



# **Water Ontario Regulation 453/07 Financial Plan**

Lambton Area Water Supply System

---

Financial Plan # 020-301

March 17, 2020

Watson & Associates Economists Ltd.  
905-272-3600  
[info@watsonecon.ca](mailto:info@watsonecon.ca)

# Table of Contents

	Page
<b>1. Introduction .....</b>	<b>1-1</b>
1.1 Study Purpose.....	1-1
1.2 Background.....	1-1
1.2.1 Financial Plan Defined .....	1-2
1.2.2 Financial Plan Requirements – Existing System.....	1-2
1.2.3 Financial Plan Requirements – General .....	1-3
1.2.4 Public Sector Accounting Board (PSAB) Requirements .....	1-4
1.2.5 LAWSS’s Financial Plan .....	1-4
<b>2. Sustainable Financial Planning .....</b>	<b>2-1</b>
2.1 Introduction .....	2-1
2.2 Sustainable Water and Sewage Systems Act .....	2-2
2.3 Water Opportunities Act, 2010 .....	2-2
2.4 Infrastructure for Jobs and Prosperity Act (I.J.P.A.), 2015 .....	2-3
2.5 Water Forecast.....	2-4
<b>3. Approach .....</b>	<b>3-1</b>
3.1 Overview .....	3-1
3.2 Conversion Process .....	3-1
3.2.1 Calculate Tangible Capital Asset Balances .....	3-1
3.2.2 Convert Statement of Operations.....	3-2
3.2.3 Convert Statement of Financial Position .....	3-4
3.2.4 Convert Statement of Cash Flow and Net Financial Assets/Debt.....	3-4
3.2.5 Verification and Note Preparation .....	3-6
<b>4. Financial Plan .....</b>	<b>4-1</b>
4.1 Introduction .....	4-1
4.2 Water Financial Plan .....	4-1
4.2.1 Statement of Financial Position (Table 4-1) .....	4-1
4.2.2 Statement of Operations (Table 4-2).....	4-2



# Table of Contents (Cont'd)

	Page
4.2.3 Statement of Change in Net Financial Assets/Debt (Table 4-3) .....	4-3
4.2.4 Statement of Cash Flow (Table 4-4) .....	4-3
<b>5. Process for Financial Plan Approval and Submission to the Province .....</b>	<b>5-1</b>
<b>6. Recommendations .....</b>	<b>6-1</b>
<b>Appendix A Water Forecast Summary Tables .....</b>	<b>A-1</b>



## List of Acronyms and Abbreviations

<b>Acronym</b>	<b>Full Description of Acronym</b>
MECP	Ministry of the Environment, Conservation and Parks
MMAH	Ministry of Municipal Affairs and Housing
O. Reg.	Ontario Regulation
PSAB	Public Sector Accounting Board
LAWSS	Lambton Area Water Supply System
S.D.W.A.	Safe Drinking Water Act
T.C.A.	Tangible Capital Assets
W.O.A.	Water Opportunities Act



# Report



# Chapter 1

## Introduction



# 1. Introduction

## 1.1 Study Purpose

---

The Lambton Area Water Supply System (LAWSS) retained Watson & Associates Economists Ltd. (Watson) to prepare a water financial plan as part of the five submission requirements for the purposes of obtaining a municipal drinking water license as per the *Safe Drinking Water Act, 2002*. 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 objective of the report provided herein is to convert the Board's 2020 water budget and five-year forecast into the prescribed reporting requirements for a financial plan as defined by Ontario Regulation 453/07 (O. Reg. 453/07).

## 1.2 Background

---

The Safe Drinking Water Act (S.D.W.A.), "the Act," was passed in December 2002 in order to address the recommendations made by the Walkerton Inquiry Part II report. Note that S.D.W.A. has been amended several times since 2002. 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 licence."

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 permit to take water.

For licence renewals, the application must be accompanied by proof that the financial plan meets the prescribed requirements as per the Act s. 32 (5) 2. ii.

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

### **1.2.1 Financial Plan Defined**

Subsection 30 of the Act provides the following definition of financial plans:

"financial plans" means financial plans that satisfy the requirements prescribed by the Minister. 2017, c. 2, Sched. 11, s. 6 (3).

As of time of writing, the Sustainable Water and Sewage Systems Act, 2002 has been repealed (see section 2.2 of this report); however, the standards that it directs underpin the specific requirements of s. 30 as they are outlined in O. Reg. 453/07 and which will be examined in detail below.

### **1.2.2 Financial Plan Requirements – Existing System**

The O. Reg. 453/07 provides details with regards to the financial plans for existing water system. The requirements for existing systems are summarized as follows:

- Financial plans must be approved by resolution of Council (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 in the year of licence expiry);
- 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 the 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 plan is to be submitted to the Ministry of Municipal Affairs and Housing; and
- The resolution of Council (or governing body) approving the Financial Plan be submitted to the Ministry of the Environment, Conservation and Parks (MECP).

### **1.2.3 Financial Plan Requirements – General**

Given that the requirements for a financial plan is legislated under the Act, a financial plan is mandatory for water systems. The financial plan shall be for a forecast period of at least six years but longer planning horizons are encouraged. The ten-year forecast goes above and beyond the minimum requirement. The financial plan is to be completed and approved by resolution of Council or the governing body in accordance with subsection 3(1)1 of O. Reg. 453/07. Confirmation of approval of the financial plan must be submitted at the time of municipal drinking water license renewal (i.e. six months prior to license expiry).

A copy of the financial plan will be submitted to the Ministry of Municipal Affairs and Housing (MMAH) and not the MECP; however, MECP may request it in the course of review of the licence renewal. Financial plans may be amended and additional information beyond what is prescribed can be included if deemed necessary. The



financial plan must contain on the front page, the appropriate financial plan number as set out in Schedule A of the Municipal Drinking Water Licence.

#### **1.2.4 Public Sector Accounting Board (PSAB) Requirements**

The components of the financial plans indicated by the regulation are consistent with the requirements for financial statement presentation as set out in section PS1200 of the Canadian Institute of Chartered Accountants Public Sector Accounting Handbook:

“Financial statements should include a Statement of Financial Position, a Statement of Operations, a Statement of Change in Net Debt, and a Statement of Cash Flow.”

The format required is to conform to the requirements of PS1200 and PS3150. The financial statements are to be reported on a full accrual accounting basis. The accrual accounting method recognizes revenues and expenses in the same period as the activities that give rise to them regardless of when they are actually paid for. Since an exchange of cash is not necessary to report a financial transaction, the accrual method is meant to provide a more accurate picture of financial position.

The accounting treatment of tangible capital assets is prescribed under section PS3150. Tangible capital assets are to be capitalized to ensure an inventory of the assets owned are recorded and to account for their ability to provide future benefits.

The Statement of Cash Flow and the Statement of Change in Net Financial Assets/Debt are required statements. The Statement of Change in Net Financial Assets/Debt reports on whether enough revenue was generated in a period to cover the expenses in the period and whether sufficient resources have been generated to support current and future activities. The Statement of Cash Flow reports on how activities were financed for a given period providing a measure of the changes in cash for that period.

#### **1.2.5 LAWSS's Financial Plan**

LAWSS is currently in the process of renewing the drinking water licence and the previous version of the financial plan no longer meets the requirements as it must apply to a period of a least six years beginning in the year that the licenses would otherwise expire. Therefore, the financial plan provides for a six-year forecast period 2020 to 2025.



# Chapter 2

## Sustainable Financial Planning



## 2. Sustainable Financial Planning

### 2.1 Introduction

---

In general, sustainability refers to the ability to maintain a certain position over time. While the Act requires a declaration of the financial plan's sustainability, it does not give a clear definition of what would be considered sustainable. Instead, MECP 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 users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.
- Principle #8: Financial plans are "living" documents that require continuous improvement. Comparing the accuracy of financial projections with actual results can lead to improved planning in the future.



Principle #9: Financial plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff, and municipal Council.

## 2.2 Sustainable Water and Sewage Systems Act

---

The *Sustainable Water and Sewage Systems Act* (S.W.S.S.A.) was passed on December 13, 2002. The intent of the Act was to introduce the requirement for municipalities to undertake an assessment of the “full cost” of providing their water services. In total, there were 40 areas within the Act to which the Minister could have made Regulations. It is noted that, the regulations, which accompany the Act, were not issued and the Act was repealed on December 31, 2012.

## 2.3 Water Opportunities Act, 2010

---

Since the passage of the *Safe Drinking Water Act*, changes and refinements to the legislation have been introduced, including the *Water Opportunities Act* (W.O.A). W.O.A. was introduced into legislation on May 18, 2010 and received Royal Assent on November 29, 2010, as the *Water Opportunities Act*.

The purposes of the *Water Opportunities Act* are to foster innovative water, wastewater and storm water technologies, services and practices; create opportunities for economic development and clean-technology jobs; and conserve and sustain water resources. To achieve this W.O.A. provides for the creation of performance targets (financial, operational and maintenance related), which will vary by service type and location and the required submission of conservation and sustainability plans for water, wastewater and stormwater.

The sustainability plan in W.O.A. expands on interim legislation for financial plans included in O. Reg. 453/07, to include the following:

- an asset management plan for the physical infrastructure;
- financial plan;
- water conservation plan (for water service only);
- a risk assessment;
- a strategy for maintaining and improving the services; and



- additional information considered advisable.

Where a Board has jurisdiction over a service, the plan (and any plan amendments) must be approved by the municipality in which the municipal service is provided, before submission to the Minister. The Minister may also direct preparation of joint or partially joint plans.

Regulations (still forthcoming) will prescribe details in regard to any time periods or time limits, contents of the plans, identifying which portions of the plan will require certification, the public consultation process (if required), limitations updates and refinements.

## **2.4 Infrastructure for Jobs and Prosperity Act (I.J.P.A.), 2015**

---

On June 4, 2015, the Province passed the Infrastructure for Jobs and Prosperity Act (I.J.P.A.) which, over time, will require municipalities to undertake and implement asset management plans for all infrastructure they own. On December 27, 2017, the Province of Ontario released Ontario Regulation 588/17 under I.J.P.A. which has 3 phases that municipalities must meet.

Every municipality in Ontario will have to prepare a strategic asset management policy by July 1, 2019. Municipalities will be required to review their strategic asset management policies at least every five years and make updates as necessary. The subsequent phases are as follows:

- Phase 1 – Asset Management Plan (by July 1, 2021):
  - For core assets – Municipalities must have the following:
    - Inventory of assets;
    - Current levels of service measured by standard metrics; and
    - Costs to maintain levels of service.
- Phase 2 – Asset Management Plan (by July 1, 2023):
  - Same steps as Phase 1 but for all assets.
- Phase 3 – Asset Management Plan (by July 1, 2024):
  - Builds on Phase 1 and 2 by adding:
    - Proposed levels of service; and
    - Lifecycle management and Financial strategy.



In relation to water (which is considered a core asset), municipalities will need to have an asset management plan that addresses the related infrastructure by July 1, 2021 (Phase 1). O. Reg. 588/17 specifies that the municipality's asset management plan must include the following for each asset category:

- the current levels of service being provided;
  - determined in accordance with the following qualitative descriptions and technical metrics and based on data from at most the two calendar years prior to the year in which all information required under this section is included in the asset management plan.
- the current performance of each asset category;
- a summary of the assets in the category;
- the replacement cost of the assets in the category;
- the average age of the assets in the category, determined by assessing the average age of the components of the assets;
- the information available on the condition of the assets in the category;
- a description of the municipality's approach to assessing the condition of the assets in the category, based on recognized and generally accepted good engineering practices where appropriate; and
- the lifecycle activities that would need to be undertaken to maintain the current levels of service.

Upon completion of the asset management plan for water, LAWSS will need to consider the impacts during the annual budget and forecast process.

## **2.5 Water Forecast**

---

The Board has already completed extensive financial planning through its 2020 water budget and forecasting exercise. The budget process is designed to address "full cost" principles and reflect the guiding principles toward sustainable financial planning. As a result of employing this process, the 2020 water budget and forecast provides the basis for a sound financial plan for the water system by assessing:

- A detailed assessment of current and future capital needs including an analysis of potential funding sources;



- An analysis of operating costs in order to determine how they will be impacted by evolving infrastructure needs;
- A review and recommendation on rates that ensure revenues are equitable and sufficient to meet system needs; and
- A public process that involves consultation with the main stakeholders including LAWSS's staff, the Board, the general public (specifically the users of the system) and others with the aim of gaining input and collaboration on the sustainability of the water system.



# Chapter 3

## Approach



## 3. Approach

### 3.1 Overview

---

The Water forecast is prepared on a modified cash basis; therefore, a conversion is required in order to present a full accrual financial plan for the purposes of this report. The conversion process used will help to establish the structure of the financial plans along with the opening balances that will underpin the forecast. This chapter outlines the conversion process utilized and summarizes the adjustments made to prepare the water financial plan.

### 3.2 Conversion Process

---

The conversion from the existing modified cash basis found in the Rate Study to the full accrual reporting format required under O. Reg. 453/07 can be summarized in the following steps:

1. Calculate Tangible Capital Asset Balances
2. Convert Statement of Operations
3. Convert Statement of Financial Position
4. Convert Statement of Cash Flow and Net Assets/Debt
5. Verification and Note Preparation

#### 3.2.1 *Calculate Tangible Capital Asset Balances*

In calculating tangible capital asset balances, existing and future purchased, developed, and/or contributed assets will need to be considered. For existing water assets, an inventory has already been compiled and summarized by LAWSS for the purposes of their annual PSAB 3150 compliance process. As required, for PSAB 3150 reporting purposes, the asset inventory listing included historical cost (which is the original cost to purchase, develop, or construct each asset) along with an estimated useful life for each asset and any anticipated salvage value is recorded. The following calculations are made to determine net book value:



- Accumulated amortization up to the year prior to the first forecast year.
- Amortization expense on existing assets for each year of the forecast period.
- Acquisition of new assets for each year of the forecast period.
- Disposals and related gains or losses for each year of forecast period.

Future water capital needs have also been determined and summarized within the 2020 Forecast. These estimates, however, only represent future assets that LAWSS anticipates purchasing or constructing without consideration for future assets that are contributed by developers and other parties (at no or partial cost to LAWSS). These contributed assets will form part of the infrastructure going forward in terms of the sustainability of the system and despite their non-monetary nature; future financial plans may need to be adjusted in order to properly account for these transactions. Once the sequence and total asset acquisition has been determined for the forecast period, annual amortization of these assets for each year is calculated in a similar manner as that used for existing assets.

Once the historical cost, accumulated amortization, and amortization expenses are calculated as described above, the total net book value of the tangible capital assets can be determined and recorded on the Statement of Financial Position.

### **3.2.2 Convert Statement of Operations**

A wide range of adjustments will be considered, dependent on the size and complexity of the systems, in order to convert from the cash to full accrual basis (see Figure 3-1). For example, debt repayment costs relating to the principal payment portion only needs to be removed under the accrual basis, as they no longer qualify as an expense for reporting purposes. Principal payments are reported as a decrease in debt liability on the Statement of Financial Position. Transfers to and from reserves are removed as these transactions are represented by changes in cash and accumulated surplus. Finally, expenses relating to tangible capital assets, such as amortization, write-offs, and (gain)/loss on disposal of assets are reported on the Statement of Operations in order to capture the allocation of the cost of these assets to operating activities over their useful lives and therefore are added in under the accrual basis.



Table 3-1  
Lambton Area Water Supply System  
Conversion Adjustments  
Statement of Operations (Water)

Modified Cash Basis	Budget 2020	Adjustments		Full Accrual Budget 2020	Accrual Basis
		DR	CR		
<b>Revenues</b>					<b>Revenues</b>
Rate Based Revenue	9,964,621			9,964,621	Rate Based Revenue
Other Revenue	6,670,000		147,668	6,817,668	Other Revenue
<b>Total Revenues</b>	<b>16,634,621</b>			<b>16,782,289</b>	<b>Total Revenues</b>
<b>Expenditures</b>					<b>Expenses</b>
Operating	5,331,239	1,458,000		6,789,239	Operating Expenses
Capital					
Transfers to Reserves	3,084,382		3,084,382		
Transfers to Capital	8,219,000		8,219,000		
Debt Repayment (Principal & Interest)	-		-	-	Interest on Debt
		1,572,147		1,572,147	Amortization
<b>Total Expenditures</b>	<b>16,634,621</b>			<b>8,361,386</b>	<b>Total Expenses</b>
<b>Net Expenditures</b>	<b>(0)</b>			<b>8,420,903</b>	<b>Annual Surplus/(Deficit)</b>
Increase (decrease) in amounts to be recovered	-			85,185,955	Accumulated Surplus/(Deficit), beginning of year
<b>Change in Fund Balances</b>	<b>-</b>	<b>8,420,903</b>	<b>-</b>	<b>93,606,858</b>	<b>Accumulated Surplus/(Deficit), end of year</b>
<b>TOTAL ADJUSTMENTS</b>		<b>11,451,050</b>	<b>11,451,050</b>		

**Note:** The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)



### **3.2.3 Convert Statement of Financial Position**

Once the Statement of Operations has been converted and the net book value of tangible capital assets has been recorded, balances for the remaining items on the Statement of Financial Position are determined and recorded (see Figure 3-2). The opening/actual balances for the remaining accounts such as accounts receivable, inventory, accounts payable, outstanding debt (principal only), are recorded and classified according to the structure of the Statement of Financial Position as outlined in PS1200.

### **3.2.4 Convert Statement of Cash Flow and Net Financial Assets/Debt**

The Statement of Cash Flow summarizes how LAWSS financed its activities or in other words, how the costs of providing services were recovered. The statement is derived using comparative Statement of Financial Position, the current Statement of Operations and other available transaction data.

The Statement of Change in Net Financial Assets/Debt is a statement which reconciles the difference between the surplus or deficit from current operations and the change in net financial assets/debt for the year. This is significant, as net debt provides an indication of future revenue requirements. In order to complete the Statement of Net Financial Assets/Debt, information regarding any gains/losses on disposals of assets, asset write-downs, acquisition/use of supplies inventory, and the acquisition use of prepaid expenses is necessary, (if applicable). Although the Statement of Change in Net Financial Assets/Debt is not required under O. Reg. 453/07, it has been included in this report as a further indicator of financial viability.



Table 3-2  
Lambton Area Water Supply System  
Conversion Adjustments  
Statement of Financial Position (Water)

Modified Cash Basis	Budget 2020	Adjustments		Full Accrual Budget 2020	Accrual Basis
		DR	CR		
<b>ASSETS</b>					<b>ASSETS</b>
<b>Financial Assets</b>					<b>Financial Assets</b>
Cash	(996,028)			7,222,972	Cash
Accounts Receivable	920,012			920,012	Accounts Receivable
<b>Total Financial Assets</b>	<b>(76,016)</b>			<b>8,142,984</b>	<b>Total Financial Assets</b>
<b>Non-Financial Assets</b>					
Inventory of Supplies	-		-		
Prepaid Expenses	-		-		
<b>Total Non-Financial Assets</b>	<b>-</b>				
<b>LIABILITIES</b>					<b>Liabilities</b>
Accounts Payable & Accrued Liabilities	611,934			611,934	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	-			-	Debt (Principal only)
Deferred Revenue	-			-	Deferred Revenue
Other	-			-	Other
<b>Total Liabilities</b>	<b>611,934</b>			<b>611,934</b>	<b>Total Liabilities</b>
<b>Net Assets/(Debt)</b>	<b>(687,950)</b>			<b>7,531,050</b>	<b>Net Financial Assets/(Debt)</b>
		87,533,808	1,458,000	86,075,808	<b>Non-Financial Assets</b>
		-		-	Tangible Capital Assets
		-		-	Inventory of Supplies
				-	Prepaid Expenses
				<b>86,075,808</b>	<b>Total Non-Financial Assets</b>
<b>Municipal Position</b>					
Water Reserves	7,531,050	7,531,050	-		
Gas Tax Reserve Fund	-	-	-		
Development Charge Reserve Fund	-	-	-		
Amounts to be Recovered	-	-	-		
<b>Total Municipal Position</b>	<b>7,531,050</b>		93,606,858	<b>93,606,858</b>	<b>Accumulated Surplus/(Deficit), end of year</b>
<b>TOTAL ADJUSTMENTS</b>		<b>95,064,858</b>	<b>95,064,858</b>		

**Note:** The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)



### **3.2.5 Verification and Note Preparation**

The final step in the conversion process is to ensure that all the statements created by the previous steps are in balance. The Statement of Financial Position summarizes the resources and obligations of LAWSS at a set point in time. The Statement of Operations summarizes how these resources and obligations changed over the reporting period. To this end, the accumulated surplus/deficit reported on the Statement of Financial Position should equal the accumulated surplus/deficit reported on the Statement of Operations.

The Statement of Change in Net Financial Assets/Debt and the Statement of Financial Position are also linked in terms of reporting on net financial assets/debt. On the Statement of Financial Position, net financial assets/debt is equal to the difference between financial assets and liabilities and should equal net financial assets/debt as calculated on the Statement of Net Financial Assets/Debt.

While not part of the financial plan, the accompanying notes are important to summarize the assumptions and estimates made in preparing the financial plan. Some of the significant assumptions that need to be addressed within the financial plan are as follows:

- a) Opening cash balances – Opening cash balances are necessary to complete the Statement of Cash Flows and balance the Statement of Financial Position. Preferably, opening cash balances should be derived from actual information contained within LAWSS's ledgers. It may not be possible, however, to extract this information from the ledgers for water alone; therefore, a reasonable proxy will be needed. One approach is to assume that opening cash balances equal ending reserve and reserve fund balances from the previous year adjusted for accrual-based transactions reflected by accounts receivable/payable balances. The following equation outlines this approach:

$$\begin{array}{l} \text{Ending Reserve/Reserve Fund Balance} \\ \text{Plus: Ending Accounts Payable Balance} \\ \text{Less: } \underline{\text{Ending Accounts Receivable Balance}} \\ \text{Equals: Approximate Ending Cash Balance} \end{array}$$



- b) Amortization Expense – The method and timing of amortization should be based on LAWSS’s amortization policy.
- c) Accumulated Amortization – Will be based on the culmination of accumulated amortization expenses throughout the life of each asset however derived, along with information on construction/acquisition date and useful life obtained from the capital asset listing provided.
- d) Contributed Assets – As noted earlier, contributed assets could represent a significant part of LAWSS’s infrastructure acquisitions. As such, a reasonable estimate of value and timing of acquisition/donation may be required in order to adequately capture these assets. In the case where contributed assets are deemed to be insignificant or unknown, an assumption of “no contributed assets within the forecast period” will be made.
- e) Accumulated Surplus – The magnitude of the surplus in this area may precipitate the need for additional explanation especially in the first year of reporting. This Accumulated Surplus captures the historical infrastructure investment which has not been reported in the past but has accumulated to significant levels. It also includes all water reserve and reserve fund balances.
- f) Other Revenues – Will represent the recognition of revenues previously deferred (i.e. development charge revenues) and/or accrued revenues (developer contributions), and/or other minor miscellaneous revenues.



# Chapter 4

## Financial Plan



## 4. Financial Plan

### 4.1 Introduction

---

The following tables provide the complete financial plan for the LAWSS's water system. A brief description and analysis of each table is provided below. It is important to note that the financial plan that follows is a forward look at the financial position of LAWSS's water system. It is not an audited document<sup>1</sup> and it contains various estimates as detailed in the "Notes to the Financial Plan" section below.

### 4.2 Water Financial Plan

---

#### 4.2.1 *Statement of Financial Position (Table 4-1)*

The Statement of Financial Position provides information that describes the assets, liabilities, and accumulated surplus of LAWSS's water systems. The first important indicator is net financial assets/(debt), which is defined as the difference between financial assets and liabilities. This indicator provides an indication of the system's "future revenue requirement." A net financial asset position is where financial assets are greater than liabilities and implies that the system has the resources to finance future operations. Conversely, a net debt position implies that the future revenues generated by the system will be needed to finance past transactions, as well as future operations. Table 4-1 indicates that in 2020, the water system will be in a net financial asset position of approximately as in a net debt position of approximately \$7.33 million. For the balance of the forecast, 2021-2025, the financial plan forecasts a continuing net financial asset position.

Another important indicator on the Statement of Financial Position is the tangible capital asset balance under section PS3150. As noted earlier, providing this information is a requirement for municipalities as part of PS3150 compliance and is significant from a financial planning perspective for the following reasons:

- Tangible capital assets such as watermains and treatment facilities are imperative to water service delivery.

---

<sup>1</sup> O. Reg. 453/07 does not require an audited financial plan.

---



- These assets represent significant economic resources in terms of their historical and replacement costs. Therefore, ongoing capital asset management is essential to managing significant replacements and repairs.
- The annual maintenance required by these assets has an enduring impact on water operational budgets.

In general terms, an increase in the tangible capital asset balance indicates that assets may have been acquired either through purchase by the municipality or donation/contribution 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 is usually represented by an increase in accumulated amortization due to annual amortization expenses arising as a result of allocating the cost of the asset to operations over the asset's useful life. Table 4-1 shows tangible capital assets net book value is expected to increase over the forecast period by approximately \$11.88 million. This indicates that LAWSS has plans to invest in tangible capital assets in excess of the anticipated use of existing assets over the forecast period.

#### **4.2.2 Statement of Operations (Table 4-2)**

The Statement of Operations summarizes the revenues and expenses generated by the water system for a given period. The annual surplus/deficit measures whether the revenues generated were sufficient to cover the expenses incurred and in turn, whether net financial assets have been maintained or depleted. Table 4-2 illustrates the ratio of expenses to revenues, generally increasing over the forecast period from 50% in 2020 to 71% by 2025. As a result, annual surplus decreases from a surplus of \$8.42 million to \$3.18 million by 2025. It is important to note that an annual surplus is beneficial to ensure funding is available to non-expense costs such as tangible capital asset acquisitions and reserve/reserve fund transfers.

Another important indicator on this statement is accumulated surplus/deficit. An accumulated surplus indicates that the available net resources are sufficient to provide future capital water services. An accumulated deficit indicates that resources are insufficient to provide future services and that borrowing, or rate increases are required to finance annual deficits. From Table 4-2, the financial plan proposes to add approximately \$25 million to a 2020 accumulated surplus of \$85.19 million over the forecast period. This accumulated surplus, as indicated in Table 4-2, is predominantly



made up of reserve and reserve fund balances as well as historical investments in tangible capital assets.

#### **4.2.3 Statement of Change in Net Financial Assets/Debt (Table 4-3)**

The Statement of Change in Net Financial Assets/Debt indicates whether revenue generated was sufficient to cover operating and non-financial asset costs (i.e. inventory supplies, prepaid expenses, tangible capital assets, etc.) and in so doing, explains the difference between the annual surplus/deficit and the change in net financial assets/debt for the period. Table 4-3 indicates that the forecasted annual surplus exceeds forecasted tangible capital asset acquisitions (net of amortization for the year) for most years of the forecast period, resulting in increases to net financial assets over the forecast period. This allows for a long-term plan of funding capital through accumulated surplus (i.e. reserves and reserve funds). This is evidenced by the ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions maintaining a value in excess of 1.00 (decreasing from 1.48 to 1.29 over the forecast period).<sup>1</sup>

#### **4.2.4 Statement of Cash Flow (Table 4-4)**

The Statement of Cash Flow summarizes how water systems are expected to generate and use cash resources during the forecast period. The transactions that provide/use cash are classified as operating, capital, investing, and financing activities as shown in Table 4-4. This statement focuses on the cash aspect of these transactions and thus is the link between cash-based and accrual-based reporting. Table 4-4 indicates that cash from operations will be used to fund capital transactions (i.e. tangible capital asset acquisitions) and build internal reserves and reserve funds over the forecast period. The financial plan projects the cash position of LAWSS's water systems to improve from a balance of \$4.3 million at the beginning of 2020, to just over \$12.35 million by the end of 2025. For further discussions, on projected cash balances please refer to the Notes to the Financial Plan.

---

<sup>1</sup> A desirable ratio is 1:1 or better.



Table 4-1  
 Lambton Area Water Supply System  
 Statement of Financial Position: Water Services  
 UNAUDITED: For Financial Planning Purposes Only  
 2020-2025

	Notes	Forecast					
		2020	2021	2022	2023	2024	2025
<b>Financial Assets</b>							
Cash	1	7,222,972	4,752,394	1,763,222	6,098,056	7,353,408	12,352,676
Accounts Receivable	1	920,012	577,140	594,151	594,151	594,151	594,151
<b>Total Financial Assets</b>		<b>8,142,984</b>	<b>5,329,534</b>	<b>2,357,373</b>	<b>6,692,207</b>	<b>7,947,559</b>	<b>12,946,827</b>
<b>Liabilities</b>							
Bank Indebtedness		-	-	-	-	-	-
Accounts Payable & Accrued Liabilities	1	611,934	623,305	634,898	646,721	658,784	671,078
Debt (Principal only)	2	-	-	-	-	-	-
Deferred Revenue	3	-	-	-	-	-	-
<b>Total Liabilities</b>		<b>611,934</b>	<b>623,305</b>	<b>634,898</b>	<b>646,721</b>	<b>658,784</b>	<b>671,078</b>
<b>Net Financial Assets/(Debt)</b>		<b>7,531,050</b>	<b>4,706,229</b>	<b>1,722,475</b>	<b>6,045,486</b>	<b>7,288,775</b>	<b>12,275,749</b>
<b>Non-Financial Assets</b>							
Tangible Capital Assets	4	86,075,808	92,306,236	98,685,396	97,734,216	99,767,140	97,960,224
<b>Total Non-Financial Assets</b>		<b>86,075,808</b>	<b>92,306,236</b>	<b>98,685,396</b>	<b>97,734,216</b>	<b>99,767,140</b>	<b>97,960,224</b>
<b>Accumulated Surplus/(Deficit)</b>	5	<b>93,606,858</b>	<b>97,012,465</b>	<b>100,407,871</b>	<b>103,779,702</b>	<b>107,055,915</b>	<b>110,235,973</b>
<b>Financial Indicators</b>	<b>Total Change</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
1) Increase/(Decrease) in Net Financial Assets	7,976,749	3,232,050	(2,824,821)	(2,983,754)	4,323,011	1,243,289	4,986,974
2) Increase/(Decrease) in Tangible Capital Assets	17,073,269	5,188,853	6,230,428	6,379,160	(951,180)	2,032,924	(1,806,916)
3) Increase/(Decrease) in Accumulated Surplus	25,050,018	8,420,903	3,405,607	3,395,406	3,371,831	3,276,213	3,180,058



Table 4-2  
Lambton Area Water Supply System  
Statement of Operations: Water Services  
UNAUDITED: For Financial Planning Purposes Only  
2020-2025

	Notes	Forecast					
		2020	2021	2022	2023	2024	2025
<b>Water Revenue</b>							
Base Charge Revenue		-	-	-	-	-	-
Rate Based Revenue		9,964,621	10,263,200	10,570,772	10,570,772	10,570,772	10,570,772
Earned Development Charges Revenue	3	-	-	-	-	-	-
Other Revenue	6	6,817,668	264,279	205,774	290,539	314,917	412,702
<b>Total Revenues</b>		<b>16,782,289</b>	<b>10,527,479</b>	<b>10,776,546</b>	<b>10,861,311</b>	<b>10,885,689</b>	<b>10,983,474</b>
<b>Water Expenses</b>							
Operating Expenses	Sch. 4-1	6,789,239	5,583,300	5,687,300	5,634,300	5,739,400	5,863,500
Interest on Debt	2	-	-	-	-	-	-
Amortization	4	1,572,147	1,538,572	1,693,840	1,855,180	1,870,076	1,939,916
Loss on Disposal of Tangible Capital Assets		-	-	-	-	-	-
<b>Total Expenses</b>		<b>8,361,386</b>	<b>7,121,872</b>	<b>7,381,140</b>	<b>7,489,480</b>	<b>7,609,476</b>	<b>7,803,416</b>
<b>Annual Surplus/(Deficit)</b>		<b>8,420,903</b>	<b>3,405,607</b>	<b>3,395,406</b>	<b>3,371,831</b>	<b>3,276,213</b>	<b>3,180,058</b>
Accumulated Surplus/(Deficit), beginning of year	5	85,185,955	93,606,858	97,012,465	100,407,871	103,779,702	107,055,915
Accumulated Surplus/(Deficit), end of year		93,606,858	97,012,465	100,407,871	103,779,702	107,055,915	110,235,973
<b>Note 5:</b>							
<b>Accumulated Surplus/(Deficit) Reconciliation:</b>		<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>Reserve Balances</b>							
Reserves: Development Charges		-	-	-	-	-	-
Reserves: Gas Tax		-	-	-	-	-	-
Reserves: Capital/Other		7,531,050	4,706,229	1,722,475	6,045,486	7,288,775	12,275,749
<b>Total Reserves Balance</b>		<b>7,531,050</b>	<b>4,706,229</b>	<b>1,722,475</b>	<b>6,045,486</b>	<b>7,288,775</b>	<b>12,275,749</b>
Less: Debt Obligations and Deferred Revenue		-	-	-	-	-	-
Add: Tangible Capital Assets	4	86,075,808	92,306,236	98,685,396	97,734,216	99,767,140	97,960,224
<b>Total Ending Balance</b>		<b>93,606,858</b>	<b>97,012,465</b>	<b>100,407,871</b>	<b>103,779,702</b>	<b>107,055,915</b>	<b>110,235,973</b>
<b>Financial Indicators</b>							
	<b>Total Change</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
1) Expense to Revenue Ratio		50%	68%	68%	69%	70%	71%
2) Increase/(Decrease) in Accumulated Surplus	25,050,018	8,420,903	3,405,607	3,395,406	3,371,831	3,276,213	3,180,058



Schedule 4-1  
 Lambton Area Water Supply System  
 Statement of Operating Expenses: Water Services  
 UNAUDITED: For Financial Planning Purposes Only  
 2020-2025

	Notes	Forecast					
		2020	2021	2022	2023	2024	2025
<b>Operating Expenses</b>							
Administration, Operations & Maintenance Contract (OCWA)		4,353,239	4,440,300	4,529,100	4,619,700	4,712,100	4,806,300
Emergency Repairs		200,000	200,000	200,000	200,000	200,000	200,000
Annual Maintenance Plan		30,000	30,000	30,000	30,000	30,000	30,000
General and Administrative Expense		348,000	355,000	362,100	369,300	376,700	384,200
Staff Salary and Benefits		250,000	255,000	260,100	265,300	270,600	276,000
Schedule G Reconciliation Estimate		150,000	150,000	150,000	150,000	150,000	150,000
Non TCA - Expenses from Capital Budget	7	1,458,000	153,000	156,000	-	-	17,000
<b>TOTAL OPERATING EXPENSES</b>		<b>6,789,239</b>	<b>5,583,300</b>	<b>5,687,300</b>	<b>5,634,300</b>	<b>5,739,400</b>	<b>5,863,500</b>



Table 4-3  
 Lambton Area Water Supply System  
 Statement of Changes in Net Financial Assets/Debt: Water Services  
 UNAUDITED: For Financial Planning Purposes Only  
 2020-2025

	Notes	Forecast					
		2020	2021	2022	2023	2024	2025
Annual Surplus/(Deficit)		8,420,903	3,405,607	3,395,406	3,371,831	3,276,213	3,180,058
Less: Acquisition of Tangible Capital Assets	4	(6,761,000)	(7,769,000)	(8,073,000)	(904,000)	(3,903,000)	(133,000)
Add: Amortization of Tangible Capital Assets	4	1,572,147	1,538,572	1,693,840	1,855,180	1,870,076	1,939,916
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-
		(5,188,853)	(6,230,428)	(6,379,160)	951,180	(2,032,924)	1,806,916
Less: Acquisition of Supplies Inventory		-	-	-	-	-	-
Less: Acquisition of Prepaid Expenses		-	-	-	-	-	-
Add: Consumption of Supplies Inventory		-	-	-	-	-	-
Add: Use of Prepaid Expenses		-	-	-	-	-	-
		-	-	-	-	-	-
<b>Increase/(Decrease) in Net Financial Assets/(Net Debt)</b>		<b>3,232,050</b>	<b>(2,824,821)</b>	<b>(2,983,754)</b>	<b>4,323,011</b>	<b>1,243,289</b>	<b>4,986,974</b>
Net Financial Assets/(Net Debt), beginning of year		4,299,000	7,531,050	4,706,229	1,722,475	6,045,486	7,288,775
<b>Net Financial Assets/(Net Debt), end of year</b>		<b>7,531,050</b>	<b>4,706,229</b>	<b>1,722,475</b>	<b>6,045,486</b>	<b>7,288,775</b>	<b>12,275,749</b>

Financial Indicators	2020	2021	2022	2023	2024	2025
1) Acquisition of Tangible Capital Assets (Cumulative)	6,761,000	14,530,000	22,603,000	23,507,000	27,410,000	27,543,000
2) Annual Surplus/Deficit before Amortization (Cumulative)	9,993,050	14,937,229	20,026,475	25,253,486	30,399,775	35,519,749
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)	1.48	1.03	0.89	1.07	1.11	1.29



Table 4-4  
 Lambton Area Water Supply System  
 Statement of Cash Flow – Indirect Method: Water Services  
 UNAUDITED: For Financial Planning Purposes Only  
 20120-2025

	Notes	Forecast					
		2020	2021	2022	2023	2024	2025
<b>Operating Transactions</b>							
Annual Surplus/Deficit		8,420,903	3,405,607	3,395,406	3,371,831	3,276,213	3,180,058
Add: Amortization of TCA's	4	1,572,147	1,538,572	1,693,840	1,855,180	1,870,076	1,939,916
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-
Less: Earned Deferred Revenue	3	-	-	-	-	-	-
Less: Developer Contributions		-	-	-	-	-	-
Add: Deferred Revenue Proceeds		-	-	-	-	-	-
Change in A/R (Increase)/Decrease		(920,012)	342,872	(17,011)	-	-	-
Change in A/P Increase/(Decrease)		611,934	11,371	11,593	11,823	12,063	12,294
Less: Interest Proceeds		(147,668)	(92,279)	(33,774)	(118,539)	(142,917)	(240,910)
<b>Cash Provided by Operating Transactions</b>		<b>9,537,304</b>	<b>5,206,143</b>	<b>5,050,054</b>	<b>5,120,295</b>	<b>5,015,435</b>	<b>4,891,567</b>
<b>Capital Transactions</b>							
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(6,761,000)	(7,769,000)	(8,073,000)	(904,000)	(3,903,000)	(133,000)
<b>Cash Applied to Capital Transactions</b>		<b>(6,761,000)</b>	<b>(7,769,000)</b>	<b>(8,073,000)</b>	<b>(904,000)</b>	<b>(3,903,000)</b>	<b>(133,000)</b>
<b>Investing Transactions</b>							
Proceeds from Investments		147,668	92,279	33,774	118,539	142,917	240,701
Less: Cash Used to Acquire Investments		-	-	-	-	-	-
<b>Cash Provided by (applied to) Investing Transactions</b>		<b>147,668</b>	<b>92,279</b>	<b>33,774</b>	<b>118,539</b>	<b>142,917</b>	<b>240,701</b>
<b>Financing Transactions</b>							
Proceeds from Debt Issue	2	-	-	-	-	-	-
Less: Debt Repayment (Principal only)	2	-	-	-	-	-	-
<b>Cash Applied to Financing Transactions</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Increase in Cash and Cash Equivalents		2,923,972	(2,470,578)	(2,989,172)	4,334,834	1,255,352	4,999,268
Cash and Cash Equivalents, beginning of year	1	4,299,000	7,222,972	4,752,394	1,763,222	6,098,056	7,353,408
<b>Cash and Cash Equivalents, end of year</b>	<b>1</b>	<b>7,222,972</b>	<b>4,752,394</b>	<b>1,763,222</b>	<b>6,098,056</b>	<b>7,353,408</b>	<b>12,352,676</b>



## Notes to Financial Plan

The financial plan format as outlined in Chapter 4 closely approximates the full accrual format used by municipalities on their audited financial statements. However, the financial plan is not an audited document and contains various estimates. In this regard, section 3 (2) of O. Reg. 453/07 states the following:

“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).”

The information referred to in sub-subparagraphs 4 i A, B and C of subsection (1) includes:

- A. Total financial assets (i.e. cash and receivables);
- B. Total liabilities (i.e. payables, debt and deferred revenue);
- C. Net debt (i.e. the difference between A and B above).

The information referred to in sub-subparagraphs 4 iii A, C, E and F of subsection (1) includes:

- A. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges
- B. Investing transactions that are acquisitions and disposal of investments
- C. Change in cash and cash equivalents during the year
- D. Cash and cash equivalents at the beginning and end of the year

In order to show a balanced financial plan in a full accrual format for LAWSS, some of the items listed above have been estimated given that LAWSS does not maintain all financial asset and liability data separately for water. Usually, this type of data is combined with the financial assets and liabilities of other departments and services



given that there is not a current obligation to disclose this data separately (as there is with revenue and expenses).

The assumptions used have been documented below:

### **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  
*Plus:* Ending Accounts Payable Balance  
*Less:* Ending Accounts Receivable Balance  
*Equals:* *Approximate Ending Cash Balance*

For LAWSS, receivable and payable balances were estimated for each year of the forecast based on the following factors:

- a) Receivables: Based on the historical levels of water receivables as a percentage of annual water revenue earned as per the actuals reported for 2016, 2017, and 2018 in the audited financial statements; and
- b) Payables: Based on historical levels of water payables as a percentage of annual water expenses as per the actuals reported for 2016, 2017, and 2018 in the audited financial statements.

### **2. Debt**

There are no outstanding debt obligations currently, nor is there new debt assumed over the forecast period.

### **3. Deferred Revenue**

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

LAWSS does not collect water development charges, therefore deferred revenue is assumed to be zero over the forecast period.



#### 4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water related assets in the following categories:
  - i. Infrastructure within LAWSS's system (watermains, hydrants, and hydrant leads);
  - ii. Land and Land improvements;
  - iii. Equipment; and
  - iv. Facilities
- Amortization is calculated based on using the straight-line approach with no amortization in the year of acquisition or construction.
- Given the planned asset replacement forecast in the water forecast, useful life on acquisitions is assumed to be equal to the weighted average useful life for all assets on hand in each respective asset category.
- 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 disposals occur when the asset is being replaced. To calculate the value of each existing asset disposal, the replacement value (of each new asset that has been identified as a "replacement") has been deflated (by weighted average useful life for all assets on hand in the respective asset category) to an estimated historical cost. Future assets are disposed of when fully amortized.
- Gains/losses on disposal are assumed to be \$0 (it is assumed that historical cost is equal to accumulated amortization for all disposals).
- Residual value is assumed to be \$0 for all assets contained within the forecast period.
- Contributed Assets, as described in section 3.2.1, are deemed to be insignificant/unknown during the forecast period and are therefore assumed to be \$0.
- There is no known issue with lead pipes in the LAWSS distribution/transmission network. Based on sampling, an issue with lead pipes may be present in the City of Sarnia distribution subsystem. The City is currently working to satisfy requirements set out and established with the MECP beginning back in 2018.



- The balance of tangible capital assets is summarized as follows:

<b>Asset Historical Cost</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
Opening Tangible Capital Asset Balance	131,273,758	137,323,939	144,200,355	151,253,348	152,048,773	155,313,848
Acquisitions	6,761,000	7,769,000	8,073,000	904,000	3,903,000	133,000
Disposals	710,819	892,584	1,020,007	108,575	637,925	-
<b>Closing Tangible Capital Asset Balance</b>	<b>137,323,939</b>	<b>144,200,355</b>	<b>151,253,348</b>	<b>152,048,773</b>	<b>155,313,848</b>	<b>155,446,848</b>
Opening Accumulated Amortization	50,386,803	51,248,131	51,894,119	52,567,952	54,314,557	55,546,708
Amortization Expense	1,572,147	1,538,572	1,693,840	1,855,180	1,870,076	1,939,916
Amortization on Disposal	710,819	892,584	1,020,007	108,575	637,925	-
<b>Ending Accumulated Amortization</b>	<b>51,248,131</b>	<b>51,894,119</b>	<b>52,567,952</b>	<b>54,314,557</b>	<b>55,546,708</b>	<b>57,486,624</b>
<b>Net Book Value</b>	<b>86,075,808</b>	<b>92,306,236</b>	<b>98,685,396</b>	<b>97,734,216</b>	<b>99,767,140</b>	<b>97,960,224</b>



## 5. Accumulated Surplus

Opening accumulated surplus for the forecast period is reconciled as follows:

Water	2020 Opening Accumulated Surplus
<b>Reserve Balances</b>	
Reserves: Capital/Other	4,299,000
<b>Total Reserves Balance</b>	<b>4,299,000</b>
Add: Tangible Capital Assets	80,886,955
<b>Total Opening Balance</b>	<b>85,185,955</b>

The accumulated surplus reconciliation for all years within the forecast period is contained in Table 4-2.

## 6. Other Revenue

Other revenues include interest from rental fees, sale of water, and carry over revenue from previous budgets for unspent capital. The interest from rental fees has been inflated by 2% per annum over the forecast period where the revenue from the sale of water has been held constant. The carryover revenue related to unspent capital only appears in the first year, 2020, and is assumed to be fully used in 2020 to complete the capital infrastructure outstanding.

## 7. Operating Expenses

Capital expenditures for items not meeting the definition of tangible capital assets have been reclassified as operating expenses and have been expensed in the year in which they occur.



# Chapter 5

## Process for Financial Plan Approval and Submission to the Province



## 5. Process for Financial Plan Approval and Submission to the Province

As mentioned in section 1.2, preparation of and approval of a financial plan for water assets that meets the requirements of the Act is mandatory for municipal water providers. Proof of the plan preparation and approval is a key submission requirement for municipal drinking water licensing and, upon completion, must be submitted to the MECP. The process established for plan approval, public circulation and filing is set out in O. Reg. 453/07 and can be summarized 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 notice advertising the availability of the financial plan. The plan will be made available to the public upon request and without charge. The plan must also be made available to the public on the board'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 owner of the drinking water system must provide proof satisfactory to the Director that the financial plans for the system satisfy the requirements under the Safe Drinking Water Act. (S.D.W.A. section 32 (5) 2.ii.)



# Chapter 6

## Recommendations



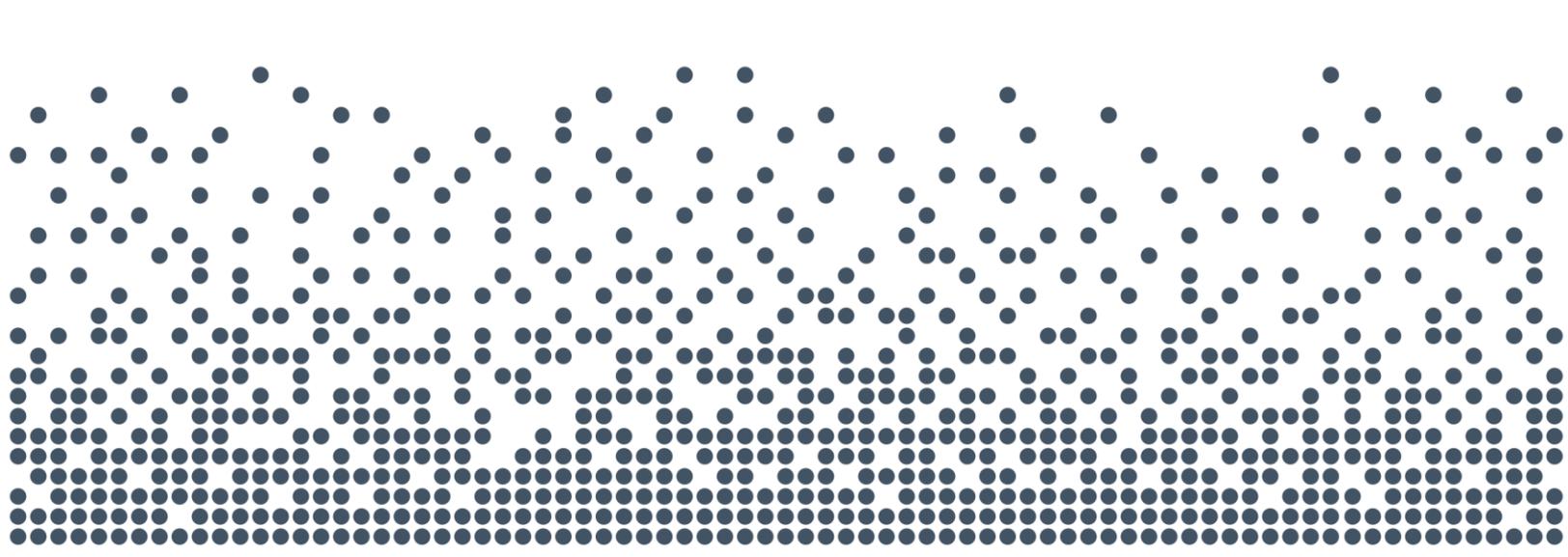
## 6. Recommendations

This report presents the water financial plan for the Lambton Area Water Supply System in accordance with the mandatory reporting formats for water systems as detailed in O. Reg. 453/07. It is important to note that while mandatory, the financial plan is provided for the Board's interest and approval however, for decision making purposes, it may be more informative to rely on the information contained within the water budget and forecast. Nevertheless, Board is required to pass certain resolutions regarding this plan and the regulations, and it is recommended that:

1. The Lambton Area Water Supply System Water Financial Plan prepared by Watson & Associates Economists Ltd. dated March 17, 2020 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. The Financial Plan dated March 17, 2020 be submitted to the Ministry of Municipal Affairs and Housing. (O. Reg. 453/07, section 3 (1) 6).
4. The Financial Plan and the Board resolution approving the Financial Plan be submitted to the Ministry of the Environment, Conservation and Parks, satisfying the requirements under the Safe Drinking Water Act. (S.D.W.A. section 32 (5) 2.ii.).



# Appendices



# Appendix A

## Water Forecast Summary Tables



Appendix A-1  
Lambton Area Water Supply System  
Capital Budget Forecast (Inflated)  
2020-2025

Description	Budget 2020	Total	Forecast					
			2021	2022	2023	2024	2025	
<b>Capital Expenditures</b>								
<b>Major Maintenance:</b>								
Filter Core Sampling	15,000	17,000	-	-	-	-	-	17,000
VFD Flocc Mixers	45,000	-	-	-	-	-	-	-
Replace 7 Chlorine On-Line Analyzers	20,000	15,000	15,000	-	-	-	-	-
Chemical Feed Pumps (3)	16,000	-	-	-	-	-	-	-
Gearbox Refurb at Flocc Tanks 2/yr	42,000	44,000	44,000	-	-	-	-	-
Lab pH meter replacement	2,500	-	-	-	-	-	-	-
Sluice gate inspection & Maintenance	-	15,000	15,000	-	-	-	-	-
Vibration Monitoring Program	1,500	10,000	2,000	2,000	2,000	2,000	2,000	2,000
Security Camera Upgrades	-	46,000	46,000	-	-	-	-	-
Person Down Alarm Monitor 3rd party	-	5,000	5,000	-	-	-	-	-
3rd party electrical inspection	-	65,000	18,000	-	19,000	-	-	28,000
Valve gate isolation(3) 10 inch	25,000	-	-	-	-	-	-	-
Low Lift Wet Well Cleanout	15,000	80,000	15,000	16,000	16,000	16,000	16,000	17,000
EQ Tank Cleanout Inspection	-	24,000	-	-	-	-	-	24,000
Electrical Inspection-3rd party contractor	-	32,000	10,000	-	11,000	-	-	11,000
Motor HLP-2 (VFD Compliant)	-	26,000	26,000	-	-	-	-	-
Crack Injection (West Wall)	5,000	-	-	-	-	-	-	-
Valve Discharge P1 Refurbish	25,000	-	-	-	-	-	-	-
Electrical Inspection-3rd party contractor	-	16,000	5,000	-	5,000	-	-	6,000
Actuator Inlet Valve (electronic)	-	15,000	-	-	-	15,000	-	-
Hydrant Installation- 6622 London Line	20,000	62,000	20,000	21,000	21,000	-	-	-
Chamber (flow) abandonment	20,000	62,000	20,000	21,000	21,000	-	-	-
Air Relief valve- 5867 Confederation Line	15,000	-	-	-	-	-	-	-
Hydrant Isolation valve repairs x (3) (gland bolts)	15,000	2,000	2,000	-	-	-	-	-
Concrete Pipe end closures and 20' lengths	-	80,000	15,000	16,000	16,000	16,000	16,000	17,000
Repair Clamps & Appurtenances	10,000	53,000	10,000	10,000	11,000	11,000	11,000	11,000
<b>Lifecycle:</b>	-	-	-	-	-	-	-	-
Electrical Upgrade (Reliability Study)	-	1,730,000	710,000	704,000	299,000	17,000	-	-
Main Plant HVAC Rehab	-	753,000	753,000	-	-	-	-	-
PLC conversion/upgrade construction	150,000	-	-	-	-	-	-	-
Lighting/Barrier North walkway (outdoors)	-	204,000	204,000	-	-	-	-	-



Appendix A-1 (Continued)  
Lambton Area Water Supply System  
Capital Budget Forecast (Inflated)  
2020-2025

Description	Budget 2020	Total	Forecast					
			2021	2022	2023	2024	2025	
<b>Capital Expenditures</b>								
Inlet Water Screens	-	396,000	-	-	196,000	200,000	-	-
Pump Upgrade Demand forecast	-	379,000	-	-	-	379,000	-	-
Storage Tank (South) Rehabilitation	-	5,712,000	5,712,000	-	-	-	-	-
Storage Tank (North) Rehabilitation	-	5,826,000	-	5,826,000	-	-	-	-
Field Gate 4 G network upgrade	75,000	-	-	-	-	-	-	-
Indian Road Water Tower Rehabilitation	-	3,656,000	122,000	-	287,000	3,247,000	-	-
Port Lambton Tower refurbish	-	1,457,000	-	1,457,000	-	-	-	-
WTP- Travelling Water Screen Assessment	12,000	-	-	-	-	-	-	-
Generator Replacement Project	4,000,000	-	-	-	-	-	-	-
Main Plant Switch Gear	1,500,000	-	-	-	-	-	-	-
PLC Upgrade Project	150,000	-	-	-	-	-	-	-
36" Ross Valve	70,000	-	-	-	-	-	-	-
Radio PLC Upgrade Project	512,000	-	-	-	-	-	-	-
<b>Studies:</b>	-	-	-	-	-	-	-	-
Electrical Upgrade (Reliability Study)	90,000	-	-	-	-	-	-	-
WTP Main Plant HVAC Repair (Engineering Design)	111,000	-	-	-	-	-	-	-
Storage Tank (South) Rehabilitation (Engineering Design)	60,000	-	-	-	-	-	-	-
Storage Tank (North) Rehabilitation (Engineering Design)	60,000	-	-	-	-	-	-	-
Indian Road WT Rehabilitation (Engineering Design)	30,000	-	-	-	-	-	-	-
Condition Assessment - Port Lambton SP & Watford SP	30,000	-	-	-	-	-	-	-
Twinning & Grid-Municipal Class EA (Addendum)	105,000	-	-	-	-	-	-	-
Watermain Condition Assessment	35,000	-	-	-	-	-	-	-
Corrosion Control Member Municipality Impact Study	113,000	-	-	-	-	-	-	-
System - Master Plan	250,000	-	-	-	-	-	-	-
Loop Study (including OCWA's time)	300,000	-	-	-	-	-	-	-
System - Asset Management Plan	-	153,000	153,000	-	-	-	-	-
System - Financial Plan	-	156,000	-	156,000	-	-	-	-
System - Energy Efficient Lighting grant program	2,000	-	-	-	-	-	-	-
System - Power factor study WTP)	2,000	-	-	-	-	-	-	-
System - Pump Upgrades for forecasted demand growth	2,000	-	-	-	-	-	-	-
WTP - Backwash Pump softstart or VFD conversion	2,000	-	-	-	-	-	-	-
WTP - Filter Core sampling	-	17,000	-	-	-	-	-	17,000



Appendix A-1 (Continued)  
Lambton Area Water Supply System  
Capital Budget Forecast (Inflated)  
2020-2025

Description	Budget 2020	Total	Forecast					
			2021	2022	2023	2024	2025	
<b>Capital Expenditures</b>								
Main Plant Switch Gear (Engineering)	116,000	-	-	-	-	-	-	-
Generator Replacement Project (Engineering)	150,000	-	-	-	-	-	-	-
<b>Total Capital Expenditures</b>	<b>8,219,000</b>	<b>21,108,000</b>	<b>7,922,000</b>	<b>8,229,000</b>	<b>904,000</b>	<b>3,903,000</b>	<b>150,000</b>	
<b>Capital Financing</b>								
Provincial/Federal Grants		-						
Operating Contributions	8,219,000	-	-	-	-	-	-	-
Water Reserve	-	21,108,000	7,922,000	8,229,000	904,000	3,903,000	150,000	
<b>Total Capital Financing</b>	<b>8,219,000</b>	<b>21,108,000</b>	<b>7,922,000</b>	<b>8,229,000</b>	<b>904,000</b>	<b>3,903,000</b>	<b>150,000</b>	

Appendix A-2  
Lambton Area Water Supply System  
Water Reserve/Reserve Fund Continuity  
2020-2025

Description	2020		2021	2022	2023	2024	2025
Opening Balance	4,299,000		7,531,050	4,706,229	1,722,476	6,045,487	7,288,777
Transfer from Operating	3,084,382		5,004,900	5,211,472	5,108,472	5,003,372	4,896,272
Transfer to Capital	-		7,922,000	8,229,000	904,000	3,903,000	150,000
Transfer to Operating	-		-	-	-	-	-
<b>Closing Balance</b>	<b>7,383,382</b>		<b>4,613,950</b>	<b>1,688,702</b>	<b>5,926,948</b>	<b>7,145,859</b>	<b>12,035,049</b>
Interest	147,668		92,279	33,774	118,539	142,917	240,701



Appendix A-3  
Lambton Area Water Supply System  
Water Operating Forecast  
2020-2025

Description	Budget 2020	Forecast				
		2021	2022	2023	2024	2025
<b>Expenditures</b>						
<u>Operating Costs</u>						
Administration, Operations & Maintenance Contract (OCWA)	4,353,239	4,440,300	4,529,100	4,619,700	4,712,100	4,806,300
Emergency Repairs	200,000	200,000	200,000	200,000	200,000	200,000
Annual Maintenance Plan	30,000	30,000	30,000	30,000	30,000	30,000
General and Administrative Expense	348,000	355,000	362,100	369,300	376,700	384,200
Staff Salary and Benefits	250,000	255,000	260,100	265,300	270,600	276,000
Schedule G Reconciliation Estimate	150,000	150,000	150,000	150,000	150,000	150,000
<b>Sub Total Operating</b>	<b>5,331,239</b>	<b>5,430,300</b>	<b>5,531,300</b>	<b>5,634,300</b>	<b>5,739,400</b>	<b>5,846,500</b>
<u>Capital-Related</u>						
Transfer to Capital	8,219,000	-	-	-	-	-
Transfer to Capital Reserve	3,084,382	5,004,900	5,211,472	5,108,472	5,003,372	4,896,272
<b>Sub Total Capital Related</b>	<b>11,303,382</b>	<b>5,004,900</b>	<b>5,211,472</b>	<b>5,108,472</b>	<b>5,003,372</b>	<b>4,896,272</b>
<b>Total Expenditures</b>	<b>16,634,621</b>	<b>10,435,200</b>	<b>10,742,772</b>	<b>10,742,772</b>	<b>10,742,772</b>	<b>10,742,772</b>
<b>Revenues</b>						
Interest from Rental Fees	72,000	72,000	72,000	72,000	72,000	72,000
Sale of Water	100,000	100,000	100,000	100,000	100,000	100,000
Revenue Transfer from Previous Budget	6,498,000	-	-	-	-	-
<b>Total Operating Revenue</b>	<b>6,670,000</b>	<b>172,000</b>	<b>172,000</b>	<b>172,000</b>	<b>172,000</b>	<b>172,000</b>
<b>Water Billing Recovery - Total</b>	<b>9,964,621</b>	<b>10,263,200</b>	<b>10,570,772</b>	<b>10,570,772</b>	<b>10,570,772</b>	<b>10,570,772</b>

Appendix A-4  
Lambton Area Water Supply System  
Water Rate Forecast  
2020-2025

Description	2020	2021	2022	2023	2024	2025
Total Water Billing Recovery	9,964,621	10,263,200	10,570,772	10,570,772	10,570,772	10,570,772
Total Volume (m <sup>3</sup> )	17,986,681	17,986,681	17,986,681	17,986,681	17,986,681	17,986,681
<b>Constant Rate</b>	<b>0.5540</b>	<b>0.5706</b>	<b>0.5877</b>	<b>0.5877</b>	<b>0.5877</b>	<b>0.5877</b>
<b>Annual Percentage Change</b>		<b>3%</b>	<b>3%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>