



# Water Ontario Regulation 453/07 Financial Plan

City of Sarnia

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Financial Plan #037-301

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## List of Acronyms and Abbreviations

<b>Acronym</b>	<b>Full Description of Acronym</b>
D.C.	Development Charges
LAWSS	Lambton Area Water Supply System
MECP	Ministry of the Environment, Conservation and Parks
MMAH	Ministry of Municipal Affairs and Housing
O.Reg.	Ontario Regulation
PSAB	Public Sector Accounting Board
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

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The City of Sarnia (the City) 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 detailed financial planning and forecasting regarding the City's water systems has already been completed based on the City's 2019 Budget and estimated Capital and Operating Forecast, including the City's proportionate share of the Lambton Area Water Supply System's (LAWSS) capital and operating expenditures. It is noted that for the 2019 LAWSS capital and operating budgets were inflated by 2% as an estimate for budgeting future expenditures and the City's current share was held constant over the forecast period. The objective of the report provided herein is to convert the findings of the 2019 Water and Wastewater Rate Study into the prescribed reporting requirements for a financial plan as defined by Ontario Regulation 453/07 (O.Reg. 453/07).

## 1.2 Background

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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 systems. 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; and
- Financial plan is to be submitted to the Ministry of Municipal Affairs and Housing.

### 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 plans 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 *The City's Financial Plan*

The City is currently in the process of renewing the drinking water licenses 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. Although the Act requires at least six years to be included, this financial plan provides for a ten-year forecast period 2019-2028.

The forecast includes the city's share of LAWSS capital and operating budgets, based on the current share of 58.76%. It is noted that the City's proportionate share is updated annually by LAWSS based on the City's share of LAWSS total flows. The percentage is based on flows from two years prior to the budget year (i.e. for the 2019 share, it is based on City flows from 2017).

As LAWSS has only provide the City with the current 2019 capital and operating budget, a 2% inflation factor was included in the analysis for the forecasted expenditures for purposes of the Financial Plan. Similarly, the city's capital and operating expenses anticipated over the forecast period have been inflated by 2% per annum.



# Chapter 2

## Sustainable Financial Planning



## 2. Sustainable Financial Planning

### 2.1 Introduction

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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

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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 and the wastewater 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

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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

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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, the City will need to consider the impacts during the annual budget and forecast process.





## 2.5 Water Forecast

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The City has already completed extensive financial planning through its 2019 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 2019 Water Budget and Forecast provides the basis for a sound financial plan for the City’s 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 and system growth;
- A review and recommendation on rate structures that ensure revenues are equitable and sufficient to meet system needs; and
- A public process that involves consultation with the main stakeholders including the City’s staff, Council, the general public (specifically the users of the system) and others with the aim of gaining input and collaboration on the sustainability of the financial plan.



# Chapter 3

## Approach



## 3. Approach

### 3.1 Overview

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The 2019 Water Budget (along with additional detailed information provided by City Staff) has been used as a starting point to prepare the water financial plan. 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 plan 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 financial plan.

### 3.2 Conversion Process

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The conversion from the existing modified cash basis water and wastewater 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 the City 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 2019 Water Budget and Forecast. However, these estimates only represent future assets that the City anticipates purchasing or constructing without consideration for future assets that are contributed by developers and other parties (at no or partial cost to the City). 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. Further, as mentioned earlier, the proportion of capital related to LAWSS assets are included based on the City's 2019 proportionate share and has been held constant over the forecast period. Annually the City will update the capital budget and forecast to reflect the latest information provided by LAWSS and adjust future budgets/forecasts and financial plans accordingly. Various factors impact the proportionate share of the LAWSS system including, but not limited to, conservation efforts in other municipalities that share in the system, growth trends within Sarnia vs. other participating municipalities, and fluctuating annual weather conditions.

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. Note also, that for tangible capital assets, the City includes their proportionate share of LAWSS tangible capital assets on the Statement of Financial Position in addition to the City owned assets.



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

A wide range of adjustments will be considered, dependent on the size and complexity of the system, in order to convert from the cash to full accrual basis. 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  
Conversion Adjustments  
Statement of Operations**

Modified Cash Basis	Budget 2019	Adjustments		Full Accrual Budget 2019	Accrual Basis
		DR	CR		
<b>Revenues</b>					<b>Revenues</b>
Base Charge Revenue	13,375,311			13,375,311	Base Charge Revenue
Rate Based Revenue	3,100,698			3,100,698	Rate Based Revenue
Transfers from Reserves	-	-			
Other Revenue	85,479		-	-	Earned Development Charges and Gas Tax Revenue
			-	-	Developer Contributions
			215,995	301,474	Other Revenue
<b>Total Revenues</b>	<b>16,561,488</b>			<b>16,777,483</b>	<b>Total Revenues</b>
<b>Expenditures</b>					<b>Expenses</b>
Operating	6,693,526	-		6,693,526	Operating Expenses
Capital					
Transfers to Reserves	4,602,872		4,602,872		
Transfers to Capital	5,265,090		5,265,090		
Debt Repayment (Principal & Interest)	-		-	-	Interest on Debt
		2,483,351		2,483,351	Amortization
		-		-	Loss on Disposal of Tangible Capital Assets
<b>Total Expenditures</b>	<b>16,561,488</b>			<b>9,176,877</b>	<b>Total Expenses</b>
<b>Net Expenditures</b>	<b>(0)</b>			<b>7,600,606</b>	<b>Annual Surplus/(Deficit)</b>
Increase (decrease) in amounts to be recovered	-			98,873,530	Accumulated Surplus/(Deficit), beginning of year
<b>Change in Fund Balances</b>	<b>-</b>	<b>7,600,606</b>	<b>-</b>	<b>106,474,136</b>	<b>Accumulated Surplus/(Deficit), end of year</b>
<b>TOTAL ADJUSTMENTS</b>		<b>10,083,957</b>	<b>10,083,957</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.

It is acknowledged that some of the balances required on the Statement of Financial Position will be consolidated across the City and as such, will be difficult to isolate the information that is relevant to water. An example of this is accounts receivable, which may be administered centrally by the Finance Department. Ontario Regulation 453/07 allows for the exclusion of these numbers if they are not known at the time of preparing the financial plan. Please refer to the Financial Plan Notes in Chapter 4 for more details.

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

The Statement of Cash Flow summarizes how the City 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  
Conversion Adjustments  
Statement of Financial Position**

Modified Cash Basis	Budget 2019	Adjustments		Full Accrual Budget 2019	Accrual Basis
		DR	CR		
<b>ASSETS</b>					<b>ASSETS</b>
<b>Financial Assets</b>					<b>Financial Assets</b>
Cash	6,024,355			11,289,445	Cash
Accounts Receivable	2,311,857			2,311,857	Accounts Receivable
				-	Investments
				-	Inventory for resale
<b>Total Financial Assets</b>	<b>8,336,212</b>			<b>13,601,302</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	1,609,863			1,609,863	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	-			-	Debt (Principal only)
Deferred Revenue	975,713			975,713	Deferred Revenue
Other	-			-	Other
<b>Total Liabilities</b>	<b>2,585,576</b>			<b>2,585,576</b>	<b>Total Liabilities</b>
<b>Net Assets/(Debt)</b>	<b>5,750,636</b>			<b>11,015,726</b>	<b>Net Financial Assets/(Debt)</b>
		95,458,410	-	95,458,410	<b>Non-Financial Assets</b>
		-		-	Tangible Capital Assets
		-		-	Inventory of Supplies
				-	Prepaid Expenses
				<b>95,458,410</b>	<b>Total Non-Financial Assets</b>
<b>Municipal Position</b>					
Water Reserves	11,015,726	11,015,726	-		
Gas Tax Reserve Fund	-	-	-		
Development Charge Reserve Fund	975,713	975,713	-		
Amounts to be Recovered	(975,713)	-	975,713		
<b>Total Municipal Position</b>	<b>11,015,726</b>		106,474,136	<b>106,474,136</b>	<b>Accumulated Surplus/(Deficit), end of year</b>
<b>TOTAL ADJUSTMENTS</b>		<b>107,449,849</b>	<b>107,449,849</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 of the statements created by the previous steps are in balance. The Statement of Financial Position summarizes the resources and obligations of the City 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 the City’s ledgers. However, it may not be possible 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:

Ending Reserve/Reserve Fund Balance

Plus: Ending Accounts Payable Balance

Less: Ending Accounts Receivable Balance

Equals: Approximate Ending Cash Balance



- b) Amortization Expense – The method and timing of amortization should be based on the City’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 the City’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

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The following tables provide the complete financial plan for the City's water systems. 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 the City's water systems. 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

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#### 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 the City'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 2019, the City's water system was in a net financial asset position of approximately \$11 million. The financial plan forecasts an increase in net financial asset position over the forecast period to \$23.1 million by 2028.

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 water mains and treatment facilities are imperative to water service delivery.

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<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 are expected to grow over \$65.95 million over the forecast period. This indicates that the City and LAWSS have 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, although fluctuating to some extent, fluctuating slightly over the forecast period with an increase from 55% in 2019 to 56% in 2028. As a result, annual surplus increases from a surplus of \$7.6 million to \$9.4 million. This is due to fluctuating earned development charge revenue annually as well as a general increasing trend in amortization expense (from planned asset acquisitions, both city-owned and the city's proportionate share of LAWSS assets). 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, reserve/reserve fund transfers and debt principal payments.

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 \$85.6 million to a 2019 accumulated surplus of \$16.67 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 by the city and LAWSS.

#### **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/(deficit) exceeds the forecasted tangible capital asset acquisitions (net of amortization for the year), resulting in a slight decrease to net financial assets over the forecast period. This is a result of more significant capital asset acquisitions forecasted between 2019 and 2028 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 decreasing from 1.34 to 1.14 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- 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 the City's water system to improve from a balance of approximately \$9.42 million at the beginning of 2019, to just over \$22.98 million by the end of 2028. For further discussions, on projected cash balances please refer to the Notes to the Financial Plan.

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



**Table 4-1**  
**Statement of Financial Position: Water Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2019-2028**

	Notes	Forecast									
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Financial Assets</b>											
Cash	1	11,289,445	9,309,997	9,782,012	9,513,266	11,803,474	13,895,442	15,985,611	18,050,145	20,089,593	22,986,507
Accounts Receivable	1	2,311,857	2,364,007	2,423,612	2,484,603	2,547,137	2,614,466	2,680,055	2,747,157	2,815,930	2,891,061
<b>Total Financial Assets</b>		<b>13,601,302</b>	<b>11,674,004</b>	<b>12,205,624</b>	<b>11,997,869</b>	<b>14,350,611</b>	<b>16,509,908</b>	<b>18,665,666</b>	<b>20,797,302</b>	<b>22,905,523</b>	<b>25,877,568</b>
<b>Liabilities</b>											
Bank Indebtedness		-	-	-	-	-	-	-	-	-	-
Accounts Payable & Accrued Liabilities	1	1,609,863	1,642,061	1,674,902	1,708,400	1,742,569	1,777,420	1,812,968	1,849,228	1,886,212	1,923,937
Debt (Principal only)	2	-	-	-	-	194,400	178,208	161,369	143,856	395,842	856,395
Deferred Revenue	3	975,713	840,314	624,942	107,988	166,541	202,972	86,147	123,293	8,332	11,127
<b>Total Liabilities</b>		<b>2,585,576</b>	<b>2,482,375</b>	<b>2,299,844</b>	<b>1,816,388</b>	<b>2,103,510</b>	<b>2,158,600</b>	<b>2,060,484</b>	<b>2,116,377</b>	<b>2,290,386</b>	<b>2,791,459</b>
<b>Net Financial Assets/(Debt)</b>		<b>11,015,726</b>	<b>9,191,629</b>	<b>9,905,780</b>	<b>10,181,481</b>	<b>12,247,101</b>	<b>14,351,308</b>	<b>16,605,182</b>	<b>18,680,925</b>	<b>20,615,137</b>	<b>23,086,109</b>
<b>Non-Financial Assets</b>											
Tangible Capital Assets	4	95,458,410	105,235,877	112,748,518	121,107,582	127,240,523	133,530,523	140,168,386	147,080,043	154,476,191	161,411,523
<b>Total Non-Financial Assets</b>		<b>95,458,410</b>	<b>105,235,877</b>	<b>112,748,518</b>	<b>121,107,582</b>	<b>127,240,523</b>	<b>133,530,523</b>	<b>140,168,386</b>	<b>147,080,043</b>	<b>154,476,191</b>	<b>161,411,523</b>
<b>Accumulated Surplus/(Deficit)</b>	5	<b>106,474,136</b>	<b>114,427,506</b>	<b>122,654,298</b>	<b>131,289,063</b>	<b>139,487,624</b>	<b>147,881,831</b>	<b>156,773,568</b>	<b>165,760,968</b>	<b>175,091,328</b>	<b>184,497,632</b>
<b>Financial Indicators</b>											
	<b>Total Change</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
1) Increase/(Decrease) in Net Financial Assets	14,622,583	2,552,200	(1,824,097)	714,151	275,701	2,065,620	2,104,207	2,253,874	2,075,743	1,934,212	2,470,972
2) Increase/(Decrease) in Tangible Capital Assets	71,001,519	5,048,406	9,777,467	7,512,641	8,359,064	6,132,941	6,290,000	6,637,863	6,911,657	7,396,148	6,935,332
3) Increase/(Decrease) in Accumulated Surplus	85,624,102	7,600,606	7,953,370	8,226,792	8,634,765	8,198,561	8,394,207	8,891,737	8,987,400	9,330,360	9,406,304



**Table 4-2**  
**Statement of Operations: Water Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2019-2028**

	Notes	Forecast									
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Water Revenue</b>											
Base Charge Revenue		13,375,311	13,681,070	14,032,727	14,392,978	14,762,026	15,140,079	15,527,348	15,924,053	16,330,415	16,746,662
Rate Based Revenue		3,100,698	3,168,524	3,243,842	3,320,512	3,399,437	3,479,741	3,562,332	3,646,327	3,732,641	3,821,293
Earned Development Charges and Gas Tax Revenue	3	-	204,000	280,800	573,300	-	23,968	176,068	23,968	174,968	57,281
Other Revenue	6	301,474	265,708	279,730	285,139	329,450	370,392	414,255	454,613	497,480	554,961
<b>Total Revenues</b>		<b>16,777,483</b>	<b>17,319,302</b>	<b>17,837,099</b>	<b>18,571,929</b>	<b>18,490,913</b>	<b>19,014,180</b>	<b>19,680,003</b>	<b>20,048,961</b>	<b>20,735,504</b>	<b>21,180,197</b>
<b>Water Expenses</b>											
Operating Expenses	Sch. 4-1	6,693,526	6,837,399	6,963,948	7,103,228	7,245,293	7,390,197	7,549,001	7,688,763	7,842,538	7,999,391
Interest on Debt	2	-	-	-	-	-	7,776	7,128	6,455	5,754	15,834
Amortization	4	2,483,351	2,528,533	2,646,359	2,833,936	3,047,059	3,222,000	3,232,137	3,366,343	3,556,852	3,758,668
Loss on Disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
<b>Total Expenses</b>		<b>9,176,877</b>	<b>9,365,932</b>	<b>9,610,307</b>	<b>9,937,164</b>	<b>10,292,352</b>	<b>10,619,973</b>	<b>10,788,266</b>	<b>11,061,561</b>	<b>11,405,144</b>	<b>11,773,893</b>
<b>Annual Surplus/(Deficit)</b>		<b>7,600,606</b>	<b>7,953,370</b>	<b>8,226,792</b>	<b>8,634,765</b>	<b>8,198,561</b>	<b>8,394,207</b>	<b>8,891,737</b>	<b>8,987,400</b>	<b>9,330,360</b>	<b>9,406,304</b>
Accumulated Surplus/(Deficit), beginning of year	5	98,873,530	106,474,136	114,427,506	122,654,298	131,289,063	139,487,624	147,881,831	156,773,568	165,760,968	175,091,328
Accumulated Surplus/(Deficit), end of year		106,474,136	114,427,506	122,654,298	131,289,063	139,487,624	147,881,831	156,773,568	165,760,968	175,091,328	184,497,632
<b>Note 5:</b>											
<b>Accumulated Surplus/(Deficit) Reconciliation:</b>		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Reserve Balances</b>											
Reserves: Development Charges		975,713	840,314	624,942	107,988	166,541	202,972	86,147	123,293	8,332	11,127
Reserves: Capital/Other		11,015,726	9,191,629	9,905,780	10,181,481	12,441,501	14,529,516	16,766,551	18,824,781	21,010,979	23,942,504
<b>Total Reserves Balance</b>		<b>11,991,439</b>	<b>10,031,943</b>	<b>10,530,722</b>	<b>10,289,469</b>	<b>12,608,042</b>	<b>14,732,488</b>	<b>16,852,698</b>	<b>18,948,074</b>	<b>21,019,311</b>	<b>23,953,631</b>
Less: Debt Obligations and Deferred Revenue		(975,713)	(840,314)	(624,942)	(107,988)	(360,941)	(381,180)	(247,516)	(267,149)	(404,174)	(867,522)
Add: Tangible Capital Assets	4	95,458,410	105,235,877	112,748,518	121,107,582	127,240,523	133,530,523	140,168,386	147,080,043	154,476,191	161,411,523
<b>Total Ending Balance</b>		<b>106,474,136</b>	<b>114,427,506</b>	<b>122,654,298</b>	<b>131,289,063</b>	<b>139,487,624</b>	<b>147,881,831</b>	<b>156,773,568</b>	<b>165,760,968</b>	<b>175,091,328</b>	<b>184,497,632</b>
<b>Financial Indicators</b>	<b>Total Change</b>	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
1) Expense to Revenue Ratio		55%	54%	54%	54%	56%	56%	55%	55%	55%	56%
2) Increase/(Decrease) in Accumulated Surplus	85,624,102	7,600,606	7,953,370	8,226,792	8,634,765	8,198,561	8,394,207	8,891,737	8,987,400	9,330,360	9,406,304





**Schedule 4-1**  
**Statement of Operating Expenses: Water Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2019-2028**

	Notes	Forecast									
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Operating Expenses</b>											
5-01000 SALARIES		42,392	43,240	44,105	44,987	45,887	46,805	47,741	48,696	49,670	50,663
5-01200 EMPLOYEE BENEFITS - STATUTORY & OMERS		8,741	8,916	9,094	9,276	9,462	9,651	9,844	10,041	10,242	10,447
5-01205 EMPLOYEE BENEFITS - NON-STATUTORY		5,486	5,596	5,708	5,822	5,938	6,057	6,178	6,302	6,428	6,557
5-02117 SOFTWARE LICENSE & MAINTENANCE FEES		-	-	-	-	-	-	-	-	-	-
5-02500 LAWSS ADMINISTRATION		357,164	364,307	371,593	379,025	386,606	394,338	402,225	410,270	418,475	426,845
5-04005 INSURANCE		83,705	85,379	87,087	88,829	90,606	92,418	94,266	96,151	98,074	100,035
5-05114 LAWSS OPERATING COSTS		284,588	290,280	296,086	302,008	308,048	314,209	320,493	326,903	333,441	340,110
5-05650 ALLOCATED ADMINISTRATION		362,550	369,801	377,197	384,741	392,436	400,285	408,291	416,457	424,786	433,282
5-05710 CITY'S SHARE LAWSS CAPITAL		-	-	-	-	-	-	-	-	-	-
Distribution											
5-01000 SALARIES		273,846	279,323	284,909	290,607	296,419	302,347	308,394	314,562	320,853	327,270
5-01050 WAGES		1,013,153	1,033,416	1,054,084	1,075,166	1,096,669	1,118,602	1,140,974	1,163,793	1,187,069	1,210,810
5-01055 WAGES - OVERTIME		330,226	336,831	343,568	350,439	357,448	364,597	371,889	379,327	386,914	394,652
5-01200 EMPLOYEE BENEFITS - STATUTORY & OMERS		260,488	265,698	271,012	276,432	281,961	287,600	293,352	299,219	305,203	311,307
5-01205 EMPLOYEE BENEFITS - NON-STATUTORY		161,632	164,865	168,162	171,525	174,956	178,455	182,024	185,664	189,377	193,165
5-01254 CLOTHING/BOOT ALLOWANCE		-	-	-	-	-	-	-	-	-	-
5-02102 ELECTRICITY		3,000	3,060	3,121	3,183	3,247	3,312	3,378	3,446	3,515	3,585
5-02104 PHONE		5,700	5,814	5,930	6,049	6,170	6,293	6,419	6,547	6,678	6,812
5-02220 VEHICLE EXPENSE		436,308	445,034	453,935	463,014	472,274	481,719	491,353	501,180	511,204	521,428
5-02300 OFFICE EXPENSES		2,000	2,040	2,081	2,123	2,165	2,208	2,252	2,297	2,343	2,390
5-02311 TRAINING & EDUCATION		37,280	38,026	38,787	39,563	40,354	41,161	41,984	42,824	43,680	44,554
5-02388 OVERTIME MEALS		12,280	12,526	12,777	13,033	13,294	13,560	13,831	14,108	14,390	14,678
5-02466 CONTRACT EXPENSE		751,832	766,869	782,206	797,850	813,807	830,083	846,685	863,619	880,891	898,509
5-02485 CONSTRUCTION		-	-	-	-	-	-	-	-	-	-
5-02490 WORKS CENTRE OPERATION		744,589	759,481	774,671	790,164	805,967	822,086	838,528	855,299	872,405	889,853
5-03002 OTHER OPERATING SUPPLIES		-	-	-	-	-	-	-	-	-	-
5-03005 MATERIALS		350,000	357,000	364,140	371,423	378,851	386,428	394,157	402,040	410,081	418,283
5-04910 OTHER PURCHASED SERVICES		483,710	493,384	503,252	513,317	523,583	534,055	544,736	555,631	566,744	578,079
5-05650 ALLOCATED ADMINISTRATION		682,856	696,513	710,443	724,652	739,145	753,928	769,007	784,387	800,075	816,077
Non TCA - Expenses from Capital Budget	7	-	10,000	-	-	-	-	11,000	-	-	-
<b>TOTAL OPERATING EXPENSES</b>		<b>6,693,526</b>	<b>6,837,399</b>	<b>6,963,948</b>	<b>7,103,228</b>	<b>7,245,293</b>	<b>7,390,197</b>	<b>7,549,001</b>	<b>7,688,763</b>	<b>7,842,538</b>	<b>7,999,391</b>



**Table 4-3**  
**Statement of Changes in Net Financial Assets/Debt: Water Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2018-2027**

	Notes	Forecast									
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Annual Surplus/(Deficit)		7,600,606	7,953,370	8,226,792	8,634,765	8,198,561	8,394,207	8,891,737	8,987,400	9,330,360	9,406,304
Less: Acquisition of Tangible Capital Assets	4	(7,531,757)	(12,306,000)	(10,159,000)	(11,193,000)	(9,180,000)	(9,512,000)	(9,870,000)	(10,278,000)	(10,953,000)	(10,694,000)
Add: Amortization of Tangible Capital Assets	4	2,483,351	2,528,533	2,646,359	2,833,936	3,047,059	3,222,000	3,232,137	3,366,343	3,556,852	3,758,668
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
		(5,048,406)	(9,777,467)	(7,512,641)	(8,359,064)	(6,132,941)	(6,290,000)	(6,637,863)	(6,911,657)	(7,396,148)	(6,935,332)
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>2,552,200</b>	<b>(1,824,097)</b>	<b>714,151</b>	<b>275,701</b>	<b>2,065,620</b>	<b>2,104,207</b>	<b>2,253,874</b>	<b>2,075,743</b>	<b>1,934,212</b>	<b>2,470,972</b>
Net Financial Assets/(Net Debt), beginning of year		8,463,526	11,015,726	9,191,629	9,905,780	10,181,481	12,247,101	14,351,308	16,605,182	18,680,925	20,615,137
<b>Net Financial Assets/(Net Debt), end of year</b>		<b>11,015,726</b>	<b>9,191,629</b>	<b>9,905,780</b>	<b>10,181,481</b>	<b>12,247,101</b>	<b>14,351,308</b>	<b>16,605,182</b>	<b>18,680,925</b>	<b>20,615,137</b>	<b>23,086,109</b>
<b>Financial Indicators</b>		<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
1) Acquisition of Tangible Capital Assets (Cumulative)		7,531,757	19,837,757	29,996,757	41,189,757	50,369,757	59,881,757	69,751,757	80,029,757	90,982,757	101,676,757
2) Annual Surplus/Deficit before Amortization (Cumulative)		10,083,957	20,565,860	31,439,011	42,907,712	54,153,332	65,769,539	77,893,413	90,247,156	103,134,368	116,299,340
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)		1.34	1.04	1.05	1.04	1.08	1.10	1.12	1.13	1.13	1.14



**Table 4-4**  
**Statement of Cash Flow – Indirect Method: Water Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2018-2027**

	Notes	Forecast									
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Operating Transactions</b>											
Annual Surplus/Deficit		7,600,606	7,953,370	8,226,792	8,634,765	8,198,561	8,394,207	8,891,737	8,987,400	9,330,360	9,406,304
Add: Amortization of TCA's	4	2,483,351	2,528,533	2,646,359	2,833,936	3,047,059	3,222,000	3,232,137	3,366,343	3,556,852	3,758,668
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Earned Deferred Revenue	3	-	(204,000)	(280,800)	(573,300)	-	(23,968)	(176,068)	(23,968)	(174,968)	(57,281)
Less: Developer Contributions		-	-	-	-	-	-	-	-	-	-
Add: Deferred Revenue Proceeds		19,132	68,601	65,428	56,346	58,553	60,398	59,243	61,113	60,007	60,076
Change in A/R (Increase)/Decrease		(2,311,857)	(52,150)	(59,605)	(60,991)	(62,534)	(67,329)	(65,589)	(67,102)	(68,773)	(75,131)
Change in A/P Increase/(Decrease)		1,609,863	32,198	32,841	33,498	34,169	34,851	35,548	36,260	36,984	37,725
Less: Interest Proceeds		(215,995)	(180,228)	(194,231)	(199,637)	(243,951)	(284,892)	(328,756)	(369,113)	(411,980)	(469,461)
<b>Cash Provided by Operating Transactions</b>		<b>9,185,100</b>	<b>10,146,324</b>	<b>10,436,784</b>	<b>10,724,617</b>	<b>11,031,857</b>	<b>11,335,268</b>	<b>11,648,252</b>	<b>11,990,934</b>	<b>12,328,482</b>	<b>12,660,900</b>
<b>Capital Transactions</b>											
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(7,531,757)	(12,306,000)	(10,159,000)	(11,193,000)	(9,180,000)	(9,512,000)	(9,870,000)	(10,278,000)	(10,953,000)	(10,694,000)
<b>Cash Applied to Capital Transactions</b>		<b>(7,531,757)</b>	<b>(12,306,000)</b>	<b>(10,159,000)</b>	<b>(11,193,000)</b>	<b>(9,180,000)</b>	<b>(9,512,000)</b>	<b>(9,870,000)</b>	<b>(10,278,000)</b>	<b>(10,953,000)</b>	<b>(10,694,000)</b>
<b>Investing Transactions</b>											
Proceeds from Investments		215,995	180,228	194,231	199,637	243,951	284,892	328,756	369,113	411,980	469,461
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	-	-	-	-
<b>Cash Provided by (applied to) Investing Transactions</b>		<b>215,995</b>	<b>180,228</b>	<b>194,231</b>	<b>199,637</b>	<b>243,951</b>	<b>284,892</b>	<b>328,756</b>	<b>369,113</b>	<b>411,980</b>	<b>469,461</b>
<b>Financing Transactions</b>											
Proceeds from Debt Issue	2	-	-	-	-	194,400	-	-	-	270,200	502,000
Less: Debt Repayment (Principal only)	2	-	-	-	-	-	(16,192)	(16,839)	(17,513)	(18,214)	(41,447)
<b>Cash Applied to Financing Transactions</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>194,400</b>	<b>(16,192)</b>	<b>(16,839)</b>	<b>(17,513)</b>	<b>251,986</b>	<b>460,553</b>
Increase in Cash and Cash Equivalents		1,869,338	(1,979,448)	472,015	(268,746)	2,290,208	2,091,968	2,090,169	2,064,534	2,039,448	2,896,914
Cash and Cash Equivalents, beginning of year	1	9,420,107	11,289,445	9,309,997	9,782,012	9,513,266	11,803,474	13,895,442	15,985,611	18,050,145	20,089,593
<b>Cash and Cash Equivalents, end of year</b>	<b>1</b>	<b>11,289,445</b>	<b>9,309,997</b>	<b>9,782,012</b>	<b>9,513,266</b>	<b>11,803,474</b>	<b>13,895,442</b>	<b>15,985,611</b>	<b>18,050,145</b>	<b>20,089,593</b>	<b>22,986,507</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 the City, some of the items listed above have been estimated given that the City 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 the City, 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 City-wide receivables as a percentage of annual City-wide revenue earned; and
- b) Payables: Based on historical levels of City-wide payables as a percentage of annual City-wide expenses.

Therefore, the opening cash balance was estimated based on the above calculations.

## 2. Debt

Currently there is no outstanding water related debt at the end of however, debenture financing is projected to take place over the forecast period to assist in funding city owned tangible capital asset acquisitions. Principal repayments for forecasted debt over the forecast period are anticipated as follows:



Year	Principal Payments
2019	-
2020	-
2021	-
2022	-
2023	-
2024	16,192
2025	16,839
2026	17,513
2027	18,214
2028	41,447
2029	84,917
<b>Total</b>	<b>\$ 195,122</b>

For financial reporting purposes, debt principal payments represent a decrease in debt liability and the interest payments represent a current year operating expense. Investment income on the sinking fund debt is assumed to assist in decreasing the debt liability. Note that currently there is no debt outstanding for LAWSS that the city is responsible for however, if future debt is issued, the city would be responsible for their proportionate share.

### 3. Deferred Revenue

Deferred revenue is made up of the water development charge reserve fund which is considered to be a liability for financial reporting purposes until the funds are used to emplace the works for which they have been collected. If future years provide for a negative balance in the water development charge reserve fund balance it would be shown as an asset (“accounts receivable – other”) for financial reporting purposes, representing future amounts to be collected from developers. Currently, the forecast does not anticipate a negative balance in the water development charges reserve fund.

### 4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water related assets in the following categories:
  - i. City-owned Assets:
    - a. Linear Infrastructure (watermains, water meters, and hydrants);
    - b. Machinery & Equipment; and



- c. Land.
  - ii. City's portion of LAWSS Assets (based on 2019 proportionate share of 58.76%):
    - a. Facilities;
    - b. Linear Infrastructure (watermains);
    - c. Machinery & Equipment;
    - d. Land; and
    - e. Land Improvements.
- Amortization is calculated based on using the straight-line approach with one-half ( $\frac{1}{2}$ ) year amortization in the year of acquisition or construction for city-owned assets and using the straight-line approach in the year following acquisitions or construction for LAWSS assets based on their approach.
  - Given the planned asset replacement forecast provided by the City, 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 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. This figure was used to calculate disposals only. 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.
  - The City is unaware of any specific lead service piping in the municipal water system. However, when older portions of the watermain system is replaced as part of the ongoing replacement program, any lead service pipes will be replaced if and when found.



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

Asset Historical Cost	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Opening Tangible Capital Asset Balance	154,798,569	161,451,819	172,304,730	181,193,473	190,850,384	198,602,510	206,423,748	214,492,154	222,901,499	231,935,102
Acquisitions	7,531,757	12,306,000	10,159,000	11,193,000	9,180,000	9,512,000	9,870,000	10,278,000	10,953,000	10,694,000
Disposals	878,507	1,453,089	1,270,257	1,536,089	1,427,874	1,690,762	1,801,594	1,868,655	1,919,397	2,058,568
<b>Closing Tangible Capital Asset Balance</b>	<b>161,451,819</b>	<b>172,304,730</b>	<b>181,193,473</b>	<b>190,850,384</b>	<b>198,602,510</b>	<b>206,423,748</b>	<b>214,492,154</b>	<b>222,901,499</b>	<b>231,935,102</b>	<b>240,570,534</b>
Opening Accumulated Amortization	64,388,565	65,993,409	67,068,853	68,444,955	69,742,802	71,361,987	72,893,225	74,323,768	75,821,456	77,458,911
Amortization Expense	2,483,351	2,528,533	2,646,359	2,833,936	3,047,059	3,222,000	3,232,137	3,366,343	3,556,852	3,758,668
Amortization on Disposal	878,507	1,453,089	1,270,257	1,536,089	1,427,874	1,690,762	1,801,594	1,868,655	1,919,397	2,058,568
<b>Ending Accumulated Amortization</b>	<b>65,993,409</b>	<b>67,068,853</b>	<b>68,444,955</b>	<b>69,742,802</b>	<b>71,361,987</b>	<b>72,893,225</b>	<b>74,323,768</b>	<b>75,821,456</b>	<b>77,458,911</b>	<b>79,159,011</b>
<b>Net Book Value</b>	<b>95,458,410</b>	<b>105,235,877</b>	<b>112,748,518</b>	<b>121,107,582</b>	<b>127,240,523</b>	<b>133,530,523</b>	<b>140,168,386</b>	<b>147,080,043</b>	<b>154,476,191</b>	<b>161,411,523</b>

Note the above information includes Sarnia's share (58.76%) of LAWSS Tangible Capital Asset's





## 5. Accumulated Surplus

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

Wastewater	2019 Opening Accumulated Surplus
<b>Reserve Balances</b>	
Reserves: Development Charges	956,581
Reserves: Gas Tax	-
Reserves: Capital/Other	8,463,526
<b>Total Reserves Balance</b>	<b>9,420,107</b>
Less: Debt Obligations and Deferred Revenue	(956,581)
Less: Unfinanced Capital	-
Add: Long-term Accounts Receivable	-
Add: Tangible Capital Assets	90,410,004
<b>Total Opening Balance</b>	<b>98,873,530</b>

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

## 6. Other Revenue

Other revenue includes hydrant usage charges, water shut-off fees, sundry revenue, recoveries from other municipalities and minor revenues from sale of materials. These revenues have been held constant over the forecast period.

## 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 Council 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 plans will be made available to the public upon request and without charge. The plans must also be made available to the public on the municipality's website. (O.Reg. 453/07, Section 3(1)5.)
3. The owner of the drinking water system must provide a copy of the financial plan to the Director of Policy Branch, Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3(1)6.)
4. The 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 City 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 Council's interest and approval however, for decision making purposes, it may be more informative to rely on the information contained within the 2019 Water and Wastewater Rate Study, dated March 20, 2019. Nevertheless, Council is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

1. The City of Sarnia Water Financial Plan prepared by Watson & Associates Economists Ltd. dated April 12, 2019 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. The Financial Plan dated April 12, 2019 be submitted to the Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3(1)6).
4. The resolution of Council approving the Financial Plan be submitted to the MECP, satisfying the requirements under the Safe Drinking Water Act. (S.D.W.A. Section 32(5)2.ii.).