ATTACHMENT 1

ENVIRONMENTAL SERVICES WATER FINANCIAL PLAN

ONTARIO REGULATION 453/07 FINANCIAL PLAN
JUNE 13, 2019

York Region

CONTENTS

1. INTRODUCTION

1.1 Study Purpose

York Region is required to prepare a water financial plan as part of the five submission requirements necessary for the purpose of renewing the Region's Municipal Drinking Water License (MDWL) under 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 this report is to convert the actuals and projections into the prescribed reporting requirements for a financial plan in accordance with Ontario Regulation 453/07 (O.Reg. 453/07).

1.2 Background

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

"No person shall,

a) establish a new municipal drinking water system or replace or carry out an alteration to a municipal drinking water system except under the authority of and in accordance with an approval under this Part or a drinking water works permit;

or

b) use or operate a municipal drinking water system that was established before or after this section comes into force except under the authority of and in accordance with an approval under this Part or municipal drinking water license. 2002 c.32, s. 31 (1)"

In order to obtain a license, a municipality must satisfy five key requirements per section 32 (5):

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

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

Section 30 of the Act provides the following definition of financial plans: “financial plans” means financial plans that satisfy the requirements prescribed by the Minister.

1.2.2 Financial Plan Requirements – License Renewal

O.Reg. 453/07 also provides details with regards to financial plan requirements for existing water systems applying for license renewal. The requirements for existing systems are summarized as follows:

- Financial plans must be approved by Council resolution (or governing body);
- Financial plans must include a statement that the financial impacts have been considered and apply for a minimum six year period (beginning in the year in which the license expires);
- Financial plans must include detail regarding proposed or projected financial operations itemized by total revenues, total expenses, annual surplus/deficit and accumulated surplus/deficit (i.e. the components of a “Statement of Operations” as per the Public Sector Accounting Board (PSAB)) for each year in which the financial plans apply;
- Financial plans must present financial position itemized by total financial assets, total liabilities, net debt, non-financial assets, and tangible capital assets (i.e. the components of a “Statement of Financial Position” as per PSAB) for each year in which the financial plans apply;

- Gross cash receipts/payments itemized by operating transactions, capital transactions, investing transactions and financial transactions (i.e. the components of a “Statement of Cash Flow” as per PSAB) for each year in which the financial plans apply; and
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system.

1.2.3 Financial Plan Requirements - General

A financial plan is *mandatory* for water systems regulated under the Act and *encouraged* for wastewater systems. The financial plans shall be for a period of at least six years but longer planning horizons are encouraged.

Having met all of the necessary prerequisites, the Ministry of Environment, Conservation and Parks (MECP) issued York Region a Municipal Drinking Water License (MDWL) for its Drinking Water Systems on January 29, 2010. As of September 2011, all existing municipal residential drinking water systems in Ontario had received a license and a drinking water works permit.

The Region is required to submit a renewal application for MDWL every 5 years.

Municipal drinking water licenses are valid for five years however, the Act requires an expiry date and renewal application deadline to be included in every MDWL. To ensure that a License remains valid, municipalities are required to submit a renewal application on or before the date listed in Schedule A of their License; for York Region this date is July 27, 2019.

The information to be submitted for a license renewal is essentially the same as the information required for the issuance of the first license except that updated Financial Plans are required to be prepared and approved prior to submitting the license renewal application. The license will be renewed if the Ministry is satisfied that:

1. The system will continue to be operated by an accredited operating authority;
2. The drinking water works permit remains in force;
3. Operational plans for the system satisfy stipulated requirements;

4. Financial plans satisfy the requirements of the *Safe Drinking Water Act*;
5. The system has been and will continue to be operated in accordance with the requirements under the *Safe Drinking Water Act* and the license; and
6. Any required permits to take water remain in force.

1.2.4 Public Sector Accounting Board (PSAB) Requirements

The components of the financial plan indicated by the regulation are congruent with the requirements for financial statement presentation as set out in section PS1200 of the Canadian Institute of Chartered Accountants (CICA) 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 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 a municipality's financial position. Historically, municipalities have reported their financial results on a modified cash basis of accounting whereby revenues and expenses are recognized when cash is paid or received and only certain accrual-type items such as payables and receivables are recognized at year-end. The difference between the methods is in the timing of when transactions are reported. This timing difference impacts the presentation of the statements in that various accounts have been added or deleted in order to properly report the transactions.

The Statement of Changes 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 which provides a measure of the changes in cash for that period.

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, the 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.

The principles help form the framework for a sustainable financial plan. Municipalities have to assess the “full cost” of providing water and wastewater services which includes:

- Operating costs of Region-owned infrastructure (i.e., labour, energy and chemicals)
- Payments to other municipalities for water and wastewater services (Peel, Toronto, Durham)
- Resources to carry out a multi-billion-dollar long-term investment plan, including building reserves for future asset rehabilitation and replacement
- Debt servicing costs
- Environmental costs, including source water protection
- Contributions to Conservation Authorities for natural hazard management and environmental protection
- Corporate costs for water and wastewater services

2.2 Water and Wastewater Rate Study

In 2015, Council approved annual blended water and wastewater rate increases from 2016 through 2021 based on the Rate Study that was jointly completed by staff from Environmental Services and Finance. The study’s goal was full cost recovery to address the guiding principles toward sustainable financial planning. Staff will bring forward a similar Rate Study in 2021 and the results of this study will be presented to Council with a recommendation on future rates for six years commencing in 2022.

Figure 2-1 summarizes the key elements of the Rate Study:

Figure 2-1

Key Elements of Water and Wastewater Rate Study

As a result of addressing all these key elements, the Rate Study provides a sound financial plan for the Region’s water and wastewater system and involves many steps including:

- Inter-jurisdictional review of water and wastewater financing policies and practices to identify best practices in rate setting
- Establishing a funding policy for major rehabilitation and replacement projects that will eliminate debt funding
- Reviewing asset condition reports, plans for system expansions/renewal and estimates of future operating costs
- Using advanced analytics to prepare demand forecasts under various funding scenarios
- Consulting with Community and Health Services to review the impact of rate increases on vulnerable residents
- Reviewing various rate structures, including mixed rate structures
- Proposing a separate rate stabilization reserve be established, to protect funds reserved for capital replacement and renewal.

A summary of the draft water rates for the Region are as follows:

	Council Approved			Preliminary Forecast			
Description	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Total Water Billing Recovery	$141,256,093	$156,607,928	$165,983,021	$173,463,637	$183,138,862	$190,324,818	$197,836,270
Total Consumption (m^3)	118,446,682	118,223,691	119,282,411	120,343,391	123,474,594	124,703,069	125,971,488
Blended Rate	**$1.19257**	**$1.32467**	**$1.39151**	**$1.44141**	**$1.48321**	**$1.52622**	**$1.57048**

Note:

The rates from 2019 to 2021 have been approved by Council. The rates for 2022 to 2025 reflect the annual increases that are necessary to maintain full cost recovery, which should be achieved in 2021. As part of the next Rate Study, updated rates will be presented for Council review in 2021.

3. APPROACH

3.1 Introduction

The Region's financial statements have been prepared on a modified cash basis and the resulting financial plan has been converted to a full accrual basis for the purposes of this report. The conversion process used will help to establish the structure of the year-end financial statements along with the opening balances that will underpin the forecast. This section outlines the conversion process utilized and summarizes the adjustments made to prepare the financial plan. It is noted that the financial plan has been prepared for water only.

3.2 Conversion Process

The conversion from the existing modified cash basis financial plan 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. However, historical cost (which is the original cost to purchase, develop, or construct each asset) is required for financial reporting purposes.

Once historical cost is established, 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 the forecast period.

Future water capital needs have also been determined and summarized. However, these estimates only represent future assets that the Region anticipates purchasing or constructing without consideration for assets that are contributed by developers and other parties (at no or partial cost to the Region). These contributed assets could form a significant part of the infrastructure going forward in terms of the sustainability of the systems as a whole and despite their non-monetary nature; the financial plan 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.

ENVIRONMENTAL SERVICES

Figure 3-1
Conversion Adjustments
Statement of Operations

Modified Cash Basis	Budget 2019	Adjustments to Remove Non-Accrual Accounts Dr	Adjustments to Remove Non-Accrual Accounts Cr	Transition Budget Balances 2019	Adjustments to add Accrual Accounts Dr	Adjustments to add Accrual Accounts Cr	Budget 2019	Accrual Basis	Notes on Adjustments
Revenues								**Revenues**	
Base Charge Revenue	559,800			559,800			559,800	Base Charge Revenue	No change
Rate Based Revenue	148,309,226			148,309,226			148,309,226	Rate Based Revenue	No change
Transfers from Reserves	77,340,006	77,340,006		-			-		Removes non-accrual reserve account
						-	-		
				-		56,821,289	56,821,289	Earned DC Revenue	New Account to reflect earned DC Revenue
Other Revenue (includes CWIP Tsf)	-			-		2,908,002	2,908,002	Other Revenue	To Account for Interest Revenue
Total Revenues	226,209,032			148,869,026			208,598,316	Total Revenues	
Expenditures								**Expenses**	
Operating	84,624,745			84,624,745			84,624,745	Operating Expenses	Various Expenses previously classified as capital expenditures
Capital									
Transfers to Reserves (Incl. Lifecycle)	1,750,000		1,750,000	-	-		0		Removes non-accrual reserve account
Transfers to Capital	51,336,624		51,336,624	-			0		Removes TCA related balances which are now captured in statement of financia
Debt Repayment (Principal & Interest)	81,441,504			81,441,504		42,064,580	39,376,924	Interest on Debt	Removes principal portion of debt - now reflected on statement of cash flow. Also Adds debt previously captured within capital budget
					31,311,512		31,311,512	Amortization	New account created as a result of PSAB 3150 - reflects cost of using TCA
Other				-	1,585,301		1,585,301	Other	To Account for financing charges
Total Expenditures	219,152,874			**166,066,249**			**156,898,482**	Total Expenses	
Net Expenditures	7,056,158						**51,699,834**	**Annual Surplus/(Deficit)**	Represents difference between Revenues and Expenditures
Increase (decrease) in amounts to be reco	**-**						543,995,585	Accumulated Surplus/(Deficit), beginning of year	
Change in fund balances	-				51,699,834		**595,695,419**	**Accumulated Surplus/(Deficit), end of yea**	To transfer annual surplus to accumulated surplus
TOTAL ADJUSTMENTS		**77,340,006**	**53,086,624**		**84,596,647**	**101,793,871**			

3.2.2 Convert Statement of Operations

As per section 1.2.4 above, the Statement of Operations eliminates and/or adds certain transactions that are to be reported differently by municipalities (see Figure 3-1). A wide range of adjustments will be considered and will depend on the size and complexity of the systems. For example, the revenues and expenses will need to be adjusted for and included within the Statement of Operations. This includes all non-tangible capital asset costs previously included in the capital statement (i.e. expenses related to various studies) while at the same time eliminating all expenditures incurred to acquire tangible capital assets which will now form part of the tangible capital asset balance discussed in section 3.2.1. Transfers to and from reserves are not revenues or expenses and are not reported on the Statement of Operations. Instead, these transactions are represented by changes in cash and accumulated surplus. Also, debt repayment costs relating to the principal payment portion is removed as it does not qualify as an expense for reporting purposes. Principal payments are reported as a decrease in debt liability on the Statement of Financial Position. 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.

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). As noted earlier, the applicable balances from the Statement of Capital and the Statement of Reserve and Reserve Funds will need to be transferred to this statement. 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 new structure of the Statement of

Financial Position as outlined in Public Sector Accounting Standards, Section PS1201.

It is acknowledged that some of the balances required on the Statement of Financial Position are consolidated across the Region and as such, will be difficult to isolate the information that is relevant to Water services. An example of this is accounts receivable which is administered centrally by the Finance Department and we have to make assumptions to include in the statement. 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 Section 4 for more details.

3.2.4 Convert Statement of Cash Flow and Net Debt

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

The Statement of Changes in Net Debt is a statement which reconciles the difference between the surplus or deficit from current operations and the changes in net 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 Debt, additional 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 Changes in Net Debt is not required under O.Reg. 453/07, it has been included in this report as a further indicator of financial viability.

Figure 3-2
Conversion Adjustments
Statement of Financial Position

Adjustments to Remove Non-Accrual Accounts		Transition Budget Balances	Adjustments to add Accrual Accounts		Budget	Accrual Basis	Notes on Adjustments
Dr	Cr	2019	Dr	Cr	2019		
						Financial Assets	
		99,231,064			99,231,064	Cash	No change
		49,240,687			49,240,687	Accounts Receivable	No change
		-			-	Investments	No change
		-				Inventory for resale	New Account
		-				Other Assets	New Account
		148,471,751			148,471,751	Total Financial Assets	
						Liabilities	
		6,735,098			6,735,098	Accounts Payable & Accrued Liabilities	No Change
		764,429,260			764,429,260	Debt (Principal only)	No Change
		-			-	Other (DC Reserves-Deferred Revenue)	No Change
		68,068,740			68,068,740	Intercompany debt	New Account
		839,233,098			839,233,098	Total Liabilities	
		-					Account reclassified as Non-Financial asset
		(690,761,347)			**(690,761,347)**	**Net Financial Assets/(Debt)**	
						Non-Financial Assets	
			1,286,456,765		1,286,456,765	Tangible Capital Assets	Adds NBV of Tangible Capital Assets - offset entry is to accumulated surplus
134,686,557							Removes non-accrual reserve account- balance to be transferred to accumulated surplus
	764,429,260	-					Removes account - balance to be transferred to accumulated surplus
						Inventory of Supplies	New Account
						Prepaid Expenses	Account reclassified as Non-Financial Asset
		-			1,286,456,765	Total Non-Financial Assets	
-	-			656,714,062	**595,695,419**	**Accumulated Surplus/(Deficit)**	Represents offset entry for TCA's and existing reserve fund balances
134,686,557	**764,429,260**		**1,286,456,765**	**656,714,062**			

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 Region at a 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 Changes in Net Debt and the Statement of Financial Position are also linked in terms of reporting on net debt. On the Statement of Financial Position, net debt is equal to the difference between financial assets and liabilities and should equal net debt as calculated on the Statement of Net 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 are included 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 Region's ledgers. However, it is not possible to extract this information from the ledgers for Water services alone; therefore a reasonable proxy was needed. One approach is to assume 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 Cash Balance

b. Amortization Expense - The method and timing of amortization should be based on the Region’s amortization policy. Otherwise, an assumption has to be made and applied consistently throughout the financial plan.

c. Accumulated Amortization - Will be based on the culmination of accumulated amortization expenses throughout the life of each asset.

d. Contributed Assets - As noted earlier, contributed assets could represent a significant part of the Region’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.

4. FINANCIAL PLAN

4.1 Introduction

The following tables provide the complete financial plan for the Region'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 Region's water systems. It is not an audited document and 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 the Region's water systems. The first important indicator is net 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 occurs when 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 systems will be needed to finance past transactions as well as future operations. Below are the key elements in Table 4-1:

- In 2019, the net debt position is forecasted at $690.8 million primarily due to the level of existing debt and anticipated issuance of new debt.
- The financial plan developed for the Region forecasts a decreasing net debt position in the 2019 to 2025 forecast period as the Region has taken steps towards fiscal sustainability.
- It is noted that liabilities did not include "Inter-fund Transfers" in the 2014 Financial Plan which represents internal borrowings from non-water Development Charge (DC) reserves to supplement future cash requirements as anticipated DC proceeds will not be sufficient to fund future growth-related capital expenditures. The Development Charge Bylaw was

last updated in 2017 and further amended in 2018. The 2017 Development Charge Bylaw (as amended) updated DC rates based on a full review of all growth-related projects eligible for DC recovery. As part of the Region's fiscal sustainability plan, DC reserves are managed in aggregate which has reduced issuance of debt and increased draws from reserves. Based on these changes, we have included Inter-fund transfers in the 2019 Financial Plan.

- As a result, net debt is projected to be at approximately $316.8 million by the end of 2025 which is a substantial reduction compared to the 2014 Financial Plan that projected net debt to be at $878.5 million by the end of 2020.
- As mentioned above, this net debt position indicates that the Region's water systems will need to generate future revenue in order to finance past transactions.

Another important indicator on the Statement of Financial Position is the tangible capital assets balance. As part of being compliant with Public Sector Accounting Standards, Section PS3150, the tangible capital assets balance has significance from a financial planning perspective for the following reasons:

- Tangible capital assets such as watermains and treatment plants are imperative to water service delivery.
- 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/construction by the Region 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 asset 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 by over $122.5 million over the 7-year forecast period. This indicates that the Region 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 systems 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 decreasing from 75 per cent to 67 per cent between 2019 and 2020 and then decreasing to 65 per cent by 2025. Correspondingly, annual surpluses are forecasted every year and increase by 86 percent from $51.7 million in 2019 to $96.4 million by 2025. It is important to note that an annual surplus is required 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 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. The surplus forecast is better than the 2014 Plan due to Region's strategy to issue less debt and borrow from internal reserves instead. As indicated in Table 4- 2, the Region's accumulated surplus is predominately made up of reserve and reserve fund balances as well as historic investments in tangible capital assets. The financial plan anticipates that accumulated surplus will increase from 2019 opening surplus of $544.0 million to $1,092.2 million by 2025. This is due to the annual surpluses forecast over the timeframe of the financial plan as described above.

4.2.3 Statement of Change in Net Debt (Table 4-3)

The Statement of Changes in Net 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 changes in net financial assets/debt for the period. Table 4-3 indicates forecasted revenues exceed forecasted expenditures resulting in an increase in net financial assets over the forecast period from 2019 to 2025. The overall trend of net financial debt position is attributed to the planned use of debt to construct tangible capital assets. This is evidenced by the ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions of 1.13 in 2019 improving to 2.07 in 2025[1].

4.2.4 Statement of Cash Flow (Table 4-4)

The Statement of Cash Flow summarizes how the water system is expected to generate and use cash resources during the planning 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 debt, investment income, and cash on hand will be used to fund operating deficits and tangible capital asset acquisitions over the forecast period. The financial plan anticipates the cash position of the Region's water system improving from approximately $79.7 million at the beginning of 2019 to $320.3 million by the end of 2025.

1 A desirable ratio is 1:1 or better.

Table 4-1

York Region

Statement of Financial Position (Water Only)

Unaudited: For Financial Planning Purposes Only

2019 – 2025

	Notes	2019	2020	2021	2022	2023	2024	2025
Financial Assets								
Cash	1	99,231,064	117,629,295	150,560,571	196,571,680	240,436,608	280,540,052	320,339,492
Accounts Receivable	1	49,240,687	54,591,960	57,861,595	60,470,269	64,639,756	67,225,434	70,170,667
Investments		-	-	-	-	-	-	-
Inventory for Resale		-	-	-	-	-	-	-
Other Assets		-	-	-	-	-	-	-
Total Financial Assets		148,471,751	172,221,255	208,422,166	257,041,949	305,076,364	347,765,486	390,510,159
Liabilities								
Accounts Payable & Accrued Liabilities	1	6,735,098	7,111,249	7,452,307	7,636,565	8,247,381	8,592,768	8,962,250
Debt (Principal only)	2	764,429,260	715,200,765	668,489,915	615,186,683	560,425,089	504,136,946	446,432,400
Deferred Revenue		-	-	-	-	-	-	-
Intercompany debt	3	68,068,740	93,505,436	113,976,329	149,589,166	178,603,868	214,126,660	251,908,476
Total Liabilities		839,233,098	815,817,450	789,918,552	772,412,414	747,276,338	726,856,374	707,303,126
Net Financial Assets/(Debt)		(690,761,347)	(643,596,196)	(581,496,386)	(515,370,466)	(442,199,974)	(379,090,888)	(316,792,966)
Non-Financial Assets								
Tangible Capital Assets	4	1,286,456,765	1,315,794,749	1,335,789,793	1,345,621,310	1,354,955,113	1,374,874,685	1,409,000,223
Inventory of Supplies								
Prepaid Expenses								
Total Non-Financial Assets		1,286,456,765	1,315,794,749	1,335,789,793	1,345,621,310	1,354,955,113	1,374,874,685	1,409,000,223
Accumulated Surplus/(Deficit)	5	595,695,419	672,198,554	754,293,407	830,250,844	912,755,139	995,783,797	1,092,207,257

Financial Indicators	Total Change	2019	2020	2021	2022	2023	2024	2025
1) Increase/(Decrease) in Net Financial Assets	381,023,386	29,281,909	47,165,151	62,099,810	66,125,920	73,170,491	63,109,086	62,297,922
2) Increase/(Decrease) in Tangible Capital Assets	1,409,000,223	22,417,925	29,337,984	19,995,044	9,831,516	9,333,803	19,919,572	34,125,538
3) Increase/(Decrease) in Accumulated Surplus	525,984,768	51,699,834	76,503,135	82,094,854	75,957,437	82,504,295	83,028,658	96,423,460

Table 4-2

York Region

Statement of Operations (Water Only)

Unaudited: For Financial Planning Purposes Only

2019 – 2025

	Notes	2019	2020	2021	2022	2023	2024	2025
Water Revenue								
Base Charge Revenue		559,800	602,800	622,800	643,000	655,860	668,977	682,356
Rate Based Revenue		148,309,226	156,603,862	165,983,219	173,466,526	185,427,221	192,844,562	201,293,333
Earned DC Revenue	3	56,821,289	73,263,889	69,063,943	53,778,255	54,201,517	49,493,922	57,767,515
Other Revenue	6	2,908,002	4,335,961	5,729,522	7,678,928	9,564,348	12,418,448	14,816,739
Total Revenues		208,598,316	234,806,512	241,399,484	235,566,710	249,848,946	255,425,909	274,559,942
Water Expenses								
Operating Expenses		84,624,745	89,720,451	94,271,279	97,045,310	105,227,654	110,738,168	116,900,875
Interest on Debt	2	39,376,924	37,700,515	34,451,590	32,210,025	32,143,676	32,076,371	32,007,310
Amortization	4	31,311,512	30,882,410	30,581,763	30,353,937	29,973,321	29,582,712	29,228,296
Other		1,585,301						
Total Expenses		156,898,482	158,303,376	159,304,631	159,609,272	167,344,651	172,397,251	178,136,481
Annual Surplus/(Deficit)		51,699,834	76,503,135	82,094,853	75,957,437	82,504,295	83,028,657	96,423,461
Accumulated Surplus/(Deficit), beginning of year		543,995,585	595,695,419	672,198,554	754,293,407	830,250,844	912,755,139	995,783,797
Accumulated Surplus/(Deficit), end of year	5	595,695,419	672,198,554	754,293,407	830,250,844	912,755,139	995,783,797	1,092,207,257

Financial Indicators	Total Change	2019	2020	2021	2022	2023	2024	2025
1) Expense to Revenue Ratio		75%	67%	66%	68%	67%	67%	65%
2) Increase/(Decrease) in Accumulated Surplus	525,984,768	51,699,834	76,503,135	82,094,853	75,957,437	82,504,295	83,028,658	96,423,460

Table 4-3
York Region
Statement of Changes in Net Debt (Water Only)
Unaudited: For Financial Planning Purposes Only
2019 – 2025

	Notes	2019	2020	2021	2022	2023	2024	2025
Annual Surplus/(Deficit)		51,699,834	76,503,135	82,094,853	75,957,437	82,504,295	83,028,657	96,423,461
Less: Acquisition of Tangible Capital Assets	4	(53,729,436)	(60,220,393)	(50,576,807)	(40,185,454)	(39,307,125)	(49,502,284)	(63,353,834)
Add: Amortization of Tangible Capital Assets	4	31,311,512	30,882,410	30,581,763	30,353,937	29,973,321	29,582,712	29,228,296
(Gain)/Loss on disposal of Tangible Capital Assets				-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets								
Add: Write-downs of Tangible Capital Assets								
		29,281,910	47,165,152	62,099,808	66,125,921	73,170,492	63,109,086	62,297,923
Less: Acquisition of Supplies Inventory								
Less: Acquisition of Prepaid Expenses								
Add: Consumption of Supplies Inventory								
Add: Use of Prepaid Expenses								
		-	-	-	-	-	-	-
(Increase)/Decrease in Net Financial Assets/Net Debt		29,281,910	47,165,152	62,099,808	66,125,921	73,170,492	63,109,086	62,297,923
Net Financial Assets/(Net Debt), beginning of year		(720,043,257)	(690,761,347)	(643,596,196)	(581,496,386)	(515,370,466)	(442,199,974)	(379,090,888)
Net Financial Assets/(Net Debt), end of year		(690,761,347)	(643,596,196)	(581,496,386)	(515,370,466)	(442,199,974)	(379,090,888)	(316,792,966)

Financial Indicators	2019	2020	2021	2022	2023	2024	2025
1) Acquisition of Tangible Capital Assets (Cumulative)	53,729,436	113,949,829	164,526,637	204,712,090	244,019,215	293,521,499	356,875,332
2) Annual Surplus/Deficit before Amortization (Cumulative)	60,784,442	168,169,987	280,846,603	387,157,977	499,635,594	612,246,963	737,898,720
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)	1.13	1.48	1.71	1.89	2.05	2.09	2.07

Table 4-4

York Region

Statement of Cash Flow – Indirect Method (Water Only)

Unaudited: For Financial Planning Purposes Only

2019 – 2025

	Notes	2019	2020	2021	2022	2023	2024	2025
Operating Transactions								
Annual Surplus/Deficit		51,699,834	76,503,135	82,094,853	75,957,437	82,504,295	83,028,657	96,423,461
Add: Amortization of TCA's	4	31,311,512	30,882,410	30,581,763	30,353,937	29,973,321	29,582,712	29,228,296
Less: DC Revenue	3	(56,821,289)	(73,263,889)	(69,063,943)	(53,778,255)	(54,201,517)	(49,493,922)	(57,767,515)
Add: Development Charge Proceeds		50,739,842	75,385,000	72,012,000	57,794,000	59,235,000	55,545,000	64,902,000
Change in A/R (Increase)/Decrease		(5,596,523)	(5,351,272)	(3,269,635)	(2,608,674)	(4,169,486)	(2,585,678)	(2,945,234)
Change in A/P Increase/(Decrease)		1,859,699	376,150	341,059	184,257	610,816	345,387	369,481
Less: Interest Proceeds		(2,908,000)	(4,335,960)	(5,729,524)	(7,678,928)	(9,564,347)	(12,418,448)	(14,816,738)
Cash Provided by Operating Transactions		70,285,075	100,195,574	106,966,572	100,223,774	104,388,082	104,003,708	115,393,752
Capital Transactions								
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(53,729,436)	(60,220,393)	(50,576,807)	(40,185,454)	(39,307,125)	(49,502,284)	(63,353,834)
Cash Applied to Capital Transactions		(53,729,436)	(60,220,393)	(50,576,807)	(40,185,454)	(39,307,125)	(49,502,284)	(63,353,834)
Investing Transactions		-	-	-	-	-	-	-
Proceeds from Investments		2,908,000	4,335,960	5,729,524	7,678,928	9,503,547	12,263,108	14,618,068
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	-
Cash Provided by (applied to) Investing Transactions		2,908,000	4,335,960	5,729,524	7,678,928	9,503,547	12,263,108	14,618,068
Financing Transactions		-	-	-	-	-	-	-
Proceeds from Debt Issue	2	41,797,234	41,194,537	28,798,762	39,444,414	31,033,924	47,787,941	64,713,554
Less: Debt Repayment (principal only)	2	(41,691,188)	(67,107,446)	(57,986,776)	(61,150,554)	(61,753,499)	(74,449,030)	(91,572,099)
Cash Applied to Financing Transactions		106,047	(25,912,909)	(29,188,014)	(21,706,140)	(30,719,575)	(26,661,089)	(26,858,546)
Increase in Cash and Cash Equivalents		19,569,684	18,398,231	32,931,276	46,011,109	43,864,928	40,103,444	39,799,440
Cash and Cash Equivalents, beginning of year	1	79,661,380	99,231,064	117,629,295	150,560,571	196,571,680	240,436,608	280,540,052
Cash and Cash Equivalents, end of year	1	99,231,064	117,629,295	150,560,571	196,571,680	240,436,608	280,540,052	320,339,492

NOTES TO FINANCIAL PLAN

The financial plan format as outlined in Chapter 4 closely approximates the full accrual treatment used by municipalities for 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;

C Investing transactions that are acquisitions and disposal of investments;

E. Change in cash and cash equivalents during the year;

F. 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 York Region, some of the items listed above have been estimated given that the Region does not maintain all financial asset and liability data separately for Water services. 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 Balances
Plus: Ending Accounts Payable Balances
Less: Ending Accounts Receivable Balances
Equals: Approximate Cash Balance

2. Debt

Outstanding Debt at the end of 2018 was $813.8 million and is anticipated to decrease over the forecast period. Principal repayments for existing and new debt over the forecast period scheduled as follows:

2019	$ 41,691,188
2020	$ 67,107,446
2021	$ 57,986,776
2022	$ 61,150,554
2023	$ 61,753,499
2024	$ 74,449,030
2025	$ 91,572,099
	$ 455,710,593

For financial reporting purposes, debt principal payments represent a decrease in debt liability and the interest payments represent a current year operating expense.

3. Intercompany Debt

Intercompany Debt represents internal borrowings from non-water Development Charge (DC) reserves to supplement future cash requirements as anticipated DC proceeds will not be sufficient to fund future growth-related capital expenditures. As part of the Region's fiscal sustainability plan, DC reserves are managed in aggregate which has reduced issuance of debt and increased draws from reserves.

4. Tangible Capital Assets

- Opening 2019 net book value of tangible capital assets includes water related assets in the following categories:
    - i. Infrastructure (linear)
    - ii. Buildings (facilities) and Building Improvements
    - iii. Vehicles
    - iv. Equipment
    - v. Land and Land Improvements
- Amortization is calculated monthly based on using the straight-line approach with no amortization in the month of acquisition or construction.
- The useful life on acquisitions is assumed to be equal to the weighted average useful life for all assets on hand in the 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.
- 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 balance of tangible capital assets is summarized as follows:

Description	2019	2020	2021	2022	2023	2024	2025
Opening TCA Balance (Historical Cost)	$ 1,578,264,406	$ 1,631,993,842	$ 1,692,214,235	$ 1,742,791,042	$ 1,782,976,496	$ 1,822,283,621	$ 1,871,785,904
Acquisitions	$ 53,729,436	$ 60,220,393	$ 50,576,807	$ 40,185,454	$ 39,307,125	$ 49,502,284	$ 63,353,834
Disposals							
Closing TCA Balance (Historical Cost)	**$ 1,631,993,842**	**$ 1,692,214,235**	**$ 1,742,791,042**	**$ 1,782,976,496**	**$ 1,822,283,621**	**$ 1,871,785,904**	**$ 1,935,139,738**
Opening Accumulated Amortization	$ 314,225,564	$ 345,537,076	$ 376,419,486	$ 407,001,249	$ 437,355,186	$ 467,328,507	$ 496,911,219
Amortization Expense	$ 31,311,512	$ 30,882,410	$ 30,581,763	$ 30,353,937	$ 29,973,321	$ 29,582,712	$ 29,228,296
Amortization on Disposal							
Ending Accumulated Amortization	**$ 345,537,076**	**$ 376,419,486**	**$ 407,001,249**	**$ 437,355,186**	**$ 467,328,507**	**$ 496,911,219**	**$ 526,139,515**
Net Book Value	**$ 1,286,456,765**	**$ 1,315,794,749**	**$ 1,335,789,793**	**$ 1,345,621,310**	**$ 1,354,955,113**	**$ 1,374,874,685**	**$ 1,409,000,223**

5. Accumulated Surplus

Accumulated Surplus reconciliation for 2019 and for all years within the forecast period is contained in the table below:

	Notes	2019	2020	2021	2022	2023	2024	2025
Accumulated Surplus/(Deficit) is made up of:								
Opening Reserve Balances								
Reserves:		$ 118,430,144						
Reserves: Capital		$ 118,298,314						
Reserves: Lifecycle								
Total Reserves Balance		**$ 118,430,144**						
Less: Debt Obligations		$ (838,473,400)						
Add: Adjustment for TCA **(Year of Implementation Only)**	**4**	$ 1,264,038,841						
Total Opening Balance		**$ 543,995,585**	**$ 595,695,419**	**$ 672,198,554**	**$ 754,293,407**	**$ 830,250,844**	**$ 912,755,139**	**$ 995,783,797**
Add: Contributions to/(from) Reserves (excl. DC reserves)								
Reserves: Capital		$ 28,387,958	$ 20,252,243	$ 31,911,795	$ 43,419,780	$ 29,496,937	$ 23,744,235	$ 23,690,387
Reserves: Lifecycle		$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 12,953,980	$ 12,703,761	$ 11,748,990
Total Change in Reserves		**$ 29,387,958**	**$ 21,252,243**	**$ 32,911,795**	**$ 44,419,780**	**$ 42,450,916**	**$ 36,447,996**	**$ 35,439,377**
Add: Changes in TCA During the Year								
Capital Assets Purchased (net of disposals)	**4**	$ 53,729,436	$ 60,220,393	$ 50,576,807	$ 40,185,454	$ 39,307,125	$ 49,502,284	$ 63,353,834
Amortization of Capital Assets	**4**	$ (31,311,512)	$ (30,882,410)	$ (30,581,763)	$ (30,353,937)	$ (29,973,321)	$ (29,582,712)	$ (29,228,296)
Total Changes in TCA		**$ 22,417,924**	**$ 29,337,984**	**$ 19,995,044**	**$ 9,831,516**	**$ 9,333,803**	**$ 19,919,572**	**$ 34,125,538**
Subtract Changes in Debt Position								
New Debt	**2**	$ (41,797,234)	$ (41,194,537)	$ (28,798,762)	$ (39,444,414)	$ (31,033,924)	$ (47,787,941)	$ (64,713,554)
Debt Repayment	**2**	$ 41,691,188	$ 67,107,446	$ 57,986,776	$ 61,150,554	$ 61,753,499	$ 74,449,030	$ 91,572,099
Total Change in Debt		**$ (106,047)**	**$ 25,912,909**	**$ 29,188,014**	**$ 21,706,140**	**$ 30,719,575**	**$ 26,661,089**	**$ 26,858,546**
Total Ending Balance		**$ 595,695,419**	**$ 672,198,554**	**$ 754,293,407**	**$ 830,250,844**	**$ 912,755,139**	**$ 995,783,797**	**$ 1,092,207,257**

6. Other revenue

Other revenue includes interest revenue, developer up-front financing, and other recoveries.

5. APPROVAL AND SUBMISSION TO THE PROVINCE

As provided in section 1.2, the requirement to prepare the financial plan is provided in Section 32 (5) 2 ii of the Act. The financial plan is one of the submission requirements for municipal drinking water licensing and upon completion, must be submitted to the MECP. The regulatory process established for approval of the plan, public circulation, and filing is summarized as follows:

1. The financial plan must be approved by resolution of the municipality who owns the drinking water system or 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 financial plan shall be submitted to the MECP as part of the application for a municipal drinking water license (*Safe Drinking Water Act*, Section 32 (5) 2 ii)

For reference purposes, the submission information for the MECP and Ministry of Municipal Affairs and Housing are as follows:

- York Region Water Financial Plan, June 13, 2019.
- Council Resolution.

6. RECOMMENDATIONS

This report presents the water financial plan for York Region 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 in the Rate Study that will be presented to Council in 2021. Nevertheless, Council is required to pass certain resolutions with regards to this plan and regulations and it is recommended that:

1. York Region Water Financial Plan dated June 13, 2019 be approved.
2. Notice of availability of the York Region Water Financial Plan be advertised.
3. A copy of York Region Water Financial Plan dated June 13, 2019 is to be submitted to the MECP as part of the Region's municipal drinking water license application.
4. A copy of York Region Water Financial Plan dated June 13, 2019 is to be submitted to the Director of Policy Branch, Ministry of Municipal Affairs and Housing as part of the Region's municipal drinking water license application.