



Water System Financial Plan

In Accordance with Ontario
Regulation 453/07

Financial Plan # 070-301A

July 9, 2019

Table of Contents

1. Executive Summary	3
1.1 Background	3
1.2 Purpose	3
2. Regulatory Requirements	4
3. Key Considerations and Assumptions	6
3.1 Operating and Maintenance Assumptions	6
3.2 Capital Budget Forecast	6
3.3 Tangible Capital Asset (TCA) Projections	6
3.4 Debt Projections	6
4. Financial Statements	8
4.1 Statement of Operations	8
4.2 Statement of Cash Flow	10
4.3 Statement of Financial Position	11
5. Summary	14

1. Executive Summary

1.1 Background

Norfolk County provides drinking water to approximately 15,627 customers through its drinking water system. This system consists of five drinking water systems. The major objective in operating water systems is to provide a continuous supply of potable water to the County's water customers. In doing so, all quality, quantity, and environmental standards put forth by Norfolk County Council and the provincial and federal agencies must be adhered to.

The County recovers both the operating and capital expenditure requirements from the water system users. The costs are recovered through user fees and rate revenues charged to water customers. The primary sources of rate revenues include a monthly basic charge based on water meter size and an additional consumption charge for metered consumption. The County also recovers costs for fire protection from the property tax levy, and levies miscellaneous user fees and charges for items such as bulk water usage and connection inspections and permits.

Under the *Safe Drinking Water Act, 2002, Ontario Regulation 188/07, Licensing of Municipal Drinking Water Systems*, Norfolk County is required to obtain a Municipal Drinking Water Licence (hereinafter licence), which is valid for a five-year period. The current licence is set to expire on February 19, 2020. An application for renewal must be received by the Ministry of Environment on August 20, 2019. There are a number of requirements for the renewal of the licence, as explained in the attached Council Report; one of these requirements is the provision of a Council Approved Water System Financial Plan. This document outlines the Water System Financial Plan, in accordance with *Safe Drinking Water Act, 2002, Ontario Regulation 453/07, Financial Plan*.

1.2 Purpose

The primary purpose of the Water System Financial Plan is to consider the financial impacts of supporting the water system infrastructure in Norfolk County over the forecasted period. Outlining the financial impacts will provide a preview of the anticipated future financial position of Norfolk County's water system.

It is important to note that the Financial Plan has been constructed by using various estimates, which are detailed in Section 3, Key Considerations and Assumptions below. The main sources of these estimates are the Approved 2019 Capital Plan for infrastructure related costs, and the Approved 2019 Rate Supported Operating Budget for projected operating costs. Additionally, note that this is not an audited document, as this is not required by the *Safe Drinking Water Act, 2002, Ontario Regulation 453/07, Financial Plan*.

2. Regulatory Requirements

The regulatory requirements for the Water System Financial Plan are set out in the *Safe Drinking Water Act, 2002, Ontario Regulation 453/07, Financial Plan* (hereinafter *O.Reg 453/07*). These requirements and an outline of how the requirements will be met have been summarized below:

A. The financial plans must be approved by a resolution by the council of the municipality.

- The Water System Financial Plan will be presented to Norfolk County's Council on July 9th, 2019.

B. The financial plans must apply to a period of at least six years.

- The Water System Financial Plan has been developed for a period of six years, from 2020 to 2025.

C. The first year of the plan must be the year in which the drinking water system's existing municipal drinking water licence would otherwise expire.

- The existing municipal drinking water licence expires in 2020, therefore this is the first year of the Water System Financial Plan presented. For reference the approved 2019 budget has also been presented in the statements.

D. Each year to which the financial plans apply, the financial plans must include the projected financial position of the drinking water system, the projected cash receipts and gross payments of the drinking water system, and the projected financial operations of the drinking water system:

- See the Sections 4.3: Statement of Financial Position, 4.2: Statement of Cash Flow, and 4.1: Statement of Operations, respectively.

E. Details on the extent to which the financial information relates to directly to the replacement of lead service pipes, if applicable.

- Some of the County's distribution systems are suspected to contain lead piping, particularly for service connections. Through the lead testing program implemented under Ontario Regulation 170/03, each system has been sampled for lead based on population numbers. Currently, all Norfolk County distribution systems are on a reduced sampling schedule due to sampling results received under the program (minimal exceedances). The County's current approach for lead service pipe removal involves replacement to property line upon discovery of service material.

F. The owner of the drinking water system must make the financial plans available to members of the public without charge through publication on the Internet.

- The Financial Plan will be posted on Norfolk County's website at no charge for members of the public.

G. Notice must be provided to the public regarding the availability of the financial plans in a manner that will bring the notice to the attention of members of the public who are served by the drinking water system.

- A notice will be issued following Council approval.

3. Key Considerations and Assumptions

Below presents the assumptions for the key items over the forecast period in order to prepare the financial plan.

3.1 Operating and Maintenance Assumptions:

Costs included in the operating budget include costs related to water systems operating and maintenance, the transfers to capital reserves, and debt servicing costs. These costs are funded through user fee charges, including the rate revenues.

The following assumptions were used to project the gross costs and non-rate revenues:

- i. Operating costs, excluding salaries and benefits, increase annually by 3.0%.
- ii. Annual debt interest costs over the forecast reflect the sum of actual interest on existing debt and interest costs on projected debt issuances required to fund capital needs. Proposed debt is issued over 10 or 20 years with interest rates of 3% or 3.5%, respectively.
- iii. Revenues from the Fire Protection Charge, and other miscellaneous non-rate fees and charges are projected to increase annually by 3.0%.
- iv. Revenues from Bulk Water Revenues are projected to remain constant over the forecast period based on current usage trends of use.
- v. Contributions to the Water Capital Replacement Reserve Fund are forecasted to increase annually by 3.0%.

3.2 Capital Budget Forecast:

The Approved 2019 Capital Plan was used in determining the capital needs between 2019 and 2025. The project costs and proposed annual funding sources for the Water System were taken from the approved plan. It is assumed that capital projects will be completed within the year proposed in the Approved 2019 Capital Plan.

3.3 Tangible Capital Asset (TCA) Projections:

The TCA projections for the forecast period are based on the following assumptions:

- i. Amortization of existing and new assets is based on a historical average of amortization as compared to beginning net book value from 2016 to 2018.
- vi. It is assumed there are no write downs or disposals within the forecast period
- vii. Fully depreciated assets continue to be used in service and therefore there are no asset removals

3.4 Debt Projections

The Debt projections for the forecast period are based on the following assumptions:

- i. Debt will be issued in the year of completion of a capital project
- ii. Projected debt is based on the approved capital project financing within the Approved 2019 Capital Plan. Proposed debt is issued over 10 or 20 years with interest rates of 3% or 3.5%, respectively.

4. Financial Statements

The following section provides the Financial Plan relating to Norfolk County's water system. The review and evaluation of financial information is displayed in three financial statements – the Statement of Operations, the Statement of Cash Flow, and the Statement of Financial Position – forecasting for the period 2020 – 2025 as required by *O.Reg. 453/07*. The projected financial statements are reported in accordance with Public Sector Accounting Board standards.

4.1 Statement of Operations

The Statement of Operations (also known as the Income Statement) is presented in Table 4.1. This statement summarizes the projected revenues and expenditures for each year of the forecasted period. The main revenue items that are reported on include water rate revenues, earned development charges revenues, interest income, and other sources (such as user fees and the fire protection charges). The main expenditures included are annual operational expenses, interest charges, and amortization on tangible capital assets.

The Statement of Operations includes the operating surplus/deficit. This calculation forecasts the ability of revenues to cover expenses. As the Statement of Operations is presented in accordance with the Public Sector Accounting Board (PSAB) standards, the surplus/deficit does not reflect a surplus/deficit of actuals versus budgeted amounts. An operating surplus is necessary to ensure that there will be a sufficient amount of revenue to fund non-expense items, such as the repayment of outstanding debt principal, capital purchases greater than amortization expense, and reserve contributions. If the Statement of Operations were to be redisplayed to match the budget presentation, instead of the shown PSAB format, the annual result would be a \$0 surplus/deficit.

Table 4.1 Statement of Operations

Statement of Operations - Water Services
Unaudited: For Financial Planning Purposes Only
2019-2025

	2019 APPROVED Budget	2020 PROJECTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	2023 PROJECTED BUDGET	2024 PROJECTED BUDGET	2025 PROJECTED BUDGET
Water Revenues							
Rate Revenues	8,451,600	9,627,112	9,675,074	9,946,482	10,160,982	10,428,182	11,587,278
Earned Development Charges Revenue	3,352,007	2,932,092	1,531,626	1,512,491	186,353	52,830	14,699,879
Other Revenue	2,359,500	2,418,700	2,482,300	2,547,600	2,615,100	2,684,600	2,753,500
Interest Revenues	216,955	182,682	180,315	110,572	136,341	154,036	184,059
Total Revenues	14,380,062	15,160,586	13,869,316	14,117,144	13,098,776	13,319,648	29,224,716
Water Expenses							
Operating Expenses	7,054,500	7,060,000	7,271,600	7,489,600	7,714,200	7,945,400	8,183,400
Amortization Expense	2,435,045	2,908,387	3,547,597	3,732,517	3,903,235	3,843,501	3,804,288
Interest Expenses	218,353	678,142	693,679	670,602	617,931	560,850	1,225,429
Total Expenditures	9,707,898	10,646,529	11,512,875	11,892,718	12,235,365	12,349,751	13,213,116
Annual Surplus/(Deficit)	4,672,164	4,514,057	2,356,441	2,224,426	863,410	969,897	16,011,599
Accumulated Surplus/(Deficit), Beginning of Year	74,558,509	79,230,673	83,744,730	86,101,171	88,325,597	89,189,007	90,158,904
Accumulated Surplus/(Deficit), End of Year	79,230,673	83,744,730	86,101,171	88,325,597	89,189,007	90,158,904	106,170,503

When reviewing the projected annual surpluses over the forecast, the significant variation of this figure, year over year, is apparent. This is largely due to the use of development charges to fund capital projects, which falls into the Earned Development Charges Revenue line. As the Water Development Charges Reserve Fund is a liability, when funds are used for the purchase of tangible capital assets, the amount used is brought into revenue.

Note that the Statement of Operations has been forecasted using status quo operating service levels. Based on Council discussions at the 2019 Rate Supported Operating Budget deliberations and other Council meetings, it is recognized that Council and Staff are working on identifying areas for potential cost savings, and it is likely there will be changes to service or staffing levels throughout this period. These potential savings have been excluded from this analysis due to the uncertainty of actual amounts of savings, which results in a conservative forecast for the Water Financial Plan. Operating cost savings identified would result in a reduction in Water Revenues raised and an offsetting reduction in Operating Expenses; the net effect of these adjustments would not change the anticipated Annual Surplus/Deficit.

When reviewing the Rate Revenues line, it is apparent that there are large increases in 2020 and 2025. In 2020 the total increase in rate revenues is \$1.18 million due to an increase in debt principal and interest payments of \$804,000, as well as the removal of the one-time funding of \$216,600 included in the 2019 Rate Supported Operating Budget from the 2018 Operating Surplus. The 2025 rate revenue increase of \$1.16 million is due to the increase in debt principal and interest payments of \$882,000.

The increases in interest payments is reflected in the Interest Expenses line on the Statement of Operations and the increase in debt principal payments is reflected on the Statement of Cash Flows in the Repayments of Long Term Debt line.

4.2 Statement of Cash Flow

The Statement of Cash Flow is presented in Table 4.2. Inflows and outflows of cash during the forecasted period are projected in this statement. The Statement of Cash Flow presents cash activities separated into three sections:

1. Operating Activities
2. Financing Activities
3. Capital Activities

The Operating Activities section begins with the annual surplus/deficit that was calculated in the Statement of Operations. Then non-cash inflows and outflows included in the Statement of Operations are removed, and an adjustment is made for changes in working capital (in this case the change in accounts receivable). The Financing Activities section includes the inflow of cash from development charges collections, proceeds from long-term debt, as well as the outflow of cash used to make debt principal repayments. The Capital Activities section includes the outflow of cash to purchase Tangible Capital Asset items.

Table 4.2 Statement of Cash Flow

Statement of Cash Flows - Water Services							
Unaudited: For Financial Planning Purposes Only							
2019-2025							
	2019 APPROVED Budget	2020 PROJECTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	2023 PROJECTED BUDGET	2024 PROJECTED BUDGET	2025 PROJECTED BUDGET
Operating Transactions							
Annual Surplus/Deficit	4,672,164	4,514,057	2,356,441	2,224,426	863,410	969,897	16,011,599
Add: Amortization	2,435,045	2,908,387	3,547,597	3,732,517	3,903,235	3,843,501	3,804,288
Less: Earned Deferred Revenue	(3,352,007)	(2,932,092)	(1,531,626)	(1,512,491)	(186,353)	(52,830)	(14,699,879)
Change in A/R (Increase)/Decrease	-	(98,000)	(4,000)	(22,600)	(17,800)	(22,300)	(96,600)
Cash Provided by Operating Transactions	3,755,202	4,392,352	4,368,411	4,421,851	4,562,492	4,738,268	5,019,408
Financing Transactions							
DC Collections	1,203,800	1,239,900	1,277,100	1,315,400	1,315,400	1,354,500	1,437,400
Proceeds From Debentures	2,527,000	13,145,000	3,425,000	88,000	-	-	12,600,000
Repayments of Long Term Debt (Principal)	(669,507)	(2,813,362)	(914,722)	(925,871)	(956,404)	(987,962)	(1,464,728)
Cash Provided by Financing Transactions	3,061,293	11,571,538	3,787,378	477,529	358,996	366,538	12,572,672
Capital Transactions							
Capital Purchases	(14,331,057)	(18,973,000)	(8,195,000)	(8,023,000)	(2,402,000)	(2,858,000)	(29,340,000)
Cash Used by Capital Transactions	(14,331,057)	(18,973,000)	(8,195,000)	(8,023,000)	(2,402,000)	(2,858,000)	(29,340,000)
Net Increase (Decrease) in Cash & Cash Equivalents	(7,514,562)	(3,009,110)	(39,211)	(3,123,619)	2,519,488	2,246,806	(11,747,920)
Cash & Cash Equivalents, beginning of the year	17,835,700	10,321,138	7,312,028	7,272,817	4,149,197	6,668,686	8,915,492
Cash & Cash Equivalents, end of the year	10,321,138	7,312,028	7,272,817	4,149,197	6,668,686	8,915,492	(2,832,428)

Over the forecast, cash and cash equivalents declines to a negative balance projected in 2025. It should be noted that though water operations is forecasting to have a negative cash balance at the end of 2025 this does not reflect the anticipated cash balance of Norfolk County in its entirety.

From 2019 to 2025 the cash and cash equivalents balance declines from a positive balance of \$10.3 million in 2019 to \$(2.8) in 2025. The decline in the cash balance is attributed to the change in the forecasted balance of the Water Development Charges Reserve Fund. During the forecast the rate of cash spending for capital requirements funded from the Water Development Charges Reserve Fund is faster than the anticipated inflow of cash from Development Charges. Based on the current capital forecast, no debt is planned to be issued for projects funded from the Water Development Charges Reserve Fund. Though not currently included in the plan, the actual requirement for funding the Development Charges Reserve by issuing debt will be monitored over the forecast period. Note that the Water Development Charge Reserve Fund capital funding and anticipated receipt of water development charges funds is based on the Draft 2019 Development Charges Study, and changes to the study would affect the Water System Financial Plan.

Another area to note is the Proceeds from Debentures line which highlights the amount of debt being issued annually. Debenture proceeds are highest in 2020 and 2025. For these years, a listing of the large dollar value projects has been included below:

- 2020 debenture issue include \$5.7 million for the New Source Water Study in Port Rowan, \$4.5 million for the New Well Field – Simcoe EA, and \$1.7 million for the refinancing of the balloon payment for the Simcoe NW Field Treatment Facility. The debenture issuance for the balloon payment is offset by the debt principal repayment within 2020.
- 2025 debenture issue includes \$12 million for the Lake Erie Water Supply – Port Dover Water Treatment Facility (which is a \$24 million dollar project funded 50% through Development Charges and 50% through debentures).

4.3 Statement of Financial Position

The Statement of Financial Position (also known as the Balance Sheet) is presented in Table 4.3. This statement summarizes the County's water-related financial and non-financial assets, liabilities, net financial asset position, and accumulated surplus in regards to the water system's operations.

Table 4.3 Statement of Financial Position

**Statement of Financial Position - Water Services
Unaudited: For Financial Planning Purposes Only
2019-2025**

	2019 APPROVED Budget	2020 PROJECTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	2023 PROJECTED BUDGET	2024 PROJECTED BUDGET	2025 PROJECTED BUDGET
Financial Assets							
Cash	10,321,138	7,312,028	7,272,817	4,149,197	6,668,686	8,915,492	(2,832,428)
Accounts Receivable - Development Charges Reserve Funds	357,749	2,049,941	2,304,468	2,501,559	1,372,512	70,842	13,333,320
Accounts Receivable	704,300	802,300	806,300	828,900	846,700	869,000	965,600
Total Financial Assets	11,383,187	10,164,269	10,383,585	7,479,656	8,887,897	9,855,333	11,466,492
Financial Liabilities							
Long-term Liabilities (Debt)	5,246,042	15,577,679	18,087,957	17,250,086	16,293,683	15,305,721	26,440,993
Total Financial Liabilities	5,246,042	15,577,679	18,087,957	17,250,086	16,293,683	15,305,721	26,440,993
Net Financial Assets (Net Debt)	6,137,146	(5,413,410)	(7,704,372)	(9,770,430)	(7,405,785)	(5,450,388)	(14,974,501)
Non-Financial Assets							
Tangible Capital Assets	73,093,527	89,158,140	93,805,544	98,096,027	96,594,792	95,609,292	121,145,004
Total Non-Financial Assets	73,093,527	89,158,140	93,805,544	98,096,027	96,594,792	95,609,292	121,145,004
Accumulated Surplus/(Deficit)	79,230,673	83,744,730	86,101,171	88,325,597	89,189,007	90,158,904	106,170,503
Tangible Capital Assets Reconciliation:							
Beginning Net Book Value	61,197,515	73,093,527	89,158,140	93,805,544	98,096,027	96,594,792	95,609,292
Add: Additions	14,331,057	18,973,000	8,195,000	8,023,000	2,402,000	2,858,000	29,340,000
Less: Amortization Expense	(2,435,045)	(2,908,387)	(3,547,597)	(3,732,517)	(3,903,235)	(3,843,501)	(3,804,288)
Ending Net Book Value	73,093,527	89,158,140	93,805,544	98,096,027	96,594,792	95,609,292	121,145,004

The majority of financial assets are cash balances in the Water Capital Replacement Reserve Fund and Water Development Charges Reserve Fund. As commented on in Section 4.2, the negative cash balance shown in year 2025 is driven by a negative balance in the Development Charges Reserve Fund, which is offset by the positive cash balance forecasted in the Water Capital Replacement Reserve Fund. The Water Development Charges Reserve Fund Balance is a liability; however, through the forecast period the liability will be in a negative balance, therefore it has been presented as a financial asset in the line Accounts Receivable – Development Charges Reserve Funds. A negative balance in the Development Charges Reserve Fund means expenditures on tangible capital assets funded through this reserve has occurred faster than the receipt of the funds to be raised from developer contributions.

Financial liabilities include long-term debt balances. Total financial liabilities are \$5.25 million in 2019, increasing to \$26.44 million in 2025. The projects resulting in the large increases in debt financing have been outlined in Section 4.2. Net financial assets/net debt is calculated by taking the presented financial assets less the liabilities. This calculation approximates the level of future revenue that will be necessary to fund prior spending decisions.

Non-financial assets include the physical assets related to water operations, such as the water facilities and infrastructure. New Tangible Capital Asset items are added in the year the assets will be received or constructed, then amortized over the asset's useful life. Note that all other non-financial assets are assumed to be zero. Total net assets increase by approximately \$48 million, which represents a significant capital investment over this period. The major project driving the increase of \$48 million is the Lake Erie Water Supply project scheduled for 2025 at an estimated cost of \$24 million.

The Accumulated Surplus represents the accumulation of prior and current year surpluses and deficits, which is reflected in the balances of the reserve funds; in addition, it includes the total cost of tangible capital assets less the amortization that has occurred to date, and debt principal payments outstanding. In other words, the Accumulated Surplus is an indication of what resources are expected to be available for the water system in future years. The accumulated surplus is projected to increase from approximately \$81.76 million in 2019 to approximately \$106.17 million by 2025.

5. Summary

The following chart outlines the main conclusions of the Water Systems Financial Plan:

	2019 Millions \$	2025 Millions \$
Net Rate Requirement	8.45	11.59
Debt (growth and non-growth)	5.25	26.4
Tangible Capital Asset Net Book Value	73.09	121.15
Capital Replacement Reserve Fund Balance	11.06	9.39
Development Charges Reserve Fund Balance	(.36)	(13.3)

Throughout this time period the financial outlook is generally positive, however, as outlined in the chart above, Norfolk County has some challenges in financing the Capital for development capital projects.

Norfolk County recognizes the difficulty in balancing the needs of maintaining an effectively operating water system with financial sustainability. Staff will continue developing long-term planning to ensure the County's affordability in the future. The Financial Plan is a living document, and as mentioned earlier changes to forecasts or assumptions will affect the financial results of the water system.