expenditures of the system. This surplus is transferred to the reserve fund and is expected to amass a total of \$1,870,323 by the end of 2027. This reserve has been assumed to generate an interest of 1.02% per year over the study period.

An additional reserve is set aside for Alfred-Lefavre that is maintained at a constant level throughout the study period. This reserve had a balance of \$17,000 at the beginning of 2020 and will remain with this amount until the end of the study period.

3.3 Government Grants

There are no grants anticipated for the remainder of the study period as it is unknown what funding programs will become available during the study period.

4 Financial Plan Summary – Alfred-Lefaiivre

This section provides a summary of the principal features concerning the current and projected future state of the Alfred-Lefaiivre DWS. The financial information is contained in financial statements covering at least six years (2021-2027) in compliance with O. Reg. 453. Detailed financial statements are set out in tabular form in Section 7. Notes regarding the financial statements are presented at the end of the financial statement section of this report.

4.1 Statement of Financial Position (Table 7.1)

4.1.1 Net Financial Assets/(Debt)

An important feature of a water system is its net financial assets/(debt). A positive net financial asset position 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. Alfred-Lefaiivre DWS’s net financial assets/(Debt) are shown in Figure 4.1 below.

Figure 4.1 – Alfred-Lefaiivre DWS Net Financial Assets/(Debt)

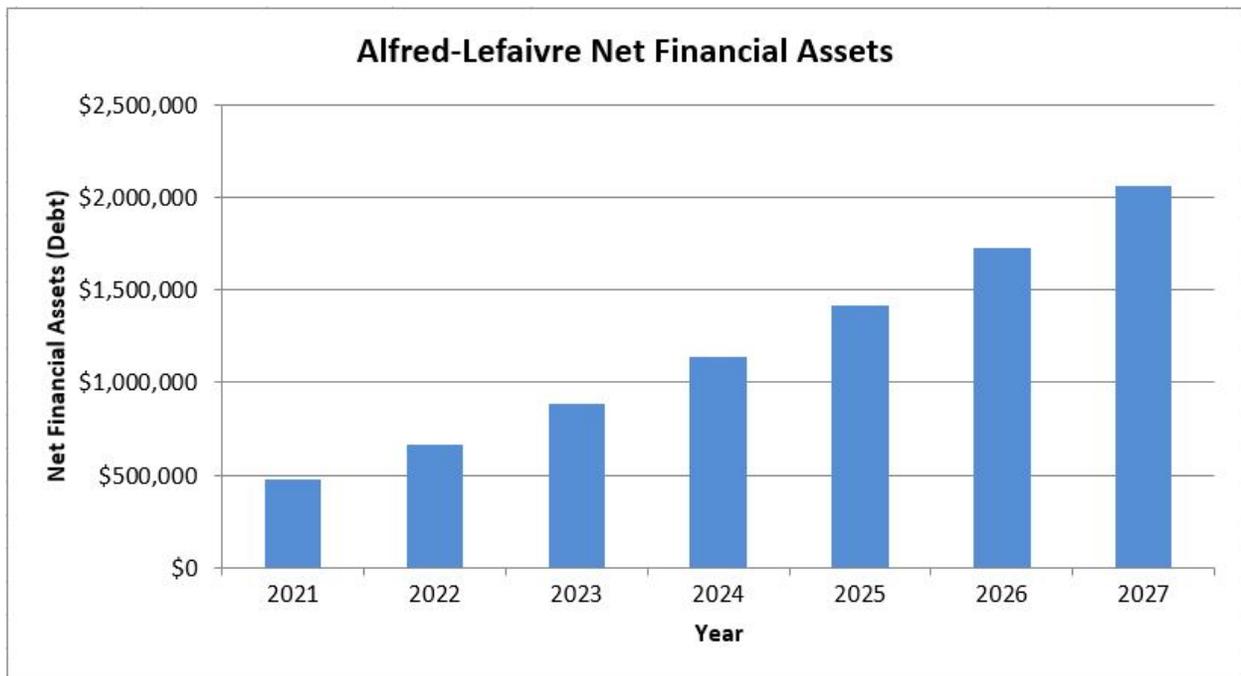


Figure 4.1 shows that the DWS’s net financial assets are presently positive and projected to further decrease until the end of 2027. The positive financial asset position is primarily attributed to the reserve fund continuing to grow throughout the study period. The positive, growing net financial assets indicates that the position of the Township is strong in 2021, and continues to improve as additional funds are added to the reserve fund. It should be noted that the accounting of capital works is more comprehensive in the short term than in the long term and there may be unidentified capital works that will have to be included in the capital budget at a future date.

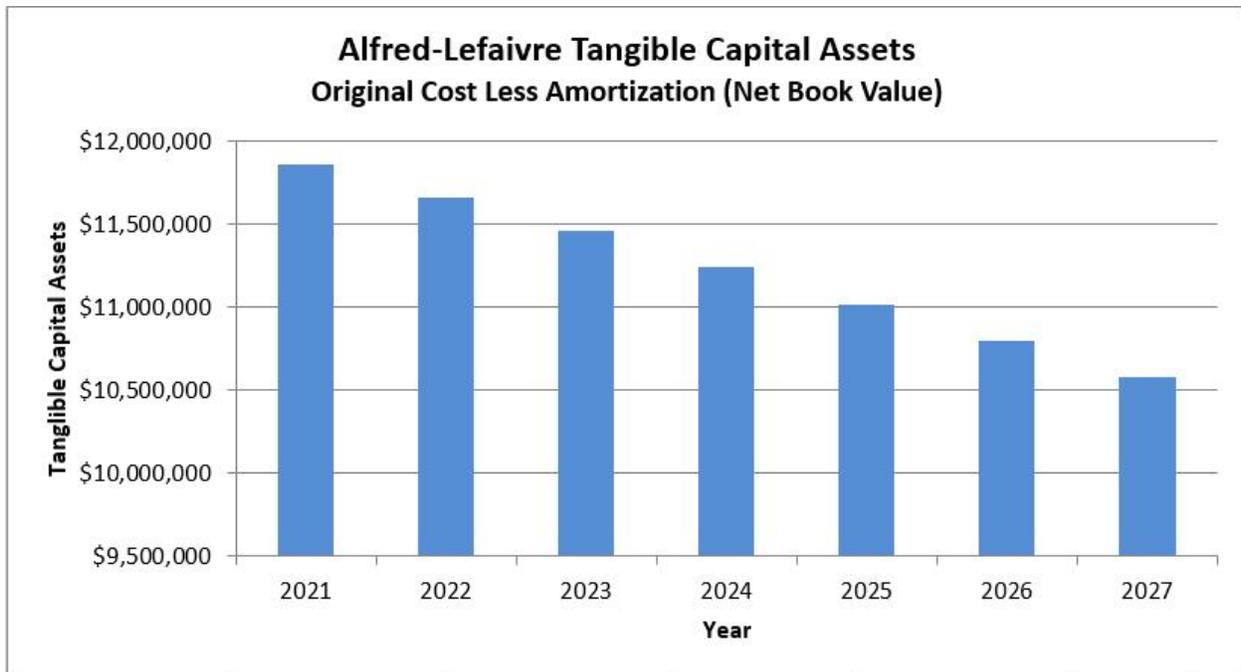
4.1.2 Tangible Capital Assets

A second feature of the water system is the total value of the system’s tangible capital assets (building, equipment, and water mains). 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 its accumulated amortization.

Managing TCAs is critical to maintaining current and future levels of service. TCAs begin amortizing once they are installed (i.e. they start to decrease in value). A decrease in the NBV indicates that assets are being used or amortized faster than they are being consumed. Conversely, an increase in the NBV of the TCAs indicates that assets are being renewed faster than they are being consumed.

The net book value of the DWS’s assets is provided in Figure 4.2. As shown, the TCA NBV decreases steadily until 2027. The overall decrease is attributed to the amortization rate being greater than the replacement rate of the assets. Although there are assets that are being added and are contributing to the tangible capital asset value in each year, this is occurring at a slower rate than the amortization of the assets.

Figure 4.2 – Alfred-Lefavre DWS Tangible Capital Assets



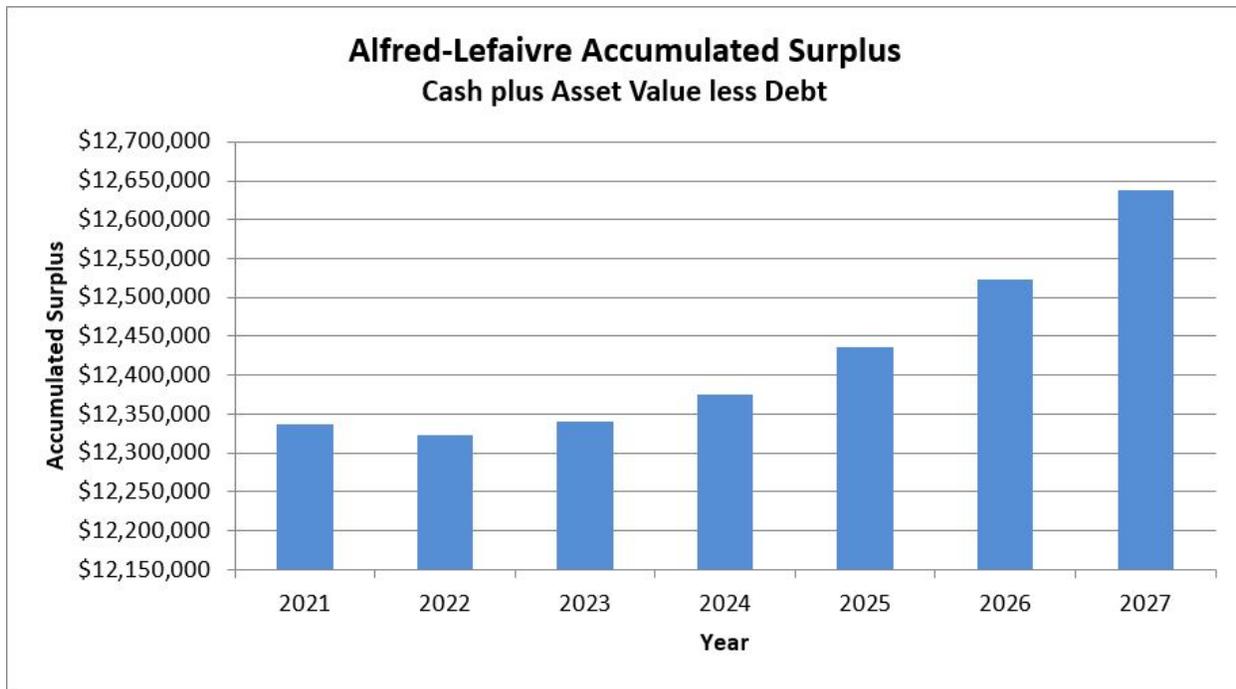
4.1.3 Accumulated Surplus

A third feature of the water system is the accumulated surplus, which represents the cash on hand plus the net book value of tangible capital assets less debt. In other words, the accumulated surplus is calculated by adding the net financial asset and non-financial assets. The accumulated surplus serves as a metric to quantify the municipality’s ability to maintain the current value of the DWS assets.

The Township’s DWS is projected to experience a steady decrease in accumulated surplus until 2022 followed by a steady increase until the end of 2027. The initial decrease is attributed to the amortization

rate being greater than the rate at which the net financial assets is increasing; however, by the end of 2022, the growing net financial assets balance the decreasing tangible capital assets thereby shifting the trend. At that point, the combination of decreasing tangible capital assets associated with amortization – along with increasing net financial assets associated with growing surplus, results in an accumulated surplus trend increasing at an accelerated rate beyond 2022. As a result, the system will become self-sustaining by the end of 2022.

Figure 4.3 – Alfred-Lefaiivre DWS Accumulated Surplus

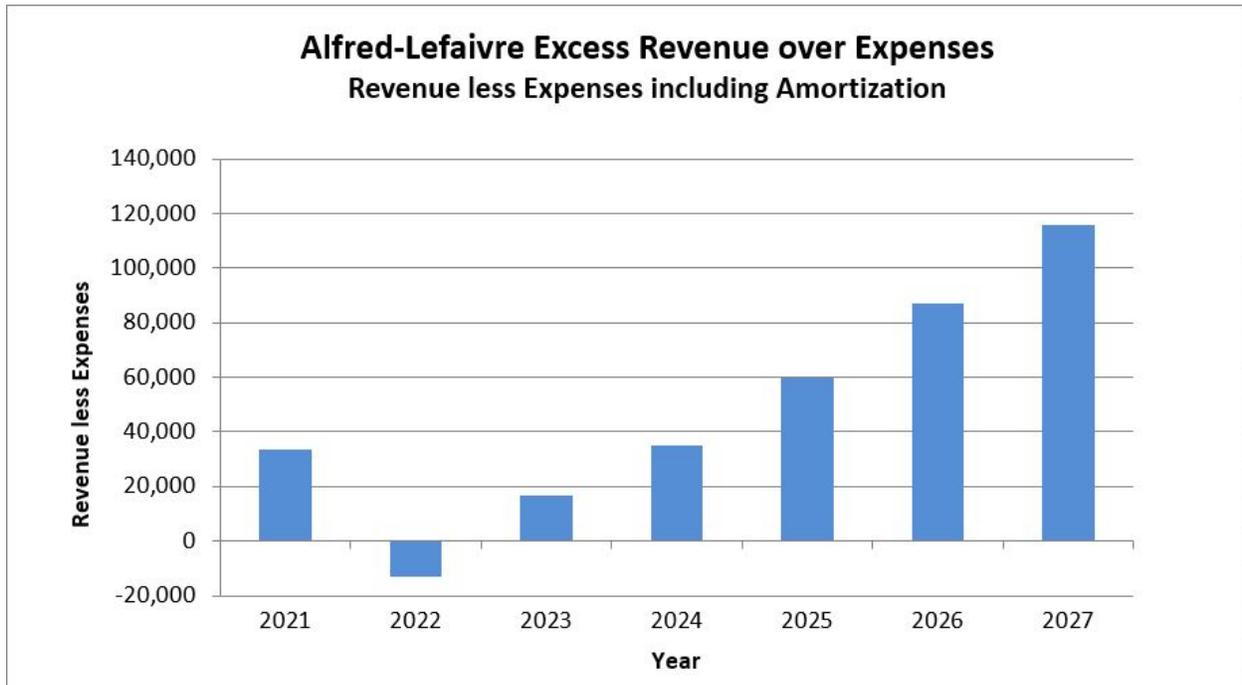


4.2 Statement of Financial Operation (Table 7.2)

The statement of financial operations summarizes the Township’s DWS revenues and expenditures over the study period. The majority of the revenue collected in the DWS comes from water user fees (residential and commercial). Revenues also include government grants and contributions from general revenue. Expenditures include operating costs, major maintenance costs, debt payment and annual asset amortization. A surplus is realized when yearly revenues exceed yearly expenses. Conversely, a deficit is realized when yearly expenses exceed yearly revenues. A surplus is desirable as additional funds would be available for the purchase of capital assets and other financial activities such as debt payment and the growth of the DWS’s Reserve Fund.

Figure 4.4 below shows the system’s revenues over expenses, including amortization. As shown, it is projected that the system’s excess of revenues over expenses, including amortization, has positive values throughout the study period, except for 2022. In 2023, the system shifts into the positive position until the end of the study period as a result of growing surplus. At this point, the generated revenues are sufficient to cover operational expenses and debt payments and the DWS is able to sustain itself based on the projected major maintenance items.

Figure 4.4 – Alfred-Lefaivre DWS Revenues less Expenses



It is important to note that amortization expense is a financial write-off of the capital assets and it is not a cash expenditure itself. Amortization is included in financial statements to represent the loss in value of the resources required to operate the drinking water system.

5 Continuous Improvement

The SDWA requires the Municipal Drinking Water Licence to be renewed 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 Licence. Thus, each Financial Plan will require updating at a minimum frequency of every five years. This on-going update will assist in re-visiting 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.

6 Conclusion

The Statement of Financial Position provides a snapshot of the financial health of the DWS. It was shown that the DWS will be in a deficit position in 2022, after which the DWS is expected to be in a surplus position. The deficit is an indication that the revenues are not high enough to meet the water system’s financial requirements. This financial statement also shows a steady decrease in TCAs, meaning that assets are amortizing faster than they are being renewed.

The Statement of Financial Operations analysis shows that the DWS’s excess revenue over expenses is currently in a negative position, but will become positive by the end of 2022. Based on Alfred-Lefaivre Drinking Water System’s existing financial position, forecasting capital works and rate increases, the DWS will be financially sustainable by the end of 2027 without a further increase in the water rates beyond the 5% historical average increase.

In reviewing these statements, it is important to keep in mind that a number of assumptions were 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 schedules may vary from current projections. Therefore, there is a need to monitor the progress of this plan and make adjustments as needed.

This Financial Plan has been prepared in accordance with O. Reg. 453/07 under the Safe Drinking Water Act, 2002.

7 Financial Statements

The detailed financial statements are set out in the following tables. Section 8 details the notes that correspond to the “notes” numbers on the right side of the tables

Table 7.1 – Statement of Financial Position

Statement of Financial Position	2021	2022	2023	2024	2025	2026	2027	Notes
Financial Assets								
Cash/Cash Equivalents								
Reserve Fund	\$675,375	\$863,716	\$1,075,098	\$1,325,327	\$1,601,049	\$1,903,983	\$2,235,949	1
Reserve	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,001	2
Total Cash/Cash Equivalents	\$692,375	\$880,716	\$1,092,098	\$1,342,327	\$1,618,049	\$1,920,983	\$2,252,950	
Investments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Accounts Receivable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Financial Assets	\$692,375	\$880,716	\$1,092,098	\$1,342,327	\$1,618,049	\$1,920,983	\$2,252,950	
Liabilities								
Accounts Payable (Capital)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Debt Principal/Working Deficit	\$218,909	\$208,437	\$197,602	\$186,393	\$174,795	\$162,797	\$150,384	3
Other liabilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Liabilities	\$218,909	\$208,437	\$197,602	\$186,393	\$174,795	\$162,797	\$150,384	
Net Financial Assets (Debt)	\$473,466	\$672,279	\$894,496	\$1,155,934.02	\$1,443,253	\$1,758,186	\$2,102,567	
Non Financial Assets								
Tangible Capital Asset Cost (Closing)	\$17,137,700	\$17,200,124	\$17,271,437	\$17,323,394	\$17,376,390	\$17,430,446	\$17,485,582	4,5
Changes in Tangible Capital Assets - Additions	\$224,604	\$62,424	\$71,313	\$51,957	\$52,996	\$54,056	\$55,137	6
Tangible Capital Asset Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Accumulated Amortization (closing)	\$5,274,529	\$5,542,056	\$5,812,229	\$6,084,062	\$6,357,588	\$6,632,840	\$6,909,854	5
Total Non Financial Assets	\$11,863,171	\$11,658,068	\$11,459,208	\$11,239,332	\$11,018,802	\$10,797,605	\$10,575,728	
Accumulated Surplus(deficit)	\$12,336,637	\$12,330,347	\$12,353,704	\$12,395,266	\$12,462,055	\$12,555,791	\$12,678,295	

Table 7.2 – Statement of Financial Operations

Statement of Financial Operations	2021	2022	2023	2024	2025	2026	2027	Notes
Total Revenues								
User Fees								
Metered Rate Revenues	\$200,000	\$196,609	\$207,597	\$219,198	\$231,445	\$244,374	\$258,022	
Fixed Rate Revenues	\$355,110	\$373,726	\$393,315	\$413,926	\$435,614	\$458,434	\$482,445	
Total User Fees	\$555,110	\$570,335	\$600,912	\$633,124	\$667,058	\$702,807	\$740,468	7
Sale of Water to Plantagenet	\$159,107	\$123,005	\$126,548	\$130,216	\$134,014	\$137,948	\$142,023	8
Contribution from Plantagenet - Mat & Rep	\$0	\$7,516	\$8,451	\$7,820	\$7,976	\$8,136	\$8,299	9
Sale of Water to Nation	\$148,077	\$122,792	\$126,220	\$129,769	\$133,444	\$137,251	\$141,194	10
Sale of Water to Nation - Mat & Rep	\$0	\$9,860	\$11,731	\$7,414	\$7,562	\$7,713	\$7,868	11
Development/Connection Charges								
Connection Charges	\$300	\$300	\$300	\$300	\$300	\$300	\$300	12
Sale of Meters	\$1,275	\$1,275	\$1,275	\$1,275	\$1,275	\$1,275	\$1,276	13
Final Meter Reading	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	14
Water Charges	\$6,596	\$6,596	\$6,596	\$6,596	\$6,596	\$6,596	\$6,596	
Total Development/Connection Charges	\$9,671	\$9,671	\$9,671	\$9,671	\$9,671	\$9,671	\$9,672	
Interest on arrears	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600	15
Proceeds from residents	\$12,770	\$12,770	\$12,770	\$12,770	\$12,770	\$12,770	\$12,770	16
Rental Revenue - Tower	\$12,807	\$12,807	\$12,807	\$12,807	\$12,807	\$12,807	\$12,807	17
Interest	\$6,233	\$6,889	\$8,810	\$10,966	\$13,518	\$16,331	\$19,421	18
Other Revenues	\$80	\$80	\$80	\$80	\$80	\$80	\$80	19
Total Revenues	907,455	879,325	921,600	958,237	1,002,502	1,049,114	1,098,201	
Expenses								
Operating including major maintenance	\$596,820	\$606,869	\$617,212	\$634,360	\$652,092	\$670,432	\$689,405	20
Cont. to Alfred Lagoon Sludge	\$3,800	\$3,800	\$3,800	\$3,800	\$3,800	\$3,800	\$3,800	21
Total Operating	600,620	610,669	621,012	638,160	655,892	674,232	693,205	
Debt Interest	\$7,770	\$7,420	\$7,057	\$6,682	\$6,295	\$5,893	\$5,478	3
Amortization	\$265,308	\$267,527	\$270,173	\$271,833	\$273,526	\$275,253	\$277,014	6
Total Expenses	873,697	885,615	898,242	916,675	935,712	955,378	975,698	
Excess of Revenues over Expenses	33,757	-6,290	23,357	41,562	66,790	93,736	122,503	
Annual Surplus (Deficit) Beginning of year	\$12,302,880	\$12,336,637	\$12,330,347	\$12,353,704	\$12,395,266	\$12,462,055	\$12,555,791	
Accumulated Surplus (Deficit) End of Year	\$12,336,637	\$12,330,347	\$12,353,704	\$12,395,266	\$12,462,055	\$12,555,791	\$12,678,294	

Table 7.3 – Statement of Cash Flow

Statement of Cash Flow	2021	2022	2023	2024	2025	2026	2027	Notes
Operating								
Total Operating Revenues	\$901,222	\$872,436	\$912,790	\$947,271	\$988,983	\$1,032,783	\$1,078,780	
Cash paid for Operating	\$600,620	\$610,669	\$621,012	\$638,160	\$655,892	\$674,232	\$693,205	20
Cash paid for Financing (Debt Interest)	\$7,770	\$7,420	\$7,057	\$6,682	\$6,295	\$5,893	\$5,478	3
Excess of Operating Revenues Over Operating Expenses	\$292,832	\$254,348	\$284,720	\$302,429	\$326,797	\$352,658	\$380,096	
Deduct Non Cash Charges to Operations								
Amortization	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Others	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Working Capital Items								
Accounts Receivable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Capital Work in Progress	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cash provided by Operating Transactions	\$292,832	\$254,348	\$284,720	\$302,429	\$326,797	\$352,658	\$380,096	
Capital								
Acquisition of TCAs	\$224,604	\$62,424	\$71,313	\$51,957	\$52,996	\$54,056	\$55,137	6
Proceeds on Disposal of TCA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cash used in Capital Transactions	\$224,604	\$62,424	\$71,313	\$51,957	\$52,996	\$54,056	\$55,137	
Investing								
Cash (used in)/Provided by Investing Activities (interest)	\$6,233	\$6,889	\$8,810	\$10,966	\$13,518	\$16,331	\$19,421	18
Increase (decrease) Cash Provided by Investing Activities	\$6,233	\$6,889	\$8,810	\$10,966	\$13,518	\$16,331	\$19,421	
Financing								
Previous Year's Deficit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Transfer from Ward 3 Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Repayment of Long Term Debt (principal)	-\$10,122	-\$10,472	-\$10,835	-\$11,209	-\$11,597	-\$11,998	-\$12,414	3
Cash Provided by (used) in Financing Activities	-\$10,122	-\$10,472	-\$10,835	-\$11,209	-\$11,597	-\$11,998	-\$12,414	
Increase (decrease) in Cash Equivalents	\$64,339	\$188,341	\$211,382	\$250,229	\$275,722	\$302,934	\$331,966	
Cash and Cash Equivalents at the beginning of the Year	\$628,036	\$692,375	\$880,716	\$1,092,098	\$1,342,327	\$1,618,049	\$1,920,983	
Cash and Cash Equivalents at the End of the Year	\$692,375	\$880,716	\$1,092,098	\$1,342,327	\$1,618,049	\$1,920,983	\$2,252,949	

8 Notes on the Alfred-Lefavre DWS Financial Plan

The Alfred-Lefavre Drinking Water System Financial Plan represents a forecast of the financial performance of the drinking water system over a study period starting in the year 2021 to the year 2027. 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 water reserve balance of \$492,001 at the beginning of 2020. The reserve increases throughout most of the study period with a final balance of \$1,870,323 by the end of 2027. Any surpluses and contributions to reserve is assumed to go into the Reserve Fund with interest calculated at 1.02% per year on the reserve balance.
2. Reserve – Township maintains a reserve that is projected to be maintained at \$17,000 throughout the study period. No interest is generated on this balance.
3. The DWS had a debt principal of approximately \$229,031 at year-end 2020. The debt principal decreases each year until 2027 when it reaches a value of \$150,384. The debt principal was calculated using a fixed interest rate of 3.43%, as provided by the Township.
4. Tangible Capital Assets Cost (Closing) includes changes (additions, betterments, disposals, write-downs) in tangible capital assets during the year.
5. 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 20% contingency for items occurring in 2020 or later. Amortization was determined using the straight-line method. The calculation of Amortization begins the year that the asset is put into service.
6. TCA Additions – There are ten (10) major capital projects, including new SCADA system, high lift pump motors, valve box replacements, flow meter replacements, new combined chlorine analyzer, new air conditioning units, chemical feed pumps, WTP process equipment repairs, distribution system emergency repairs, hydrants emergency repairs.
7. User Charges – Direct Billings – All users of the DWS are charged a flat annual water rate based on the type of service connection used. User charges are anticipated to be \$570,335 in 2022, based on an increase of four (4) units per year, a 4.93% rate increase for the flat rate and a 5.27% rate increase for the metered rate.
8. Sale of Water to Plantagenet – Plantagenet’s share of the operating cost of the Alfred-Lefavre Water Treatment Plant.

9. Contribution from Plantagenet - Mat & Rep – Plantagenet’s share of the major maintenance cost of the Alfred-Lefavre Water Treatment Plant.
10. Sale of Water to Nation – St. Isidore’s share of the operating cost of the Alfred-Lefavre Water Treatment Plant.
11. Sale of Water to Nation - Mat & Rep – St. Isidore’s share of the major maintenance cost of the Alfred-Lefavre Water Treatment Plant.
12. Connection Charges – New users are charged a connection fee, once they are connected to the existing system. Connection charges are anticipated to remain constant throughout the study period (\$300).
13. Sale of meters – Sale of meters was assumed constant throughout the study period (3 meters per year at \$425)
14. Final Meter Reading – Final meter reading was assumed constant throughout the study period (\$1,500)
15. Interest on Arrears – Interest on arrears was assumed constant throughout the study period (\$3,600)
16. Proceeds from residents – proceeds from residents were assumed constant throughout the study period (\$12,770)
17. Tower Rental Revenue - Interest on arrears was assumed constant throughout the study period (\$12,807)
18. Interest - Interest is calculated at a rate of 1.02% per year on the “Reserve Fund” balances.
19. Other Revenue – Other Revenue is anticipated to be \$80 in 2021, based on the 2021 budget figure for connection/disconnection fees, and is expected to remain constant throughout the study period.
20. Operating Costs – Operating costs are projected to increase at 2% per annum for most items and 5% per annum for energy. Operating costs also includes major maintenance items, which are major non-routine costs that are not capital items. From 2021 to 2026, major maintenance costs were derived from OCWA capital and major maintenance plan; for 2027 the WTP major maintenance costs were assumed constant (\$5,000).
21. Contribution to Alfred Lagoon Sludge – Expense attributable to Alfred-Lefavre for the operation of the sludge lagoon. It was assumed constant throughout the study period (\$3,800).

APPENDIX A

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.