



# Haldimand County

O.Reg 453/07  
Water System Financial Plan  
No. 066-301A  
(January 19, 2021)

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**DFA Infrastructure International Inc.**



## DFA Infrastructure International Inc.

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January 19, 2021

Charmaine Corlis  
Treasurer  
Haldimand County  
53 Thorburn Street  
Cayuga, ON  
N0A 1E0

**Re: Haldimand County, O.Reg 453/07 Water System Financial Plan No. 066-301A**

Dear Charmaine:

We are pleased to submit the updated Water System Financial Plan No. 066-301A prepared in accordance with the requirements of O. Reg 453/07 as required for the County's water system license renewal application.

The attached Water System Financial Plan is based on the extent of the information as provided by the County.

Please do not hesitate to contact us if you have any questions or require clarification on any aspect of the financial plan.

Yours truly,

**DFA Infrastructure International Inc.**

Derek Ali, MBA, P.Eng.  
President

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Transmittal Letter

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# 1 Introduction

## 1.1 Background

Haldimand County (County) provides drinking water to approximately 10,000 customers through its drinking water system which consists of two water treatment plants and seven water distribution systems. The County recovers its water system costs through user fees charged to its water customers which include a monthly basic charge and an additional consumption charge for metered consumption. The County also recovers costs for Fire Protection and for Industrial Pumping Stations, and levies miscellaneous fees and charges including a separate charge on bulk water usage, a fee for Raw Water sales, and a fee for New Credit Water sales. The County is proposing to sell water to Norfolk County. The projected revenues and estimated costs were based on the joint feasibility study developed by Watson & Associates Economists Ltd. (Watson & Associates) regarding water servicing strategy for Norfolk County from the Nanticoke water treatment plant.

Under O.Reg. 188/07, the County is required to obtain a Drinking Water System Licence which was received on August 4th, 2011 and is valid for a period of 5 years. The first renewal of the County's Drinking Water System Licence was obtained August 4<sup>th</sup> 2016 therefore the existing drinking water system licence is due to expire on August 4th, 2021. A condition of the application for renewal of the licences is the preparation of an updated water system financial plan in accordance with O.Reg. 453/07. This document presents the updated financial plan.

## 1.2 Purpose

The primary purpose of this document is to present an updated single water financial plan as defined in O.Reg. 453/07, thereby allowing the County to fulfil its obligations under the drinking water licensing regulations for the renewal of its drinking water systems licence as shown in Table 1.1. The number for the updated financial plan is 066-301A as it covers all of the water systems.

**Table 1-1: Water Systems Included in the Updated Financial plan**

Water System	Licence No.
Dunnville Drinking Water System	066-101
Nanticoke Drinking Water System	066-102
Caledonia and Cayuga Distribution System	066-103

# 2 Regulatory Requirements

Regulation 188/07 under the Safe Drinking Water Act requires Ontario municipalities to apply for and obtain Drinking Water System Licences as part of their overall DWQMS. One of the requirements of holding a valid

drinking water licence is preparing and submitting to the Province an updated financial plan in accordance with O.Reg. 453/07. The financial plan must include financial statements on the following:

- The proposed or projected financial position of the drinking water systems;
- The proposed or projected gross cash receipts and gross cash payments;
- The proposed or projected financial operations of the drinking water system; and
- Details on the extent to which the above information applies to the replacement of lead service pipes, if applicable.

Appendix A lists each requirement of the regulation and references the respective financial statements and other items that contain relevant information required under each item. The financial plan must apply to a period of at least six (6) years with the first year being the year the existing licence expires. In the County's case, the updated plan covers the period 2021 to 2026 inclusive.

It is anticipated that this financial plan would be made available to the public at no charge and posted on the County's website following final approval of the plan by resolution of Council. This will be confirmed through separate correspondence at the time of submission to the Ministry of Municipal Affairs and Housing (MMAH).

### 3 Key Considerations

This section presents the projections for key items over the six (6) year period and the assumptions used in order to prepare the financial plan. These include:

- Operations & Maintenance (O&M) cost projections;
- Capital Budget forecasts;
- Revenue Requirements;
- Debt Repayments;
- Tangible Capital Asset (TCA) projections; and
- Reserve Projections.

The financial projections are based on the data sources identified in Table 4-4 and other relevant information provided by County staff.

#### 3.1 Operating & Maintenance (O&M) Cost Projections

The County's annual operating budget includes costs related to the following:

- Water system operations and maintenance costs;
- Transfers to capital reserves; and

- Debt servicing costs.

A portion of these costs is offset by various non-rate revenues.

The assumptions used in arriving at the projection of the gross costs and non-rate revenues over the six (6)-year period from 2021 to 2026 are as follows:

- Water O&M costs (not including non-recurring costs and reserve transfers) increase annually by 2.0%;
- Transfers to capital reserves are as per the County's capital financing strategy and the Haldimand and Norfolk Water Supply Feasibility Memo from Watson and Associates dated December 2, 2020;
- Transfers to the operating stabilization reserve are assumed to be zero over the forecast period;
- Annual debt servicing costs over the forecast period reflects the sum of actual debt servicing on existing debt and debt servicing on new growth and non-growth related debt required to fund capital needs. Debt is issued over 20 years at an interest rate of 3.0%;
- The incremental impact of the Norfolk Servicing Strategy is as reflected in the Haldimand and Norfolk Water Supply Feasibility Memo from Watson and Associates dated December 2, 2020.
- All other revenues from non-rate fees and charges are increase over the forecast period by 2.0%; and
- Contributions from development charge reserves are based on offsetting the debt servicing cost of existing and new growth-related debt.

Table 3-1 summarizes the gross operating costs, non-rate revenues and net costs to be recovered from users through the County's water rate charges. It should be noted that the annual percent change of net costs to be recovered from users does not reflect actual water rate increases. Impacts on rates and the average household will be less due to increases in projected customers and water consumption.

**Table 3-1: O&M Cost Projections**

	2021	2022	2023	2024	2025	2026
Water System O & M	\$10,097,010	\$10,298,950	\$10,504,929	\$10,715,028	\$10,929,328	\$11,147,915
Incremental Operating Costs (Norfolk Water Supply)	\$0	\$72,211	\$73,656	\$75,129	\$1,344,711	\$1,371,605
Transfers to Reserves	\$1,417,000	\$3,095,728	\$3,254,930	\$3,367,461	\$5,182,171	\$5,257,610
Debt servicing	\$1,279,440	\$1,301,509	\$1,314,955	\$1,453,715	\$1,837,153	\$1,860,500
<b>Gross Operating Costs</b>	<b>\$12,793,450</b>	<b>\$14,768,398</b>	<b>\$15,148,470</b>	<b>\$15,611,333</b>	<b>\$19,293,363</b>	<b>\$19,637,630</b>
Water Admin - General Recoveries	\$22,940	\$23,399	\$23,867	\$24,344	\$24,831	\$25,328
Water Treatment - General Recoveries	\$2,127,970	\$2,170,529	\$2,213,940	\$2,258,219	\$2,303,383	\$2,349,451
Water Fees and Charges - General Recoveries	\$4,224,820	\$4,309,316	\$4,395,503	\$4,483,413	\$4,573,081	\$4,664,543
Contributions from Development Charges Reserve Fund	\$502,130	\$527,130	\$543,048	\$762,710	\$765,619	\$788,242
Incremental Revenues (Norfolk Water Supply)	\$0	\$1,622,280	\$1,654,725	\$1,687,820	\$5,152,645	\$5,255,698
<b>Non-Rate Revenues</b>	<b>\$6,877,860</b>	<b>\$8,652,655</b>	<b>\$8,831,083</b>	<b>\$9,216,506</b>	<b>\$12,819,559</b>	<b>\$13,083,261</b>
<b>Net Operating Cost to be Recovered from Rates</b>	<b>\$5,915,590</b>	<b>\$6,115,743</b>	<b>\$6,317,388</b>	<b>\$6,394,827</b>	<b>\$6,473,804</b>	<b>\$6,554,368</b>
<b>Annual Percent Change</b>		<b>3.4%</b>	<b>3.3%</b>	<b>1.2%</b>	<b>1.2%</b>	<b>1.2%</b>

### 3.2 Capital Budget Forecast

The capital budget forecast used for the financial plan is presented in Appendix B. This identifies the planned capital needs between 2021 and 2026. The project costs, and annual funding sources are taken from the County's 2021 – 2030 Projected Capital Program and the Haldimand and Norfolk Water Supply Feasibility Memo prepared by Watson & Associates dated December 2, 2020.

### 3.3 Revenue Requirements

The County recovers its net costs through user fees charged to its customers that include a monthly basic charge and a consumption charge for metered consumption. The projection of revenues required from user fees over the six (6)-year period from 2021 to 2026 are detailed above in Table 3-1. The revenue requirements from the rates are projected to be approximately \$5.9 million in 2021, increasing to approximately \$6.6 million by 2026.

### 3.4 Debt Projections

The County is projected to hold a 2021 opening debt balance of \$7.9 million for its water system. It is expected that \$6.5 million will be required to be issued between 2021 - 2026 to fund growth related water projects, and \$5.7 million to be issued in 2024 to fund the implementation of Phase 2 of Norfolk's water supply. As reflected in Table 3-2, the County's outstanding debt is expected to increase to \$12.4 million by 2026.

**Table 3-2: Debt Projections**

Year	2021	2022	2023	2024	2025	2026
Opening Debt Balance	\$7,915,018	\$7,172,017	\$6,258,856	\$8,349,889	\$12,831,999	\$11,684,139
Principal Repayment (Non-Growth Capital)	(\$680,898)	(\$689,957)	(\$700,526)	(\$633,111)	(\$856,203)	(\$877,128)
Principal Repayment (Growth Capital)	(\$437,357)	(\$457,904)	(\$474,737)	(\$605,399)	(\$620,420)	(\$647,809)
New Debt Issue (Non-Growth Capital)	\$0	\$0	\$0	\$5,670,000	\$0	\$0
New Debt Issue (Growth Capital)	\$375,254	\$234,700	\$3,266,296	\$50,620	\$328,763	\$2,230,600
<b>Closing Debt Balance</b>	<b>\$7,172,017</b>	<b>\$6,258,856</b>	<b>\$8,349,889</b>	<b>\$12,831,999</b>	<b>\$11,684,139</b>	<b>\$12,389,803</b>



### 3.5 Tangible Capital Assets (TCA) Projections

The County's PSAB 3150 TCA data was used to develop the financial information related to the County's water assets which include:

- Linear Assets;
- Machinery, Vehicles and Equipment;
- Buildings;
- Land; and
- Land Improvements.

The TCA projections for the study period are presented in Table 3-3 and are based on the following assumptions:

- Amortization of existing assets is based on the County's Tangible Capital Assets Policies and Procedures. Amortization of new assets is based on straight line depreciation with half-year depreciation charged in the year of acquisition;
- Historical costs, life expectancy and remaining useful life as per the PSAB 3150 data provided by the County;
- Fully depreciated assets continue to be used in service i.e. no asset removals;
- New assets acquired are based on the capital forecast presented in Appendix B. These are added to the TCA in the year of acquisition and depreciated over their useful life; and
- Contributed assets from new development are assumed to be zero as current growth is mostly due to infilling.

As detailed in Table 3-3, the depreciated value of the County's water system is projected to increase from approximately \$79.6 million at the end of 2021 to \$105.8 million at the end of 2026.

**Table 3-3: TCA Projections**

TCA	2021	2022	2023	2024	2025	2026
<b>Historical Cost</b>	\$ 130,846,075	\$ 136,296,337	\$ 143,714,422	\$ 157,485,323	\$ 160,015,535	\$ 163,541,765
<b>Accumulated Amortization (Beginning)</b>	\$ 49,024,769	\$ 52,427,586	\$ 55,871,107	\$ 59,411,382	\$ 63,170,117	\$ 66,873,125
<b>Amortization Expense</b>	\$ 3,402,817	\$ 3,443,521	\$ 3,540,275	\$ 3,758,735	\$ 3,703,008	\$ 3,458,635
<b>Accumulated Amortization (Ending)</b>	\$ 51,253,775	\$ 53,048,727	\$ 55,303,988	\$ 52,003,624	\$ 54,894,944	\$ 57,717,809
<b>Net Book Value</b>	<b>\$ 79,592,300</b>	<b>\$ 83,247,609</b>	<b>\$ 88,410,434</b>	<b>\$ 105,481,699</b>	<b>\$ 105,120,591</b>	<b>\$ 105,823,956</b>

### 3.6 Reserve Balances

The projected transfers to and from the County's water related reserve and reserve funds and their respective balances are presented in Tables 3-4 to 3-7 and include reserves related to:

- Water Capital Replacement Reserve Fund;
- Water Rate Stabilization Reserve; and

- Development Charges Reserve Fund.

Contributions to the Water Capital Replacement Reserve Fund and Water Rate Stabilization Reserve are derived from rate-based revenues. The Water Capital Replacement Reserve Fund also receives contributions from Haldimand County from the proposed sale of water which include transfers for capital replacement and the lifecycle cost of incremental capital. Contributions from the Water Capital Replacement Reserve Fund are used in funding proposed capital replacement needs contained in the water capital forecast. Contributions from the Water Rate Stabilization Reserve are used in addressing revenue shortfalls that can arise due to volatility in water consumption. Contributions to the Water Development Charges Reserve Fund are derived from projected development charge receipts. Contributions from the Water Development Charges Reserve Fund are used in funding growth related capital projects as contained in the water capital forecast and in servicing growth related debt that is required as a source of financing the County's development related capital program.

**Table 3-4: Water Capital Replacement Reserve Fund**

	2021	2022	2023	2024	2025	2026
Opening Balance	\$1,434,752	\$1,207,302	\$2,119,030	\$4,342,960	\$7,017,741	\$11,211,792
Transfer from Operating	\$1,417,000	\$1,545,660	\$1,673,860	\$1,754,770	\$1,755,350	\$1,754,630
Transfer from Operating (Norfolk Water Supply)	\$0	\$1,550,068	\$1,581,070	\$1,612,691	\$3,285,981	\$3,362,140
Transfer from Operating (Norfolk Lifecycle Cost)	\$0	\$0	\$0	\$0	\$140,840	\$140,840
Transfer from Stabilization Reserve	\$0	\$0	\$651,000	\$0	\$0	\$0
Transfer to Capital	\$1,644,450	\$2,184,000	\$1,682,000	\$692,680	\$988,120	\$329,700
Closing Balance	<b>\$1,207,302</b>	<b>\$2,119,030</b>	<b>\$4,342,960</b>	<b>\$7,017,741</b>	<b>\$11,211,792</b>	<b>\$16,139,702</b>

**Table 3-5: Water Rate Stabilization Reserve**

	2021	2022	2023	2024	2025	2026
Opening Balance	\$1,973,219	\$2,083,719	\$2,200,408	\$1,636,174	\$1,727,800	\$1,824,557
Contributions from Operating Budget	\$0	\$0	\$0	\$0	\$0	\$0
Transfer to Operating	\$0	\$0	\$0	\$0	\$0	\$0
Transfer to Capital Replacement Reserve	\$0	\$0	\$651,000	\$0	\$0	\$0
Interest Earned	\$55,250	\$58,344	\$43,383	\$45,813	\$48,378	\$51,088
Closing Balance	<b>\$2,028,469</b>	<b>\$2,142,063</b>	<b>\$1,592,791</b>	<b>\$1,681,987</b>	<b>\$1,776,179</b>	<b>\$1,875,645</b>

**Table 3-6: Water Development Charges Reserve Fund**

	2021	2022	2023	2024	2025	2026
Opening Balance	(\$210,971)	(\$18,135)	\$168,699	\$358,988	\$343,669	\$340,104
Development Charges Proceeds	\$695,460	\$709,370	\$723,560	\$738,030	\$752,790	\$793,680
Transfer to Capital	\$0	\$0	\$0	\$0	\$0	\$0
Transfer to Operating	\$502,130	\$527,130	\$543,048	\$762,710	\$765,619	\$788,242
Interest	(\$494)	\$4,595	\$9,778	\$9,361	\$9,264	\$9,675
Closing Balance	<b>(\$18,135)</b>	<b>\$168,699</b>	<b>\$358,988</b>	<b>\$343,669</b>	<b>\$340,103</b>	<b>\$355,216</b>

### 3.7 Lead Service Pipe Removal

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 Haldimand County distribution systems are exempt from sampling 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.

## 4 Financial Statements

This financial plan involves the review, analysis and assessment of financial information as provided by the County including costs, revenues, debt, cash transactions and Tangible Capital Assets (TCA) to prepare the following three (3) financial statements covering the period 2021 – 2026 as required under O.Reg 453/07:

- Statement of Financial Position.
- Statement of Operations; and
- Statement of Cash Flow

### 4.1 Statement of Financial Position

The Statement of Financial Position is presented in Table 4-1. This statement summarizes the County's water-related financial and non-financial assets i.e. Tangible Capital Assets (TCA) and liabilities, and provides the net financial asset (or net debt) position and accumulated surplus related to managing the water system.

The financial assets are primarily cash balances in the County's water reserves and reserve funds. Liabilities consist of the water long-term debt and development charges reserve fund balances (i.e. deferred revenues).

The non-financial assets (TCA) include the County's water infrastructure. The historical costs are amortized over the asset life to arrive at the net book value each year from 2021 to 2026. New assets are added in the years acquired, developed or built. Contributed assets are primarily new infrastructure and facilities that would be transferred to the County's ownership and control by developers as they are completed. However this is assumed to be zero. It is also assumed that other non-financial assets such as inventory and prepaid expenses are zero.

Contained within the Statement of Financial Position are important indicators, the first being net financial assets (or net debt) which is defined as the difference between financial assets and liabilities. This indicator provides a measure of the water system's "future revenue requirement". Table 4-1 indicates that in 2021, the County's water system will be in a net debt position of \$3.9 million. This will change to a net financial asset position of \$5.4 million by 2026. The net financial asset position indicates that financial resources will be available to fund future operations. The change from a net debt to a net financial asset position over the forecast period is due to a significant increase in cash resources, offset by an increase in deferred revenues and long-term debt.

The next important indicator contained in the Statement of Financial Position is the net book value of TCA. Table 4-1 shows that net TCA are expected to increase over the forecast period by about \$35.5 million. This indicates that the County has plans to invest in tangible capital assets greater than the consumption of existing assets. Further, a consumption ratio consisting of the accumulated amortization of the County's TCA as a percent of historical cost ratio highlights the aged condition of the assets and their potential replacement needs. The County's Water Asset Consumption Ratio decreases over the forecast period from 39% to 35%, suggesting that the water system would be approximately a third through its life expectancy by 2026. As this percentage is decreasing over time, it indicates the County is allocating adequate funds to finance the replacement or rehabilitation of aging assets as they expire.

Another important indicator in the Statement of Financial Position is the accumulated surplus. This indicator provides a measure of the resources available to the County for managing its water system. The accumulated surplus is projected to increase from approximately \$75.7 million in 2021 to approximately \$111.2 million by 2026. The accumulated surplus consists of non-financial assets that are made up of the net TCA balance representing past investments in water infrastructure, and the net financial asset balance.

**Table 4-1: Statement of Financial Position**

	2021	2022	2023	2024	2025	2026
<b>Financial Assets</b>						
Cash, Receivables and Investment	\$3,217,636	\$4,374,543	\$6,181,146	\$8,883,990	\$13,122,854	\$18,116,964
<b>Total Financial Assets</b>	<b>\$3,217,636</b>	<b>\$4,374,543</b>	<b>\$6,181,146</b>	<b>\$8,883,990</b>	<b>\$13,122,854</b>	<b>\$18,116,964</b>
<b>Financial Liabilities</b>						
Accounts Payable & Deferred Revenue	(\$18,135)	\$168,699	\$358,988	\$343,669	\$340,104	\$355,216
Long-term Liabilities	\$7,172,017	\$6,258,856	\$8,349,889	\$12,831,999	\$11,684,139	\$12,389,803
<b>Total Financial Liabilities</b>	<b>\$7,153,882</b>	<b>\$6,427,555</b>	<b>\$8,708,877</b>	<b>\$13,175,668</b>	<b>\$12,024,243</b>	<b>\$12,745,019</b>
<b>Net Financial Assets (Net Debt)</b>	<b>(\$3,936,246)</b>	<b>(\$2,053,012)</b>	<b>(\$2,527,732)</b>	<b>(\$4,291,678)</b>	<b>\$1,098,611</b>	<b>\$5,371,945</b>
<b>Non-Financial Assets</b>						
Tangible Capital Assets	\$130,846,075	\$136,296,337	\$143,714,422	\$157,485,323	\$160,015,535	\$163,541,765
Accumulated Amortization	(\$51,253,775)	(\$53,048,727)	(\$55,303,988)	(\$52,003,624)	(\$54,894,944)	(\$57,717,809)
<b>Total Non-Financial Assets</b>	<b>\$79,592,300</b>	<b>\$83,247,609</b>	<b>\$88,410,434</b>	<b>\$105,481,699</b>	<b>\$105,120,591</b>	<b>\$105,823,956</b>
<b>Accumulated Surplus</b>	<b>\$75,656,054</b>	<b>\$81,194,597</b>	<b>\$85,882,702</b>	<b>\$101,190,022</b>	<b>\$106,219,202</b>	<b>\$111,195,901</b>
<b>Financial Indicators</b>						
<b>Increase (Decrease) in Net Financial Assets</b>	\$570,801	\$1,883,234	(\$474,720)	(\$1,763,946)	\$5,390,288	\$4,273,334
<b>Increase (Decrease) in Tangible Capital Assets</b>	\$1,960,590	\$3,655,309	\$5,162,825	\$17,071,265	(\$361,108)	\$703,365
<b>Increase (Decrease) in Accumulated Surplus</b>	\$2,531,391	\$5,538,543	\$4,688,105	\$15,307,319	\$5,029,181	\$4,976,699
<b>Water Asset Consumption Ratio</b>	39%	39%	38%	33%	34%	35%

## 4.2 Statement of Operations

The Statement of Operations is presented in Table 4-2. It summarizes the annual revenues and expenses associated with managing the County's water system. It provides a report on the transactions and events that have an influence on the accumulated surplus. The main revenue items included are:

- Revenues from Water Rates and Charges;
- Earned Revenues (development charge transfers and external capital funding); and
- Other Revenues (general recoveries, miscellaneous fees and charges and incremental revenues from the sale of water to Norfolk County).

The main expense items are:

- The annual cost of operating and maintaining the water systems;
- Non-TCA Capital (Studies and other expenditures funded within the capital budget that would not be deemed capital and therefore expensed in the year incurred)
- Interest on long-term debt; and
- Amortization expenses on existing and added TCA.

The operating surplus (or deficit) is an important indicator contained in the Statement of Operations. An operating surplus (deficit) measures whether operating revenues generated in a year were sufficient to cover operating expenses incurred in that year. It is important to note that an annual surplus is necessary to ensure funds will be available to address non-expense items such as TCA acquisitions over and above amortization expenses, reserve/reserve fund contributions for asset replacement and rate stabilization, and repayment of outstanding debt principal. A ratio of operating surplus to total revenue is shown in Table 4-2 and reflects the percent of total revenue that can be allocated to funding the non-expense items noted above.

**Table 4-2: Statement of Operations**

	2021	2022	2023	2024	2025	2026
<b>Water Revenue</b>						
Rate Revenue	\$5,915,590	\$6,115,743	\$6,317,388	\$6,394,827	\$6,473,804	\$6,554,368
Earned Revenue	\$4,463,933	\$5,790,360	\$4,615,952	\$15,467,510	\$3,108,735	\$2,738,042
Other Revenue	\$6,430,980	\$8,183,869	\$8,331,418	\$8,497,179	\$12,102,319	\$12,346,107
<b>Total Revenues</b>	<b>\$16,810,503</b>	<b>\$20,089,973</b>	<b>\$19,264,758</b>	<b>\$30,359,517</b>	<b>\$21,684,858</b>	<b>\$21,638,517</b>
<b>Water Expenses</b>						
Operating Expenses	\$10,097,010	\$10,371,161	\$10,578,585	\$10,790,157	\$12,274,039	\$12,519,520
Non-TCA Capital	\$618,100	\$583,100	\$318,100	\$288,100	\$318,100	\$348,100
Interest on Debt	\$161,185	\$153,648	\$139,692	\$215,206	\$360,530	\$335,563
Amortization	\$3,402,817	\$3,443,521	\$3,540,275	\$3,758,735	\$3,703,008	\$3,458,635
<b>Total Expenses</b>	<b>\$14,279,112</b>	<b>\$14,551,430</b>	<b>\$14,576,653</b>	<b>\$15,052,197</b>	<b>\$16,655,678</b>	<b>\$16,661,818</b>
<b>Annual Surplus/(Deficit)</b>	<b>\$2,531,391</b>	<b>\$5,538,543</b>	<b>\$4,688,105</b>	<b>\$15,307,319</b>	<b>\$5,029,181</b>	<b>\$4,976,699</b>
<b>Accumulated Surplus/(Deficit), Beginning of Year</b>	<b>\$73,124,663</b>	<b>\$75,656,054</b>	<b>\$81,194,597</b>	<b>\$85,882,702</b>	<b>\$101,190,021</b>	<b>\$106,219,202</b>
<b>Accumulated Surplus/ (Deficit), End of Year</b>	<b>\$75,656,054</b>	<b>\$81,194,597</b>	<b>\$85,882,702</b>	<b>\$101,190,021</b>	<b>\$106,219,202</b>	<b>\$111,195,900</b>
<b>Financial Indicators</b>						
<b>Increase (Decrease) in Total Revenues</b>	N/A	\$3,279,470	(\$825,215)	\$11,094,759	(\$8,674,659)	(\$46,341)
<b>Increase (Decrease) in Total Expenses</b>	N/A	\$272,318	\$25,223	\$475,544	\$1,603,480	\$6,141
<b>Increase (Decrease) in Annual Surplus</b>	N/A	\$3,007,152	(\$850,438)	\$10,619,215	(\$10,278,139)	(\$52,482)
<b>Operating Surplus Ratio</b>	N/A	27.6%	24.3%	50.4%	23.2%	23.0%

### 4.3 Statement of Cash Flows

The Statement of Cash Flow is presented in Table 4-3. This statement summarizes the main cash inflows and outflows related to the water system in four (4) main areas - operating, capital, investing and financing, and shows the annual changes in cash.

The operating cash transactions begin with the surplus or deficit identified in the Statement of Operations. This figure is adjusted to add or subtract non-cash items that were included as revenues or expenses (e.g. amortization expenses and earned revenues). It is assumed that there are no “investing activities” over the period. The capital section indicates the amounts to be spent to acquire capital assets (TCA) or to be received from the sale of assets. In the County’s case, it is assumed that there are no assets to be sold to generate cash. The financing section identifies funds external sources, proceeds from the issuance of debenture as cash inflows, and the portion of debt repaid as cash outflows.

Table 4-3 indicates that cash is being generated from operations, which is used in funding the acquisition of TCA and towards building internal reserves. The County's cash position is projected to increase over the forecast period from \$3.2 million in 2021 to \$18.1 million in 2026.

**Table 4-3: Statement of Cash Flows**

	2021	2022	2023	2024	2025	2026
<b>Cash Provided by:</b>						
<b>Operating Activities</b>						
Annual Surplus/(Deficit)	\$2,531,391	\$5,538,543	\$4,688,105	\$15,307,319	\$5,029,181	\$4,976,699
<b>Non-Cash Items</b>						
Amortization	\$3,402,817	\$3,443,521	\$3,540,275	\$3,758,735	\$3,703,008	\$3,458,635
Earned Revenue	(\$4,463,933)	(\$5,790,360)	(\$4,615,952)	(\$15,467,510)	(\$3,108,735)	(\$2,738,042)
<b>Net Change in Cash Provided by Operating Activities</b>	<b>\$1,470,275</b>	<b>\$3,191,703</b>	<b>\$3,612,428</b>	<b>\$3,598,544</b>	<b>\$5,623,453</b>	<b>\$5,697,292</b>
<b>Capital Activities</b>						
Purchase of TCA	(\$5,363,407)	(\$7,098,830)	(\$8,703,100)	(\$20,830,000)	(\$3,341,900)	(\$4,162,000)
<b>Net Change in Cash Used in Capital Activities</b>	<b>(\$5,363,407)</b>	<b>(\$7,098,830)</b>	<b>(\$8,703,100)</b>	<b>(\$20,830,000)</b>	<b>(\$3,341,900)</b>	<b>(\$4,162,000)</b>
<b>Financing Activities</b>						
DC Collections	\$694,966	\$713,965	\$733,338	\$747,391	\$762,054	\$803,355
External Financing	\$3,961,803	\$5,263,230	\$4,072,904	\$14,704,800	\$2,343,116	\$1,949,800
Proceeds From Long-Term Debt	\$375,254	\$234,700	\$3,266,296	\$5,720,620	\$328,763	\$2,230,600
Repayment of Long-Term Debt	(\$1,118,255)	(\$1,147,861)	(\$1,175,263)	(\$1,238,510)	(\$1,476,623)	(\$1,524,936)
<b>Net Change in Cash Used in Financing Activities</b>	<b>\$3,913,768</b>	<b>\$5,064,033</b>	<b>\$6,897,275</b>	<b>\$19,934,301</b>	<b>\$1,957,310</b>	<b>\$3,458,819</b>
<b>Net Change in Cash and Cash Equivalents</b>	<b>\$20,636</b>	<b>\$1,156,907</b>	<b>\$1,806,603</b>	<b>\$2,702,845</b>	<b>\$4,238,864</b>	<b>\$4,994,111</b>
Cash and Cash Equivalents, Beginning of the Year	\$3,197,000	\$3,217,636	\$4,374,543	\$6,181,146	\$8,883,990	\$13,122,854
Cash and Cash Equivalents, End of the Year	<b>\$3,217,636</b>	<b>\$4,374,543</b>	<b>\$6,181,146</b>	<b>\$8,883,990</b>	<b>\$13,122,854</b>	<b>\$18,116,964</b>

## 4.4 Data Sources

The primary sources of data used to prepare this financial plan are listed in Table 4-4. In addition, information was also developed from discussions with and input from the County's staff, as required.

**Table 4-4: Financial Plan Data Sources**

Item	Data Source
Asset Life Expectancy	- County's TCA Policy - Information Contained in County's TCA Registry
Asset Values	- County's TCA Registry - Information Provided by the County
O & M Costs and Revenue Projections	- County's Draft 2021 Water Operating Budget - Norfolk Water Supply Review
Capital Cost and TCA Projections	- County's Draft 2021-2026 Capital Program - Norfolk Water Supply Review - County's TCA Registry
Investments, Reserve Balances, Etc.	- Information Provided by the County

## 5 Conclusions & Recommendations

The following are the main conclusions and recommendations:

- The annual net cost to be recovered from rates is projected to increase from \$5.9 million in 2021 to approximately \$6.6 million by 2026;
- \$12.2 million of new water system debt is required between 2021 to 2026 to finance growth and non-growth related capital infrastructure;
- The Net Book Value (NBV) of the County's water system is projected to increase from approximately \$79.6 million in 2021 to approximately \$105.8 million by 2026. These values represent on the whole approximately 65% of the assets' remaining service potential, with an overall system depreciation of approximately 35%;
- Capital Replacement Reserve Fund balance over the period is projected to increase from \$1.2 million in 2021 to approximately \$16.1 million by 2026;
- Water Rate Stabilization Reserve balance over the period is projected to decrease from \$2.0 million in 2021 to approximately \$1.9 million by 2026;
- Development Charges Reserve Fund balance over the period is projected to increase from a deficit of \$18 thousand in 2021 to a positive balance of \$355 thousand by 2026;
- Based on the financial statements the financial outlook to 2026 appears to be positive, however there are some challenges in financing the County's development capital program.
- That the Water Financial Plan No. 066-301A including the Financial Statements presented herein be approved and submitted to the Ministry of Municipal Affairs and Housing (MMAH) in accordance with the Drinking Water System Licence renewal requirements and O. Reg. 453/07; and
- That a copy of the Water Financial Plan No. 066-301A be posted on the County's website.



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# **Appendix A**

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**Requirements of O. Reg. 453/07**

## Appendix A: Requirements of O.Reg. 453/07

Requirements		How Requirements are Met
1.	The financial plans must be approved by a resolution that is passed by,	
	i. The council of the municipality, if the owner of the drinking water system is a municipality.	<ul style="list-style-type: none"> <li>It is expected the Council will approve the Updated Financial Plan prior to February 4, 2021.</li> </ul>
	ii. The governing body of the owner, if the owner of the drinking water system has a governing body and is not a municipality.	<ul style="list-style-type: none"> <li>N/A</li> </ul>
2.	The financial plans must apply to a period of at least six years.	<ul style="list-style-type: none"> <li>Applies for 6 years from 2021 to 2026 inclusive.</li> </ul>
3.	The first year to which the financial plans must apply must be the year determined in accordance with the following rules:	
	i. If the financial plans are required by subsection 2, the first year to which the financial plans must apply must be the year in which the drinking water system's existing municipal drinking water licence would otherwise expire.	<ul style="list-style-type: none"> <li>The licence expires August 4 2021 for the water systems (No. 066-301A). Therefore, the first year of the Updated Financial Plan is 2021</li> </ul>
	ii. If the financial plans are required by a condition that was included in a municipal drinking water licence under subsection 1 (3), the first year to which the financial plans must apply must be the later of 2010 and the year in which the first licence for the system was issued.	<ul style="list-style-type: none"> <li>N/A</li> </ul>
4.	Subject to subsection (2), for each year to which the financial plans apply, the financial plans must include the following:	
	i. Details of the proposed or projected financial position of the drinking water system itemized by:	<ul style="list-style-type: none"> <li>See Statement of Financial Position for all water systems combined in Financial Plan.</li> </ul>
	a. Total financial assets	<ul style="list-style-type: none"> <li>See Statement of Financial Position for all water systems combined in Financial Plan.</li> </ul>
	b. Total liabilities	<ul style="list-style-type: none"> <li>See Statement of Financial Position for all water systems combined in Financial Plan.</li> </ul>
	c. Net financial assets (debt)	<ul style="list-style-type: none"> <li>See Statement of Financial Position for all water systems combined in Financial Plan.</li> </ul>
	d. Non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies and prepaid expenses.	<ul style="list-style-type: none"> <li>See Statement of Financial Position for all water systems combined in Financial Plan. TCA Projections in Financial Plan.</li> </ul>
	e. Changes in tangible capital assets that are additions, donations, write downs and disposals.	<ul style="list-style-type: none"> <li>See Statement of Financial Position for all water systems combined in Financial Plan. TCA Projections in Financial Plan.</li> </ul>

## Appendix A: Requirements of O.Reg. 453/07

	ii.	Details of the proposed or projected financial operations of the drinking water system itemized by,	<ul style="list-style-type: none"> <li>See Statement of Operations for all water systems combined in Financial Plan.</li> </ul>
		a. Total revenues, further itemized by water rates, user charges and other revenues.	<ul style="list-style-type: none"> <li>See Statement of Operations for all water systems combined in Financial Plan.</li> </ul>
		b. Total expenses, further itemized by amortization expenses, interest expenses and other expenses	<ul style="list-style-type: none"> <li>See Statement of Operations for all water systems combined in Financial Plan.</li> </ul>
		c. Annual surplus or deficit, and	<ul style="list-style-type: none"> <li>See Statement of Operations for all water systems combined in Financial Plan.</li> </ul>
		d. Accumulated surplus or deficit	<ul style="list-style-type: none"> <li>See Statement of Operations for all water systems combined in Financial Plan.</li> </ul>
	iii.	Details of the drinking water system's proposed or projected gross cash receipts and gross cash payments itemized by,	<ul style="list-style-type: none"> <li>See Statement of Cash Flow for all water systems combined in Financial Plan.</li> </ul>
		a. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges, - done in full cost report	<ul style="list-style-type: none"> <li>See Statement of Cash Flow for all water systems combined in Financial Plan.</li> </ul>
		b. Capital transactions that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets,	<ul style="list-style-type: none"> <li>See Statement of Cash Flow for all water systems combined in Financial Plan.</li> </ul>
		c. Investing transactions that are acquisitions and disposal of investments,	<ul style="list-style-type: none"> <li>See Statement of Cash Flow for all water systems combined in Financial Plan.</li> </ul>
		d. Financing transactions that are proceeds from the issuance of debt and debt repayment.	<ul style="list-style-type: none"> <li>See Statement of Cash Flow for all water systems combined in Financial Plan.</li> </ul>
		e. Changes in cash and cash equivalents during the year,	<ul style="list-style-type: none"> <li>See Statement of Cash Flow for all water systems combined in Financial Plan.</li> </ul>
		f. Cash and cash equivalents at the beginning and end of the year.	<ul style="list-style-type: none"> <li>See Statement of Cash Flow for all water systems combined in Financial Plan.</li> </ul>
	iv.	Details of the extent to which the information described in subparagraphs i, ii and iii relates directly to the replacement of lead service pipes as defined in section 15.1- 3 of Schedule 15.1 to Ontario Regulation 170/03 (Drinking Water Systems), made under the Act.	<ul style="list-style-type: none"> <li>Currently, all Haldimand County distribution systems are exempt from sampling due to sampling results received under the program (minimal exceedances). Also, there is no dedicated lead service pipe removal program in place. If lead pipe is discovered during normal operations, it is replaced accordingly. Therefore, there are no significant material financial costs associated with lead pipe removal.</li> </ul>
5.	The owner of the drinking water system must.		
	i.	Make the financial plans available, on request, to members of the public who are served by the drinking water system without charge,	<ul style="list-style-type: none"> <li>This will be done by the municipality following Council approval.</li> </ul>

## Appendix A: Requirements of O.Reg. 453/07

	ii.	Make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet,	<ul style="list-style-type: none"> <li>The Financial Plan will be posted on the municipality's website and made available for public review at no charge.</li> </ul>
	iii.	Provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring the notice to the attention of members of the public who are served by the drinking water system.	<ul style="list-style-type: none"> <li>A notice will be issued following Council approval.</li> </ul>
6.		The owner of the drinking water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing. O. Reg. 453/07, s. 3 (1).	<ul style="list-style-type: none"> <li>Will be submitted following Council approval.</li> </ul>
		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.	<ul style="list-style-type: none"> <li>The Financial Plan was prepared using available information at the time of preparation and may not contain all desired items. Reasonable assumptions were made and these are noted in the Financial Plan.</li> </ul>
	1.	Sub-subparagraphs 4 i A, B and C of subsection (1).	<ul style="list-style-type: none"> <li>The Financial Plan was prepared using available information at the time of preparation and may not contain all desired items. Reasonable assumptions were made and these are noted in the Financial Plan.</li> </ul>
	2.	Sub-subparagraphs 4 iii A, C, E and F of subsection (1). O. Reg. 453/07, s. 3 (2).	<ul style="list-style-type: none"> <li>The Financial Plan was prepared using available information at the time of preparation and may not contain all desired items. Reasonable assumptions were made and these are noted in the Financial Plan.</li> </ul>

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## **Appendix B**

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### **Water Capital Forecast (2021 – 2026)**

## Appendix B: Water Capital Forecast (2021 – 2026)

<b>Haldimand County</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Haldimand County (Non-Growth Related Capital)	\$ 2,288,246	\$ 3,561,400	\$ 5,754,904	\$ 817,480	\$ 3,331,237	\$ 2,279,500
Haldimand County (Growth Related Capital)	\$ 375,254	\$ 234,700	\$ 3,266,296	\$ 50,620	\$ 328,763	\$ 2,230,600
Norfolk County Water Supply Capital	\$ 3,318,007	\$ 3,885,830	\$ -	\$20,250,000	\$ -	\$ -
<b>Total Capital Expenditures</b>	<b>\$5,981,507</b>	<b>\$7,681,930</b>	<b>\$9,021,200</b>	<b>\$21,118,100</b>	<b>\$3,660,000</b>	<b>\$4,510,100</b>
<b>Capital Financing</b>						
Provincial/Federal Grants	\$226,538	\$675,000	\$3,907,762	\$0	\$2,218,316	\$1,825,000
Norfolk County	\$3,318,007	\$3,885,830	\$0	\$14,580,000	\$0	\$0
External Contributions	\$417,258	\$702,400	\$165,142	\$124,800	\$124,800	\$124,800
Development Charges	\$0	\$0	\$0	\$0	\$0	\$0
Non-Growth Related Debenture Requirements	\$0	\$0	\$0	\$5,670,000	\$0	\$0
Growth Related Debenture Requirements	\$375,254	\$234,700	\$3,266,296	\$50,620	\$328,763	\$2,230,600
Water Capital Reserve	\$1,644,450	\$2,184,000	\$1,682,000	\$692,680	\$988,120	\$329,700
<b>Total Capital Financing</b>	<b>\$5,981,507</b>	<b>\$7,681,930</b>	<b>\$9,021,200</b>	<b>\$21,118,100</b>	<b>\$3,660,000</b>	<b>\$4,510,100</b>