



Water Ontario Regulation 453/07 Financial Plan

City of Cornwall

Financial Plan # 176-101

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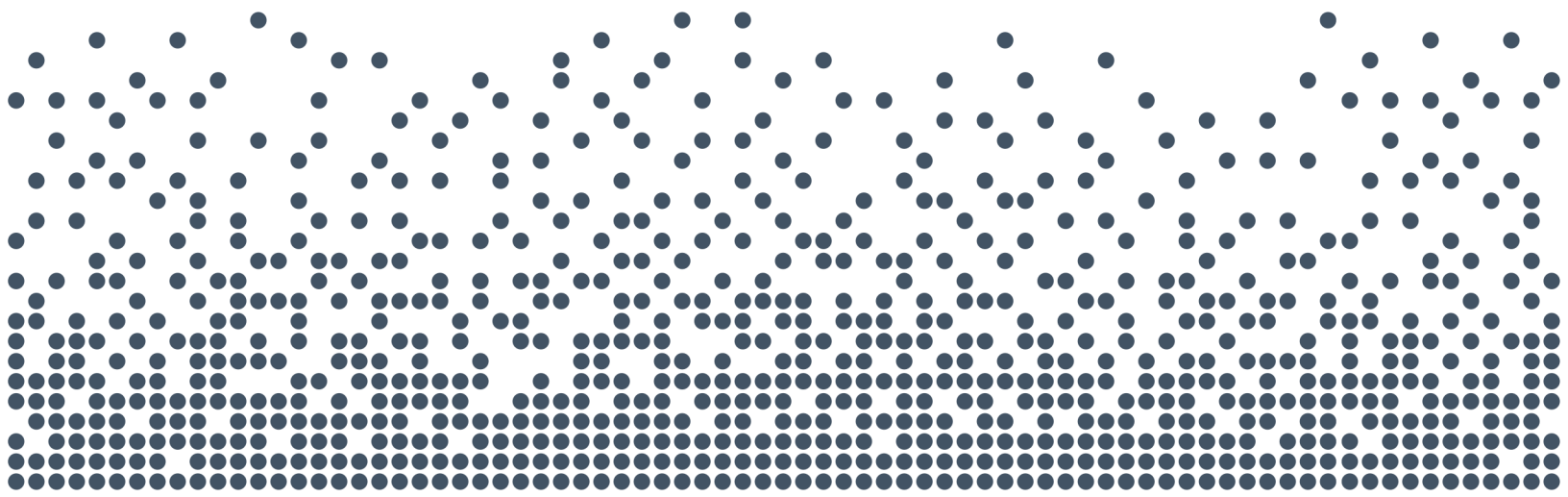
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Report



Chapter 1

Introduction



1. Introduction

1.1 Study Purpose

The City of Cornwall (City) retained Watson & Associates Economists Ltd. (Watson) to prepare a water financial plan as part of the five submission requirements for the purposes of obtaining a municipal drinking water license as per the *Safe Drinking Water Act, 2002*. In general, a financial plan requires an in-depth analysis of capital and operating needs, a review of current and future demand versus supply, and consideration of available funding sources. The detailed financial planning and forecasting regarding the City's water system has been completed based the draft findings of the City's Water Rate Study, that is currently ongoing. The Water Rate Study draft findings have been prepared on the basis of the City's current water rate structure that imposes residential water rates based on the number of water using fixtures in each home and non-residential rates based on either the number of water using fixtures or metered water consumption. The City is also currently undertaking a Water Conservation and Servicing Master Plan to assess the impacts of implementing water demand initiatives such as the implementation of City-wide water meters and rate structure alternatives to promote water conservation. Depending on the findings of the Water Conservation and Servicing Master Plan, this water financial plan may be subsequently amended.

The objective of the report provided herein is to convert the findings of the Water Rate Study draft findings into the prescribed reporting requirements for a financial plan as defined by Ontario Regulation 453/07 (O. Reg. 453/07).

1.2 Background

The Safe Drinking Water Act (S.D.W.A.), "the Act," was passed in December 2002 in order to address the recommendations made by the Walkerton Inquiry Part II report. Note that S.D.W.A. has been amended several times since 2002. One of the main requirements of the Act is the mandatory licensing of municipal water providers. Section 31 (1) specifically states:

"No person shall,



- a) establish a new municipal drinking water system or replace or carry out an alteration to a municipal drinking water system except under the authority of and in accordance with an approval under this Part or a drinking water works permit; or
- b) use or operate a municipal drinking water system that was established before or after this section comes into force except under the authority of and in accordance with an approval under this Part or municipal drinking water licence.”

In order to become licensed, a municipality must satisfy five key requirements as per section 44(1):

1. Obtain a drinking water works permit.
2. Acceptance of the operational plan for the system based on the Drinking Water Quality Management Standard.
3. Accreditation of the Operating Authority.
4. Prepare and provide a financial plan.
5. Obtain permit to take water.

For licence renewals, the application must be accompanied by proof that the financial plan meets the prescribed requirements as per the Act s. 32 (5) 2.ii.

The preparation of a financial plan is a key requirement for licensing and as such, must be undertaken by all municipal water providers.

1.2.1 Financial Plan Defined

Subsection 30 of the Act provides the following definition of financial plans:

“financial plans” means financial plans that satisfy the requirements prescribed by the Minister. 2017, c. 2, Sched. 11, s. 6 (3).

As of time of writing, the Sustainable Water and Sewage Systems Act, 2002 has been repealed (see section 2.2 of this report); however, the standards that it directs underpin the specific requirements of s. 30 as they are outlined in O. Reg. 453/07 and which will be examined in detail below.



1.2.2 Financial Plan Requirements – Existing System

The O. Reg. 453/07 provides details with regards to the financial plans for existing water systems. The requirements for existing systems are summarized as follows:

- Financial plans must be approved by resolution of Council (or governing body);
- Financial plans must include a statement that the financial impacts have been considered and apply for a minimum six-year period (commencing in the year of licence expiry);
- Financial plans must include detail regarding proposed or projected financial operations itemized by total revenues, total expenses, annual surplus/deficit and accumulated surplus/deficit (i.e. the components of a “Statement of Operations” as per the PSAB) for each year in which the financial plans apply;
- Financial plans must present financial position itemized by total financial assets, total liabilities, net debt, non-financial assets, and tangible capital assets (i.e. the components of a “Statement of Financial Position” as per PSAB) for each year in which the financial plans apply;
- Gross cash receipts/payments itemized by operating transactions, capital transactions, investing transactions and financial transactions (i.e. the components of a “Statement of Cash Flow” as per PSAB) for each year in which the financial plans apply;
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system;
- Financial plans are to be made available to the public upon request and at no charge;
- If a website is maintained, financial plans are to be made available to the public through publication on the Internet at no charge;
- Notice of the availability of the financial plans is to be given to the public;
- Financial plan is to be submitted to the Ministry of Municipal Affairs and Housing; and
- The resolution of Council approving the Financial Plan be submitted to the Ministry of the Environment, Conservation and Parks (MECP).



1.2.3 Financial Plan Requirements – General

Given that the requirements for a financial plan is legislated under the Act, a financial plan is mandatory for water systems. The financial plans shall be for a forecast period of at least six years but longer planning horizons are encouraged. The ten-year forecast goes above and beyond the minimum requirement. The financial plan is to be completed and approved by resolution of Council or the governing body in accordance with subsection 3(1)1 of O. Reg. 453/07. Confirmation of approval of the financial plan must be submitted at the time of municipal drinking water license renewal (i.e. six months prior to license expiry).

A copy of the financial plan will be submitted to the Ministry of Municipal Affairs and Housing (MMAH) and not the MECP; however, MECP may request it in the course of review of the licence renewal. Financial plans may be amended and additional information beyond what is prescribed can be included if deemed necessary. The financial plan must contain on the front page, the appropriate financial plan number as set out in Schedule A of the Municipal Drinking Water Licence.

1.2.4 Public Sector Accounting Board (PSAB) Requirements

The components of the financial plans indicated by the regulation are consistent with the requirements for financial statement presentation as set out in section PS1200 of the Canadian Institute of Chartered Accountants Public Sector Accounting Handbook:

“Financial statements should include a Statement of Financial Position, a Statement of Operations, a Statement of Change in Net Debt, and a Statement of Cash Flow.”

The format required is to conform to the requirements of PS1200 and PS3150. The financial statements are to be reported on a full accrual accounting basis. The accrual accounting method recognizes revenues and expenses in the same period as the activities that give rise to them regardless of when they are actually paid for. Since an exchange of cash is not necessary to report a financial transaction, the accrual method is meant to provide a more accurate picture of financial position.

The accounting treatment of tangible capital assets is prescribed under section PS3150. Tangible capital assets are to be capitalized to ensure an inventory of the assets owned are recorded and to account for their ability to provide future benefits.



The Statement of Cash Flow and the Statement of Change in Net Financial Assets/Debt are required statements. The Statement of Change in Net Financial Assets/Debt reports on whether enough revenue was generated in a period to cover the expenses in the period and whether sufficient resources have been generated to support current and future activities. The Statement of Cash Flow reports on how activities were financed for a given period providing a measure of the changes in cash for that period.

1.2.5 The City's Financial Plan

The City is currently in the process of renewing the drinking water license (license number 176-101) and the previous version of the financial plan no longer meets the requirements as it must apply to a period of a least six years beginning in the year that the licenses would otherwise expire. Although the Act requires at least six years to be included, this financial plan provides for a ten-year forecast period 2021 to 2030. The City's application renewal deadline was October 13, 2020, however, the City has received permission from MECP to submit their financial plan portion of their application by December 31, 2020.



Chapter 2

Sustainable Financial Planning



2. Sustainable Financial Planning

2.1 Introduction

In general, sustainability refers to the ability to maintain a certain position over time. While the Act requires a declaration of the financial plan's sustainability, it does not give a clear definition of what would be considered sustainable. Instead, MECP released a guideline ("Towards Financially Sustainable Drinking-Water and Wastewater Systems") that provides possible approaches to achieving sustainability. The Province's Principles of Financially Sustainable Water and Wastewater Services are provided below:

- Principle #1: Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system(s) to which they relate.
- Principle #2: An integrated approach to planning among water, wastewater, and storm water systems is desirable given the inherent relationship among these services.
- Principle #3: Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services.
- Principle #4: Life-cycle planning with mid-course corrections is preferable to planning over the short-term, or not planning at all.
- Principle #5: An asset management plan is a key input to the development of a financial plan.
- Principle #6: A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs.
- Principle #7: Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.
- Principle #8: Financial plans are "living" documents that require continuous improvement. Comparing the accuracy of financial projections with actual results can lead to improved planning in the future.



Principle #9: Financial plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff, and municipal Council.

2.2 Sustainable Water and Sewage Systems Act

The *Sustainable Water and Sewage Systems Act* (S.W.S.S.A.) was passed on December 13, 2002. The intent of the Act was to introduce the requirement for municipalities to undertake an assessment of the “full cost” of providing their water and the wastewater services. In total, there were 40 areas within the Act to which the Minister could have made Regulations. It is noted that, the regulations, which accompany the Act, were not issued and the Act was repealed on December 31, 2012.

2.3 Water Opportunities Act, 2010

Since the passage of the *Safe Drinking Water Act*, changes and refinements to the legislation have been introduced, including the *Water Opportunities Act* (W.O.A). W.O.A. was introduced into legislation on May 18, 2010 and received Royal Assent on November 29, 2010, as the *Water Opportunities Act*.

The purposes of the *Water Opportunities Act* are to: foster innovative water, wastewater and storm water technologies, services and practices; create opportunities for economic development and clean-technology jobs; and conserve and sustain water resources. To achieve this the W.O.A. provides for the creation of performance targets (financial, operational and maintenance related), which will vary by service type and location and the required submission of conservation and sustainability plans for water, wastewater and stormwater.

The sustainability plan in W.O.A. expands on interim legislation for financial plans included in O. Reg. 453/07, to include the following:

- an asset management plan for the physical infrastructure;
- financial plan;
- water conservation plan (for water service only);
- a risk assessment;
- a strategy for maintaining and improving the services; and



- additional information considered advisable.

Where a Board has jurisdiction over a service, the plan (and any plan amendments) must be approved by the municipality in which the municipal service is provided, before submission to the Minister. The Minister may also direct preparation of joint or partially joint plans.

Regulations (still forthcoming) will prescribe details in regard to any time periods or time limits, contents of the plans, identifying which portions of the plan will require certification, the public consultation process (if required), limitations updates and refinements.

2.4 Infrastructure for Jobs and Prosperity Act (I.J.P.A.), 2015

On June 4, 2015, the Province passed the Infrastructure for Jobs and Prosperity Act (I.J.P.A.) which, over time, will require municipalities to undertake and implement asset management plans for all infrastructure they own. On December 27, 2017, the Province of Ontario released Ontario Regulation 588/17 under I.J.P.A. which has 3 phases that municipalities must meet.

Every municipality in Ontario will have to prepare a strategic asset management policy by July 1, 2019. Municipalities will be required to review their strategic asset management policies at least every five years and make updates as necessary. The subsequent phases are as follows:

- Phase 1 – Asset Management Plan (by July 1, 2021):
 - For core assets – Municipalities must have the following:
 - Inventory of assets;
 - Current levels of service measured by standard metrics; and
 - Costs to maintain levels of service.
- Phase 2 – Asset Management Plan (by July 1, 2023):
 - Same steps as Phase 1 but for all assets.
- Phase 3 – Asset Management Plan (by July 1, 2024):
 - Builds on Phase 1 and 2 by adding:
 - Proposed levels of service; and
 - Lifecycle management and Financial strategy.



In relation to water (which is considered a core asset), municipalities will need to have an asset management plan that addresses the related infrastructure by July 1, 2021 (Phase 1). O. Reg. 588/17 specifies that the municipality's asset management plan must include the following for each asset category:

- the current levels of service being provided;
 - determined in accordance with the following qualitative descriptions and technical metrics and based on data from at most the two calendar years prior to the year in which all information required under this section is included in the asset management plan.
- the current performance of each asset category;
- a summary of the assets in the category;
- the replacement cost of the assets in the category;
- the average age of the assets in the category, determined by assessing the average age of the components of the assets;
- the information available on the condition of the assets in the category;
- a description of the municipality's approach to assessing the condition of the assets in the category, based on recognized and generally accepted good engineering practices where appropriate; and
- the lifecycle activities that would need to be undertaken to maintain the current levels of service.

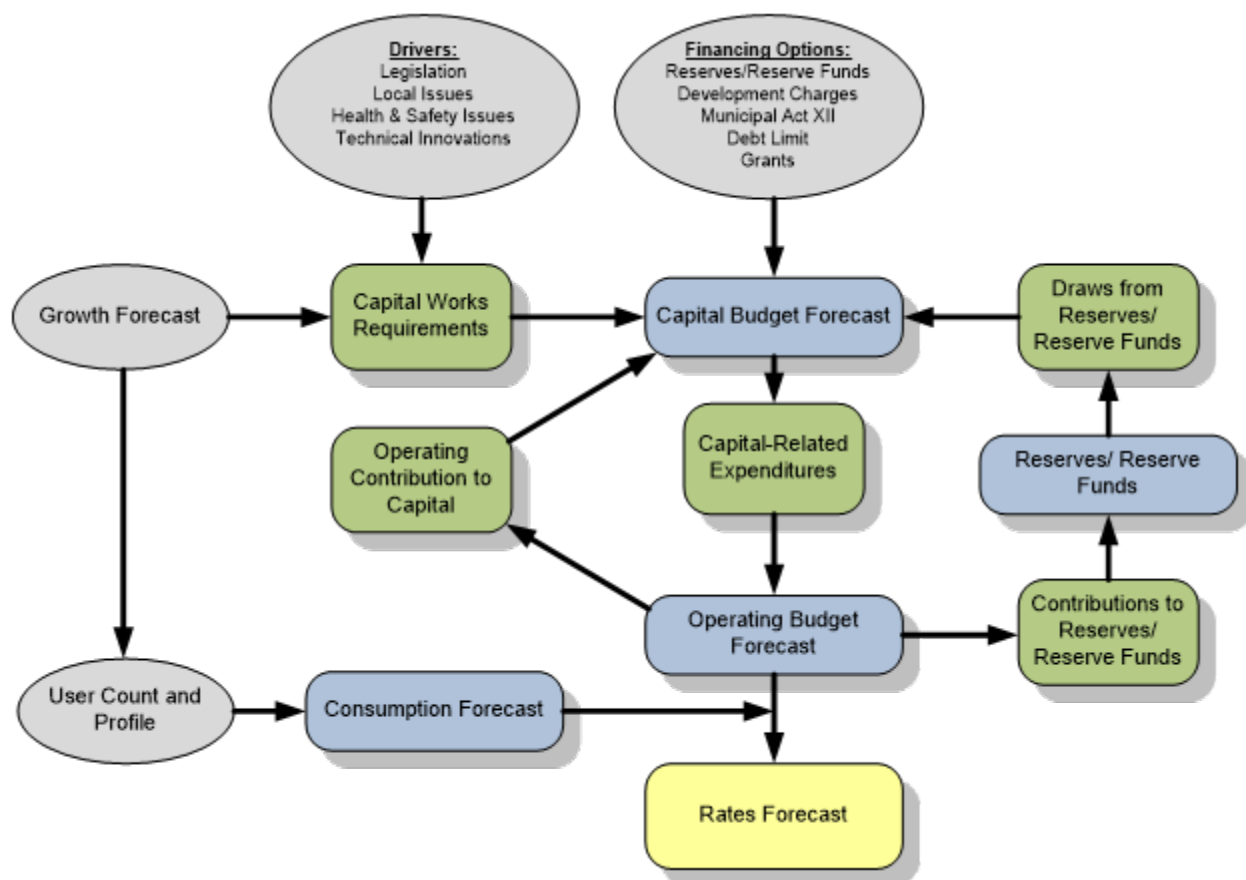
Upon completion of the asset management plan for water, the City will need to consider the impacts during the annual budget and forecast process.

2.5 Water Forecast

As noted earlier, City is currently undertaking a Water Rate Study and Water Conservation and Servicing Master Plan including preparing draft findings within the context of the current rate structure. The ongoing Rate Study process is designed to address “full cost” principles and reflects the guiding principles toward sustainable financial planning. Figure 2-1 below summarizes the process.



Figure 2-1
Water and Wastewater Rate Calculation Methodology



As a result of employing this process, a Rate Study provides the basis for a sound financial plan for the City's water system by assessing:

- A detailed assessment of current and future capital needs including an analysis of potential funding sources;
- An analysis of operating costs in order to determine how they will be impacted by evolving infrastructure needs;
- A review and recommendation on rates that ensure revenues are equitable and sufficient to meet system needs; and
- A public process that involves consultation with the main stakeholders including the City's staff, Council, the general public (specifically the users of the system) and others with the aim of gaining input and collaboration on the sustainability of the water systems.



The details from the draft findings of the Rate Study that have been used in this plan are outlined in detail in Appendix A.



Chapter 3

Approach



3. Approach

3.1 Overview

The draft Rate Study has been used as a starting point to prepare the water financial plan. The draft Rate Study is prepared on a modified cash basis; therefore, a conversion is required in order to present a full accrual financial plan for the purposes of this report. The conversion process used will help to establish the structure of the financial plan along with the opening balances that will underpin the forecast. This chapter outlines the conversion process utilized and summarizes the adjustments made to prepare the water financial plan.

3.2 Conversion Process

The conversion from the existing modified cash basis found in the draft Rate Study to the full accrual reporting format required under O. Reg. 453/07 can be summarized in the following steps:

1. Calculate Tangible Capital Asset Balances
2. Convert Statement of Operations
3. Convert Statement of Financial Position
4. Convert Statement of Cash Flow and Net Assets/Debt
5. Verification and Note Preparation

3.2.1 Calculate Tangible Capital Asset Balances

In calculating tangible capital asset balances, existing and future purchased, developed, and/or contributed assets will need to be considered. For existing water assets, an inventory has already been compiled and summarized by the City for the purposes of their annual PSAB 3150 compliance process. As required, for PSAB 3150 reporting purposes, the asset inventory listing included historical cost (which is the original cost to purchase, develop, or construct each asset) along with an estimated useful life for each asset and any anticipated salvage value is recorded. The following calculations are made to determine net book value:



- Accumulated amortization up to the year prior to the first forecast year.
- Amortization expense on existing assets for each year of the forecast period.
- Acquisition of new assets for each year of the forecast period.
- Disposals and related gains or losses for each year of forecast period.

Future water capital needs have also been determined and summarized within the draft Rate Study. These estimates, however, only represent future assets that the City anticipates purchasing or constructing without consideration for future assets that are contributed by developers and other parties (at no or partial cost to the City). These contributed assets will form part of the infrastructure going forward in terms of the sustainability of the system and despite their non-monetary nature; future financial plans may need to be adjusted in order to properly account for these transactions. Once the sequence and total asset acquisition has been determined for the forecast period, annual amortization of these assets for each year is calculated in a similar manner as that used for existing assets.

Once the historical cost, accumulated amortization, and amortization expenses are calculated as described above, the total net book value of the tangible capital assets can be determined and recorded on the Statement of Financial Position.

3.2.2 Convert Statement of Operations

A wide range of adjustments will be considered, dependent on the size and complexity of the systems, in order to convert from the cash to full accrual basis (see Figure 3-1). For example, debt repayment costs relating to the principal payment portion only needs to be removed under the accrual basis, as they no longer qualify as an expense for reporting purposes. Principal payments are reported as a decrease in debt liability on the Statement of Financial Position. Transfers to and from reserves are removed as these transactions are represented by changes in cash and accumulated surplus. Finally, expenses relating to tangible capital assets, such as amortization, write-offs, and (gain)/loss on disposal of assets are reported on the Statement of Operations in order to capture the allocation of the cost of these assets to operating activities over their useful lives and therefore are added in under the accrual basis.



Table 3-1
Conversion Adjustments
Statement of Operations

Modified Cash Basis	Budget 2021	Adjustments		Full Accrual Budget 2021	Accrual Basis
		DR	CR		
Revenues					Revenues
Base Charge Revenue	1,214,288			1,214,288	Base Charge Revenue
Rate Based Revenue	7,599,824			7,599,824	Rate Based Revenue
Transfers from Reserves	38,699	38,699			
			38,699	38,699	Earned Development Charges and Gas Tax Revenue
			-	-	Developer Contributions
Other Revenue	269,586		28,501	298,087	Other Revenue
Total Revenues	9,122,397			9,150,898	Total Revenues
Expenditures					Expenses
Operating	5,160,500	-		5,160,500	Operating Expenses
Capital					
Transfers to Reserves	3,866,910		3,866,910		
Transfers to Capital	-		-		
Debt Repayment (Principal & Interest)	94,987		47,737	47,250	Interest on Debt
		1,288,600		1,288,600	Amortization
		-		-	Loss on Disposal of Tangible Capital Assets
Total Expenditures	9,122,397			6,496,350	Total Expenses
Net Expenditures	0			2,654,548	Annual Surplus/(Deficit)
Increase (decrease) in amounts to be recovered	-			53,660,854	Accumulated Surplus/(Deficit), beginning of year
Change in Fund Balances	-	2,654,548	-	56,315,402	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		3,981,847	3,981,847		



3.2.3 Convert Statement of Financial Position

Once the Statement of Operations has been converted and the net book value of tangible capital assets has been recorded, balances for the remaining items on the Statement of Financial Position are determined and recorded (see Figure 3-2). The opening/actual balances for the remaining accounts such as accounts receivable, inventory, accounts payable, outstanding debt (principal only), are recorded and classified according to the structure of the Statement of Financial Position as outlined in PS1200.

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

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

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

The Statement of Change in Net Financial Assets/Debt is a statement which reconciles the difference between the surplus or deficit from current operations and the change in net financial assets/debt for the year. This is significant, as net debt provides an indication of future revenue requirements. In order to complete the Statement of Net Financial Assets/Debt, information regarding any gains/losses on disposals of assets, asset write-downs, acquisition/use of supplies inventory, and the acquisition use of prepaid expenses is necessary, (if applicable). Although the Statement of Change in Net Financial Assets/Debt is not required under O. Reg. 453/07, it has been included in this report as a further indicator of financial viability.



Table 3-2
Conversion Adjustments
Statement of Financial Position

Modified Cash Basis	Budget 2021	Adjustments		Full Accrual Budget 2021	Accrual Basis
		DR	CR		
ASSETS					ASSETS
Financial Assets					Financial Assets
Cash	1,691,363			1,691,362	Cash
Accounts Receivable	415,649			415,649	Accounts Receivable
				-	Investments
				-	Inventory for resale
Total Financial Assets	2,117,969			2,117,968	Total Financial Assets
Non-Financial Assets					
Inventory of Supplies	-		-		
Prepaid Expenses	-		-		
Total Non-Financial Assets	-				
LIABILITIES					Liabilities
Accounts Payable & Accrued Liabilities	664,424			664,424	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	1,817,263			1,817,263	Debt (Principal only)
Deferred Revenue	-			-	Deferred Revenue
Other	-			-	Other
Total Liabilities	2,481,687			2,481,687	Total Liabilities
Net Assets/(Debt)	(363,718)			(363,719)	Net Financial Assets/(Debt)
		56,679,120	-	56,679,120	Non-Financial Assets
		-		-	Tangible Capital Assets
		-		-	Inventory of Supplies
					Prepaid Expenses
				56,679,120	Total Non-Financial Assets
Municipal Position					
Water Reserves	1,453,545	1,453,545	-		
Gas Tax Reserve Fund	-	-	-		
Development Charge Reserve Fund	(10,957)	-	10,957		
Amounts to be Recovered	(1,806,306)	-	1,806,306		
Total Municipal Position	(363,718)		56,315,402	56,315,402	Accumulated Surplus/(Deficit), end of year
TOTAL ADJUSTMENTS		58,132,665	58,132,665		



3.2.5 Verification and Note Preparation

The final step in the conversion process is to ensure that all the statements created by the previous steps are in balance. The Statement of Financial Position summarizes the resources and obligations of the City at a set point in time. The Statement of Operations summarizes how these resources and obligations changed over the reporting period. To this end, the accumulated surplus/deficit reported on the Statement of Financial Position should equal the accumulated surplus/deficit reported on the Statement of Operations.

The Statement of Change in Net Financial Assets/Debt and the Statement of Financial Position are also linked in terms of reporting on net financial assets/debt. On the Statement of Financial Position, net financial assets/debt is equal to the difference between financial assets and liabilities and should equal net financial assets/debt as calculated on the Statement of Net Financial Assets/Debt.

While not part of the financial plan, the accompanying notes are important to summarize the assumptions and estimates made in preparing the financial plan. Some of the significant assumptions that need to be addressed within the financial plan are as follows:

- a) Opening cash balances – Opening cash balances are necessary to complete the Statement of Cash Flows and balance the Statement of Financial Position. Preferably, opening cash balances should be derived from actual information contained within the City's ledgers. It may not be possible, however, to extract this information from the ledgers for water alone; therefore, a reasonable proxy will be needed. One approach is to assume that opening cash balances equal ending reserve and reserve fund balances from the previous year adjusted for accrual-based transactions reflected by accounts receivable/payable balances. The following equation outlines this approach:

$$\begin{aligned} &\text{Ending Reserve/Reserve Fund Balance} \\ &\text{Plus: Ending Accounts Payable Balance} \\ &\text{Less: } \underline{\text{Ending Accounts Receivable Balance}} \\ &\text{Equals: Approximate Ending Cash Balance} \end{aligned}$$

- b) Amortization Expense – The method and timing of amortization should be based on the City's amortization policy.



- c) Accumulated Amortization – Will be based on the culmination of accumulated amortization expenses throughout the life of each asset however derived, along with information on construction/acquisition date and useful life obtained from the City
- d) Contributed Assets – As noted earlier, contributed assets could represent a significant part of the City's infrastructure acquisitions. As such, a reasonable estimate of value and timing of acquisition/donation may be required in order to adequately capture these assets. In the case where contributed assets are deemed to be insignificant or unknown, an assumption of “no contributed assets within the forecast period” will be made.
- e) Accumulated Surplus – The magnitude of the surplus in this area may precipitate the need for additional explanation especially in the first year of reporting. This Accumulated Surplus captures the historical infrastructure investment which has not been reported in the past but has accumulated to significant levels. It also includes all water reserve and reserve fund balances.
- f) Other Revenues – Will represent the recognition of revenues previously deferred (i.e. development charge revenues) and/or accrued revenues (developer contributions), and/or other minor miscellaneous revenues.



Chapter 4

Financial Plan



4. Financial Plan

4.1 Introduction

The following tables provide the complete financial plan for the City's water system. A brief description and analysis of each table is provided below. It is important to note that the financial plan that follows is a forward look at the financial position of the City's water system. It is not an audited document¹ and it contains various estimates as detailed in the "Notes to the Financial Plan" section below.

4.2 Water Financial Plan

4.2.1 *Statement of Financial Position (Table 4-1)*

The Statement of Financial Position provides information that describes the assets, liabilities, and accumulated surplus of the City's water system. The first important indicator is net financial assets/(debt), which is defined as the difference between financial assets and liabilities. This indicator provides an indication of the system's "future revenue requirement." A net financial asset position is where financial assets are greater than liabilities and implies that the system has the resources to finance future operations. Conversely, a net debt position implies that the future revenues generated by the system will be needed to finance past transactions, as well as future operations. Table 4-1 indicates that in 2021, the City's water system was in a net debt position of \$364,000. The financial plan forecasts a net debt position for each year of the forecast period, decreasing to a net debt position of \$18.3 million by 2030.

Another important indicator on the Statement of Financial Position is the tangible capital asset balance under section PS3150. As noted earlier, providing this information is a requirement for municipalities as part of PS3150 compliance and is significant from a financial planning perspective for the following reasons:

- Tangible capital assets such as watermain and treatment facilities are imperative to water service delivery.

¹ O. Reg. 453/07 does not require an audited financial plan.



- These assets represent significant economic resources in terms of their historical and replacement costs. Therefore, ongoing capital asset management is essential to managing significant replacements and repairs.
- The annual maintenance required by these assets has an enduring impact on water operational budgets.

In general terms, an increase in the tangible capital asset balance indicates that assets may have been acquired either through purchase by the municipality or donation/contribution by a third party. A decrease in the tangible capital asset balance can indicate a disposal, write down, or use of assets. A use of assets is usually represented by an increase in accumulated amortization due to annual amortization expenses arising as a result of allocating the cost of the asset to operations over the asset's useful life. Table 4-1 shows tangible capital assets net book value is expected to increase by \$57.6 million to approximately \$107.9 million over the 10-year forecast period. This indicates that the City is anticipating acquiring more assets than the anticipated use of existing assets over the forecast period

4.2.2 Statement of Operations (Table 4-2)

The Statement of Operations summarizes the revenues and expenses generated by the water system for a given period. The annual surplus/deficit measures whether the revenues generated were sufficient to cover the expenses incurred and in turn, whether net financial assets have been maintained or depleted. Table 4-2 illustrates the ratio of expenses to revenues decreasing from 71% to 64% over the forecast period. As a result, annual surplus/(deficit) increases from a surplus of \$2.7 million to a surplus of \$4.7 million over the forecast period. It is important to note that an annual surplus is beneficial to ensure funding is available to non-expense costs such as tangible capital asset acquisitions and reserve/reserve fund transfers.

Another important indicator on this statement is accumulated surplus/deficit. An accumulated surplus indicates that the available net resources are sufficient to provide future capital water services. An accumulated deficit indicates that resources are insufficient to provide future services and that borrowing or rate increases are required to finance annual deficits. From Table 4-2, the financial plan proposes to add approximately \$35.9 million over the forecast period to a 2021 accumulated surplus of \$53.7 million. The accumulated surplus, as indicated in Table 4-2, is predominantly related to of investments in tangible capital assets made by the City.



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

The Statement of Change in Net Financial Assets/Debt indicates whether revenue generated was sufficient to cover operating and non-financial asset costs (i.e. inventory supplies, prepaid expenses, tangible capital assets, etc.) and in so doing, explains the difference between the annual surplus/deficit and the change in net financial assets/debt for the period. Table 4-3 indicates that forecasted tangible capital asset acquisitions (net of amortization for the year) exceed the forecasted annual surplus for all years of the forecast period, resulting in a decrease in net financial assets.

Therefore, an overall decrease to net financial assets is anticipated over the forecast period. This is due to the planned use of debt to construct tangible capital assets in all years of the forecast. Based on the foregoing, the ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions improves from a value of 0.51 to 0.70 over the forecast period.¹

4.2.4 Statement of Cash Flow (Table 4-4)

The Statement of Cash Flow summarizes how water systems are expected to generate and use cash resources during the forecast period. The transactions that provide/use cash are classified as operating, capital, investing, and financing activities as shown in Table 4-4. This statement focuses on the cash aspect of these transactions and thus is the link between cash-based and accrual-based reporting. Table 4-4 indicates that cash from operations will be used to fund capital transactions (i.e. tangible capital asset acquisitions) over the forecast period. The financial plan projects the cash position of the City's water systems to worsen from a balance of approximately \$1.7 million at the beginning of 2021, to a deficit of \$946,000 by the end of 2030. The deficit cash position is primarily made up of a deficit position within the City's DC Reserve Fund for Water services throughout the forecast period. Contributing to this trend is a large amount of growth-related debt servicing, which is not matched by sufficient DC revenue during the forecast period. For further discussions, on projected cash balances please refer to the Notes to the Financial Plan.

¹ A desirable ratio is 1:1 or better.



Table 4-1
Statement of Financial Position: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2030

	Notes	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Financial Assets											
Cash	1	1,691,362	193,670	111,009	12,536	-	-	-	-	-	-
Accounts Receivable	1	415,649	440,520	466,811	493,439	520,770	534,723	550,592	567,284	584,386	601,903
Long-term Accounts Receivable	2	10,957	43,521	113,435	199,107	285,114	371,337	493,348	660,383	874,610	1,138,281
Total Financial Assets		2,117,968	677,711	691,255	705,082	805,884	906,060	1,043,940	1,227,667	1,458,996	1,740,184
Liabilities											
Bank Indebtedness		-	-	-	-	86,703	172,484	295,700	464,465	680,536	946,158
Accounts Payable & Accrued Liabilities	1	664,424	677,711	691,256	705,084	719,182	733,577	748,242	763,203	778,460	794,026
Debt (Principal only)	2	1,817,263	6,790,777	12,806,069	13,359,888	13,802,743	14,313,675	14,888,116	15,555,506	16,326,422	18,250,765
Deferred Revenue	3	-	-	-	-	-	-	-	-	-	-
Total Liabilities		2,481,687	7,468,488	13,497,325	14,064,972	14,608,628	15,219,736	15,932,058	16,783,174	17,785,418	19,990,949
Net Financial Assets/(Debt)		(363,718)	(6,790,777)	(12,806,069)	(13,359,888)	(13,802,743)	(14,313,675)	(14,888,116)	(15,555,506)	(16,326,422)	(18,250,765)
Non-Financial Assets											
Tangible Capital Assets	4	56,679,120	65,540,837	74,383,208	77,681,863	81,257,482	85,815,418	90,685,201	95,806,234	101,186,013	107,843,752
Total Non-Financial Assets		56,679,120	65,540,837	74,383,208	77,681,863	81,257,482	85,815,418	90,685,201	95,806,234	101,186,013	107,843,752
Accumulated Surplus/(Deficit)	5	56,315,402	58,750,060	61,577,139	64,321,975	67,454,739	71,501,743	75,797,085	80,250,728	84,859,591	89,592,987
Financial Indicators	Total Change	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1) Increase/(Decrease) in Net Financial Assets	(21,669,899)	(3,782,852)	(6,427,059)	(6,015,292)	(553,819)	(442,855)	(510,932)	(574,441)	(667,390)	(770,916)	(1,924,343)
2) Increase/(Decrease) in Tangible Capital Assets	57,602,032	6,437,400	8,861,717	8,842,371	3,298,655	3,575,619	4,557,936	4,869,783	5,121,033	5,379,779	6,657,739
3) Increase/(Decrease) in Accumulated Surplus	35,932,133	2,654,548	2,434,658	2,827,079	2,744,836	3,132,764	4,047,004	4,295,342	4,453,643	4,608,863	4,733,396



Table 4-2
Statement of Operations: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2030

	Notes	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Water Revenue											
Rate Based Revenue		1,214,288	1,280,312	1,351,559	1,425,743	1,502,895	1,540,389	1,578,156	1,618,587	1,659,312	1,700,331
Fixture Charge Revenue		7,599,824	8,038,098	8,501,200	8,990,516	9,507,511	9,770,540	10,040,347	10,317,100	10,600,969	10,892,130
Earned Development Charges Revenue	3	38,699	74,935	112,226	127,635	127,635	127,635	162,534	205,806	250,345	296,220
Other Revenue	6	298,087	274,900	280,300	285,799	291,500	297,200	303,001	308,901	315,101	321,501
Total Revenues		9,150,898	9,668,245	10,245,285	10,829,693	11,429,541	11,735,764	12,084,038	12,450,394	12,825,727	13,210,182
Water Expenses											
Operating Expenses	Sch. 4-1	5,160,500	5,793,700	5,696,900	6,039,300	6,188,800	5,798,600	5,811,500	5,927,700	6,046,200	6,194,100
Interest on Debt	2	47,250	63,604	237,677	448,212	467,596	483,096	500,979	521,084	544,443	571,425
Amortization	4	1,288,600	1,376,283	1,483,629	1,597,345	1,640,381	1,407,064	1,476,217	1,547,967	1,626,221	1,711,261
Loss on Disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Total Expenses		6,496,350	7,233,587	7,418,206	8,084,857	8,296,777	7,688,760	7,788,696	7,996,751	8,216,864	8,476,786
Annual Surplus/(Deficit)		2,654,548	2,434,658	2,827,079	2,744,836	3,132,764	4,047,004	4,295,342	4,453,643	4,608,863	4,733,396
Accumulated Surplus/(Deficit), beginning of year	5	53,660,854	56,315,402	58,750,060	61,577,139	64,321,975	67,454,739	71,501,743	75,797,085	80,250,728	84,859,591
Accumulated Surplus/(Deficit), end of year		56,315,402	58,750,060	61,577,139	64,321,975	67,454,739	71,501,743	75,797,085	80,250,728	84,859,591	89,592,987
Note 5:											
Accumulated Surplus/(Deficit) Reconciliation:		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Reserve Balances											
Reserves: Development Charges		(10,957)	(43,521)	(113,435)	(199,107)	(285,114)	(371,337)	(493,348)	(660,383)	(874,610)	(1,138,281)
Reserves: Gas Tax		-	-	-	-	-	-	-	-	-	-
Reserves: Capital/Other		1,453,545	-	-	-	-	-	-	-	-	-
Total Reserves Balance		1,442,588	(43,521)	(113,435)	(199,107)	(285,114)	(371,337)	(493,348)	(660,383)	(874,610)	(1,138,281)
Less: Debt Obligations and Deferred Revenue		(1,817,263)	(6,790,777)	(12,806,069)	(13,359,888)	(13,802,743)	(14,313,675)	(14,888,116)	(15,555,506)	(16,326,422)	(18,250,765)
Add: Long-term Accounts Receivable		10,957	43,521	113,435	199,107	285,114	371,337	493,348	660,383	874,610	1,138,281
Add: Tangible Capital Assets	4	56,679,120	65,540,837	74,383,208	77,681,863	81,257,482	85,815,418	90,685,201	95,806,234	101,186,013	107,843,752
Total Ending Balance		56,315,402	58,750,060	61,577,139	64,321,975	67,454,739	71,501,743	75,797,085	80,250,728	84,859,591	89,592,987
Financial Indicators	Total Change	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1) Expense to Revenue Ratio		71%	75%	72%	75%	73%	66%	64%	64%	64%	64%
2) Increase/(Decrease) in Accumulated Surplus	35,932,133	2,654,548	2,434,658	2,827,079	2,744,836	3,132,764	4,047,004	4,295,342	4,453,643	4,608,863	4,733,396



Schedule 4-1
Statement of Operating Expenses: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2030

	Notes	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Operating Expenses											
Financial Overhead		672,100	685,500	699,200	713,200	727,500	742,100	756,900	772,000	787,400	803,100
Purchase of Goods		1,231,300	1,255,900	1,281,000	1,306,600	1,332,700	1,359,400	1,386,600	1,414,300	1,442,600	1,471,500
Salary and Benefits		2,432,700	2,481,400	2,531,000	2,581,600	2,633,200	2,685,900	2,739,600	2,794,400	2,850,300	2,907,300
Services and Rent		824,400	840,900	857,700	874,900	892,400	910,200	928,400	947,000	965,900	985,200
Non TCA - Expenses from Capital Budget	7	-	530,000	328,000	563,000	603,000	101,000	-	-	-	27,000
TOTAL OPERATING EXPENSES		5,160,500	5,793,700	5,696,900	6,039,300	6,188,800	5,798,600	5,811,500	5,927,700	6,046,200	6,194,100



Table 4-3
Statement of Changes in Net Financial Assets/Debt: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2030

	Notes	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Annual Surplus/(Deficit)		2,654,548	2,434,658	2,827,079	2,744,836	3,132,764	4,047,004	4,295,342	4,453,643	4,608,863	4,733,396
Less: Acquisition of Tangible Capital Assets	4	(7,726,000)	(10,238,000)	(10,326,000)	(4,896,000)	(5,216,000)	(5,965,000)	(6,346,000)	(6,669,000)	(7,006,000)	(8,369,000)
Add: Amortization of Tangible Capital Assets	4	1,288,600	1,376,283	1,483,629	1,597,345	1,640,381	1,407,064	1,476,217	1,547,967	1,626,221	1,711,261
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
		(6,437,400)	(8,861,717)	(8,842,371)	(3,298,655)	(3,575,619)	(4,557,936)	(4,869,783)	(5,121,033)	(5,379,779)	(6,657,739)
Less: Acquisition of Supplies Inventory		-	-	-	-	-	-	-	-	-	-
Less: Acquisition of Prepaid Expenses		-	-	-	-	-	-	-	-	-	-
Add: Consumption of Supplies Inventory		-	-	-	-	-	-	-	-	-	-
Add: Use of Prepaid Expenses		-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-
Increase/(Decrease) in Net Financial Assets/(Net Debt)		(3,782,852)	(6,427,059)	(6,015,292)	(553,819)	(442,855)	(510,932)	(574,441)	(667,390)	(770,916)	(1,924,343)
Net Financial Assets/(Net Debt), beginning of year		3,419,134	(363,718)	(6,790,777)	(12,806,069)	(13,359,888)	(13,802,743)	(14,313,675)	(14,888,116)	(15,555,506)	(16,326,422)
Net Financial Assets/(Net Debt), end of year		(363,718)	(6,790,777)	(12,806,069)	(13,359,888)	(13,802,743)	(14,313,675)	(14,888,116)	(15,555,506)	(16,326,422)	(18,250,765)

Financial Indicators	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1) Acquisition of Tangible Capital Assets (Cumulative)	7,726,000	17,964,000	28,290,000	33,186,000	38,402,000	44,367,000	50,713,000	57,382,000	64,388,000	72,757,000
2) Annual Surplus/Deficit before Amortization (Cumulative)	3,943,148	7,754,089	12,064,797	16,406,978	21,180,123	26,634,191	32,405,750	38,407,360	44,642,444	51,087,101
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)	0.51	0.43	0.43	0.49	0.55	0.60	0.64	0.67	0.69	0.70



Table 4-4
Statement of Cash Flow – Indirect Method: Water Services
UNAUDITED: For Financial Planning Purposes Only
2021-2030

	Notes	Forecast									
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Operating Transactions											
Annual Surplus/Deficit		2,654,548	2,434,658	2,827,079	2,744,836	3,132,764	4,047,004	4,295,342	4,453,643	4,608,863	4,733,396
Add: Amortization of TCA's	4	1,288,600	1,376,283	1,483,629	1,597,345	1,640,381	1,407,064	1,476,217	1,547,967	1,626,221	1,711,261
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Earned Deferred Revenue	3	(38,699)	(74,935)	(112,226)	(127,635)	(127,635)	(127,635)	(162,534)	(205,806)	(250,345)	(296,220)
Less: Developer Contributions		-	-	-	-	-	-	-	-	-	-
Add: Deferred Revenue Proceeds		42,983	42,370	42,311	41,963	41,629	41,412	40,523	38,772	36,118	32,549
Change in A/R (Increase)/Decrease		(415,649)	(24,870)	(26,291)	(26,628)	(27,331)	(13,953)	(15,869)	(16,692)	(17,102)	(17,517)
Change in A/P Increase/(Decrease)		664,424	13,287	13,545	13,828	14,098	14,395	14,665	14,961	15,257	15,566
Less: Interest Proceeds		(28,501)	-	-	-	-	-	-	-	-	-
Cash Provided by Operating Transactions		4,167,706	3,766,793	4,228,047	4,243,709	4,673,906	5,368,287	5,648,344	5,832,845	6,019,012	6,179,035
Capital Transactions											
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(7,726,000)	(10,238,000)	(10,326,000)	(4,896,000)	(5,216,000)	(5,965,000)	(6,346,000)	(6,669,000)	(7,006,000)	(8,369,000)
Cash Applied to Capital Transactions		(7,726,000)	(10,238,000)	(10,326,000)	(4,896,000)	(5,216,000)	(5,965,000)	(6,346,000)	(6,669,000)	(7,006,000)	(8,369,000)
Investing Transactions											
Proceeds from Investments		28,501	-	-	-	-	-	-	-	-	-
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	-	-	-	-
Cash Provided by (applied to) Investing Transactions		28,501	-	-	-	-	-	-	-	-	-
Financing Transactions											
Proceeds from Debt Issue	2	515,000	5,041,134	6,263,538	1,032,238	974,521	1,095,666	1,218,384	1,376,955	1,554,007	2,789,793
Less: Debt Repayment (Principal only)	2	(47,737)	(67,619)	(248,246)	(478,420)	(531,666)	(584,734)	(643,944)	(709,565)	(783,090)	(865,450)
Cash Applied to Financing Transactions		467,263	4,973,515	6,015,292	553,818	442,855	510,932	574,440	667,390	770,917	1,924,343
Increase in Cash and Cash Equivalents		(3,062,530)	(1,497,692)	(82,661)	(98,473)	(99,239)	(85,781)	(123,216)	(168,765)	(216,071)	(265,622)
Cash and Cash Equivalents, beginning of year	1	4,753,892	1,691,362	193,670	111,009	12,536	(86,703)	(172,484)	(295,700)	(464,465)	(680,536)
Cash and Cash Equivalents, end of year	1	1,691,362	193,670	111,009	12,536	(86,703)	(172,484)	(295,700)	(464,465)	(680,536)	(946,158)



Notes to Financial Plan

The financial plan format as outlined in Chapter 4 closely approximates the full accrual format used by municipalities on their audited financial statements. However, the financial plan is not an audited document and contains various estimates. In this regard, section 3 (2) of O. Reg. 453/07 states the following:

“Each of the following sub-subparagraphs applies only if the information referred to in the sub-subparagraph is known to the owner at the time the financial plans are prepared:

1. Sub-subparagraphs 4 i A, B and C of subsection (1)
2. Sub-subparagraphs 4 iii A, C, E and F of subsection (1).”

The information referred to in sub-subparagraphs 4 i A, B and C of subsection (1) includes:

- A. Total financial assets (i.e. cash and receivables);
- B. Total liabilities (i.e. payables, debt and deferred revenue);
- C. Net debt (i.e. the difference between A and B above).

The information referred to in sub-subparagraphs 4 iii A, C, E and F of subsection (1) includes:

- A. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges
- B. Investing transactions that are acquisitions and disposal of investments
- C. Change in cash and cash equivalents during the year
- D. Cash and cash equivalents at the beginning and end of the year

In order to show a balanced financial plan in a full accrual format for the City, some of the items listed above have been estimated given that the City does not maintain all financial asset and liability data separately for water. Usually, this type of data is combined with the financial assets and liabilities of other departments and services



given that there is not a current obligation to disclose this data separately (as there is with revenue and expenses).

The assumptions used have been documented below:

1. Cash, Receivables and Payables

It is assumed that the opening cash balances required to complete the financial plan are equal to:

Ending Reserve/Reserve Fund Balance
Plus: Ending Accounts Payable Balance
Less: Ending Accounts Receivable Balance
Equals: *Approximate Ending Cash Balance*

Receivable and payable balances were estimated for each year of the forecast based on the following factors:

- a) Receivables: Based on historical levels of water receivables as a percentage of annual water revenue earned (source: 2018-2019 City provided water accounts receivable balances); and
- b) Payables: Based on historical levels of City-wide payables as a percentage of annual City-wide expenses incurred (source: 2017-2018 Financial Information Returns).

2. Debt

Currently there is no outstanding water related debt. The City is anticipating the need to issue debt in 2020 as well as over the forecast period 2021-2030) to fund growth and non-growth-related expenditures. Principal repayments for the new debt over the forecast period are scheduled as follows:



Year	Principal Payments
2021	47,737
2022	67,619
2023	248,246
2024	478,420
2025	531,666
2026	584,734
2027	643,944
2028	709,565
2029	783,090
2030	865,450
Total	4,960,471

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

3. Deferred Revenue

Deferred revenue is typically made up of water development charge reserve fund and gas tax balances which are considered to be a liability for financial reporting purposes until the funds are used to emplace the works for which they have been collected. In years when the water development charge reserve fund balance is negative, it is shown as an asset (“long-term accounts receivable”) for financial reporting purposes, representing future amounts to be collected from developers. Note that the draft findings for the Rate Study anticipates that the water D.C. reserve fund will continue to stay in a deficit position throughout the forecast. Therefore, the deficit balances are being financed internally through the overall general water revenues. In future years, as D.C. revenue is received, there will be an adjustment to refund the overall water account to repay the internal financing.

4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water related assets in the following categories:
 - i. Infrastructure (hydrants, service, valves, watermain and relined watermain)
 - ii. Facilities (building equipment and building structures)



- Amortization is calculated based on using the straight-line approach with no amortization in the year of acquisition or construction.
- Given the planned asset replacement forecast in the Rate Study draft findings, useful life on acquisitions is assumed to be equal to the weighted average useful life for all assets on hand in each respective asset category.
- Write-offs are assumed to equal \$0 for each year in the forecast period.
- Tangible capital assets are shown on a net basis. It is assumed that disposals occur when the asset is being replaced, unless the asset is documented as a new asset. The value of each asset disposal is calculated by estimating the original purchase/construction date and deflating current replacement cost values to those estimated dates in order to calculate original historical cost.
- Gains/losses on disposal are assumed to be \$0 (it is assumed that historical cost is equal to accumulated amortization for all disposals).
- Residual value is assumed to be \$0 for all assets contained within the forecast period.
- The City is unaware of any specific lead service piping in the municipal water system.

The balance of tangible capital assets is summarized as follows:

Asset Historical Cost	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Opening Tangible Capital Asset Balance	83,668,477	91,132,895	101,024,920	110,977,058	115,624,832	120,565,378	126,214,158	132,220,288	138,542,587	145,183,922
Acquisitions	7,726,000	10,238,000	10,326,000	4,896,000	5,216,000	5,965,000	6,346,000	6,669,000	7,006,000	8,369,000
Disposals	261,582	345,975	373,862	248,226	275,454	316,220	339,870	346,701	364,665	203,354
Closing Tangible Capital Asset Balance	91,132,895	101,024,920	110,977,058	115,624,832	120,565,378	126,214,158	132,220,288	138,542,587	145,183,922	153,349,568
Opening Accumulated Amortization	33,426,757	34,453,775	35,484,083	36,593,850	37,942,969	39,307,896	40,398,740	41,535,087	42,736,353	43,997,909
Amortization Expense	1,288,600	1,376,283	1,483,629	1,597,345	1,640,381	1,407,064	1,476,217	1,547,967	1,626,221	1,711,261
Amortization on Disposal	261,582	345,975	373,862	248,226	275,454	316,220	339,870	346,701	364,665	203,354
Ending Accumulated Amortization	34,453,775	35,484,083	36,593,850	37,942,969	39,307,896	40,398,740	41,535,087	42,736,353	43,997,909	45,505,816
Net Book Value	56,679,120	65,540,837	74,383,208	77,681,863	81,257,482	85,815,418	90,685,201	95,806,234	101,186,013	107,843,752

5. Accumulated Surplus

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



Water	2021 Opening Accumulated Surplus
Reserve Balances	
Reserves: Development Charges	(15,242)
Reserves: Capital/Other	4,769,134
Total Reserves Balance	4,753,892
Less: Debt Obligations and Deferred Revenue	(1,350,000)
Less: Unfinanced Capital	-
Add: Long-term Accounts Receivable	15,242
Add: Tangible Capital Assets	50,241,720
Total Opening Balance	53,660,854

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

6. Other Revenue

Other revenues include general sales and rents, other user fees, water connections, recoveries, miscellaneous fees and charges, interest, and miscellaneous other revenues.

7. Operating Expenses

Capital expenditures for items not meeting the definition of tangible capital assets have been reclassified as operating expenses and have been expensed in the year in which they occur.



Chapter 5

Process for Financial Plan Approval and Submission to the Province



5. Process for Financial Plan Approval and Submission to the Province

As mentioned in section 1.2, preparation of and approval of a financial plan for water assets that meets the requirements of the Act is mandatory for municipal water providers. Proof of the plan preparation and approval is a key submission requirement for municipal drinking water licensing and, upon completion, must be submitted to the MECP. The process established for plan approval, public circulation and filing is set out in O. Reg. 453/07 and can be summarized as follows:

1. The financial plan must be approved by resolution of Council of the municipality who owns the drinking water system or the governing body of the owner. (O. Reg. 453/07, section 3 (1) 1.)
2. The owner of the drinking water system must provide notice advertising the availability of the financial plan. The plans will be made available to the public upon request and without charge. The plans must also be made available to the public on the municipality's website. (O. Reg. 453/07, section 3 (1) 5.)
3. The owner of the drinking water system must provide a copy of the financial plan to the Director of Policy Branch, Ministry of Municipal Affairs and Housing. (O. Reg. 453/07, section 3 (1) 6.)
4. The owner of the drinking water system must provide proof satisfactory to the Director that the financial plans for the system satisfy the requirements under the Safe Drinking Water Act. (S.D.W.A. section 32 (5) 2.ii.)



Chapter 6

Recommendations

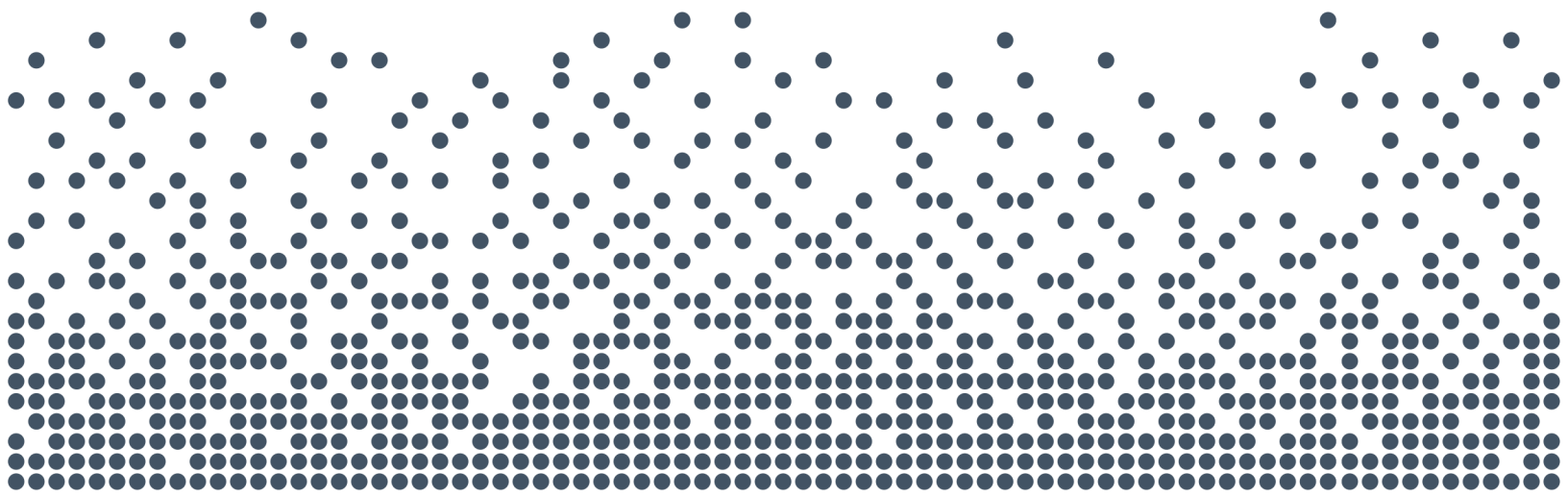


6. Recommendations

This report presents the water financial plan for the City of Cornwall in accordance with the mandatory reporting formats for water systems as detailed in O. Reg. 453/07. It is important to note that while mandatory, the financial plan is provided for Council's interest and approval, however, for decision making purposes, it may be more informative to rely on the information contained within draft Rate Study and ultimately the final Water Rate Study prepared through the conclusion of the Water Conservation and Servicing Master Plan. S.5 of O.Reg. 453/07 allows for financial plans to be amended, and as such this plan may be amended upon completion of the Water Rate Study and Water Conservation and Servicing Master Plan. Nevertheless, Council is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

1. The City of Cornwall's Water Financial Plan prepared by Watson & Associates Economists Ltd. dated October 28, 2020 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. The Financial Plan dated October 28, 2020 be submitted to the Ministry of Municipal Affairs and Housing. (O. Reg. 453/07, section 3 (1) 6).
4. The resolution of Council approving the Financial Plan be submitted to the MECP, satisfying the requirements under the Safe Drinking Water Act. (S.D.W.A. section 32 (5) 2.ii.).¹

¹ Note: The Ministry of the Environment does not require the Council Resolution for the initial financial plan submission. We encourage the municipality to contact the Ministry of the Environment to verify all requirements have been met.



Appendices



Appendix A

2020 Water Rate Study Draft Findings – Water Summary Tables



Table 1
City of Cornwall
Water Service
Capital Budget Forecast
Inflated \$

Description	Budget 2020	Total	Forecast									
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Capital Expenditures												
Water Purification Plant												
Water Purification Plant Building Addition and Renovations	225,000	-	-	-	-	-	-	-	-	-	-	-
Supervisory Control and Data Acquisition (SCADA) Upgrades	400,000	-	-	-	-	-	-	-	-	-	-	-
Raw Water Intake Redundancy Environmental Assessment	125,000	-	-	-	-	-	-	-	-	-	-	-
Plant Upgrades / Process Improvements estimated for 2021 - 2029	-	10,313,000	824,000	902,000	983,000	1,069,000	1,159,000	1,230,000	1,304,000	1,381,000	1,461,000	-
Water Distribution												
Watermain Rehabilitation												
Improvements to system throughout the City	2,000,000	23,646,000	2,112,000	2,228,000	2,349,000	2,476,000	2,608,000	2,746,000	2,890,000	3,040,000	3,197,000	-
Vincent Massey - Tollgate Rd. to End	-	8,395,000	3,090,000	5,305,000	-	-	-	-	-	-	-	-
Pitt St. - Tollgate Rd. to Cornwall Centre Rd.	-	5,464,000	-	-	5,464,000	-	-	-	-	-	-	-
System Growth - New Watermain												
Powerdam Dr. - Riverdale Ave. to Tollgate Rd.	550,000	-	-	-	-	-	-	-	-	-	-	-
Other System Growth/Protection Projects - Business Park Watermain	-	1,572,000	-	-	328,000	563,000	580,000	101,000	-	-	-	-
Other System Growth/Protection Projects - Powerdam Dr. - Tollgate Rd.	-	1,264,000	515,000	530,000	219,000	-	-	-	-	-	-	-
Other System Growth/Protection Projects - Future Projects	-	2,396,000	-	-	-	-	-	496,000	615,000	633,000	652,000	-
Joint Infrastructure												
York St. - Seventh St. to Ninth St.	800,000	-	-	-	-	-	-	-	-	-	-	-
Sydney St. - Fourth St. to Fifth St.	550,000	-	-	-	-	-	-	-	-	-	-	-
Sydney St. - Fifth St. to Seventh St.	-	1,185,000	1,185,000	-	-	-	-	-	-	-	-	-
Sydney St. - Seventh St. to Eighth St.	-	690,000	-	690,000	-	-	-	-	-	-	-	-
Sydney St. - Eighth St. to Ninth St.	-	583,000	-	583,000	-	-	-	-	-	-	-	-
Third St. - York St. to Bedford St.	-	601,000	-	-	601,000	-	-	-	-	-	-	-
Third St. - Bedford St. to Cumberland St.	-	710,000	-	-	710,000	-	-	-	-	-	-	-
Lawrence Ave. - Montreal Rd. to Second St.	-	732,000	-	-	-	732,000	-	-	-	-	-	-
Gloucester St. - Water St. to First St.	-	619,000	-	-	-	619,000	-	-	-	-	-	-
Gloucester St. - Aberdeen St. to Second St.	-	522,000	-	-	-	-	522,000	-	-	-	-	-
Race St. - Water St. to Marlborough St.	-	927,000	-	-	-	-	927,000	-	-	-	-	-
Eighth St. - Sydney St. to Adolphus St.	-	1,493,000	-	-	-	-	-	1,493,000	-	-	-	-
Eighth St. - Adolphus St. to Marlborough St.	-	1,537,000	-	-	-	-	-	-	1,537,000	-	-	-
Future Projects	-	3,311,000	-	-	-	-	-	-	-	1,615,000	1,696,000	-
Constructed Wetlands for Backwash Water	-	530,000	-	530,000	-	-	-	-	-	-	-	-
Provisions (2030)	-	8,369,000	-	-	-	-	-	-	-	-	-	8,369,000
Studies:												
Asset Management	50,000	-	-	-	-	-	-	-	-	-	-	-
Water Wastewater Rate Study and Financial Plan	-	50,000	-	-	-	-	23,000	-	-	-	-	27,000
Total Capital Expenditures	4,700,000	74,909,000	7,726,000	10,768,000	10,654,000	5,459,000	5,819,000	6,066,000	6,346,000	6,669,000	7,006,000	8,396,000
Capital Financing												
Provincial/Federal Grants	-	-	-	-	-	-	-	-	-	-	-	-
Development Charges Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Related Debenture Requirements	800,000	18,201,236	-	4,511,134	6,044,538	1,032,238	974,521	599,666	603,384	743,955	902,007	2,789,793
Growth Related Debenture Requirements	550,000	3,660,000	515,000	530,000	219,000	-	-	496,000	615,000	633,000	652,000	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Lifecycle Reserve Fund	-	-	-	-	-	-	-	-	-	-	-	-
Water Reserve	3,350,000	53,047,764	7,211,000	5,726,866	4,390,462	4,426,762	4,844,479	4,970,334	5,127,616	5,292,045	5,451,993	5,606,207
Total Capital Financing	4,700,000	74,909,000	7,726,000	10,768,000	10,654,000	5,459,000	5,819,000	6,066,000	6,346,000	6,669,000	7,006,000	8,396,000



Table 2
City of Cornwall
Water Service
Schedule of Non-Growth Related Debenture Repayments
 Inflated \$

Debenture Year	2020	Principal (Inflated)	Forecast									
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2020		800,000	56,289	56,289	56,289	56,289	56,289	56,289	56,289	56,289	56,289	56,289
2021		-	-	-	-	-	-	-	-	-	-	-
2022		4,511,134			317,408	317,408	317,408	317,408	317,408	317,408	317,408	317,408
2023		6,044,538				425,300	425,300	425,300	425,300	425,300	425,300	425,300
2024		1,032,238					72,629	72,629	72,629	72,629	72,629	72,629
2025		974,521						68,568	68,568	68,568	68,568	68,568
2026		599,666							42,193	42,193	42,193	42,193
2027		603,384								42,455	42,455	42,455
2028		743,955									52,346	52,346
2029		902,007										63,466
2030		2,789,793										
Total Annual Debt Charges	-	18,201,236	56,289	56,289	373,697	798,997	871,627	940,195	982,388	1,024,843	1,077,188	1,140,655

Table 3
City of Cornwall
Water Service
Schedule of Growth Related Debenture Repayments
 Inflated \$

Debenture Year	2020	Principal (Inflated)	Forecast									
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2020		550,000	38,699	38,699	38,699	38,699	38,699	38,699	38,699	38,699	38,699	38,699
2021		515,000		36,236	36,236	36,236	36,236	36,236	36,236	36,236	36,236	36,236
2022		530,000			37,291	37,291	37,291	37,291	37,291	37,291	37,291	37,291
2023		219,000				15,409	15,409	15,409	15,409	15,409	15,409	15,409
2024		-					-	-	-	-	-	-
2025		-						-	-	-	-	-
2026		496,000							34,899	34,899	34,899	34,899
2027		615,000								43,272	43,272	43,272
2028		633,000									44,539	44,539
2029		652,000										45,875
2030		-										
Total Annual Debt Charges	-	4,210,000	38,699	74,935	112,226	127,635	127,635	127,635	162,534	205,806	250,345	296,220



Table 4
City of Cornwall
Water Service
Water Reserve Funds Continuity
 Inflated \$

Description	2020		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Opening Balance	4,484,436		4,769,134	1,453,544	-	-	-	-	-	-	-	0
Transfer from Operating	3,541,186		3,866,910	4,273,322	4,390,462	4,426,762	4,844,479	4,970,334	5,127,616	5,292,045	5,451,993	5,606,207
Transfer to Capital	3,350,000		7,211,000	5,726,866	4,390,462	4,426,762	4,844,479	4,970,334	5,127,616	5,292,045	5,451,993	5,606,207
Transfer to Operating	-		-	-	-	-	-	-	-	-	-	-
Closing Balance	4,675,622		1,425,044	-	-	-	-	-	-	-	0	0
Interest	93,512		28,501	-	-	-	-	-	-	-	0	0

Table 5
City of Cornwall
Water Service
Water Development Charges Reserve Fund Continuity
 Inflated \$

Description	2020		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Opening Balance	(56,872)		(15,242)	(10,957)	(42,235)	(110,845)	(195,194)	(279,756)	(364,505)	(485,022)	(650,541)	(863,200)
Development Charge Proceeds	41,929		43,198	44,485	45,790	47,113	48,559	50,033	51,528	53,043	54,611	56,305
Transfer to Capital	-		-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-		38,699	74,935	112,226	127,635	127,635	127,635	162,534	205,806	250,345	296,220
Closing Balance	(14,943)		(10,742)	(41,407)	(108,671)	(191,367)	(274,271)	(357,358)	(475,512)	(637,785)	(846,274)	(1,103,115)
Interest	(299)		(215)	(828)	(2,173)	(3,827)	(5,485)	(7,147)	(9,510)	(12,756)	(16,925)	(22,062)
Required from Development Charges	550,000		515,000	530,000	219,000	-	-	496,000	615,000	633,000	652,000	-



Table 6
City of Cornwall
Water Services
Operating Budget Forecast
Inflated \$

Description	Budget 2020		Forecast									
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Expenditures												
<u>Operating Costs</u>			-	-	-	-	-	-	-	-	-	-
Financial Overhead	658,959		672,100	685,500	699,200	713,200	727,500	742,100	756,900	772,000	787,400	803,100
Purchase of Goods	1,207,156		1,231,300	1,255,900	1,281,000	1,306,600	1,332,700	1,359,400	1,386,600	1,414,300	1,442,600	1,471,500
Salary and Benefits	2,384,968		2,432,700	2,481,400	2,531,000	2,581,600	2,633,200	2,685,900	2,739,600	2,794,400	2,850,300	2,907,300
Services and Rent	808,212		824,400	840,900	857,700	874,900	892,400	910,200	928,400	947,000	965,900	985,200
Sub Total Operating	5,059,295		5,160,500	5,263,700	5,368,900	5,476,300	5,585,800	5,697,600	5,811,500	5,927,700	6,046,200	6,167,100
<u>Capital-Related</u>												
Existing Debt (Principal) - Growth Related												
Existing Debt (Interest) - Growth Related												
New Growth Related Debt (Principal)			19,449	38,340	58,424	68,212	70,600	73,071	93,167	118,175	144,695	172,815
New Growth Related Debt (Interest)			19,250	36,594	53,802	59,423	57,035	54,564	69,367	87,631	105,650	123,405
Existing Debt (Principal) - Non-Growth Related												
Existing Debt (Interest) - Non-Growth Related												
New Non-Growth Related Debt (Principal)			28,289	29,279	189,822	410,207	461,066	511,663	550,776	591,390	638,395	692,635
New Non-Growth Related Debt (Interest)			28,000	27,010	183,875	388,790	410,561	428,532	431,612	433,453	438,793	448,019
Transfer to Capital Reserve	3,541,186		3,866,910	4,273,322	4,390,462	4,426,762	4,844,479	4,970,334	5,127,616	5,292,045	5,451,993	5,606,207
Sub Total Capital Related	3,541,186		3,961,897	4,404,545	4,876,385	5,353,394	5,843,741	6,038,164	6,272,538	6,522,694	6,779,526	7,043,082
Total Expenditures	8,600,481		9,122,397	9,668,245	10,245,285	10,829,694	11,429,541	11,735,764	12,084,038	12,450,394	12,825,726	13,210,182
Revenues												
Fixture Charge	7,185,064		7,599,824	8,038,098	8,501,200	8,990,516	9,507,511	9,770,540	10,040,347	10,317,100	10,600,969	10,892,130
General Sales and Rents	110,000		112,200	114,400	116,700	119,000	121,400	123,800	126,300	128,800	131,400	134,000
Other User Fees	19,200		19,584	20,000	20,400	20,800	21,200	21,600	22,000	22,400	22,800	23,300
Water Connections	5,000		5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800	5,900	6,000
Recoveries	11,000		11,220	11,400	11,600	11,800	12,000	12,200	12,400	12,600	12,900	13,200
Misc. Fees/Charges	15,100		15,402	15,700	16,000	16,300	16,600	16,900	17,200	17,500	17,900	18,300
Interest on Taxes	64,000		65,280	66,600	67,900	69,300	70,700	72,100	73,500	75,000	76,500	78,000
Misc. Other Revenue	40,000		40,800	41,600	42,400	43,200	44,100	45,000	45,900	46,800	47,700	48,700
Contributions from Development Charges Reserve Fund	-		38,699	74,935	112,226	127,635	127,635	127,635	162,534	205,806	250,345	296,220
Contributions from Reserve Funds	-		-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	7,449,364		7,908,109	8,387,933	8,893,726	9,403,951	9,926,646	10,195,375	10,505,882	10,831,806	11,166,414	11,509,850
Water Billing Recovery - Operating	1,151,117		1,214,288	1,280,312	1,351,559	1,425,743	1,502,895	1,540,389	1,578,156	1,618,587	1,659,312	1,700,331
Water Billing Recovery - Total	1,151,117		1,214,288	1,280,312	1,351,559	1,425,743	1,502,895	1,540,389	1,578,156	1,618,587	1,659,312	1,700,331