# **Township of Wellington North**

2020 Water and Wastewater Rate Study & O. Reg 453/07 Financial Plan



**DFA Infrastructure International Inc.** 

November 13, 2020



## **DFA Infrastructure International Inc.**

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November 13, 2020

Mathew Aston Director of Operation Township of Wellington North 7490 Sideroad 7 W Kenilworth, Ontario NOG 2E0

Re: 2020 Water and Wastewater Rate Study and O. Reg 453/07 Financial Plan

Dear Matt:

We are pleased to submit to you the above noted report entitled: "Water and Wastewater Rate Study and O. Reg 453/07 Financial Plan". Please note, this report takes into consideration the November 9th direction from Township Council that no increase in rates occur in the year 2021.

Yours truly,

**DFA Infrastructure International Inc.** 

Derek Ali, MBA, P.Eng.

President

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### 1 Introduction

### 1.1 Background

The Township of Wellington North (Township) has a population of approximately 12,600 with the Township providing water services to approximately 3378, and wastewater services to approximately 3,258 residential and non-residential customers.

The Township operates two water and wastewater systems, with one in Arthur and one in Mount Forest. The total cost of the Township's water and wastewater systems are recovered from operating (non-rate) revenues (e.g. administrative fees, etc.) and through direct billing to customers (rate revenues). Rate revenues consist of revenues from flat rate water and wastewater charges to residential customers, and base charges and metered rate charges to non-residential users.

DFA Infrastructure International Inc. (DFA) was retained by the Township to conduct a comprehensive Water and Wastewater Rate Review. The study includes an evaluation of the existing rate structure the determination of the full cost of service for water and wastewater over ten (10) years from 2021 to 2030 inclusive, and the calculation of rates that adequately fund the cost of service, while treating ratepayers in a fair and equitable manner.

#### 1.2 Purpose

The primary purpose of this Water and Wastewater Rate Study is to:

- Identify the full costs of managing the Township's water and wastewater systems based on the most recent available information;
- Update the Township's current rates and charges to its customers that will recover the full costs of supplying and distributing drinking water, and collection and treatment of wastewater.
- Prepare an updated Water System Financial Plan in accordance with the requirements of O.Reg. 453/07 for the May 19<sup>th</sup> 2021 renewal of the licence for the Township's water distribution system; and
- Prepare a Wastewater System Financial Plan similar to that required for water under O.Reg 453/07.

# 2 Regulatory Requirements

# 2.1 Provincial Regulations

Provincial requirements governing water and wastewater services primarily include the following:

- The Environmental Assessment Act (EAA);
- The Safe Drinking Water Act (SDWA);
- The Municipal Act (MA);
- The Development Charges Act (DCA);
- The Sustainable Water and Sewage Systems Act, 2002 (SWSA); and
- The Water Opportunities and Conservation Act, 2010 (WOA).

The first two (2) set out the technical requirements related to service delivery. The EA Act applies to expansion of existing facilities and establishment of new capacity such as the installation of new pipes to service growth in customers.

The Safe Drinking Water Act, 2002 (SDWA) has significant implications to the daily operations as it sets out the water sampling and other operational requirements (in O. Reg. 170/03) for ensuring that the water delivered to consumers is of high quality and safe for consumption. The SDWA has been a major influence over the past decade in terms of adjustments to operational practices and water quality assurance. In addition, there is also a requirement under this Act (O.Reg. 188/07) for drinking water providers to establish a Drinking Water Quality Management System (DWQMS) and obtain licences for their respective water systems. As part of the DWQMS, and as required under O. Reg. 453/07 (Financial Plans Regulation), operating authorities must submit a financial plan for their respective water systems as a condition of licensing. There are also many regulations and guidelines that deal with design and operation standards that mandate certain activities be undertaken as part of service delivery.

The Municipal Act, Part VII, Section 293 requires municipalities to establish reserves for dealing with long-term liabilities. This applies directly to the water systems and the future liabilities associated with their age and condition. The Municipal Act also permits the municipalities to establish fees for cost recovery and requires public input prior to any fee adjustments. The Development Charges Act and regulations establishes the requirements for the recovery of portions of future growth-related capital expenditures to be incurred by municipalities. The Sustainable Water and Sewage Systems Act, 2002 requires that water systems be financially sustainable. The Water Opportunities and Conservation Act, 2010 is the most recent legislation to be enacted influencing water system management. It requires sustainability plans to be prepared for water systems and overlaps somewhat with the SWSA.

#### The Sustainable Water and Sewage Systems Act, 2002

One of the main recommendations contained in Justice O'Connor's report on the Walkerton incident is the need for municipalities to identify the full cost of water services and to develop a sustainable plan to finance these costs. This resulted in the establishment of the Sustainable Water and Sewage Systems Act, 2002 in December 2002 which requires operators of Water systems to report full costs and the method of cost recovery to the Province of Ontario. However, the Sustainable Water and Sewage Systems Act, 2002 was never proclaimed into force, nor were the regulations necessary for the act to operate ever developed. Under the Sustainable Water and Sewage Systems Act, 2002, the municipalities are required to submit to the Province of Ontario:

- A report prepared by a Professional Engineer, identifying the full cost of water services;
- A report identifying a sustainable method by which municipalities would recover these costs;
- The comments made by the Town's Auditor following a review of both reports; and
- Copies of Council resolutions accepting the recommendation of reports.

#### The Water Opportunities and Conservation Act, 2010

The WOA was enacted in November 2010 and the regulations are pending. This legislation promotes water conservation and requires municipalities to develop:

- Water conservation plans;
- Sustainability plans for water, wastewater & stormwater management; and
- Asset management plans.

Financial plans are required as a component of the water sustainability and asset management plans.

#### The DWQMS 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 to obtain a drinking water licence is to prepare and submit a financial plan in accordance with O.Reg. 453/07.

### 2.2 Township of Wellington North By-Law

Township By-law No. 114-19 establishes the water and wastewater rates and charges that apply to the various customer classes in 2020. Schedule B of By-law 114-19 is attached as Appendix A.

# 3 Methodology

The Rate Study gives consideration to the full costs (or the required investment) associated with managing the Township's water and wastewater systems over a ten (10) year period from 2021 to 2030 inclusive, and the recovery of those costs (or revenue plan) through proposed rates and charges to customers. Life cycle costs of assets from the Township's Capital Asset Inventory were also considered to determine the full replacement and/or rehabilitation needs given that some water and wastewater system assets (e.g. water mains and sewer mains) can have life expectancies in the 50 to 100 year range. Rates are then developed that recover the full costs of water and wastewater services.

#### 3.1 Full Cost Considerations

Calculation of the Township's full cost of managing the water and wastewater systems is based on the draft 2020 budgets related to the primary activities required to deliver water and wastewater services to Township customers. Higher costs are generally expected in the future as the water and wastewater business environment changes. The impact can be mitigated however by fully understanding, assessing and planning for future water and wastewater system costs.

Determination of the full cost of managing the Township's water and wastewater systems takes into account the factors that have a bearing on the cost of providing reliable water and wastewater services to the customers over the long-term. These included both current and future considerations that would influence the cost of managing the systems (and the revenues required to sustain them). Table 3-1 notes the main drivers of cost. The assumptions made are noted in the respective sections of this report.

**Table 3-1: Cost Components and Drivers** 

Cost Component	Cost Drivers	Future Cost Implications
Water and	This is the annual cost of operating and maintaining the	This is a direct annual cost that is
Wastewater systems	current system including direct (e.g. operations staff)	reasonably consistent (fixed) from year
operations and	and indirect costs (e.g overhead, charge backs etc).	to year but requires adjustment to
maintenance (O&M)		account for non-recurring items,
	Changes in regulations can result in additional (O&M)	operational changes, variable cost (e.g.
	activities and added costs. This was evident when the	chemical use) changes and inflation.  Non-rate revenues from
	regulations under the Safe Drinking Water Act took effect. Municipalities were required to undertake	administrative fees and grants offset
	specific activities in the interest of water quality	these costs.
	management (e.g sampling, analysis and reporting of	
	water quality). More recently, the DWQMS meant	The long term impact of new
	additional costs for water system operational plans and	regulations on costs are difficult to
	licensing albeit not annually. It is expected that pending	predict. However, the costs are
	regulations under the Water Opportunities Act and	expected to rise as more stringent
	greater enforcement of compliance requirements by the Ministry of the Environmnet and Climate Change	requirements are established and compliance enforcement by the
	(MOECC) would require more actions to be undertaken	compliance enforcement by the MOECC increases.
	(and increased costs) by municipalities.	Wozee mereuses.
	, , , ,	Operating costs are assumed to
		increase by 2% annually.
Customer Growth	As the existing urban areas are developed, the addition	The increase in demand, if significant,
	of new customers would increase the total demand for water . A corresponding rise in wastewater volume	would increase volumes of water consumed and wastewater treated,
	requiring treatment would also be expected	and variable costs in the year the new
	requiring a caument would also be expected	customers are added.
		Customer Growth is based on
		projections contained on the
		Wellington North 2018 Development
Consumption	Consumption is a function of the number of customers	Charges Background Study The annual consumption volume is
Volume (m3)	(existing and new growth), weather conditions and the	unpredictable. Fluctuations can result
	economic environment. The weather conditions have a	in higher than anticipated costs or
	significant influence on how much water is consumed in	lower revenues and lead to budget
	a given year. For example, lower temperatures and wet	deficits. An operating reserve would
	weather tend to result is less water consumption. Dry	minimize the risk of deficits and
	weather and higher temperatures increase water consumption. Wet weather would also mean more	stabilize rates (i.e. minimize rate spikes) It is assumed that consumption
	stormwater entering the wastewater system (known as	will continue to increase as a result of
	inflow and infiltration) The loss of large (commercial or	new customer growth.
	industrial) customers perhaps due to economic climate	
	would reduce demand.	
New growth related	This refers to installation of new assets to increase the	Would result in capital investments in
services	system capacity to facilitate new development and build	the year the new infrastructure is
	out of the approved service areas within the Township	needed. Note that financing of these
		costs can be through debt or cash from

Cost Component	Cost Drivers	Future Cost Implications
		reserves after third party contributions are considered (e.g. grants, developer contributions etc.)  Growth related capital investments are
		as provided from the Township's 2021 - 2029 capital forecast and the 2018 Development Charges Background Study
Asset preservation and renewal	This is mainly the replacement of aging Tangible Capital Assets (TCA) e.g. old water mains, plant components, well components etc. that have exceeded their service life.	Would result in future capital expenditures in the year in which the assets require replacement or rehabilitation to extend their useful lives. Allowances must be made as part of the annual costs to account for the future replacement of these assets Financing can be through a combination of debt and reserve funds.
		Asset renewal needs are as provided from the Township's 2021-2029 Capital forecast, and supplemented with additional lifecycle needs as determined by the Township's 2019 Tangible Capital Asset Inventory.
Other capital expenditures	These are capital expenditures other than those needed for growth and asset renewal. These would include cost of studies and implementation of operational improvements of the water and wastewater systems such as water loss reduction measures and wastewater	Would increase costs in the year the expenditure is required. Financing can be through a combination of debt and reserves.
	I & I reduction programs.	Other capital investments are as provided from the Township's 2021 - 2029 capital forecast.
Capital Financing	Capital financing for projects can be from four (4) main sources: Debt financing, reserves, annual rates and third party contributions (grants etc.). Grant funding is available only when approved and is therefore not a predictable source of financing for financial planning purposes. The greater the debt financing, the higher the annual amount (costs) needed to repay the principal and interest on any current or future debt. Financing	Annual costs would increase to provide for reserve contributions and debt repayment. It should be noted that using debt financing would minimize spikes in funding required for capital projects and allocates cost to future users
	from reserves can only be used if sufficient funds are available. Therefore annual contributions to reserves are required to build balances for use in future years. Financing from rates do not increase annual costs but tend to drive up rates in the year the capital expenditure is required.	It is assumed that debt financing will be used when funds from other sources (reserves, grants, etc) are insufficient to finance the current year's capital program

Cost Component	Cost Drivers	Future Cost Implications
Inflation	This is the annual rate of inflation as reported by Statistics Canada for the provision for cost of living adjustments each year.	Annual inflation is assumed to be 2%
Market competition and pricing	The level of competition within the market place depends on the number of service providers available. Additionally, the capacity of industry service providers to meet the increasing demand for their services may tend to increase prices. Tender prices for future capital projects would be influenced by the market conditions at the time of tendering.	Potential higher prices depending on the future behaviour of the industry.

#### 3.2 Full Cost Assessment

The full cost assessment identifies the current and future costs (i.e. the full costs) associated with the management of the water and wastewater systems over the next ten (10) years (2021 to 2030). The key cost areas include:

- Operations & Maintenance (O&M) cost projections;
- Capital Budget based on the capital forecast provided by the Township;
- Tangible Capital Asset (TCA) projections including asset replacement needs;
- Debt servicing requirements; and
- Reserve fund requirements.

The non-rate revenues associated with the systems are also identified. These are defined as revenues that are routinely generated each year by the daily operations and include administrative revenues such as service connection fees, penalties, operating grants and other direct user fees and service charges. It is important to note that the non-rate revenues do not include the revenues generated by the water and wastewater user rates. The full cost developed through the various analyses in this study identify the revenue requirements for the water and wastewater systems and form the basis for the future rates and charges.

#### 3.3 Data Sources

The primary sources of data used in this review are listed in Table 3-2. In addition, information was also developed from discussions with input from Township staff, as required.

Table 3-2: Data Sources

Item	Data Source
Asset Life Expectancy	<ul><li>Township's TCA Policy</li><li>Information Provided by the Township</li></ul>
Asset Replacement Costs	<ul> <li>Township's TCA Policy</li> <li>Historical Costs Provided by the Township indexed to 2020</li> </ul>
Asset Values	<ul> <li>Township's TCA Policy</li> <li>Information Provided by the Township</li> </ul>
O & M Costs and Revenue Projections	Township's 2020 Water Operating Budget
Capital Cost Projections	Township's 2020 Water Capital Budget and 2021-2029     Capital Forecasts
Debt	Township's 2020 Water and Wastewater Operating Budgets and 2021-2029 Capital Budget Forecasts
Investments, Reserve balances etc.	Information provided by the Township
Existing Customers	Town's Customer count Provided by the Township
Growth	Information as contained in the Township 2018     Development Charges Background Study
Water and Wastewater Volumes	Township's actual historical Consumption Volumes provided by the Township

# 4 Customer Growth

The cost of service depends on the number and type of customers and corresponding demand. Although most costs are fixed, variable costs such as annual chemical use and hydro costs can increase depending on the level of customer growth and water consumption and wastewater treated. Capital costs related to increasing system capacity to accommodate customer growth can also be influenced by growth and demand. In addition, the rate structure to be considered is comprised of a fixed charge for residential customers, and a fixed (base charge) per non-residential customer plus a consumption charge based on the metered volume of water consumed (billed wastewater flows). Therefore forecasting customer growth and annual water consumption volumes is essential to projecting future costs, revenue requirements and rates.

#### 4.1 Current Customers

There are currently approximately 3,378 water customers and 3,258 wastewater customers based on information provided by the Township. This number is expected to increase over the 2021 – 2030 forecast period. Table 4-1 shows the current total number of residential and commercial customers.

Table 4-1: 2020 Customer Count

System/Customer Type	Number of Customers (Water)	Number of Customers (Wastewater)
Arthur Residential	918	904
Mount Forest Residential	2,110	2,022
Arthur Non-Residential	111	104
Mount Forest Non-Residentia	239	228
Total	3,378	3,258

### 4.2 Customer Growth Projections

Table 4-2 shows the increase in total customers over the 2021-2030 forecast period. Customer growth projections reflect the customer growth as provided by the Township's 2018 Development Charges Background Study. Customer growth over the forecast period is projected to be 812 units. Detailed customer growth projections by year over the forecast period are presented in Appendix B.

**Table 4-2: Customer Growth Projection** 

Water Customers	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total	3,459	3,540	3,621	3,702	3,783	3,864	3,945	4,026	4,108	4,190
Wastewater Customers	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total	3,339	3,420	3,501	3,582	3,663	3,744	3,825	3,906	3,988	4,070

# 5 Volume Projections

## 5.1 2020 Water Consumption (Billed Wastewater) Volumes

Table 5-1 details the projected 2020 metered water consumption and billed wastewater flows as determined from billing records provided by the Township. It should be noted that only non-residential customers are metered.

Table 5-1: 2020 Water and Wastewater Volumes (m<sup>3</sup>)

System/Customer Type	Water Volume (m³)	Wastewater Volume (m³)		
Arthur Residential	n/a	n/a		
Mount Forest Residential	n/a	n/a		
Arthur Non-Residential	162,968	147,121		
Mount Forest Non-Residentia	118,398	117,622		
Total	281,366	264,743		

### 5.2 Projected Water Consumption and Billed Wastewater Volume

Projected water consumption and billed wastewater flow increases are based on projected customer growth by customer type/system multiplied by the estimated average customer consumption in that customer type/system. The 2021-2041 volume projections are shown below in Table 5-3. Appendix C presents the detailed water and wastewater volume projections by customer class/system over the forecast period.

Table 5-2: 2020-2030 Water and Wastewater Projected Volumes (m<sup>3</sup>)

Water Billing Volume Projection									
Water Customers 2021 2022 2023 2024 2025 2026								2029	2030
284,321	287,275	290,229	293,184	296,138	299,092	302,047	305,001	306,965	308,928
	W	astewate	r Billing V	olume Pro	jection				
Wastewater Customers 2021 2022 2023 2024 2025 2026 2027 2028 2029 203								2030	
Total 267,698 270,652 273,606 276,561 279,515 282,469 285,424 288,378 290,342								292.305	
	284,321	284,321 287,275 W 2021 2022	2021 2022 2023 284,321 287,275 290,229 Wastewater 2021 2022 2023	2021 2022 2023 2024 284,321 287,275 290,229 293,184 Wastewater Billing V 2021 2022 2023 2024	2021         2022         2023         2024         2025           284,321         287,275         290,229         293,184         296,138           Wastewater Billing Volume Pro           2021         2022         2023         2024         2025	2021         2022         2023         2024         2025         2026           284,321         287,275         290,229         293,184         296,138         299,092           Wastewater Billing Volume Projection           2021         2022         2023         2024         2025         2026	2021         2022         2023         2024         2025         2026         2027           284,321         287,275         290,229         293,184         296,138         299,092         302,047           Wastewater Billing Volume Projection           2021         2022         2023         2024         2025         2026         2027	2021       2022       2023       2024       2025       2026       2027       2028         284,321       287,275       290,229       293,184       296,138       299,092       302,047       305,001         Wastewater Billing Volume Projection         2021       2022       2023       2024       2025       2026       2027       2028	284,321 287,275 290,229 293,184 296,138 299,092 302,047 305,001 306,965  Wastewater Billing Volume Projection 2021 2022 2023 2024 2025 2026 2027 2028 2029

# 6 Capital Budget Requirements

The future water and wastewater capital budget requirements are presented in Appendices D and E respectively. These appendices reflect the projects identified by the Township in its 2020 Capital Budget and 2021 to 2029 forecast, and the 2018 Development Charges Background Study. Additional asset management lifecycle needs provisions as determined by an age-based analysis of the Township's tangible capital asset inventory were also included thereby ensuring that sufficient annual capital funding is being provided from rates to address the average annual capital lifecycle needs. It should be noted that the additional asset management lifecycle provisions were adjusted to reflect asset management related projects already contained in the Township's capital forecast.

There is approximately \$29.2 million in projected water related capital expenditures and approximately \$20.8 million in projected wastewater related capital related expenditures required between 2021 and 2030.

Appendices D and E also show the projected sources of financing for the annual water and wastewater capital requirements. The level of water and wastewater rates have a direct impact on the mix of capital financing. The Township will continue to finance its' non-growth capital requirements mainly through cash from capital reserves. The Township will not be required to incur debt to cashflow non-growth capital projects as sufficient capital reserve funds are projected to be available over the forecast period. The Township will however be required to incur debt for financing growth-related water capital. Debt servicing for the growth-related water debt will be funded from water development charges revenues generated from the new growth anticipated in the Township and therefore will not impact on the user rates. Wastewater growth-related capital will be funded from the wastewater development charges reserves as sufficient fund balances are projected to be available over the forecast period in the wastewater development charges reserve fund.

### 6.1 Debt Financing

Issuance of debt allows for funds to be available in the year the project is required to proceed, with repayment of the debt occurring in future years. This approach supports the principle of user pay such that the beneficiaries of the new assets pay for their use through the debt repayment. Financing from capital reserve requires that sufficient funds be available in the reserve in the year the project is undertaken, through annual contributions from the operating budget to the reserve in prior years. Therefore, without debt or reserve financing, major rate increases, or "spikes" would be required in the project year to raise sufficient funds to cover the project expenditures.

The Township has used debt in the past as a source of capital financing, most notably the Township's new Wastewater Treatment Plant. As previously noted, the Township will be looking at borrowing \$16.1 million over the 2021-2030 forecast period to finance the water growth-related capital program. This debt will be serviced from future development charge revenues and will not impact on future water and wastewater rates. Appendix F shows the debt continuity for both water and wastewater debt from 2021 - 2030.

# 6.2 Reserve Requirements

There are two (2) separate reserve/reserve funds identified in this study for both water and wastewater for which projections are made:

- The Water and Wastewater Reserve Funds; and
- Water and Wastewater Development Charges Reserve Funds.

The water and wastewater reserve funds are funded annually by operating budget transfers. Funds contained in these reserve funds are used in funding the annual non-growth capital needs reflected in the capital budget projections, and to provide an account to transfer any projected revenue surpluses, as well as to offset any projected operating deficits in the operating budget.

The water and wastewater development charge reserve funds required to be established under the *Development Charges Act 1997*. Development charges revenues generated from future anticipated growth are

credited to each respective development charge reserves. The development charges reserve fund balances are used in financing the growth-related component of future capital expenditures, or used in the servicing of debt that was required to finance past growth-related capital.

Appendix G shows the continuity schedule for each reserve fund projection. These schedules show the transfers to and from the respective reserves and the opening and closing balances. Reserve funds are assumed to earn 1.25 % annual interest on balances. Reserve balances do not earn interest.

# 7 Operations & Maintenance (O&M) Cost Projections

The annual operating budgets are based on the operations and maintenance needs of the Township's water and wastewater systems. These include operations and maintenance costs related to the water system (i.e. water treatment and water distribution), and the wastewater system (i.e. wastewater treatment and wastewater collection). These costs generally include the staffing, materials, utilities and other costs related to the following:

- Administration;
- Contracted Services;
- Minor Capital; and
- Maintenance.

Transfers to reserves and debt servicing are typically included in the annual O&M budgets. These costs have however been addressed separately for the purposes of this report and are noted in Section 6.

A portion of the O&M costs is offset by non-rate revenues. These include:

- Penalties and late payment charges;
- Administrative service fees and charges;
- Service Connection Fees; and
- Recoveries.

The projection of the gross costs and non-rate revenues over the study period is based on the Township's 2020 Operating Budget. It has been assumed that for 2021 and beyond, O&M costs (not including non-recurring costs, reserve transfers and debt servicing) will increase annually by 2%; and

Table 7.1 and Table 7.2 shows the Township's 2021 projected operating budgets for water and wastewater services including the net amount to be recovered from customers.

Table 7-1: 2021 Water Operating Budget Forecast

Operating Expenditures	
WW-Salaries - Supt.	34,936
WW-ADM Salaries/Wages	217,299
WW-Training Salaries/Wages	15,955
WW-Locates Salaries/Wages	99,217
WW-Well Operation Salaries/Wages	129,145
WW-Main/Service/Mtce Salaries/Wages	14,091
WW-Hydrant Mtce Salaries/Wages	450
WW-Benefits	6,355
WW - Group Benefits	49,878
WW - ADM - Benefits	38,784
WW - Training Benefits WW - Locates Benefits	2,848 17,709
WW - Well Operation Benefits	23,051
WW - Main/Service/Mtce Benefits	2,515
WW - Hydrant Mtce Benefits	1,398
WW-Materials & Supplies	178,500
WW-Meters & Hardware	3,162
WW-Testing/Sampling	25,500
WW - Water Tower Inspection & Mtce	33,966
WW-Backflow Preventer Testing	27,030
WW - Meter/Backflow preventer maintenance	5,100
WW-Water Testing (Lead)	510
WW - Leak Detection	4,080
WW - Property Expense	10,098
WW - Well Mainenance	51,000
WW - Locates (Ontario One)	1,224
WW - Advertising	1,020
WW - Computer	9,180
WW-Insurance	53,858
WW-Consulting/Engineering	25,500
WW - Drinking Water Quality Management Standards	5,100
WW - Memberships	1,530
WW-Conferences, training & travel	20,400
WW-Safety Clothing Allowance	2,244
WW-Telephone	5,100
WW-Services & Rents(HEC Billings)	56,610
WW-Truck Mtce -Truck #1 -New 2020	4,437
WW -Source Water Protection Expense	19,890
MF WW-Well #3 (Mtce & hydro)	14,790
MF WW-Well #4 (Mtce & hydro)	9,690
MF WW-Well #5 (Mtce & hydro)	10,200
MF WW-Well #6 (Mtce & hydro)	8,160
AV WW-Well #1(Mtce & hydro)	2,856
AV WW-Well #5 (Mtce & hydro)	4,335
AV WW-Well #7 & 7B(Mtce & hydro)	10,200
WW - AV WW - Well #8A & 8B Mtce/Utilities	18,360
WW - Equipment Mtce Oil & Gas	18,870
WW - Truck Mtce - Truck #2 (2019 Dodge)	2,550
WW - Truck Mtce - Truck #3 (2008 GM)	4,437
Ww - Truck Mtce - Truck #4 (2007 Dodge)	4,437
Sub Total Operating Expenditures	1,307,556
<u>Capital-Related</u>	
Transfer to Reserve Fund	1,406,340
Total Expenditures	2,713,897
Non-Rate Revenues	
WW - Meter & Backflow Fee	51,000
WW-Service Connection Fees	15,300
WW-Meters & Hardware	510
WW-Interfunctional Transfer	17,768
Total Operating Revenue	84,578
Net Water Costs To Be Recovered From Users	2,629,318

Table 7-2: 2021 Wastewater Operating Budget Forecast

SS-Benefits       SS - Group Benefits         SS - Materials/Supplies/Rent       4         SS-Testing/Sampling       5         SS - Sewer Inspections (Camera)       5         SS - Line Flushing       1         SS-Pumping Stn - Utilities & Mice - A & MF       6         SS-Property Expense       7         SS-Arthur Disposal Mice       25         SS-MF New Disposal/Storage/Utilities/Mice       26         SS - Locates (Ontario One)       5         SS-Insurance       5	49,929 8,912 1,326 40,800 1,020 7,650 15,300 61,200 78,407 57,550 62,732 1,224 510 1,867
SS-Benefits         SS - Group Benefits         SS-Materials/Supplies/Rent         SS-Testing/Sampling         SS - Sewer Inspections (Camera)         SS - Line Flushing         SS-Pumping Stn - Utilities & Mice - A & MF         SS-Property Expense         SS-Arthur Disposal Mice         SS-MF New Disposal/Storage/Utilities/Mice         SS - Locates (Ontario One)         SS - Computer         SS-Insurance         SS-Consultants Fees         SS-Conferances, training & travel         SS-Safety Clothing Allowance	8,912 1,326 40,800 1,020 7,650 15,300 61,200 78,407 57,550 62,732 1,224 510
SS-Benefits         SS - Group Benefits         SS-Materials/Supplies/Rent         SS-Testing/Sampling         SS - Sewer Inspections (Camera)         SS - Line Flushing         SS-Pumping Stn - Utilities & Mice - A & MF         SS-Property Expense         SS-Arthur Disposal Mice         SS-MF New Disposal/Storage/Utilities/Mice         SS - Locates (Ontario One)         SS - Computer         SS-Insurance         SS-Consultants Fees         SS-Conferances, training & travel         SS-Safety Clothing Allowance	1,326 40,800 1,020 7,650 15,300 61,200 78,407 57,550 62,732 1,224 510
SS - Group Benefits       4         SS-Materials/Supplies/Rent       4         SS-Testing/Sampling       5         SS - Sewer Inspections (Camera)       5         SS - Line Flushing       1         SS-Pumping Stn - Utilities & Mice - A & MF       6         SS-Property Expense       7         SS-Arthur Disposal Mice       25         SS-MF New Disposal/Storage/Utilities/Mice       26         SS - Locates (Ontario One)       5         SS - Computer       5         SS-Insurance       5         SS-Consultants Fees       2         SS-Conferances, training & travel       5         SS-Safety Clothing Allowance       5	40,800 1,020 7,650 15,300 61,200 78,407 57,550 62,732 1,224 510
SS-Materials/Supplies/Rent       4         SS-Testing/Sampling       5         SS - Sewer Inspections (Camera)       5         SS - Line Flushing       6         SS-Pumping Stn - Utilities & Mice - A & MF       6         SS-Property Expense       7         SS-Arthur Disposal Mice       25         SS-MF New Disposal/Storage/Utilities/Mice       26         SS - Locates (Ontario One)       5         SS - Computer       5         SS-Insurance       5         SS-Consultants Fees       2         SS-Conferances, training & travel       5         SS-Safety Clothing Allowance       5	40,800 1,020 7,650 15,300 61,200 78,407 57,550 62,732 1,224 510
SS-Testing/Sampling       SS - Sewer Inspections (Camera)         SS - Line Flushing       1         SS-Pumping Stn - Utilities & Mice - A & MF       6         SS-Property Expense       7         SS-Arthur Disposal Mice       25         SS-MF New Disposal/Storage/Utilities/Mice       26         SS - Locates (Ontario One)       5         SS - Computer       5         SS-Insurance       5         SS-Consultants Fees       2         SS-Conferances, training & travel       5         SS-Safety Clothing Allowance       5	1,020 7,650 15,300 61,200 78,407 57,550 62,732 1,224 510
SS - Sewer Inspections (Camera)         SS - Line Flushing       1         SS-Pumping Stn - Utilities & Mice - A & MF       6         SS-Property Expense       7         SS-Arthur Disposal Mice       25         SS-MF New Disposal/Storage/Utilities/Mice       26         SS - Locates (Ontario One)       5         SS - Computer       5         SS-Insurance       5         SS-Consultants Fees       2         SS-Conferances, training & travel       5         SS-Safety Clothing Allowance       5	7,650 15,300 61,200 78,407 57,550 62,732 1,224 510
SS - Line Flushing       1         SS-Pumping Stn - Utilities & Mice - A & MF       6         SS-Property Expense       7         SS-Arthur Disposal Mice       25         SS-MF New Disposal/Storage/Utilities/Mice       26         SS - Locates (Ontario One)       5         SS - Computer       5         SS-Insurance       5         SS-Consultants Fees       2         SS-Conferances, training & travel       5         SS-Safety Clothing Allowance       5	15,300 61,200 78,407 57,550 62,732 1,224 510
SS-Pumping Stn - Utilities & Mtce - A & MF       6         SS- Property Expense       7         SS-Arthur Disposal Mtce       25         SS-MF New Disposal/Storage/Utilities/Mtce       26         SS - Locates (Ontario One)       8         SS - Computer       8         SS-Insurance       8         SS-Consultants Fees       2         SS-Conferances, training & travel       8         SS-Safety Clothing Allowance       8	61,200 78,407 57,550 62,732 1,224 510
SS- Property Expense         7           SS-Arthur Disposal Mice         25           SS-MF New Disposal/Storage/Utilities/Mice         26           SS - Locates (Ontario One)         5           SS - Computer         5           SS-Insurance         5           SS-Consultants Fees         2           SS-Conferances, training & travel         5           SS-Safety Clothing Allowance         5	78,407 57,550 62,732 1,224 510
SS-Arthur Disposal Mice  SS-MF New Disposal/Storage/Utilities/Mice  SS - Locates (Ontario One)  SS - Computer  SS-Insurance  SS-Consultants Fees  SS-Consultants Fees  SS-Conferances, training & travel  SS-Safety Clothing Allowance	57,550 62,732 1,224 510
SS-MF New Disposal/Storage/Utilities/Mtce         26           SS - Locates (Ontario One)            SS - Computer            SS-Insurance            SS-Consultants Fees            SS-Conferances, training & travel            SS-Safety Clothing Allowance	62,732 1,224 510
SS - Locates (Ontario One)  SS - Computer  SS-Insurance  SS-Consultants Fees  SS-Conferances, training & travel  SS-Safety Clothing Allowance	1,224 510
SS - Computer SS-Insurance SS-Consultants Fees SS-Conferances, training & travel SS-Safety Clothing Allowance	510
SS-Insurance SS-Consultants Fees SS-Conferances, training & travel SS-Safety Clothing Allowance	
SS-Consultants Fees 2 SS-Conferances, training & travel 5 SS-Safety Clothing Allowance 2	1,867
SS-Conferances, training & travel SS-Safety Clothing Allowance	00 400
SS-Safety Clothing Allowance	20,400
	-
SS-Telephone I	-
	9,180
	47,834
SS-Truck Mice - Truck #1 (2012 Ford)	-
SS - Inflow & Infiltration Improvements	10,200
SS-Salaries (Works Employees)	2,912
SS - Benefits (Works Employees)	562
SS-Arthur MOE Operating (OCWA)	60,638
SS-MF MOE Operating (OCWA) 27	70,306
SS - Equipment Oil & Gas	-
SS - Truck Mtce - Truck #2 (2010 Dodge)	-
SS - Truck Mtce - Truck #3 (2008 GM)	-
SS - Truck Mtce - Truck #4 (2007 Dodge)	-
SS-Interfunctional Transfer 2	26,826
Sub Total Operating Expenditures 1,43	37,284
Capital-Related	
Existing Debt (Principal) - Non-Growth Related 27	72,670
Existing Debt (Interest) - Non-Growth Related 7	73,739
Existing Debt (Principal) - Growth Related 37	74,955
	36,070
	49,002
Sub Total Capital Related Expenditures 2,10	06,437
•	43,721
Non-Rate Revenues	
SS - Misc Revenue	2,040
	15,300
	11,026
Total Operating Revenue 52	28,366
Net Wastewater Costs To Be Recovered From Users 3,01	15,355

Appendix H summarizes the projected 2021 – 2030 water systems gross operating & maintenance costs, non-rate revenues and net costs to be recovered from customers through the Township's water rates and charges. The net annual costs of the water system are expected to increase from \$2.6 million in 2021 to approximately \$3.5 million by 2030.

Appendix I summarizes the projected 2021 - 2030 wastewater systems gross operating & maintenance costs, non-rate revenues and net costs to be recovered from customers through the Township's wastewater rates and charges. The net annual costs of the wastewater system are expected to increase from approximately \$3.0 million in 2021 to \$4.0 million by 2041.

# 8 Sustainable User Rates and Charges

The sustainable water and wastewater rates and charges are based on the Township's current water and wastewater rate structure, and includes the November 9<sup>th</sup> direction from Council that there be a 0% increase in water and wastewater rates for the fiscal year 2021.

The capital costs and sources of capital financing contained in Section 6 (Capital Budget Requirements) and costs and revenues contained in Section 7 (Operating & Maintenance Cost Projections), and the projected growth contained in Section 4 (Customer Growth) and Section 5 (Volume Projections) were considered in calculating the sustainable user rates and charges as presented in this section.

### 8.1 Current Rates and Charges

The Township's current rate structure and rates are shown in Table 8-1. The rate structure includes:

- A (Flat) Base Charge for Residential Customers
- A Base Charge and Uniform Volumetric Rate for Non-Residential Customers

Table 8-8-1: Current 2020 Water and Wastewater Rates and Charges

Category	A	Water 2020 pproved	astewater 2020 pproved
Residential Annual (Flat) Base Charge	\$	558.96	\$ 687.48
Non-Residential Annual Base Charge	\$	670.14	\$ 824.16
Non-Residential Volumetric Rate (per m³)	\$	2.05	\$ 2.52

# 8.2 Water Rates and Charges Projection

Table 8-2 presents the projected sustainable water rates and charges for the six (6) year period 2021 - 2026. The ten (10) year projection of water rates and charges is detailed in Appendix J. The water rates and charges as projected are required to ensure a sustainable level of water funding over the forecast period.

**Table 8-2: Projected Water Rates and Charges** 

		Water												
Category		2021		2022		2023		2024		2025		2026		
		roposed	Ք	roposed	P	roposed	P	roposed	P	roposed	Pr	oposed		
Annual Increase (Percent)		0.00%		0.00% 1.50%		1.50%		1.50%		1.50%	1.50%		1.50%	
Residential Annual (Flat) Base Charge	\$	558.96	\$	567.34	\$	575.85	\$	584.49	\$	593.26	\$	602.16		
Non-Residential Annual Base Charge	\$	670.14	\$	680.19	\$	690.39	\$	700.75	\$	711.26	\$	721.93		
Non-Residential Volumetric Rate (per m <sup>3</sup> )	\$	2.05	\$	2.08	\$	2.11	\$	2.14	\$	2.18	\$	2.21		

#### 8.3 Wastewater Rates and Charges Projection

Table 8-3 presents the current and projected sustainable wastewater rates and charges for the six (6) year period 2021 – 2026. The ten (10) year projection of wastewater rates and charges is detailed in Appendix K. The wastewater rates and charges as projected are required to ensure a sustainable level of wastewater funding over the forecast period.

**Table 8-3: Projected Wastewater Rates and Charges** 

	Wastewater											
Category		2021 Proposed		2022 Proposed		2023 Proposed		2024 roposed	2025 Proposed		2026 d Propose	
Annual Increase (Percent)	0.00%		1.50%		1.50%		<u> </u>	1.50%	1.50%		1.50%	
Residential Annual (Flat) Base Charge	\$	687.48	\$	697.79	\$	708.26	\$	718.88	\$	729.67	\$	740.61
Non-Residential Annual Base Charge	\$	824.16	\$	836.52	\$	849.07	\$	861.81	\$	874.73	\$	887.85
Non-Residential Volumetric Rate (per m <sup>3</sup> )	\$	2.52	\$	2.56	\$	2.60	\$	2.64	\$	2.67	\$	2.71

# 8.4 Water and Wastewater Cost Comparison

Table 8-4 provides a comparison of the Township's water and wastewater costs on a typical residential customer that consumes 180 cubic metres of water a year based on the proposed 2021 water and wastewater rates and charges.

While difficult to compare the appropriateness of water and wastewater costs given the many differences that can exists among the different water and wastewater systems, Table 8-4 would indicate that the Townships water costs are reasonable when compared to the other municipalities listed, whereas the Township's wastewater costs could be seen on the high side.

**Table 8-4: Comparison of Rate Impacts** 

	ANNUAL	RESIDENTIAL WATER	CHARGES	ANNUAL RES	ANNUAL RESIDENTIAL WASTEWATER CHARGES						
Municipality	Base Charge (\$/year)	Consumption Charge (\$/year)	Total Water (\$/year)	Base Charge (\$/year)	Consumption Charge (\$/year)	Total Wastewater (\$/year)					
Owen Sound	\$297.24	\$251.82	\$549.060	\$368.58	\$312.26	\$680.83					
Georgian Bluffs - Oxende	\$1,267.71	\$579.60	\$1,847.31								
Georgian Bluffs - East Linton	\$690.58	\$340.20	\$1,030.78								
Georgian Bluffs - Pottawatomi	\$2,079.78	\$1,026.00	\$3,105.78								
Georgian Bluffs - Shallow Lake	\$1,638.13	\$808.20	\$2,446.33								
Wasaga Beach	\$167.28	\$70.20	\$237.48	\$196.44		\$196.44					
Orangeville	\$115.92	\$381.60	\$497.52	\$115.32		\$115.32					
Brockton	\$215.00	\$241.20	\$456.20	\$238.00		\$238.00					
Hanover	\$148.80	\$163.80	\$312.60	\$193.44		\$193.44					
Collingwood	\$269.52	\$120.60	\$390.12	\$633.36		\$633.36					
Clearview	\$178.00	\$432.00	\$610.00	\$473.97		\$473.97					
Blue Mountain	\$317.76	\$325.80	\$643.56	\$276.24		\$276.24					
Shelburne	\$301.68	\$127.80	\$429.48	\$351.00		\$351.00					
Meaford- Meaford System	\$528.72	\$387.00	\$915.72	\$449.40		\$449.40					
Southgate (3/4 inch meter)	\$322.44	\$322.20	\$644.64	\$750.24		\$750.24					
Saugeen Shores	\$270.90	\$183.60	\$454.50	\$304.32		\$304.32					
Average	\$550.59	\$360.10	\$910.69	\$362.53	\$312.26	\$388.55					
Median	\$299.46	\$324.00	\$579.53	\$327.66	\$312.26	\$327.66					
Wellington North Proposed 2021 Rates	\$558.96	\$0.00	\$558.96	\$687.48	\$0.00	\$687.48					

# 9 2020 O.Reg 453/07 Water System Financial Plan No. 113-301A and Wastewater System Financial Plan

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.

The financial plan must apply to a period of at least six (6) years with the first year being the year the existing license expires. In the Township's case an updated Water System Financial Plan is required for the period 2021 to 2026. While not mandatory, but in keeping with best practice, a Wastewater System Financial Plan has also

been prepared in accordance with the requirements of O.Reg 453/07. It should be noted that the financial plans are based on the results of the rate analysis and rate recommendations contained in this report.

Upon Council's approval the financial plans would be made available to the public at no charge and posted on the Township's website. The financial plans will also be submitted to the Province as part of the Township's drinking water license renewal application.

Appendix L presents the updated water system and wastewater system financial plans as defined in O.Reg. 453/07, thereby allowing the Township to fulfil its obligations under the drinking water licensing regulations for the renewal of its drinking water systems license. The financial outlook for both the water and wastewaters systems over the 6-year period from 2021-2026 are excellent.

## 10 Conclusions & Recommendations

The following are the main conclusions regarding the water system:

- 1. Approximately \$29.2 million in water capital expenditures is identified between 2021 and 2030, with \$13.1 million in capital financing coming from the capital reserves and \$16.1 million in capital financing coming from growth-related debt.
- 2. The net annual water expenditures are expected to increase approximately \$2.3 million, from \$0.9 million in 2021 to \$3.5 million by 2030.
- 3. The financial statements for the water system are prepared based on the results of the rate study analyses and projections, indicate the following:
  - The accumulated surplus is projected to increase from approximately \$22.1 million in 2021 to approximately \$29.5 million by 2026.
  - The operating surplus ratio is projected to increase from approximately 39% in 2021 to \$48% in 2026.
  - The cash position is projected to increase from \$5.6 million in 2021 to a \$7.0 million in 2026.

These indicate that the financial outlook for the water system over the 6-year period 2021 to 2026 is excellent.

The following are the main conclusions regarding the wastewater system:

- 4. Approximately \$20.8 million in wastewater capital expenditures is identified between 2021 and 2030. Approximately 12.1 million in capital financing will be required from the wastewater capital reserve and \$8.6 million in capital financing from development charges.
- 5. The net annual wastewater expenditures are expected to increase approximately \$1.0 million, from \$3.0 million in 2021 to \$4.0 million by 2030.

- 6. The financial statements for the wastewater system are prepared based on the results of the rate study analyses and projections, indicate the following:
  - The accumulated surplus is projected to increase from approximately \$26.3 million in 2021 to approximately \$38.9 million by 2026.
  - The operating surplus ratio is projected to decrease from approximately 59% in 2021 to 53% in 2026
  - The cash position is projected to increase from \$6.0 million in 2022 to \$6.5 million in 2026.

These indicate that the financial outlook for the wastewater system over the 6-year period 2021 to 2026 is excellent.

The following are the main recommendations resulting from the water and wastewater rate study:

- 7. That implementation of Water Rates and Charges as contained in Appendix J be approved to achieve full cost recovery and long-term sustainable financing of the Township's water system.
- 8. That implementation of Wastewater Rates and Charges as contained in Appendix K be approved to achieve full cost recovery and long-term sustainable financing of the Township's wastewater system.
- 9. That the O.Reg. 453/07 Water System Financial Plan No. 113-301A including the Financial Statements contained in Appendix L be approved by Council and submitted to the Province of Ontario in accordance with the Drinking Water System License renewal requirements and O. Reg. 453/07.
- 10. That the Wastewater System Financial Plan including the Financial Statements contained in Appendix L be received by Council.
- 11. That a copy of the Water Financial Plan No. 113-301A and the Wastewater Financial Plan as contained in Appendix L be posted on the Township's website and made available to the public at no charge.

# **APPENDICIES**

# **Appendix A**

2020 Water and Wastewater Rate By-Law No. 114-19

# SCHEDULE "B" WATER & SEWER RATES

# Effective January 1, 2020

DESCRIPTION	
Water	
Residential (flat rate)	
Residential - monthly	\$46.58
Residential - annually	\$558.96
Non-residential Customers	
Annual Flat Rate	\$670.14
Non-residential	
Rate per cubic metre	\$2.05
Meter Maintenance Fee	\$17.34
(Commercial / Industrial)	
- monthly	
Wastewater (Sewer)	
Residential (flat rate)	
Residential - monthly	\$57.29
Residential - annually	\$687.48
Non-residential Customers –	
Annual Flat Rate	\$824.16
Non-residential	
Rate per cubic metre	\$2.52
Water Account Set up	\$25.00
Sewer Account Set up	\$25.00

# **Appendix B**

2021-2030 Water and Wastewater Customer Growth Projections

**APPENDIX B: 2021 – 2030 Water and Wastewater Customer Growth Projections** 

Water Customers	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Residential	945	972	999	1,026	1053	1080	1107	1134	1164	1194
Mount Forest Residential	2,160	2,210	2,260	2,310	2360	2410	2460	2510	2560	2610
Arthur Non-Residential	112	113	114	115	116	117	118	119	120	121
Mount Forest Non-Residential	242	245	248	251	254	257	260	263	264	265
Total	3,459	3,540	3,621	3,702	3,783	3,864	3,945	4,026	4,108	4,190

Wastewater Customers	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Residential	931	958	985	1,012	1,039	1,066	1,093	1,120	1,150	1,180
Mount Forest Residential	2,072	2,122	2,172	2,222	2,272	2,322	2,372	2,422	2,472	2,522
Arthur Non-Residential	105	106	107	108	109	110	111	112	113	114
Mount Forest Non-Residential	231	234	237	240	243	246	249	252	253	254
Total	3,339	3,420	3,501	3,582	3,663	3,744	3,825	3,906	3,988	4,070

# **Appendix C**

# 2021-2030 Water and Wastewater Volume Projections

**APPENDIX C: 2021 – 2030 Water and Wastewater Volume Projections** 

		Wa	ater Billin	g Volume	Projection					
Water Customers	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Residential	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Mount Forest Residential</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Arthur Non-Residential	164,436	165,905	167,373	168,841	170,309	171,777	173,245	174,714	176,182	177,650
<b>Mount Forest Non-Residential</b>	119,884	121,371	122,857	124,343	125,829	127,315	128,801	130,288	130,783	131,278
Total	284,321	287,275	290,229	293,184	296,138	299,092	302,047	305,001	306,965	308,928

		Waste	ewater Bil	ling Volur	ne Project	tion				
Wastewater Customers	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Residential	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Mount Forest Residential	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Arthur Non-Residential	148,589	150,058	151,526	152,994	154,462	155,930	157,398	158,867	160,335	161,803
Mount Forest Non-Residential	119,108	120,595	122,081	123,567	125,053	126,539	128,025	129,512	130,007	130,502
Total	267,698	270,652	273,606	276,561	279,515	282,469	285,424	288,378	290,342	292,305

# **Appendix D**

2021-2030 Capital Forecast - Water

#### APPENDIX D: 2021 - 2030 Capital Forecast - Water

			Township of W		ו					
		2020 Ca	: water pital Budget a	Service nd 2021 - 2030	Forecast					
Description		2020 Ga	ipitai Buuget ai	nu 2021 - 2030 i	Forecast	ast				
•••	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
_	-	-	-	-	-	-	-	-	-	
Capital Forecast Water Meters		-		-			1,825,133	-	-	
2027 Rate Study				-			22,814	-		
Master Study Update	-	-	-	-	35,791	-	22,014	-	-	
Mount Forest Stand-Pipe	1,007,000	-	-	-	-	-	-		-	-
2017 Ford F150 Replacement	-	-	-	-	-	34,407	-	-	-	-
2017 Ford F150 Replacement	-	-	-	-	-	34,407	-	-	-	-
2019 Dodge Ram 1500 Replacement	-	-	-	-	-	-	-	37,598	-	-
2020 Ford F150 Replacement	-	-	-	-	-	-	-	-	38,726	-
Arthur Spheroid Rehab	-	-	-	579,145	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Clarke - Mid-Block to Domville	-	491,310	393,594	-	-	-	-	-	-	-
Domville - Conestoga to Preston Frederick W - George to Edward	-	491,310	-	-	-	430,091	-	-	-	
Adelaide - Clarke to Conestoga	-	-	-		-	- 180,081	456,283	-		
Fergus - Wellington to Birmingham	-	-	393,594	-	-	-	.50,200	-	_	
Fergus - Birmingham to Durham	-	-		405,402	-	-	-	-	-	-
Fergus - Durham to Sligo	-				417,564					-
King - Main to Fergus	-	-	-	-	-	430,091	-	-	-	-
King - Fergus to east of Egremont	-	-	-	-	-	-	456,283	-	-	-
Queen - Main to White's Bridge	535,300	-	-	-	-	-	-	-	-	-
South Water Street	-	-	-	231,658	-	-	-	-	-	-
John - Waterloo to Queen	-	382,130		-	-	-	-	-	-	-
Valve Exerciser/Vac Trailer Wellhouse HM's	42,400	-	97,603	-		-	-	-		-
Connecting Link Water Upgrades	238,500	-	-	-	-		-	-		
Edward St ( Frederick St. to Charles St.)	-	-	-	-	477,216	-	-	-	-	-
Walton St. (Clarke St. to Tucker St.)	-	-	-	405,402	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Growth Capital	-	-	-	-	-	-	-	-	-	-
Water Tower - Arthur	-	-	-	-	4,772,157	-	-	-	-	-
Wells St (Domville St to Macauley St)	-	836,243	-	-	-	-	-	-	-	-
Macauley St (Wells St. To Eliza St)	-	-	-	-	-	-	753,320	-	-	
Durham St (London Road Westerly)	-	44,534	-	-	-	-	-	-	-	-
Sligo Road Reconstruction (Church St to London Rd)	-	-	337,652	413,401	-	-	-		-	-
London Road Reconstruction (Sligo Rd to Durham)  Birmingham St. Reconstruction (London Rd. to Westerly)	156,132	-	-	413,401	-	-	-	- -		- -
New Street (East of HWY#6)	130,132	-	-			445,538	-		-	-
Coral Lea Drive (Main St. Westerly)	-	-	-	-	662,360	-	-	-	-	-
Internal Road – Industrial Park – (Coral Lea Dr. to Industrial Dr.)	-	-	-	-	75,698	-	-	-	-	-
Cork St. (Waterloo St. to Princess St.)	197,567	-	-	-	-	-	-	-	-	-
Murphy Lands (Bristol St/Bentley St.)	318,269	-	-	-	-	-	-	-	-	-
Mount Forest Water Tower	-	-	-	-	-	-	-	-	6,915,298	-
Edward St ( Frederick St. to Charles St.)	-	-	-	-	477,216	-	-	-	-	-
Eliza St (Macauley St. to Tucker St)	-	219,898	-	-	-	-	-	-	-	-
Draper St. (Eliza to Anderson St.)	-	151,834	-	-	-	-	-	-	-	-
Anderson St. (Draper St. to Farrell Lane)	-	431,942	-	-	-	-	-	-	-	-
Trunk Watermain, Exisiting System to new Elevated Tank Water Vehicle	-	693,366	-	-			-	-		-
Water Vehicle	-	46,292	-	-	-	-	-	-	-	-
Water Vehicle	-	-	-	-	-	-	-	-	-	-
Arthur Water Supply	-	-	-	1,158,291	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Total Capital Expenditures - Capital Program	2,495,168	3,297,550	1,222,442	3,193,298	6,918,002	1,374,534	3,513,833	37,598	6,954,024	=
Additional Lifecycle Needs	13,564	13,971	14,390	14,822	15,266	15,724	16,196	16,682	17,182	17,698
Total Capital Expenditures	2,508,732	3,311,521	1,236,833	3,208,120	6,933,268	1,390,258	3,530,030	54,280	6,971,206	17,69
Capital Financing										
Development Charges Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	348,487	2,289,054	168,826	1,364,991	4,033,720	445,538	527,324		6,915,298	-
Water Reserve Fund	2,160,246	1,022,466	1,068,007	1,843,129	2,899,548	944,720	3,002,706	54,280	55,908	17,69
						·		·	·	
Total Capital Financing	2,508,732	3,311,521	1,236,833	3,208,120	6,933,268	1,390,258	3,530,030	54,280	6,971,206	17,69

# **Appendix E**

2021-2030 Capital Forecast - Wastewater

#### APPENDIX E: 2021 – 2030 Capital Forecast - Wastewater

			ship of Welli Vastewater S							
	2	2020 Capital I			orecast					
Description						cast				
·	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
- Capital Forecast							•••••			
Clarke - Mid-Block to Domville		-	393,594						-	
Domville - Conestoga to Preston	-	491,310	353,354	-	-		-		-	
Walton - Tucker to Clarke	-	- 491,310	-	405,402	-	-	-		-	-
Edward - Charles to Frederick				403,402	477,216		-			
Adelaide - Clarke to Conestoga					4//,210	-	456,283	-		
Fergus - Wellington to Birmingham		-	393,594		-		-		-	······
Fergus - Birmingham to Durham		-	-	405,402	-		-			-
Fergus - Durham to Sligo		-		-	417,564	-	-			-
King - Main to Fergus	-	-	-	-		430,091			-	-
King - Fergus to east of Egremont	-	-	-	-	-	-	456,283	-	-	-
Queen - Main to White's Bridge	386,900	-	-					-	-	
John - Waterloo to Queen	- 380,900	382,130								
Master Plan Update		-		-	35,791	-	-			
2027 Rate Study			-	_	-	_	22,814	-	-	-
2017 Ford F150 Replacement	-	-	-	-	-	34,407	-	-	-	-
2017 Ford F150 Replacement	-	-	-	-	-	34,407	-	-	-	-
2019 Dodge Ram 1500 Replacement	-	-	-	-	-	-	-	37,598	-	-
2020 Ford F150 Replacement	-	-	-	-	-	-	-	-	38,726	
-	-	-	-	-	-	-	-	-	-	
Growth Capital	-	-	-	-	-	-	-	-	-	-
Murphy Lands Bristol St./Bentley St. S.P.S.	629,627	-	-	-	-	-	-	-	-	-
Coral Lea Drive SPS and Forcemain	-	-	-	-	1,837,620	-	-	-	-	-
Sligo Road Reconstruction (Church St to London Rd)	-	-	561,351	-	-	-	-	-	-	-
London Road Reconstruction (Sligo to Durham)	-	-	-	856,763	-	-	-	-	-	-
Birmingham St. Reconstruction (London Rd. to Westerly)	424,888	-	-	-	-	-	-	_	-	_
Internal Road – Industrial Park – (Coral Lea Dr. to Industrial Dr.)	-	-	-	-	816,153	-	-	-	-	-
New Street, East of Hwy#6)	-	-	-	-	-	1,130,921	-	-	-	-
Bentley St.	750,069	-	-	-	-	-	-	-	-	-
Bristol St.	724,009	-	-	-	-	-	-	-	-	-
Arthur Wastewater Treatment Plant Upgrades Phase 2	-	-	-	-	-	-	-	-	-	-
Anderson St. (Draper to Farrell Lane)	-	392,675	-	-	-	-	-	-	-	-
Wells St. (CPR to Macauley St.)	-	848,325	-	-	-	-	-	-	-	-
Macauley St. (Wells St. to Eliza St.)	-	-	-	-	-	-	398,101	-	-	-
Mount Forest WWTP Upgrade	-	-	-	-	-	-	-	-	-	1,424,551
South Water SPS	-	-	-	-	-	-	-	-	-	-
South Water Street	-	-	-	-	-	-	-	-	-	-
New Vehicle	-	-	-	-	-	-	-	-	-	-
Cork - Waterloo to Princess	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-
Total Capital Expenditures - Capital Program	2,915,492	2,114,440	1,348,539	1,667,566	3,584,345	1,629,826	1,333,481	37,598	38,726	1,424,551
Additional Lifecycle Needs	406,162	418,347	430,898	443,824	457,139	470,853	484,979	499,528	514,514	529,950
Total Capital Expenditures	3,321,654	2,532,787	1,779,436	2,111,391	4,041,484	2,100,679	1,818,460	537,126	553,240	1,954,501
Capital Financing										
Development Charges	2,253,185	1,241,000	449,081	428,382	2,225,166	1,130,921	358,291	-	-	527,084
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	
Growth Related Debenture Requirements	0	(0)	-	-	-	-	-	-	-	-
Wastewater Reserve Fund	1,068,469	1,291,787	1,330,355	1,683,009	1,816,318	969,759	1,460,170	537,126	553,240	1,427,417
Total Capital Financing	3,321,654	2,532,787	1,779,436	2,111,391	4,041,484	2,100,679	1,818,460	537,126	553,240	1,954,50

# **Appendix F**

# 2021-2030 Water and Wastewater Debt Continuity Schedules

## APPENDIX F: 2021 – 2030 Water and Wastewater Debt Continuity Schedules

## Note: There is no non growth-related water debt projected over the forecast period

Water Growth-Related Debt Continuity										
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Annual Debt Charges	\$0	\$41,903	\$317,142	\$337,441	\$501,570	986,590	1,040,162	1,103,568	1,103,568	1,935,073
Total Annual Interest Expense	\$0	\$12,197	\$91,274	\$89,278	\$128,367	256,485	246,525	237,204	206,881	417,533
Total Annual Principal Repayments	\$0	\$29,706	\$225,867	\$248,164	\$373,203	730,105	793,637	866,364	896,687	1,517,540
New Debt Issues	\$348,487	\$2,289,054	\$168,826	\$1,364,991	\$4,033,720	445,538	527,324		6,915,298	-
Total Annual Outstanding Debt	\$348,487	\$2,607,835	\$2,550,794	\$3,667,622	\$7,328,139	7,043,572	6,777,259	5,910,895	11,929,506	10,411,966

Wastewater Non Growth-Related Debt Continuity										
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Annual Debt Charges	\$346,409	\$346,409	\$346,409	\$346,409	\$90,181	90,181	90,181	90,181	90,181	-
Total Annual Interest Expense	\$73,739	\$59,187	\$43,830	\$27,620	\$14,251	11,593	8,843	5,996	3,050	-
Total Annual Principal Repayments	\$272,670	\$287,222	\$302,580	\$318,789	\$75,930	78,588	81,338	84,185	87,131	-
New Debt Issues	\$0	\$0	\$0	\$0	\$0	-	-	-	-	-
Total Annual Outstanding Debt	\$1,315,763	\$1,028,541	\$725,961	\$407,172	\$331,242	252,654	171,316	87,131	(0)	(0)

Wastewater Growth-Related Debt Continuity										
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Annual Debt Charges	\$511,026	\$511,026	\$511,026	\$511,026	\$511,026	511,026	511,026	511,026	511,026	-
Total Annual Interest Expense	\$136,070	\$122,947	\$109,364	\$95,306	\$80,756	65,696	50,110	33,978	17,281	-
Total Annual Principal Repayments	\$374,955	\$388,079	\$401,662	\$415,720	\$430,270	445,329	460,916	477,048	493,745	-
New Debt Issues	\$0	\$0	\$0	\$0	\$0	-	-	-	-	-
Total Annual Outstanding Debt	\$3,512,769	\$3,124,690	\$2,723,028	\$2,307,308	\$1,877,038	1,431,709	970,793	493,745	(0)	(0)

# **Appendix G**

**2021-2030 Reserve Funds Projections** 

## APPENDIX G: 2021 – 2030 Water and Wastewater Reserve Funds Projections

				/ellington Nort Service serve Fund	h									
Description 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030														
Opening Balance	5,287,563	4,590,329	5,105,613	5,652,188	5,493,504	4,337,730	5,223,124	4,114,099	6,056,627	8,101,464				
Transfer from Operating	1,406,340	1,474,719	1,544,802	1,616,624	1,690,222	1,765,631	1,842,890	1,922,035	2,000,727	2,081,313				
Transfer to Capital	2,160,246	1,022,466	1,068,007	1,843,129	2,899,548	944,720	3,002,706	54,280	55,908	17,698				
Transfer to Operating														
Closing Balance	4,533,658	5,042,581	5,582,408	5,425,683	4,284,178	5,158,641	4,063,308	5,981,854	8,001,446	10,165,079				
Interest	56,671	63,032	69,780	67,821	53,552	64,483	50,791	74,773	100,018	127,063				

Township of Wellington North Water Service Water Development Charges Reserve Fund														
Description 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030														
Opening Balance	566,782	1,033,584	1,477,588	1,704,064	1,928,692	2,006,296	1,610,628	1,173,118	701,165	259,842				
Development Charge Proceeds	454,042	467,664	522,580	538,258	554,405	571,038	588,169	622,959	659,037	678,808				
Transfer to Capital														
Transfer to Operating	-	41,903	317,142	337,441	501,570	986,590	1,040,162	1,103,568	1,103,568	1,935,073				
Closing Balance	1,020,824	1,459,346	1,683,027	1,904,881	1,981,527	1,590,744	1,158,635	692,509	256,634	(996,423)				
Interest	12,760	18,242	21,038	23,811	24,769	19,884	14,483	8,656	3,208	(12,455)				

		١	ship of Welli Vastewater S stewater Res	Service										
Description 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030														
Opening Balance	1,381,871	1,581,934	1,640,854	1,746,002	1,582,060	1,629,343	2,625,385	3,230,613	4,873,562	6,616,276				
Transfer from Operating	1,249,002	1,330,450	1,413,947	1,499,535	1,843,486	1,933,388	2,025,513	2,119,908	2,214,272	2,401,110				
Transfer to Capital	1,068,469	1,291,787	1,330,355	1,683,009	1,816,318	969,759	1,460,170	537,126	553,240	1,427,417				
Transfer to Operating														
Closing Balance	1,562,404	1,620,597	1,724,446	1,562,528	1,609,228	2,592,973	3,190,729	4,813,395	6,534,594	7,589,969				
Interest	19,530	20,257	21,556	19,532	20,115	32,412	39,884	60,167	81,682	94,875				

	Wa	١	ship of Welli Wastewater S velopment C	Service	rve Fund									
Description 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030														
Opening Balance	5,927,440	4,441,471	3,998,925	4,502,398	5,075,889	3,881,356	3,825,186	4,597,336	5,836,780	7,190,150				
Development Charge Proceeds	1,223,409	1,260,111	1,407,994	1,450,233	1,493,740	1,538,553	1,584,709	1,678,411	1,775,628	1,828,897				
Transfer to Capital	2,253,185	1,241,000	449,081	428,382	2,225,166	1,130,921	358,291	-	-	527,084				
Transfer to Operating	511,026	511,026	511,026	511,026	511,026	511,026	511,026	511,026	511,026	-				
Closing Balance	4,386,638	3,949,556	4,446,813	5,013,224	3,833,438	3,777,962	4,540,579	5,764,721	7,101,382	8,491,963				
Interest	54,833	49,369	55,585	62.665	47.918	47.225	56,757	72.059	88,767	106,150				

# **Appendix H**

2021-2030 Operating Budget Forecast - Water

## APPENDIX H: 2021 – 2030 Operating Budget Forecast - Water

				Wellington No er Service	orth					
			Operating I	Budget Foreca						
Description	2021	2022	2023	2024	Fore 2025	2026	2027	2028	2029	2030
Operating Expenditures	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
WW-Salaries - Supt.	34,936	35,635	36,347	37,074	37,816	38,572	39,344	40,131	40,933	41,752
WW-ADM Salaries/Wages	217,299	221,645	226,078	230,599	235,211	239,915	244,714	249,608	254,600	259,692
WW-Training Salaries/Wages	15,955	16,274	16,599	16,931	17,270	17,615	17,968	18,327	18,694	19,068
WW-Locates Salaries/Wages WW-Well Operation Salaries/Wages	99,217 129,145	101,202 131,728	103,226 134,363	105,290 137,050	107,396 139,791	109,544 142,587	111,735 145,439	113,970 148,347	116,249 151,314	118,574 154,341
WW-Main/Service/Mtce Salaries/Wages	14,091	14,373	14,661	14,954	15,253	15,558	15,869	16,186	16,510	16,840
WW-Hydrant Mtce Salaries/Wages	450	459	468	477	487	497	507	517	527	538
WW-Benefits	6,355	6,482	6,611	6,744	6,878	7,016	7,156	7,299	7,445	7,594
WW - Group Benefits	49,878	50,876	51,893	52,931	53,990	55,069	56,171	57,294	58,440	59,609
WW - ADM - Benefits	38,784	39,560	40,351	41,158	41,982	42,821	43,678	44,551	45,442	46,351
WW - Training Benefits WW - Locates Benefits	2,848 17,709	2,905 18,063	2,963 18,425	3,022 18,793	3,083 19,169	3,144 19,552	3,207 19,943	3,271 20,342	3,337 20,749	3,403 21,164
WW - Well Operation Benefits	23,051	23,512	23,982	24,462	24,951	25,450	25,959	26,478	27,008	27,548
WW - Main/Service/Mtce Benefits	2,515	2,566	2,617	2,669	2,723	2,777	2,833	2,889	2,947	3,006
WW - Hydrant Mtce Benefits	1,398	1,426	1,455	1,484	1,514	1,544	1,575	1,606	1,638	1,671
WW-Materials & Supplies	178,500	182,070	185,711	189,426	193,214	197,078	201,020	205,040	209,141	213,324
WW-Meters & Hardware	3,162	3,225	3,290	3,356	3,423	3,491	3,561	3,632	3,705	3,779
WW-Testing/Sampling	25,500	26,010	26,530	27,061	27,602	28,154	28,717	29,291	29,877	30,475
WW - Water Tower Inspection & Mtce	33,966	34,645	35,338	36,045	36,766	37,501	38,251	39,016	39,797	40,593
WW-Backflow Preventer Testing	27,030	27,571 5,202	28,122	28,684	29,258	29,843	30,440	31,049	31,670 5,975	32,303
WW - Meter/Backflow preventer maintenance	5,100 510	5,202 520	5,306 531	5,412 541	5,520 552	5,631 563	5,743 574	5,858 586	5,975 598	6,095 609
WW-Water Testing (Lead) WW - Leak Detection	4,080	4,162	4,245	4,330	4,416	4,505	4,595	4,687	4,780	4,876
WW - Property Expense	10,098	10,300	10,506	10,716	10,930	11,149	11,372	11,599	11,831	12,068
WW - Well Mainenance	51,000	52,020	53,060	54,122	55,204	56,308	57,434	58,583	59,755	60,950
WW - Locates (Ontario One)	1,224	1,248	1,273	1,299	1,325	1,351	1,378	1,406	1,434	1,463
WW - Advertising	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
WW - Computer	9,180	9,364	9,551	9,742	9,937	10,135	10,338	10,545	10,756	10,971
WW-Insurance	53,858	54,935	56,034	57,155	58,298	59,464	60,653	61,866	63,103	64,365
WW-Consulting/Engineering	25,500	26,010	26,530	27,061	27,602	28,154	28,717	29,291	29,877	30,475
WW - Drinking Water Quality Management Standards	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	6,095
WW - Memberships	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	1,828
WW-Conferences, training & travel	20,400 2,244	20,808	21,224 2,335	21,649 2,381	22,082 2,429	22,523 2,478	22,974 2,527	23,433 2,578	23,902 2,629	24,380 2,682
WW-Safety Clothing Allowance	2,244 5,100	5,202	2,335 5,306	5,412	2,429 5,520	2,478 5,631	2,52 <i>1</i> 5,743	2,578 5,858	5,975	6,095
WW-Telephone WW-Services & Rents(HEC Billings)	56,610	57,742	58,897	60,075	61,276	62,502	63,752	65,027	66,328	67,654
WW-Truck Mtce -Truck #1 -New 2020	4,437	4,526	4,616	4,709	4,803	4,899	4,997	5,097	5,199	5,303
WW -Source Water Protection Expense	19,890	20,288	20,694	21,107	21,530	21,960	22,399	22,847	23,304	23,770
MF WW-Well #3 (Mtce & hydro)	14,790	15,086	15,388	15,695	16,009	16,329	16,656	16,989	17,329	17,675
MF WW-Well #4 (Mtce & hydro)	9,690	9,884	10,081	10,283	10,489	10,699	10,913	11,131	11,353	11,580
MF WW-Well #5 (Mtce & hydro)	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717	11,951	12,190
MF WW-Well #6 (Mtce & hydro)	8,160	8,323	8,490	8,659	8,833	9,009	9,189	9,373	9,561	9,752
AV WW-Well #1(Mtce & hydro)	2,856	2,913	2,971	3,031	3,091	3,153	3,216	3,281	3,346	3,413
AV WW-Well #5 (Mtce & hydro)	4,335	4,422	4,510	4,600	4,692	4,786	4,882	4,980	5,079	5,181
AV WW-Well #7 & 7B(Mtce & hydro)	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717	11,951	12,190
WW - AV WW - Well #8A & 8B Mtce/Utilities	18,360 18,870	18,727 19,247	19,102 19,632	19,484 20,025	19,873 20,425	20,271 20,834	20,676 21,251	21,090 21,676	21,512 22,109	21,942 22,551
WW - Equipment Mtce Oil & Gas	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	3,047
WW - Truck Mtce - Truck #2 (2019 Dodge) WW - Truck Mtce - Truck #3 (2008 GM)	4,437	4,526	4,616	4,709	4,803	4,899	4,997	5,097	5,199	5,303
Ww - Truck Mice - Truck #4 (2007 Dodge)	4,437	4,526	4,616	4,709	4,803	4,899	4,997	5,097	5,199	5,303
Sub Total Operating Expenditures	1,307,556	1,333,707	1,360,382	1,387,589	1,415,341	1,443,648	1,472,521	1,501,971	1,532,011	1,562,651
<u>Capital-Related</u> Existing Debt (Principal) - Non-Growth Related	_	_	-	-	-		-	_	_	_
Existing Debt (Interest) - Non-Growth Related	-	_	-	_	_	_	_		-	_
Existing Debt (Principal) - Growth Related	-	-	-	-		-	-	-	-	-
Existing Debt (Interest) - Growth Related  New Non-Growth Related Debt (Principal)	-	-		-		-	-	-	-	-
New Non-Growth Related Debt (Principal)  New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Principal)	-	29,706	225,867	248,164	373,203	730,105	793,637	866,364	896,687	1,517,540
New Growth Related Debt (Interest)	-	12,197	91,274	89,278	128,367	256,485	246,525	237,204	206,881	417,533
Transfer to Reserve Fund	1,406,340	1,474,719	1,544,802	1,616,624	1,690,222	1,765,631	1,842,890	1,922,035	2,000,727	2,081,313
Sub Total Capital Related Expenditures	1,406,340	1,516,621	1,861,943	1,954,065	2,191,792	2,752,221	2,883,051	3,025,603	3,104,295	4,016,386
Total Expenditures  Non-Rate Revenues	2,713,897	2,850,329	3,222,325	3,341,655	3,607,133	4,195,869	4,355,572	4,527,574	4,636,306	5,579,037
WW - Meter & Backflow Fee	51,000	52,020	53,060	54,122	55,204	56,308	57,434	58,583	59,755	60,950
WW - Misc Revenue	-	-	-	-	-	-	-	-	-	-
WW-Service Connection Fees	15,300	15,606	15,918	16,236	16,561	16,892	17,230	17,575	17,926	18,285
WW-Meters & Hardware	510	520	531	541	552	563	574	586	598	609
WW-Interfunctional Transfer	17,768	18,124	18,486	18,856	19,233	19,618	20,010	20,410	20,819 <b>99,097</b>	21,235
Total-Non Rate Revenues Operating Subsidies	84,578	86,270	87,995	89,755	91,550	93,381	95,249	97,154	99,097	101,079
Contributions from Development Charges Reserve Fund		41,903	317,142	337,441	501,570	986,590	1,040,162	1,103,568	1,103,568	1,935,073
Contributions from Reserves	-		- 317,142	-	-	-			-,.00,000	- ,500,075
Total Operating Revenue	84,578	128,173	405,137	427,197	593,120	1,079,971	1,135,411	1,200,722	1,202,665	2,036,152
Net Water Costs To Be Recovered From Users	2,629,318	2,722,156	2,817,188	2,914,458	3,014,012	3,115,898	3,220,161	3,326,852	3,433,641	3,542,885
Talai Godio 10 Do Recovered Hom Gaera	2,020,010	2,122,130	2,017,100	2,017,700	0,017,012	5,115,030	J,220,101	0,020,002	0,-00,0-1	0,042,083

# **Appendix I**

2021-2030 Operating Budget Forecast - Wastewater

## APPENDIX I: 2021 – 2030 Operating Budget Forecast - Wastewater

				Wellington No	rth					
			Wastewa	ater Service						
			Operating B	udget Forecas	st					
					Fore	cast				
Description	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Operating Expenditures	Ī									
SS-Salaries Corey, Ed, Supt.	49,929	50,928	51,946	52,985	54,045	55,126	56,228	57,353	58,500	59,670
SS-Benefits	8,912	9,090	9,272	9,457	9,646	9,839	10,036	10,237	10,442	10,650
SS - Group Benefits	1,326	1,353	1,380	1,407	1,435	1,464	1,493	1,523	1,554	1,585
SS-Materials/Supplies/Rent	40,800	41,616	42,448	43,297	44,163	45,046	45,947	46,866	47,804	48,760
SS-Testing/Sampling	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219
SS - Sewer Inspections (Camera)	7,650	7,803	7,959	8,118	8,281	8,446	8,615	8,787	8,963	9,142
SS - Line Flushing	15,300	15,606	15,918	16,236	16,561	16,892	17,230	17,575	17,926	18,285
SS-Pumping Stn -Utilities & Mtce - A & MF	61,200	62,424	63,672	64,946	66,245	67,570	68,921	70,300	71,706	73,140
SS- Property Expense	78,407	79,976	81,575	83,207	84,871	86,568	88,299	90,065	91,867	93,704
SS-Arthur Disposal Mtce	257,550	262,701	267,955	273,314	278,780	284,356	290,043	295,844	301,761	307,796
SS-MF New Disposal/Storage/Utilities/Mtce	262,732	267,986	273,346	278,813	284,389	290,077	295,878	301,796	307,832	313,989
SS - Locates (Ontario One)	1,224	1,248	1,273	1,299	1,325	1,351	1,378	1,406	1,434	1,463
SS - Computer	510	520	531	541	552	563	574	586	598	609
SS-Insurance	1,867	1,904	1,942	1,981	2,020	2,061	2,102	2,144	2,187	2,231
SS-Consultants Fees	20,400	20.808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	24,380
SS-Telephone	9,180	9,364	9,551	9,742	9,937	10,135	10,338	10,545	10,756	10,971
SS-Services (WNP Billing only)	47,834	48,791	49,766	50,762	51,777	52,813	53,869	54,946	56,045	57,166
SS - Inflow & Infiltration Improvements	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717	11,951	12,190
SS-Salaries (Works Employees)	2,912	2,970	3,030	3,090	3,152	3,215	3,279	3,345	3,412	3,480
SS - Benefits (Works Employees)	562	573	585	596	608	621	633	646	658	672
SS-Arthur MOE Operating (OCWA)	260,638	265,850	271,167	276,591	282,122	287,765	293,520	299,391	305,378	311,486
SS-MF MOE Operating (OCWA)	270,306	275,712	281,226	286,851	292,588	298,440	304,409	310,497	316,707	323,041
SS-Interfunctional Transfer	26,826	27,363	27,910	28,468	29,037	29,618	30,210	30,815	31,431	32,060
Sub Total Operating Expenditures	1,437,284	1,466,030	1,495,350	1,525,257	1,555,762	1,586,878	1,618,615	1,650,988	1,684,007	1,717,687
Capital-Related	1,437,204	1,400,030	1,495,550	1,323,237	1,555,762	1,300,676	1,010,013	1,030,966	1,064,007	1,717,007
Existing Debt (Principal) - Non-Growth Related	272,670	287,222	302,580	318,789	75,930	78,588	81,338	84,185	87,131	
Existing Debt (Interest) - Non-Growth Related	73,739	59.187	43,830	27.620	14.251	11,593	8,843	5.996	3,050	-
Existing Debt (Principal) - Growth Related	374,955	388,079	401,662	415,720	430.270	445,329	460.916	477.048	493,745	-
Existing Debt (Interest) - Growth Related	136,070	122,947	109,364	95,306	80,756	65,696	50,110	33,978	17,281	-
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	=	-	-	=	-
New Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Transfer to Reserve Fund	1,249,002	1,330,450	1,413,947	1,499,535	1,843,486	1,933,388	2,025,513	2,119,908	2,214,272	2,401,110
Sub Total Capital Related Expenditures	2,106,437	2,187,885	2,271,382	2,356,970	2,444,693	2,534,595	2,626,720	2,721,115	2,815,479	2,401,110
Total Expenditures	3,543,721	3,653,915	3,766,732	3,882,228	4,000,456	4,121,473	4,245,335	4,372,102	4,499,486	4,118,797
Non-Rate Revenues		0.03110	0.03088	0.03066	0.03045	0.03025				
SS - Misc Revenue	2,040	2,081	2,122	2,165	2,208	2,252	2,297	2,343	2,390	2,438
SS-Service Connection Fees	15,300	15,606	15,918	16,236	16,561	16,892	17,230	17,575	17,926	18,285
Total-Non Rate Revenues	17,340	17,687	18,041	18,401	18,769	19,145	19,528	19,918	20,317	20,723
Operating Subsidies										
Contributions from Development Charges Reserve Fund	511,026	511,026	511,026	511,026	511,026	511,026	511,026	511,026	511,026	-
Total Operating Revenue	528,366	528,713	529,066	529,427	529,795	530,171	530,553	530,944	531,342	20,723
Net Wastewater Costs To Be Recovered From Users	3,015,355	3,125,202	3,237,666	3,352,800	3,470,661	3,591,302	3,714,782	3,841,158	3,968,144	4,098,075

# **Appendix J**

Projected 2021-2030 Sustainable Water Rates and Charges

#### WATER BASE RATE CALCULATION

**Projected Number of Accounts** 

Customer Type	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Residential	945	972	999	1,026	1,053	1,080	1,107	1,134	1,164	1,194
Mount Forest Residential	2,160	2,210	2,260	2,310	2,360	2,410	2,460	2,510	2,560	2,610
Arthur Non-Residential	112	113	114	115	116	117	118	119	120	121
Mount Forest Non-Residential	242	245	248	251	254	257	260	263	264	265
Total	3,459	3,540	3,621	3,702	3,783	3,864	3,945	4,026	4,108	4,190

**Projected Annual Base Charges** 

Customer Type	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Annual Increase % Increases	0.00%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Arthur Residential	\$ 558.96	\$ 567.34	\$ 575.85	\$ 584.49	\$ 593.26	\$ 602.16	\$ 611.19	\$ 620.36	\$ 629.66	\$ 639.11
Mount Forest Residential	\$ 558.96	\$ 567.34	\$ 575.85	\$ 584.49	\$ 593.26	\$ 602.16	\$ 611.19	\$ 620.36	\$ 629.66	\$ 639.11
Arthur Non-Residential	\$ 670.14	\$ 680.19	\$ 690.39	\$ 700.75	\$ 711.26	\$ 721.93	\$ 732.76	\$ 743.75	\$ 754.91	\$ 766.23
Mount Forest Non-Residential	\$ 670.14	\$ 680.19	\$ 690.39	\$ 700.75	\$ 711.26	\$ 721.93	\$ 732.76	\$ 743.75	\$ 754.91	\$ 766.23
Meter Maintenacee Fee-Arthur	\$ 208.08	\$ 211.20	\$ 214.37	\$ 217.58	\$ 220.85	\$ 224.16	\$ 227.52	\$ 230.94	\$ 234.40	\$ 237.92
Meter Maintenacee Fee-Mount Forest	\$ 208.08	\$ 211.20	\$ 214.37	\$ 217.58	\$ 220.85	\$ 224.16	\$ 227.52	\$ 230.94	\$ 234.40	\$ 237.92

Projected Annual Revenue Generated from Base Charges

Customer Type	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Residential	528,217	551,459	575,279	599,689	624,703	650,331	676,588	703,487	732,929	763,096
Mount Forest Residential	1,207,354	1,253,831	1,301,431	1,350,177	1,400,093	1,451,202	1,503,530	1,557,101	1,611,941	1,668,075
Arthur Non-Residential	75,056	76,862	78,705	80,586	82,506	84,466	86,466	88,506	90,589	92,714
Mount Forest Non-Residential	162,174	166,647	171,218	175,888	180,661	185,536	190,518	195,607	199,296	203,051
Meter Maintenacee Fee-Arthur	23,305	23,866	24,438	25,022	25,618	26,227	26,848	27,481	28,128	28,788
Meter Maintenacee Fee-Mount Forest	50,355	51,744	53,164	54,614	56,096	57,609	59,156	60,736	61,882	63,048
Total	2,046,461	2,124,409	2,204,235	2,285,977	2,369,677	2,455,372	2,543,106	2,632,919	2,724,764	2,818,773

#### **WATER UNIFORM RATE CALCULATION**

Projected Annual Water Consumption in Cubic Metres

Consumption	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Non-Residential	164,436	165,905	167,373	168,841	170,309	171,777	173,245	174,714	176,182	177,650
Mount Forest Non-Residential	119,884	121,371	122,857	124,343	125,829	127,315	128,801	130,288	130,783	131,278
Projected Annual Consumption	284,321	287,275	290,229	293,184	296,138	299,092	302,047	305,001	306,965	308,928

Projected Annual Uniform Rates

Volumetric Rates	2021	2022	2023	2024	2025	2026	2027	2028	2029		2030
Annual Increase % Increases	0.00%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1	1.50%
Arthur Non-Residential	\$ 2.05	\$ 2.08	\$ 2.11	\$ 2.14	\$ 2.18	\$ 2.21	\$ 2.24	\$ 2.28	\$ 2.31	\$	2.34
Mount Forest Non-Residential	\$ 2.05	\$ 2.08	\$ 2.11	\$ 2.14	\$ 2.18	\$ 2.21	\$ 2.24	\$ 2.28	\$ 2.31	\$	2.34

**Projected Annual Volumetric** 

Revenues	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Non-Residential	337,095	345,206	353,485	361,934	370,558	379,358	388,340	397,505	406,858	416,403
Mount Forest Non-Residential	245,763	252,542	259,469	266,546	273,778	281,167	288,716	296,428	302,018	307,710
Projected Annual Uniform Rate Revenues	582,857	597,748	612,953	628,481	644,336	660,525	677,056	693,933	708,877	724,112

Total Water User Revenues	2,629,318	2,722,156	2,817,188	2,914,458	3,014,012	3,115,898	3,220,161	3,326,852	3,433,641	3,542,885

# **Appendix K**

Projected 2021-2030 Sustainable Wastewater Rates and Charges

## **WASTEWATER BASE RATE CALCULATION**

**Projected Number of Accounts** 

Customer Type	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Residential	931	958	985	1,012	1,039	1,066	1,093	1,120	1,150	1,180
Mount Forest Residential	2,072	2,122	2,172	2,222	2,272	2,322	2,372	2,422	2,472	2,522
Arthur Non-Residential	105	106	107	108	109	110	111	112	113	114
Mount Forest Non-Residential	231	234	237	240	243	246	249	252	253	254
Total	3,339	3,420	3,501	3,582	3,663	3,744	3,825	3,906	3,988	4,070

**Projected Annual Base Charges** 

Customer Type	:	2021	2022	202	3	2024	2025	2026	2027	2028	20	129	2030
Annual Increase % Increases		0.00%	1.50%		1.50%	1.50%	1.50%	1.50%	1.50%	1.50%		1.50%	1.50%
Arthur Residential	\$	687.48	\$ 697.79	\$ 7	08.26	\$ 718.88	\$ 729.67	\$ 740.61	\$ 751.72	\$ 763.00	\$	774.44	\$ 786.06
Mount Forest Residential	\$	687.16	\$ 697.47	\$ 7	07.93	\$ 718.55	\$ 729.33	\$ 740.27	\$ 751.37	\$ 762.64	\$	774.08	\$ 785.69
Arthur Non-Residential	\$	824.16	\$ 836.52	\$ 8	49.07	\$ 861.81	\$ 874.73	\$ 887.85	\$ 901.17	\$ 914.69	\$	928.41	\$ 942.34
Mount Forest Non-Residential	\$	824.16	\$ 836.52	\$ 8	49.07	\$ 861.81	\$ 874.73	\$ 887.85	\$ 901.17	\$ 914.69	\$	928.41	\$ 942.34

Projected Annual Revenue Generated from Base Charges

Customer Type	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Residential	640,044	668,485	697,635	727,510	758,123	789,492	821,630	854,556	890,607	927,548
Mount Forest Residential	1,423,796	1,480,026	1,537,623	1,596,614	1,657,030	1,718,899	1,782,251	1,847,117	1,913,527	1,981,515
Arthur Non-Residential	86,537	88,671	90,851	93,075	95,346	97,664	100,030	102,445	104,910	107,426
Mount Forest Non-Residential	190,381	195,746	201,230	206,834	212,560	218,412	224,392	230,502	234,888	239,353
Tota	l 2,340,757	2,432,928	2,527,338	2,624,033	2,723,059	2,824,466	2,928,303	3,034,619	3,143,933	3,255,843

#### **WASTEWATER UNIFORM RATE CALCULATION**

**Projected Annual Billed Wastewater Flows** 

Consumption	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Non-Residential	148,589	150,058	151,526	152,994	154,462	155,930	157,398	158,867	160,335	161,803
Mount Forest Non-Residential	119,108	120,595	122,081	123,567	125,053	126,539	128,025	129,512	130,007	130,502
Projected Annual Consumption	267,698	270,652	273,606	276,561	279,515	282,469	285,424	288,378	290,342	292,305

**Projected Annual Uniform Rates** 

Volumetric Rates	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Annual Increase % Increases	0.00%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Arthur Non-Residential	\$ 2.52	\$ 2.56	\$ 2.60	\$ 2.64	\$ 2.67	\$ 2.71	\$ 2.76	\$ 2.80	\$ 2.84	\$ 2.88
Mount Forest Non-Residential	\$ 2.52	\$ 2.56	\$ 2.60	\$ 2.64	\$ 2.67	\$ 2.71	\$ 2.76	\$ 2.80	\$ 2.84	\$ 2.88

**Projected Annual Volumetric Revenues** 

Revenues	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Arthur Non-Residential	374,445	383,817	393,386	403,156	413,130	423,313	433,708	444,320	455,152	466,210
Mount Forest Non-Residential	300,153	308,457	316,942	325,612	334,471	343,523	352,771	362,219	369,059	376,022
Projected Annual Uniform Rate Revenues	674,598	692,274	710,328	728,768	747,601	766,836	786,479	806,539	824,211	842,232

Total Wastewater User Revenues	3,015,355	3,125,202	3,237,666	3,352,800	3,470,661	3,591,302	3,714,782	3,841,158	3,968,144	4,098,075
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## **Appendix L**

2020 O.Reg Water System Financial Plan No. 113-301A and Wastewater Financial Plan (Final)

# **Township of Wellington North**

2020 O.Reg 453/07 Water System Financial Plan No. 113-301A and Wastewater System Financial Plan (Final)



**DFA Infrastructure International Inc.** 

November 13, 2020



## **DFA Infrastructure International Inc.**

33 Raymond Street St. Catharines Ontario Canada L2R 2T3

Telephone: (905) 938 -0965 Fax: (905) 937-6568

November 13, 2020

Matthew Aston
Director of Operations
Township of Wellington North
7490 Sideroad 7 W
Kenilworth, Ontario
NOG 2E0

Re: 2020 O.Reg 453/07 Water System Financial Plan No. 113-301A and Wastewater System Financial Plan (Final)

#### Dear Matt:

We are pleased to submit to you the above noted report entitled: "2020 O. Reg 453/07 Water System Financial Plan and Wastewater System Financial Plan (Final)". The water and wastewater financial plans are based on the results of the Township's water and wastewater rate study that will be presented to your Council at the November 23<sup>rd</sup> Council meeting.

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`

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 relevant information required under each regulatory requirement. The financial plan must apply to a period of at least six (6) years with the first year being the year the existing license expires. In the Township's case an updated Water System Financial Plan is required for the period 2021 to 2026.

It is important to note that the water system financial plan, along with the accompanying wastewater system financial plan are based on the results of the Township's 2020 Water of Wastewater Rate Study and O. Reg 453/07 Financial Plan.

Upon Council's approval, the financial plans will be made available to the public at no charge and posted on the Township's website. The plans will also be submitted to the Province as part of the Township's drinking water license renewal application.

## 2 O.Reg 453/07 Water System Financial Plan No. 113-301A

This section presents an updated water system financial plan as defined in O.Reg. 453/07, thereby allowing the Township to fulfil its obligations under the drinking water licensing regulations for the renewal of its drinking water systems license. The number for the updated financial plan is 113-301A

## 2.1 Water Tangible Capital Assets (TCA) Analysis

As noted in the introduction the results of the 2020 Water and Wastewater Rate Study are used as the basis for preparing the water system financial plan. The Township's Tangible Capital Asset inventories were also used in the preparation of the water system financial plan. The amortization of the tangible capital assets is shown as a "non-cash" annual cost that reflects the annual "use" of assets until the end of their respective useful lives.

Allowances are made to finance the replacement and/ or rehabilitation of the existing assets once they "expire" and can no longer play a role in providing the required drinking water service to customers. It should be noted however that since amortization is based on the original (historical) cost at the time the asset was placed in service it does not account for inflation since the year of installation. Therefore, basing asset replacement costs on amortization alone is not sufficient to cover the future replacement needs.

The TCA projections contained in the Township's water system financial plan are based on the following assumptions:

- Amortization of existing assets is based on the Township's Tangible Capital Assets Policies and Procedures. Amortization of new infrastructure investments is based on straight line depreciation with half year depreciation charged in the year of acquisition;
- Historical costs, life expectancy and remaining useful life are as identified in the TCA data provided by the Township;
- Fully depreciated assets continue to be used in service i.e. no asset removals; and
- New assets to be acquired are based on the capital forecast presented. The forecast includes projects in the Township's Capital Budget Forecast, 2018 Development Charges Study and asset replacement projections based on an analysis of the Township's tangible capital asset inventories.

#### Water Asset Value

The water system is comprised of the following asset classes:

- Wells and Storage, and
- Watermains

Table 2-1 shows the current capital asset value based on historical cost and accumulated amortization to 2021. This is reflected as the net book value (NBV) i.e. the "accounting" value, and indicates that the water system as a whole is approximately 33% depreciated or has approximately 67% remaining life based on the TCA data. This suggests that the water system assets are relatively new.

Table 2-1: Water – Asset Amortization and Book Value (NBV)

2021 Water Asset Details										
Historical Cost	\$	26,775,219	100%							
Accumulated Amortization	\$	8,835,962	33%							
Net Book Value	\$	17,939,257	67%							

#### 2.2 Water Financial Statements

This financial plan involves the review, analysis and assessment of financial information contained in the rate study 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

#### 2.2.1 Water - Statement of Financial Position

The Statement of Financial Position is presented in Table 2-2. This statement summarizes the Townships'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 water reserves and reserve funds. Liabilities consist of the water deferred revenues and long-term debt. The non-financial assets (TCA) include the Township'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 Township'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 2-2 indicates that in 2021, the Township's water system will be in a financial asset position of \$4.2 million. This will decrease to a net debt position of \$1.6 million by 2026. The net debt position indicates that additional financial resources will be required to fund future operations. The trend to the net debt position is due to a significant increase of long-term debt and increase deferred revenues, offset by an increase of cash balances.

The next important indicator contained in the Statement of Financial Position is the net book value of TCA. Table 2-2 shows that net TCA are expected to increase over the forecast period by about \$13.2 million. This indicates that the Township 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 Township's TCA as a percent of historical cost ratio highlights the aged condition of the assets and their potential replacement needs. The Township's Water Asset Consumption Ratio decreases over the forecast period from 33% to 18%, suggesting that the water system would be less than a quarter through its life expectancy by 2026. As this percentage is decreasing over time, it indicates the Township 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 Township for managing its water system. The accumulated surplus is projected to increase from approximately \$22.2 million in 2021 to approximately \$29.5 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, offset by the net debt balances.

Table 2-2: Water – Statement of Financial Position

	2021	2022	2023	2024	2025	2026
Financial Assets						
Cash, Receivables and Investment	\$5,623,913	\$6,536,908	\$7,309,960	\$7,377,862	\$6,299,693	\$7,045,904
Total Financial Assets	\$5,623,913	\$6,536,908	\$7,309,960	\$7,377,862	\$6,299,693	\$7,045,904
Financial Liabilities						
Accounts Payable & Deferred Revenue	\$1,033,584	\$1,477,588	\$1,704,064	\$1,928,692	\$2,006,296	\$1,610,628
Long-term Liabilities	\$348,487	\$2,607,835	\$2,550,794	\$3,667,622	\$7,328,139	\$7,043,572
Total Financial Liabilities	\$1,382,071	\$4,085,423	\$4,254,859	\$5,596,313	\$9,334,435	\$8,654,200
Net Financial Assets (Net Debt)	\$4,241,842	\$2,451,485	\$3,055,101	\$1,781,548	(\$3,034,742)	(\$1,608,295)
Non-Financial Assests						
Tangible Capital Assets	\$26,775,219	\$29,467,552	\$30,033,771	\$32,413,880	\$37,071,228	\$38,199,384
Accumulated Amortization	(\$8,835,962)	(\$8,665,797)	(\$8,477,039)	(\$8,173,065)	(\$6,549,605)	(\$7,044,867)
Total Non-Financial Assets	\$17,939,257	\$20,801,755	\$21,556,733	\$24,240,814	\$30,521,622	\$31,154,518
Accumulated Surplus	\$22,181,099	\$23,253,239	\$24,611,834	\$26,022,363	\$27,486,881	\$29,546,222
Financial Indicators	2021	2022	2023	2024	2025	2026
Increase (Decrease) in Net Financial Assets	(\$1,045,722)	(\$1,790,357)	\$603,617	(\$1,273,553)	(\$4,816,290)	\$1,426,446
Increase (Decrease) in Tangible Capital Assets	\$2,111,594	\$2,862,498	\$754,978	\$2,684,081	\$6,280,808	\$632,895
Increase (Decrease) in Accumulated Surplus	\$1,065,872	\$1,072,141	\$1,358,595	\$1,410,529	\$1,464,518	\$2,059,342
Water Asset Consumption Ratio	33%	29%	28%	25%	18%	18%

#### 2.2.2 Water - Statement of Operations

The Statement of Operations is presented in Table 2-3 It summarizes the annual revenues and expenses associated with managing the Township'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, and
- Other Revenues (meter and backflow fees, service connection fees, miscellaneous fees and charges).

#### The main expense items are:

- The annual cost of operating and maintaining the water systems;
- 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 2-3 and reflects the percent of total revenue that can be allocated to funding the non-expense items noted above.

Table 2-3: Water – Statement of Operation

	2021	2022	2023	2024	2025	2026
Water Revenue						
Rate Revenue	\$2,629,318	\$2,722,156	\$2,817,188	\$2,914,458	\$3,014,012	\$3,115,898
Earned Revenue	\$0	\$41,903	\$317,142	\$337,441	\$501,570	\$986,590
Other Revenue	\$141,249	\$149,302	\$157,775	\$159,535	\$145,103	\$157,864
Total Revenues	\$2,770,567	\$2,913,361	\$3,292,105	\$3,411,435	\$3,660,685	\$4,260,352
Water Expenses						
Operating Expenses	\$1,307,556	\$1,380,000	\$1,360,382	\$1,387,589	\$1,415,341	\$1,443,648
Interest on Debt	\$0	\$12,197	\$91,274	\$89,278	\$128,367	\$0
Amortization	\$397,139	\$449,023	\$481,854	\$524,039	\$652,460	\$757,363
Total Expenses	\$1,704,695	\$1,841,220	\$1,933,510	\$2,000,906	\$2,196,168	\$2,201,010
Annual Surplus/(Deficit)	\$1,065,872	\$1,072,141	\$1,358,595	\$1,410,529	\$1,464,517	\$2,059,341
Accumulated Surplus/(Deficit), Beginning of Year	\$21,115,226	\$22,181,099	\$23,253,240	\$24,611,835	\$26,022,363	\$27,486,881
Accumulated Surplus/ (Deficit), End of Year	\$22,181,099	\$23,253,240	\$24,611,835	\$26,022,363	\$27,486,881	\$29,546,222
et a a statut discussion	2024	2022	2022	2024	2025	2025
Financial Indicators	2021	2022	2023	2024	2025	2026
Increase (Decrease) in Total Revenues	\$45,660	\$142,794	\$378,744	\$119,330	\$249,250	\$599,667
Increase (Decrease) in Total Expenses	\$27,978	\$136,525	\$92,290	\$67,396	\$195,261	\$4,843
Increase (Decrease) in Annual Surplus	\$17,681	\$6,269	\$286,454	\$51,934	\$53,989	\$594,824
Operating Surplus Ratio	38.5%	36.8%	41.3%	41.3%	40.0%	48.3%

#### 2.2.3 Water - Statement of Cash Flows

The Statement of Cash Flow is presented in Table 2-4. 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 Township'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 2-4 indicates that cash is being generated from operations, which is used in funding the acquisition of TCA and towards building internal reserves. The Town's cash position is projected to increase over the forecast period from \$5.6 million in 2021 to a \$7.0 million in 2026.

Table 2-4: Water – Statement of Cash Flow

	2021	2022	2023	2024	2025	2026
Cash Provided by:						
Operating Activities						
Annual Surplus/(Deficit)	\$1,065,872	\$1,072,141	\$1,358,595	\$1,410,529	\$1,464,517	\$2,059,341
Non-Cash Items						
Amortization	\$397,139	\$449,023	\$481,854	\$524,039	\$652,460	\$757,363
Earned Revenue	\$0	(\$41,903)	(\$317,142)	(\$337,441)	(\$501,570)	(\$986,590)
Net Change in Cash Provided by Operating Activities	\$1,463,011	\$1,479,262	\$1,523,308	\$1,597,126	\$1,615,407	\$1,830,114
Capital Activities						
Purchase of TCA	(\$2,508,732)	(\$3,311,521)	(\$1,236,832)	(\$3,208,121)	(\$6,933,268)	(\$1,390,258)
Net Change in Cash Used in Capital Activities	(\$2,508,732)	(\$3,311,521)	(\$1,236,832)	(\$3,208,121)	(\$6,933,268)	(\$1,390,258)
Financing Activities	•				•	
DC Collections	\$466,803	\$485,906	\$543,618	\$562,069	\$579,174	\$590,922
External Financing	\$0	\$0	\$0	\$0	\$0	\$0
Proceeds From Long-Term Debt	\$348,487	\$2,289,054	\$168,826	\$1,364,991	\$4,033,720	\$445,538
Repayment of Long-Term Debt	\$0	(\$29,706)	(\$225,867)	(\$248,164)	(\$373,203)	(\$730,105)
Net Change in Cash Used in Financing Activities	\$815,290	\$2,745,254	\$486,577	\$1,678,896	\$4,239,692	\$306,355
Net Change in Cash and Cash Equivalents	(\$230,432)	\$912,995	\$773,052	\$67,902	(\$1,078,169)	\$746,211
Cash and Cash Equivalents, Beginning of the Year	\$5,854,345	\$5,623,913	\$6,536,908	\$7,309,960	\$7,377,862	\$6,299,693
Cash and Cash Equivalents, End of the Year	\$5,623,913	\$6,536,908	\$7,309,960	\$7,377,862	\$6,299,693	\$7,045,904

## 2.3 Lead Service Pipe Removal

The financial plan is also required to detail the extent to which the information described above relates directly to the replacement of lead service pipes. There are no known lead service pipes in the Township. 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.

## 3 Wastewater System Financial Plan

Preparing a wastewater system financial plan is not mandatory but has become a municipal best practice over the past few years. It is typically prepared in accordance with the requirements of O.Reg 453/07 which applies to water systems.

This financial plan involves the review, analysis and assessment of financial information contained in the 2020 water and wastewater rate study including costs, revenues, debt, cash transactions and Tangible Capital Assets (TCA) to prepare the following three (3) financial statements covering the period 2021 to 2026 as required under O.Reg. 453/07:

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

The wastewater system financial plan applies to a period of (6) six years from 2021 to 2026 to be consistent with the period covered by the water system financial plan. It is anticipated that the financial plan would be made available to the public at no charge on the Town's website following final approval of the rate study and financial plan by Council.

## 3.1 Wastewater Tangible Capital Assets (TCA) Analysis

As in the preparation of the water system financial plan, the results of the 2020 water and wastewater rate study are used as the basis for preparing the wastewater system financial plan. The Township's Asset Inventories were also used in the preparation of the wastewater system financial plan. The amortization of the tangible capital assets is shown as a "non-cash" annual cost that reflects the annual "use" of assets until the end of their respective useful lives. Allowances are made to finance the replacement and/ or rehabilitation of the existing assets once they "expire" and can no longer play a role in providing the required wastewater service to customers. However, it should be noted that since amortization is based on the original (historical) cost at the time the asset was placed in service it does not account for inflation since the year of installation. Therefore, basing asset replacement costs on amortization alone is not sufficient to cover the future replacement needs.

The TCA projections contained in the Township's wastewater financial plan are based on the following assumptions:

- Amortization of existing assets is based on the Township's Tangible Capital Assets policies and procedures. Amortization of new infrastructure investments 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 TCA data provided by the Township;
- Fully depreciated assets continue to be used in service i.e. no asset removals; and
- New assets to be acquired are based on the capital forecast. The forecast includes projects in the Township's Capital Budget Forecast, 2018 Development Charges Study and asset replacement projections based on an analysis of the Township's tangible capital asset inventories.

#### **Wastewater Asset Value**

The wastewater system is comprised of the following asset classes:

- Pump Stations and Lagoons
- Forcemains
- Sanitary Mains, and
- Wastewater Treatment Plant

Table 3-1 shows the current capital asset value based on historical cost and accumulated amortization to 2021. This is reflected as the net book value (NBV) i.e. the "accounting" value, and indicates that the wastewater

system as a whole is approximately 31% depreciated or has approximately 69% remaining life based on the TCA data. This suggests that the water system assets are relatively new.

Table 3-1: Wastewater – Asset Amortization and 2020 Net Book Value (NBV)

2021 Wastewater Asset Details							
Historical Cost	\$	42,562,906	100%				
Accumulated Amortization	\$	12,999,913	31%				
Net Book Value	\$	29,562,993	69%				

#### 3.2 Wastewater Financial Statements

This financial plan involves the review, analysis and assessment of financial information contained in the rate study 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.

#### 3.2.1 Wastewater - Statement of Financial Position

The Statement of Financial Position is presented in Table 3-2. This statement summarizes the Township's wastewater related financial and non-financial assets (Tangible Capital Assets – TCA) and liabilities and provides the net financial asset/ (net debt) position and accumulated surplus related to managing the wastewater system. The financial assets are primarily cash balances in the wastewater reserves and reserve funds. Liabilities consist of wastewater deferred revenues and long-term debt. The non-financial assets (TCA) include the Township's wastewater 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 that would be transferred to the Township'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 wastewater system's "future revenue requirement". Table 3.2 indicates that in 2021, the Township's wastewater system will be in a net debt position in the amount of \$3.2 million. There will be change to a net financial asset position of \$1.0 million by 2026. The net financial asset position indicates that financial resources will be available to fund future operations. The change to a net financial asset position is due to a combination of a decrease liabilities through a decrease in long-term debt with a decrease in deferred revenues, and an increase in the cash position.

The next important indicator contained in the Statement of Financial Position is the net book value of TCA. Table 3-2 shows that net TCA are expected to grow by \$8.4 million over the forecast period, or from \$29.6 million in 2021 to \$37.9 million in 2026. This indicates that the Township has plans to invest in tangible capital assets in excess of the consumption of existing assets. Further, a consumption ratio consisting of the accumulated amortization of the Township's TCA as a percent of historical cost ratio highlights the aged condition of the assets and their potential replacement needs. The Township's Wastewater Asset Consumption Ratio will decrease from 31% in 2021 to 28% in 2026. As this percentage is decreasing over time, it indicates the Township 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 Township for managing its water system. The accumulated surplus is projected to increase from approximately \$26.3 million in 2021 to approximately \$38.9 million by 2026. The accumulated surplus consists of non-financial assets that are made up of the net TCA balance representing past investments in wastewater infrastructure, and net financial assets that consist of cash balances, offset by deferred revenues and long-term debt.

Table 3-2: Wastewater - Statement of Financial Position

	2021	2022	2023	2024	2025	2026
Financial Assets						
Cash, Receivables and Investment	\$6,023,404	\$5,639,779	\$6,248,399	\$6,659,972	\$5,512,722	\$6,529,884
Total Financial Assets	\$6,023,404	\$5,639,779	\$6,248,399	\$6,659,972	\$5,512,722	\$6,529,884
Financial Liabilities	ψο,σΞο, ισ ι	45,005,115	<del>+ 0,2 10,000</del>	<del>+0,000,01</del>	<del>40</del> ,022,722	φο,σΞσ,σσ :
Accounts Payable & Deferred Revenue	\$4,441,471	\$3,998,925	\$4,502,398	\$5,075,889	\$3,881,356	\$3,825,186
Long-term Liabilities	\$4,828,531	\$4,153,231	\$3,448,989	\$2,714,480	\$2,208,280	\$1,684,363
Total Financial Liabilities	\$9,270,002	\$8,152,156	\$7,951,387	\$7,790,369	\$6,089,636	\$5,509,550
Net Financial Assets (Net Debt)	(\$3,246,598)	(\$2,512,377)	(\$1,702,988)	(\$1,130,398)	(\$576,914)	\$1,020,335
Non-Financial Assests						
Tangible Capital Assets	\$42,562,906	\$44,631,124	\$46,081,959	\$47,802,853	\$51,093,078	\$52,799,541
Accumulated Amortization	(\$12,999,913)	(\$13,329,323)	(\$13,812,792)	(\$14,249,447)	(\$14,369,043)	(\$14,889,555)
Total Non-Financial Assets	\$29,562,993	\$31,301,801	\$32,269,167	\$33,553,406	\$36,724,035	\$37,909,987
Accumulated Surplus	\$26,316,395	\$28,789,425	\$30,566,179	\$32,423,009	\$36,147,121	\$38,930,321
Financial Indicators	2021	2022	2023	2024	2025	2026
Increase (Decrease) in Net Financial Assets	\$847,689	\$734,221	\$809,388	\$572,591	\$553,484	\$1,597,249
Increase (Decrease) in Tangible Capital Assets	\$2,569,493	\$1,738,808	\$967,366	\$1,284,239	\$3,170,629	\$1,185,952
Increase (Decrease) in Accumulated Surplus	\$3,417,181	\$2,473,029	\$1,776,754	\$1,856,830	\$3,724,112	\$2,783,200
Water Asset Consumption Ratio	31%	30%	30%	30%	28%	28%

## 3.2.2 Wastewater - Statement of Operations

The Statement of Operations is presented in Table 3-3 It summarizes the annual revenues and expenses associated with managing the Township's wastewater 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 wastewater rates and charges;
- Earned Revenues; and
- Other Revenues (service connection fees, and miscellaneous fees and charges).

#### The main expense items are:

- The annual cost of operating and maintaining the wastewater system;
- Interest on long-term debt; and
- Amortization expenses on existing and new TCA.

The operating surplus/ (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 3-3 and reflects the percent of total revenue that can be allocated to funding the non-expense items noted above.

**Table 3-3: Wastewater - Statement of Operations** 

	1	1				
	2021	2022	2023	2024	2025	2026
Water Revenue						
Rate Revenue	\$3,015,355	\$3,125,202	\$3,237,666	\$3,352,800	\$3,470,661	\$3,591,302
Earned Revenue	\$2,764,211	\$1,752,026	\$960,106	\$939,407	\$2,736,192	\$1,641,947
Other Revenue	\$36,870	\$37,944	\$39,596	\$39,957	\$38,885	\$51,557
Total Revenues	\$5,816,436	\$4,915,172	\$4,237,368	\$4,332,165	\$6,245,737	\$5,284,806
Water Expenses						
Operating Expenses	\$1,437,284	\$1,466,030	\$1,495,350	\$1,525,257	\$1,555,762	\$1,586,878
Interest on Debt	\$209,809	\$182,134	\$153,194	\$122,926	\$95,007	\$0
Amortization	\$752,161	\$793,979	\$812,070	\$827,152	\$870,855	\$914,728
Other	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$2,399,255	\$2,442,143	\$2,460,614	\$2,475,335	\$2,521,624	\$2,501,605
Annual Surplus/(Deficit)	\$3,417,181	\$2,473,029	\$1,776,754	\$1,856,830	\$3,724,113	\$2,783,200
Accumulated Surplus/(Deficit), Beginning of Year	\$22,899,214	\$26,316,395	\$28,789,425	\$30,566,179	\$32,423,009	\$36,147,121
Accumulated Surplus/ (Deficit), End of Year	\$26,316,395	\$28,789,425	\$30,566,179	\$32,423,009	\$36,147,121	\$38,930,321
	1	1	Ī			
Financial Indicators	2021	2022	2023	2024	2025	2026
Increase (Decrease) in Total Revenues	\$2,319,656	(\$901,264)	(\$677,804)	\$94,796	\$1,913,572	(\$960,931)
Increase (Decrease) in Total Expenses	\$42,888	\$42,888	\$18,471	\$14,721	\$46,289	(\$20,019)
Increase (Decrease) in Annual Surplus	(\$938,752)	(\$944,152)	(\$696,275)	\$80,076	\$1,867,283	(\$940,912)
Operating Surplus Ratio	58.8%	50.3%	41.9%	42.9%	59.6%	52.7%

#### 3.2.3 Wastewater - Statement of Cash Flows

The Statement of Cash Flow is presented in Table 3-4. This statement summarizes the main cash inflows and outflows related to the wastewater 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 Township'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 3-4 indicates that cash is being generated from operations, which is used in funding the acquisition of TCA and towards building internal reserves. The Township's cash position is projected to increase over the forecast period from \$6.0 million in 2021 to a \$6.5 million in 2026.

Table 3-4: Wastewater - Statement of Cash Flows

				1		T
	2021	2022	2023	2024	2025	2026
				-9-1		
Cash Provided by:						
Operating Activities						
Annual Surplus/(Deficit)	\$3,417,181	\$2,473,029	\$1,776,754	\$1,856,830	\$3,724,113	\$2,783,200
Non-Cash Items						
Amortization	\$752,161	\$793,979	\$812,070	\$827,152	\$870,855	\$914,728
Earned Revenue	(\$2,764,211)	(\$1,752,026)	(\$960,106)	(\$939,407)	(\$2,736,192)	(\$1,641,947)
Net Change in Cash Provided by Operating Activities	\$1,405,132	\$1,514,983	\$1,628,718	\$1,744,574	\$1,858,776	\$2,055,981
Capital Activities						
Purchase of TCA	(\$3,321,654)	(\$2,532,787)	(\$1,779,436)	(\$2,111,391)	(\$4,041,484)	(\$2,100,679)
Net Change in Cash Used in Capital Activities	(\$3,321,654)	(\$2,532,787)	(\$1,779,436)	(\$2,111,391)	(\$4,041,484)	(\$2,100,679)
Financing Activities						
DC Collections	\$1,278,242	\$1,309,480	\$1,463,579	\$1,512,899	\$1,541,658	\$1,585,777
External Financing	\$0	\$0	\$0	\$0	\$0	\$0
Proceeds From Long-Term Debt	\$0	\$0	\$0	\$0	\$0	\$0
Repayment of Long-Term Debt	(\$647,626)	(\$675,301)	(\$704,241)	(\$734,509)	(\$506,200)	(\$523,917)
Net Change in Cash Used in Financing Activities	\$630,616	\$634,180	\$759,337	\$778,390	\$1,035,458	\$1,061,860
Net Change in Cash and Cash Equivalents	(\$1,285,906)	(\$383,625)	\$608,619	\$411,573	(\$1,147,249)	\$1,017,162
Cash and Cash Equivalents, Beginning of the Year	\$7,309,310	\$6,023,404	\$5,639,779	\$6,248,399	\$6,659,972	\$5,512,722
Cash and Cash Equivalents, End of the Year	\$6,023,404	\$5,639,779	\$6,248,399	\$6,659,972	\$5,512,722	\$6,529,884

## 4 Conclusions & Recommendations

The following are the main conclusions regarding the water system:

- 1. The financial statements for the water system are prepared based on the results of the rate study analyses and projections, indicate the following:
  - The accumulated surplus is projected to increase from approximately \$22.1 million in 2021 to approximately \$29.5 million by 2026.
  - The operating surplus ratio is projected to increase from approximately 39% in 2021 to \$48% in 2026.
  - The cash position is projected to increase from \$5.6 million in 2021 to a \$7.0 million in 2026.

These indicate that the financial outlook for the water system over the 6-year period 2021 to 2026 is excellent.

The following are the main conclusions regarding the wastewater system:

- 2. The financial statements for the wastewater system are prepared based on the results of the rate study analyses and projections, indicate the following:
  - The accumulated surplus is projected to increase from approximately \$26.3 million in 2021 to approximately \$38.9 million by 2026.
  - The operating surplus ratio is projected to decrease from approximately 59% in 2021 to 53% in 2026
  - The cash position is projected to increase from \$6.0 million in 2022 to \$6.5 million in 2026.

These indicate that the financial outlook for the wastewater system over the 6-year period 2021 to 2026 is excellent.

The following are the main recommendations resulting from the O. Reg 453.07 water system and wastewater financial plans:

- 3. That the O.Reg. 453/07 Water System Financial Plan No. 113-301A including the Financial Statements contained herein be approved by Council and submitted to the Province of Ontario in accordance with the Drinking Water System License renewal requirements and O. Reg. 453/07.
- 4. That the Wastewater System Financial Plan including the Financial Statements contained herein be received by Council.
- 5. That a copy of the Water Financial Plan No. 113-301A and the Wastewater Financial Plan be posted on the Township's website and made available to the public at no charge.

# **Appendix A**

Requirements of O. Reg. 453/07

	Req	uirements		How Requirements are Met
1.	The financial plans mus is passed by,	t be approved by a resolution that		
		ne municipality, if the owner of er system is a municipality.	•	It is expected the Council will approve the Updated Financial Plan 6 months prior to the expiry of the drinking water licence – May 19, 2021)
		ody of the owner, if the owner of er system has a governing body nicipality.	•	N/A
2.	The financial plans mu years.	st apply to a period of at least six	•	Applies for 6 years from 2021 to 2026 inclusive.
3.		the financial plans must apply mined in accordance with the		
	the first year to apply must be the	lans are required by subsection 2, o which the financial plans must be year in which the drinking water g municipal drinking water licence be expire.	•	The licence expires in 2021 for the water systems (No. 113-301A). Therefore, the first year of the Updated Financial Plan is 2021
	that was includ licence under s which the finan	plans are required by a condition ed in a municipal drinking water ubsection 1 (3), the first year to cial plans must apply must be the d the year in which the first licence was issued.	•	N/A
4.		(2), for each year to which the e financial plans must include the		
		oposed or projected financial Irinking water system itemized	•	See Statement of Financial Position for all water systems combined in Financial Plan.
	a. Total fi	nancial assets	•	See Statement of Financial Position for all water systems combined in Financial Plan.
	b. Total lia	abilities	•	See Statement of Financial Position for all water systems combined in Financial Plan.
	c. Net fin	ancial assets (debt)	•	See Statement of Financial Position for all water systems combined in Financial Plan.
	capital under o	ancial assets that are tangible assets, tangible capital assets construction, inventories of s and prepaid expenses.	•	See Statement of Financial Position for all water systems combined in Financial Plan. TCA Projections in Financial Plan.

		e. Changes in tangible capital assets that are additions, donations, write downs and disposals.	See Statement of Financial Position for all water systems combined in Financial Plan. TCA Projections in Financial Plan.
	ii.	Details of the proposed or projected financial operations of the drinking water system itemized by,	See Statement of Operations for all water systems combined in Financial Plan.
		<ul> <li>a. Total revenues, further itemized by water rates, user charges and other revenues.</li> </ul>	See Statement of Operations for all water systems combined in Financial Plan.
		<ul> <li>Total expenses, further itemized by amortization expenses, interest expenses and other expenses</li> </ul>	See Statement of Operations for all water systems combined in Financial Plan.
		c. Annual surplus or deficit, and	See Statement of Operations for all water systems combined in Financial Plan.
		d. Accumulated surplus or deficit	<ul> <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,	See Statement of Cash Flow for all water systems combined in Financial Plan.
		<ul> <li>a. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges,</li> <li>done in full cost report</li> </ul>	See Statement of Cash Flow for all water systems combined in Financial Plan.
		b. Capital transactions that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets,	See Statement of Cash Flow for all water systems combined in Financial Plan.
		c. Investing transactions that are acquisitions and disposal of investments,	See Statement of Cash Flow for all water systems combined in Financial Plan.
		d. Financing transactions that are proceeds from the issuance of debt and debt repayment.	See Statement of Cash Flow for all water systems combined in Financial Plan.
		e. Changes in cash and cash equivalents during the year,	See Statement of Cash Flow for all water systems combined in Financial Plan.
		<ul> <li>f. Cash and cash equivalents at the beginning and end of the year.</li> </ul>	<ul> <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.	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.
5.	The o	wner 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,	This will be done by the municipality following Council approval.

## 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,	ı	The Financial Plan will be posted on the municipality's website and made available for public review at no charge.
	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.	•	A notice will be issued following Council approval.
6.	of the	wner of the drinking water system must give a copy financial plans to the Ministry of Municipal Affairs lousing. O. Reg. 453/07, s. 3 (1).	•	Will be submitted following Council approval.
		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.	•	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.
	1.	Sub-subparagraphs 4 i A, B and C of subsection (1).	•	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.
	2.	Sub-subparagraphs 4 iii A, C, E and F of subsection (1). O. Reg. 453/07, s. 3 (2).	•	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.