

**City of Brantford**  
**Water and Wastewater**  
**Ontario Regulation 453/07**  
**Financial Plans**

**Financial Plan #063-301**

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# Contents

	Page
EXECUTIVE SUMMARY	(i)
1. Introduction .....	1-1
1.1 Study Purpose .....	1-1
1.2 Background.....	1-1
1.2.1 Financial Plan Defined .....	1-2
1.2.2 Financial Plan Requirements – New System .....	1-2
1.2.3 Financial Plan Requirements – Existing System.....	1-3
1.2.4 Financial Plan Requirements - General .....	1-4
1.2.5 Public Sector Accounting Board (P.S.A.B.) Requirements.....	1-4
2. Sustainable Financial Planning.....	2-1
2.1 Introduction .....	2-1
2.2 Sustainable Water and Sewage Systems Act.....	2-2
2.3 Water Opportunities Act, 2010 (Bill 72).....	2-2
2.4 Water and Wastewater Rate Study.....	2-3
3. Approach .....	3-1
3.1 Overview.....	3-1
3.2 Conversion Process.....	3-1
3.2.1 Calculate Tangible Capital Asset Balances.....	3-1
3.2.2 Convert Statement of Operations.....	3-2
3.2.3 Convert Statement of Financial Position .....	3-4
3.2.4 Convert Statement of Cash Flow and Net Financial Assets/Debt.....	3-4
3.2.5 Verification and Note Preparation .....	3-6
4. Financial Plan .....	4-1
4.1 Introduction .....	4-1
4.2 Water Financial Plan.....	4-1
4.2.1 Statement of Financial Position (Table 4-1) .....	4-1
4.2.2 Statement of Operations (Table 4-2).....	4-2
4.2.3 Statement of Change in Net Financial Assets/Debt (Table 4- 3).....	4-3
4.2.4 Statement of Cash Flow (Table 4-4) .....	4-3
5. Process for Financial Plan Approval and Submission to the Province.....	5-1
6. Recommendations.....	6-1
Appendix A – 2015 Water and Wastewater Rate Study – Summary Tables .....	A-1
Appendix B – Wastewater Financial Plan.....	B-1

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## List of Acronyms

O.Reg.	Ontario Regulation
P.S.A.B.	Public Sector Accounting Board
S.D.W.A.	Safe Drinking Water Act
S.W.S.S.A.	Sustainable Water and Sewage Systems Act

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## EXECUTIVE SUMMARY

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

This report fulfills requirement four above. Financial plans may be amended and additional information beyond what is prescribed can be included if deemed necessary.

Given that the legislation falls under the S.D.W.A., a financial plan is mandatory for water systems and encouraged for wastewater systems. The financial plans shall be for a period of at least six years but longer planning horizons are encouraged.

2. The financial plans that were developed as part of this report represent a forward look at the financial position of the City's water and wastewater systems. In order to complete the financial plans, the water and wastewater rate projections outlined in the "City of Brantford Water and Wastewater Rate Study, 2015" (2015 Rate Study), were converted to the required format for submission to the Province. In particular, the following general results over the projection period 2015 – 2024 were noted:

### Water (please refer to Chapter 4):

- (i) Net debt position improves from approximately \$290,000 at the end of 2014 to \$32.3 million at the end of 2024;
- (ii) Net tangible capital assets increase by \$75.1 million, from \$167.9 million in 2014 to \$243.1 million in 2024;
- (iii) Accumulated surplus grows from \$168.2 million in 2014 to \$275.4 million in 2024;
- (iv) Expense to revenue ratio remains at less than 100%, and becomes stable at just under 70%, resulting in regular annual surpluses;
- (v) Ratio of cumulative annual surplus before amortization to cumulative acquisitions of tangible capital assets achieves a desired result of greater than 1:1 by 2020.

### Wastewater (please refer to Appendix B):

- (i) Net financial asset position improves from \$26.5 million at the end of 2014 to \$54.3 million at the end of 2024;
- (ii) Net tangible capital assets increase by \$66 million, from \$120.1 million in 2014 to \$186.1 million in 2024;

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(ii)

- (iii) Accumulated surplus grows from \$146.6 million in 2014 to \$240.3 million in 2024;
  - (iv) Expense to revenue ratio remains at less than 100%, and becomes stable at approximately 68%, resulting in regular annual surpluses;
  - (v) Ratio of cumulative annual surplus before amortization to cumulative acquisitions of tangible capital assets achieves a desired result of greater than 1:1 by 2019.
3. Proof of the preparation of a financial plan is one of the submission requirements for municipal drinking water licensing. In keeping with this requirement, the completed financial plan must be approved by resolution of Council, be publicly circulated, and must be submitted to the Ministry of the Environment and Ministry of Municipal Affairs.

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# 1. Introduction

## 1.1 Study Purpose

Watson & Associates Economists Ltd. (Watson) was retained by the City of Brantford (the City) to prepare water and wastewater financial plans 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. This detailed financial planning and forecasting in regards to the City's water and wastewater systems has already been completed and documented by Watson within the "City of Brantford Water and Wastewater Rate Study, 2015" (2015 Rate Study). The objective of the report provided herein is to convert the findings of the 2015 Rate Study 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.) was passed in December, 2002 in order to address some of the recommendations made by the Walkerton Inquiry Part II report. One of the main requirements of the Act is the mandatory licensing of municipal water providers. Section 31 (1) specifically states,

"No person shall,

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

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

### **1.2.1 Financial Plan Defined**

Section 30 (1) of the S.D.W.A. provides the following definition of financial plans:

“financial plans’ means,

- a) financial plans that satisfy the requirements of subsection (2), but only if,
  - (i) Bill 175 (Sustainable Water and Sewage Systems Act, 2002, introduced on September 23, 2002) receives Royal Assent, and
  - (ii) sections 3 and 9 of Bill 175 (Sustainable Water and Sewage Systems Act, 2002) are in force, or
- b) financial plans that satisfy the requirements prescribed by the Minister, in any other case. 2002, c. 32, s. 30 (1).”

As of time of writing, the Sustainable Water and Sewage Systems Act, 2002 cited above has been repealed (see Section 2.2 of this report); however, the standards that it directs underpin the specific requirements of s.30 (1) part b as they are outlined in O.Reg. 453/07 and which will be examined in detail below.

### **1.2.2 Financial Plan Requirements – New System**

O.Reg. 453/07 provides the following parameters with regard to s.30 (1) part b of the S.D.W.A. for new water systems:

- Financial plans must be approved by Council resolution (or governing body) indicating that the drinking water system is financially viable;
- Financial plans must include a statement that the financial impacts have been considered and apply for a minimum six-year period (commencing when the system first serves the public);
- Financial plans must include detail regarding proposed or projected financial operations itemized by total revenues, total expenses, annual surplus/deficit and accumulated surplus/deficit (i.e. the components of a “Statement of Operations” as per the Public Sector Accounting Board (P.S.A.B.) 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; and
- Financial plans are to be submitted to the Ministry of Municipal Affairs and Housing.

### ***1.2.3 Financial Plan Requirements – Existing System***

O.Reg. 453/07 also provides details with regard to s.30 (1) part b of the S.D.W.A. for existing water systems. The requirements for existing systems are summarized as follows:

- Financial plans must be approved by Council resolution (or governing body);
- Financial plans must include a statement that the financial impacts have been considered and apply for a minimum six-year period (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 P.S.A.B.) 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 the P.S.A.B.) 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 the P.S.A.B.) 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; and

- Financial plans are to be submitted to the Ministry of Municipal Affairs and Housing.

#### ***1.2.4 Financial Plan Requirements - General***

Given that the legislation falls under the S.D.W.A., a financial plan is mandatory for water systems and encouraged for wastewater systems. The financial plans shall be for a forecast period of at least six years but longer planning horizons are encouraged. The financial plan is to be completed, approved and submitted at the time of licence renewal (i.e. six months prior to licence expiry). Financial plans may be amended and additional information beyond what is prescribed can be included if deemed necessary.

The financial plans must contain, on the front page, the appropriate financial plan number as set out in Schedule A of the Municipal Drinking Water Licence document.

#### ***1.2.5 Public Sector Accounting Board (P.S.A.B.) 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.”

Both the Statement of Financial Position and the Statement of Operations were required for financial reporting purposes in pre-2009 reporting years; however, the format changed in 2009 to conform to the requirements of PS1200 and PS3150 (see Figures 1-1 and 1-2). Financial statements are now reported on a full accrual accounting basis, which will continue in future years. 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. Before 2009, financial results were reported on a modified cash basis of accounting, whereby revenues and expenses are recognized when cash is paid or received and only certain accrual-type items such as payables and receivables are recognized at year-end. The difference between the methods is in the timing of when transactions are reported. This timing difference has impacted the presentation of the statements in that various accounts have been added or deleted in order to properly report the transactions.

Moreover, since the 2009 fiscal year, additional information relating to the accounting treatment of tangible capital assets is included in annual reporting, as indicated by the requirements under section PS3150. Pre-2009, the costs to acquire, develop and/or construct capital assets were expensed in the year in which they occur. Going forward, tangible capital assets are capitalized so as to create an inventory of the assets owned and to account for their ability to provide future benefits. The reporting of tangible capital assets required further changes to the format of existing financial statements. From a financial planning perspective, this change is significant for water and wastewater assets as they can represent a significant portion of the City's total assets.

The Statement of Cash Flow and the Statement of Change in Net Financial Assets/Debt (which is a new statement as of 2009) are required statements going forward. 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 (see Figure 1-3). 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 (see Figure 1-4).

It should be noted that the Statement of Reserves and Reserve Funds and the Statement of Capital, as used by the public sector pre-2009, have been eliminated by the new reporting format. The balances and transactions that make up these two statements have been transferred to either the Statement of Operations or the Statement of Financial Position depending on the nature of the account.

**Figure 1-1**  
**Statement of Financial Position**

**OLD FORMAT (PRE-2009)****2009 AND FUTURE**

<b><u>Assets</u></b>
Financial Assets
Cash
Accounts Receivable
Investments
Inventory for resale
Other Assets
Total Financial Assets
<b><u>Non-Financial Assets</u></b>
Inventory of Supplies
Prepaid Expenses
Total Non-Financial Assets
<b><u>Liabilities</u></b>
Accounts Payable & Accrued Liabilities
Debt (Principal only)
Other (DC Reserves-Deferred Revenue)
Total Liabilities
<b>NET ASSETS</b>
<b><u>Municipal Position</u></b>
Fund Balances
Current Fund
Capital Fund
Reserves and Reserve Funds
Amounts to be Recovered
From Future Revenues
From Reserves & Reserve Funds
<b>TOTAL MUNICIPAL POSITION</b>

<b><u>Financial Assets</u></b>
Cash
Accounts Receivable
Investments
Inventory for resale
Other Assets
Total Financial Assets
<b><u>Liabilities</u></b>
Accounts Payable & Accrued Liabilities
Debt (Principal only)
Other (DC Reserves-Deferred Revenue)
Total Liabilities
<b>NET FINANCIAL ASSETS/(DEBT)</b>
<b><u>Non-Financial Assets</u></b>
Tangible Capital Assets
Inventory of Supplies
Prepaid Expenses
Total Non-Financial Assets
<b>ACCUMULATED SURPLUS/(DEFICIT)</b>

**Figure 1-2**  
**Statement of Operations**

**OLD FORMAT (PRE-2009)**

<b><u>Revenues</u></b>
Base Charge Revenue
Rate Based Revenue
Transfers from Reserves
Other Revenue
<b>Total Revenues</b>
<b><u>Expenditures</u></b>
Operating Expenses
Capital
<b>Total Expenditures</b>
Net Revenues for the year
Increase (decrease) in amounts to be recovered
<b>Change in fund balances</b>

**2009 AND FUTURE**

<b><u>Revenue</u></b>
Base Charge Revenue
Rate Based Revenue
Earned DC Revenue
Other Revenue
<b>Total Revenue</b>
<b><u>Expenses</u></b>
Operating Expenses
Interest on Debt
Amortization
Other
<b>Total Expenses</b>
<b>Annual Surplus/(Deficit)</b>
<b>Accum. Surplus/(Deficit), beg. of year</b>
<b>Accum. Surplus/(Deficit), end of year</b>

**Figure 1-3**  
**Statement of Change in Net Financial Assets/Debt**

**2009 AND FUTURE**

Annual Surplus/(Deficit)
Less: Acquisition of tangible capital assets
Add: Amortization of tangible capital assets
(Gain)/Loss on disposal of tangible capital assets
Add: Proceeds on sale of tangible capital assets
Add: Write-downs of tangible capital assets
<b>Sub-total</b>
Less: Acquisition of supplies inventory
Less: Acquisition of prepaid expenses
Add: Consumption of supplies inventory
Add: Use of prepaid expenses
<b>Sub-total</b>
<b>(Increase)/Decrease in net financial assets/net debt</b>
<b>Net financial assets/(net debt), beginning of year</b>
<b>Net financial assets/(net debt), end of year</b>

**Figure 1-4**  
**Statement of Cash Flow<sup>1</sup>**

DIRECT METHOD	INDIRECT METHOD
<p><b><u>Operating Transactions</u></b> Cash received from:   Water Operations Less: Cash paid for:   Operating expenses   Finance charges</p>	<p><b><u>Operating Transactions</u></b> Annual Surplus/(Deficit) Add: Amortization of Tangible Capital Assets Loss/(Gain) on sale of Tangible Capital Assets Decrease/(Increase) in Accounts Receivable Increase/(Decrease) in Accounts Payable Decrease/(Increase) in Inventories for sale Other items</p>
<b>Cash provided by operating transactions</b>	<b>Cash provided by operating transactions</b>
<p><b><u>Capital Transactions</u></b> Proceeds on sale of tangible capital assets Less: Cash used to acquire tangible capital assets</p>	<p><b><u>Capital Transactions</u></b> Proceeds on sale of tangible capital assets Less: Cash used to acquire tangible capital assets</p>
<b>Cash applied to capital transactions</b>	<b>Cash applied to capital transactions</b>
<p><b><u>Investing Transactions</u></b> Proceeds from investments Less: Cash used to acquire investments</p>	<p><b><u>Investing Transactions</u></b> Proceeds from investments Less: Cash used to acquire investments</p>
<b>Cash provided by (applied to) investing transactions</b>	<b>Cash provided by (applied to) investing transactions</b>
<p><b><u>Financing Transactions</u></b> Proceeds from debt issue Less: Debt repayment (Principal only)</p>	<p><b><u>Financing Transactions</u></b> Proceeds from debt issue Less: Debt repayment (Principal only)</p>
<b>Cash applied to financing transactions</b>	<b>Cash applied to financing transactions</b>
<b>Increase in cash and cash equivalents</b>	<b>Increase in cash and cash equivalents</b>
<b>Cash and cash equivalents, beginning of year</b>	<b>Cash and cash equivalents, beginning of year</b>
<b>Cash and cash equivalents, end of year</b>	<b>Cash and cash equivalents, end of year</b>

<sup>1</sup> The statement of cash flow can be prepared using either the direct or indirect methods. The indirect method derives cash flow by making adjustments to the net surplus/deficit reported on the statement of operations. The direct method calculates cash flow identifying the direct sources and uses of cash.



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## 2. Sustainable Financial Planning

### 2.1 Introduction

In general, sustainability refers to the ability to maintain a certain position over time. While the S.D.W.A. requires a declaration of the financial plan's sustainability, it does not give a clear definition of what would be considered sustainable. Instead, the Ministry of the Environment 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: Lifecycle 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 (Bill 72)**

Since the passage of the Safe Drinking Water Act, changes and refinements to the legislation have been introduced, including Bill 72. Bill 72 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; to create opportunities for economic development and clean-technology jobs; and to conserve and sustain water resources. To achieve this, Bill 72 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 Bill 72 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.

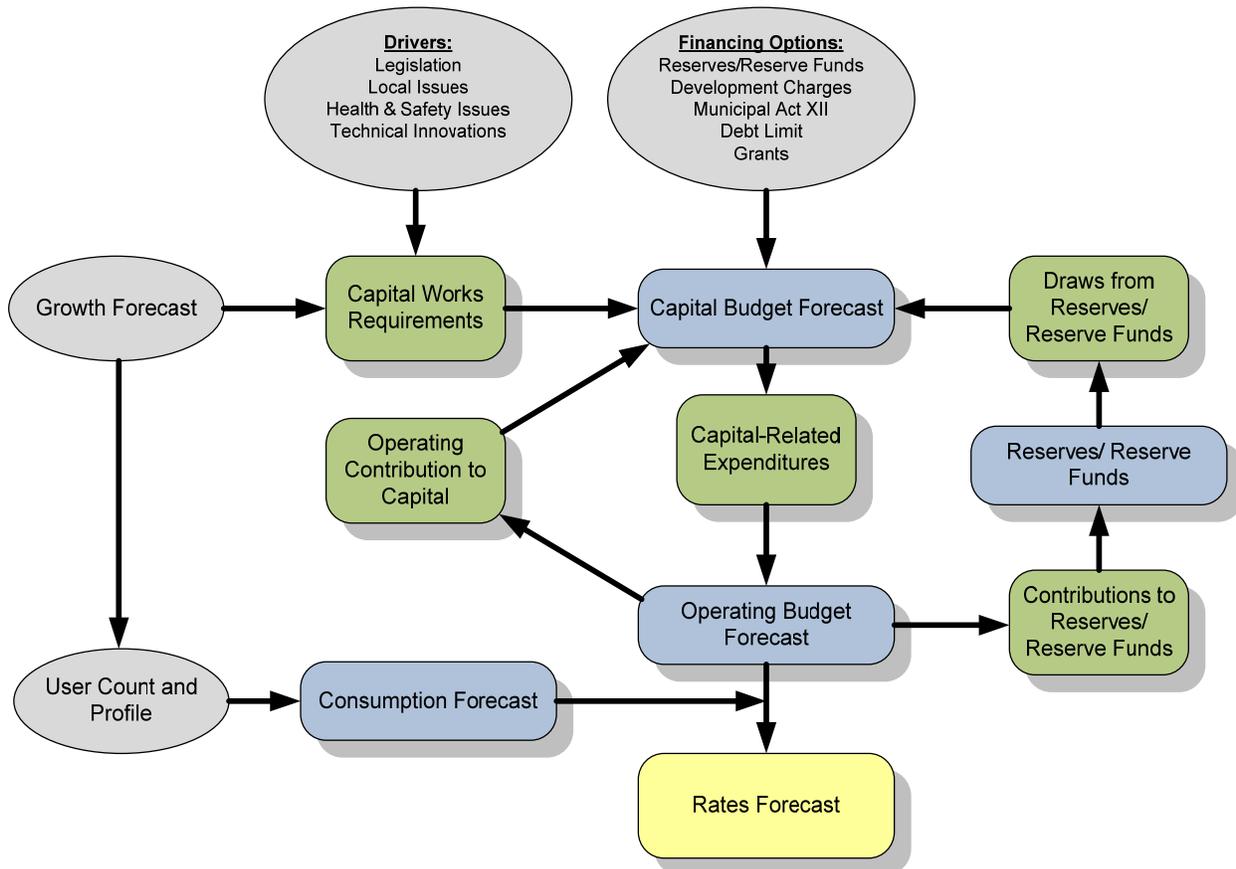
Where a Board has jurisdiction over a service, the plan (and any plan amendments) must be approved by the municipality in which the municipal service is provided, before submission to the Minister. The Minister may also direct preparation of joint or partially joint plans.

Regulations (still forthcoming) will prescribe details with 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 Water and Wastewater Rate Study

As noted above, Watson has already completed extensive financial planning as documented in the 2015 Rate Study conducted on behalf of the City. The study process was designed to address “full cost” principles and reflect the guiding principles toward sustainable financial planning. Figure 2-1 below summarizes the process.

**Figure 2-1  
Water and Wastewater Rate Calculation Process**



As a result of employing this process, the 2015 Rate Study provides a sound financial plan for the City’s water and wastewater system by providing:

- A detailed assessment of current and future capital needs including an analysis of potential funding sources;
- An analysis of fixed and variable operating costs in order to determine how they will be impacted by evolving infrastructure needs and system growth;
- A review and recommendation on rate structures that ensure revenues are equitable and sufficient to meet system needs; and
- A public process that involves ongoing consultation with the main stakeholders including the City 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 financial plan.

The details of the financial plan arising from the 2015 Rate Study are contained in Appendix A.

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## 3. Approach

### 3.1 Overview

The 2015 Rate Study has been prepared on a modified cash basis; therefore, a conversion was 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 financial plan. It is noted that the financial plan has been prepared for both water and wastewater; however, the focus of the remaining chapters will be on water only. The complete financial plan for wastewater is provided in Appendix B.

### 3.2 Conversion Process

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

1. Calculate Tangible Capital Asset Balances;
2. Convert Statement of Operations;
3. Convert Statement of Financial Position;
4. Convert Statement of Cash Flow and Net Assets/Debt; and
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 within the 2015 Rate Study as well as part of the City's annual P.S.A.B. 3150 compliance processes. Given the prospective nature of the 2015 Rate Study, replacement cost is provided for each asset; however, historical cost (which is the original cost to purchase, develop or construct each asset) is required for financial reporting purposes. Once historical cost is established, the following calculations are made to determine net book value:

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

Future water capital needs have also been determined and summarized within the 2015 Rate Study. These estimates, however, only represent future assets that the City anticipates purchasing or constructing without consideration for assets that are contributed by developers and other parties (at no cost or partial cost to the City). These contributed assets could form a significant part of the infrastructure going forward in terms of the sustainability of the system as a whole and despite their non-monetary nature; the financial plan may need to be adjusted in order to properly account for these transactions. Once the sequence and total asset acquisition has been determined for the forecast period, annual amortization of these assets for each year is calculated in a similar manner as that used for existing assets.

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

### ***3.2.2 Convert Statement of Operations***

As per subsection 1.2.5 above, the new Statement of Operations eliminates and/or adds certain transactions that have been reported differently by municipalities since 2009 (see Figure 3-1). A wide range of adjustments will be considered and will depend on the size and complexity of the system. For example, the revenues and expenses associated with the now obsolete Statement of Capital and Statement of Reserves and Reserve Funds (see subsection 1.2.5) will need to be adjusted for and included within the Statement of Operations. This includes all non-tangible capital asset costs previously included in the capital statement (i.e. expenses related to various studies) while at the same time eliminating all expenditures incurred to acquire tangible capital assets which will now form part of the tangible capital asset balance discussed in subsection 3.2.1. Transfers to and from reserves are no longer explicitly reported on the Statement of Operations. Instead, these transactions are represented by changes in cash and accumulated surplus. Also, debt repayment costs relating to the principal payment portion only need to be removed, as they no longer qualify as an expense for reporting purposes. Principal payments will now be reported as a decrease in debt liability on the Statement of Financial Position. Finally, expenses relating to tangible capital assets, such as amortization, write-offs and (gain)/loss on disposal of assets, will be 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.

**Table 3-1**  
**Conversion Adjustments**  
**Statement of Operations (Water)**

Modified Cash Basis	Budget 2015	Adjustments		Full Accrual Budget 2015	Accrual Basis
		DR	CR		
<b>Revenues</b>					<b>Revenues</b>
Base Charge Revenue	3,698,733			3,698,733	Base Charge Revenue
Rate Based Revenue	19,732,280			19,732,280	Rate Based Revenue
			268,125	268,125	Earned Development Charges and Gas Tax Revenue
Other Revenue <sup>1</sup>	302,300		930,004	1,232,304	Other Revenue
<b>Total Revenues</b>	<b>23,733,313</b>			<b>24,931,442</b>	<b>Total Revenues</b>
<b>Expenditures</b>					<b>Expenses</b>
Operating <sup>2</sup>	11,407,800	50,000		11,457,800	Operating Expenses
Other (GRCA)	517,100			517,100	Other (GRCA)
Capital					
Transfers to Reserves	9,360,663		9,360,663		
Debt Repayment (Principal & Interest)	2,447,750		1,257,689	1,190,061	Interest on Debt
		5,453,467		5,453,467	Amortization
<b>Total Expenditures</b>	<b>23,733,313</b>			<b>18,618,428</b>	<b>Total Expenses</b>
<b>Net Expenditures</b>	<b>-</b>			<b>6,313,014</b>	<b>Annual Surplus/(Deficit)</b>
Increase (decrease) in amounts to be recovered	-			168,228,871	Accumulated Surplus/(Deficit), beginning of year
<b>Change in Fund Balances</b>	<b>-</b>	<b>6,313,014</b>		<b>174,541,885</b>	<b>Accumulated Surplus/(Deficit), end of year</b>
<b>TOTAL ADJUSTMENTS<sup>3</sup></b>		<b>11,816,481</b>	<b>11,816,481</b>		

**Notes:**

- 1 Other revenue adjusted to include interest earned on Water Capital Reserve Funds
- 2 Operating expense adjusted to include capital expenditures not meeting the definition of tangible capital assets (Studies)
- 3 The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)

### ***3.2.3 Convert Statement of Financial Position***

Once the Statement of Operations has been converted and the net book value of tangible capital assets has been recorded, balances for the remaining items on the Statement of Financial Position are determined and recorded (see Figure 3-2). As noted earlier, the applicable balances from the Statement of Capital and the Statement of Reserve and Reserve Funds will need to be transferred to this statement. The opening/actual balances for the remaining accounts, such as accounts receivable, inventory, accounts payable and 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 receivable 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 new 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, additional information regarding any gains/losses on disposals of assets, asset write-downs, acquisition/use of supplies inventory and the acquisition use of prepaid expenses, is necessary (if applicable). Although the Statement of 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**  
**Statements of Financial Position (Water)**

Modified Cash Basis	Budget 2015	Adjustments		Full Accrual Budget 2015	Accrual Basis
		DR	CR		
<b>ASSETS</b>					<b>ASSETS</b>
<b>Financial Assets</b>					<b>Financial Assets</b>
Cash	34,423,068			34,423,068	Cash
Accounts Receivable	2,568,729			2,568,729	Accounts Receivable
<i>Total Financial Assets</i>	<i>36,991,797</i>			<i>36,991,797</i>	<i>Total Financial Assets</i>
<b>LIABILITIES</b>					<b>Liabilities</b>
Accounts Payable & Accrued Liabilities	2,149,325			2,149,325	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	27,693,195			27,693,195	Debt (Principal only)
Deferred Revenue	2,912,366			2,912,366	Deferred Revenue
<i>Total Liabilities</i>	<i>32,754,886</i>			<i>32,754,886</i>	<i>Total Liabilities</i>
<b>Net Assets/(Debt)</b>	<b>4,236,911</b>			<b>4,236,911</b>	<b>Net Financial Assets/(Debt)</b>
		170,354,974	50,000	170,304,974	<b>Non-Financial Assets</b>
				<b>170,304,974</b>	Tangible Capital Assets
					<b>Total Non-Financial Assets</b>
<b>Municipal Position</b>					
Water Reserves	31,930,106	31,930,106			
Development Charge Reserve Fund	2,912,366	2,912,366			
Amounts to be Recovered	(30,605,561)		30,605,561		
<b>Total Municipal Position</b>	<b>4,236,911</b>		174,541,885	<b>174,541,885</b>	<b>Accumulated Surplus/(Deficit), end of year</b>

<b>TOTAL ADJUSTMENTS</b>	<b>205,197,446</b>	<b>205,197,446</b>
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**Note:** The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)

### ***3.2.5 Verification and Note Preparation***

The final step in the conversion process is to ensure that all of the statements created by the previous steps are in balance. The Statement of Financial Position summarizes the resources and obligations of the 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:

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

- b) Amortization Expense – The method and timing of amortization should be based on the City's amortization policy. Otherwise, an assumption will need to be made and applied consistently throughout the financial plan.

- c) Accumulated Amortization – Will be based on the culmination of accumulated amortization expenses throughout the life of each asset however derived, along with information on construction/acquisition date and useful life obtained from the 2015 Rate Study.
- 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.



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## 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 document<sup>2</sup> and contains various estimates as detailed in the "Notes to the Financial Plan" section below.

### 4.2 Water Financial Plan

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

The Statement of Financial Position provides information that describes the assets, liabilities, and accumulated surplus of the 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 estimation 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 at the end of 2015, the City's water system will be in a net financial asset position of approximately \$4.2 million. From 2016 to 2019, the financial plan forecasts a net debt position, including a projected net debt position of \$3.2 million in 2018. This is due to the use of significant reserve/reserve fund amounts during these years to pay for anticipated capital projects. After 2019, the City's water system is projected to achieve an improving net financial asset position in each subsequent year of the forecast period. By the end of 2024, the City's water system is projected to attain a net financial asset position of over \$32.3 million.

Another important indicator on the Statement of Financial Position is the tangible capital asset balance. 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:

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<sup>2</sup> O.Reg. 453/07 does not require an audited financial plan.

- Tangible capital assets such as water mains are imperative to water service delivery;
- These assets represent significant economic resources in terms of their historical and replacement costs; therefore, ongoing capital asset management is essential to managing significant replacements and repairs; and
- 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 are expected to grow nearly \$75.2 million over the 10-year forecast period. This indicates that the City has plans to invest in tangible capital assets in excess of the anticipated use of existing assets over the forecast period.

#### ***4.2.2 Statement of Operations (Table 4-2)***

The Statement of Operations summarizes the revenues and expenses generated by the water 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 remaining relatively consistent, decreasing from 75% to 68% over the forecast period. As a result, annual surplus grows from approximately \$6.3 million in 2015 to just under \$11.1 million by 2024. 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, reserve/reserve fund transfers and debt principal payments.

Another important indicator on this statement is accumulated surplus/deficit. An accumulated surplus indicates that the available net resources are sufficient to provide future water services. An accumulated deficit indicates that resources are insufficient to provide future services and that borrowing or rate increases are required to finance annual deficits. From Table 4-2, the financial plan proposes to add approximately \$107.2 million to a 2014 accumulated surplus of approximately \$168.2 million over the forecast period. This accumulated surplus, as indicated in Table 4-2, is predominantly

made up of reserve and reserve fund balances as well as historical investments in tangible capital assets.

#### ***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 annual surplus exceeds forecasted tangible capital asset acquisitions (net of amortization) for 2015, resulting in an increase of approximately \$3.9 million in net financial assets. However, in 2016 to 2018 the forecasted tangible capital asset acquisitions (net of amortization for the year) exceed the forecasted annual surplus, resulting in a decrease to net financial assets in each year. This is as a result of significant capital asset acquisitions forecasted during this period. In each of the subsequent years (i.e. 2019 to 2024), forecasted annual surplus exceeds forecasted tangible capital asset acquisitions (net of amortization for the year) resulting in annual increases in net financial assets. This allows for a long-term plan of funding capital through accumulated surplus (i.e. reserves). This is evidenced by the ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions, after achieving a value of 1.50 in 2015, improving from 0.98 in 2016 to 1.24 by 2024.<sup>3</sup>

#### ***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 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), make debt principle payments and build internal reserves and reserve funds over the forecast period. The financial plan projects the cash position of the City's water system to improve from a balance of approximately \$31.2 million at the beginning of 2015, reducing to approximately \$15 million by 2018, then increasing annually thereafter to over \$37.4 million by 2024. For further discussions on projected cash balances, please refer to the Notes to the Financial Plan.

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<sup>3</sup> A desirable ratio is 1:1 or better.

**Table 4-1**  
**Statement of Financial Position: Water Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Financial Assets</b>											
Cash	1	34,423,068	24,711,597	18,338,181	14,973,632	15,023,887	19,935,027	21,438,932	23,961,498	29,634,878	37,408,355
Accounts Receivable	1	2,568,729	2,712,660	2,822,951	2,942,191	3,033,189	3,127,221	3,224,514	3,321,404	3,417,697	3,517,193
Accounts Receivable - Other	3	-	825,350	5,522,780	4,803,861	4,303,687	4,065,952	6,876,972	9,186,120	8,459,036	7,979,186
<b>Total Financial Assets</b>		<b>36,991,797</b>	<b>28,249,607</b>	<b>26,683,912</b>	<b>22,719,684</b>	<b>22,360,763</b>	<b>27,128,200</b>	<b>31,540,418</b>	<b>36,469,022</b>	<b>41,511,611</b>	<b>48,904,734</b>
<b>Liabilities</b>											
Accounts Payable & Accrued Liabilities	1	2,149,325	2,217,888	2,288,784	2,361,960	2,437,502	2,515,567	2,596,257	2,679,608	2,765,826	2,854,912
Debt (Principal only)	2	27,693,195	26,382,581	25,016,801	23,593,521	22,110,310	20,564,629	18,953,834	17,275,169	15,525,758	13,702,605
Deferred Revenue	3	2,912,366	-	-	-	-	-	-	-	-	-
<b>Total Liabilities</b>		<b>32,754,886</b>	<b>28,600,469</b>	<b>27,305,585</b>	<b>25,955,481</b>	<b>24,547,812</b>	<b>23,080,196</b>	<b>21,550,091</b>	<b>19,954,777</b>	<b>18,291,584</b>	<b>16,557,517</b>
<b>Net Financial Assets/(Debt)</b>		<b>4,236,911</b>	<b>(350,862)</b>	<b>(621,673)</b>	<b>(3,235,797)</b>	<b>(2,187,049)</b>	<b>4,048,004</b>	<b>9,990,327</b>	<b>16,514,245</b>	<b>23,220,027</b>	<b>32,347,217</b>
<b>Non-Financial Assets</b>											
Tangible Capital Assets	4	170,304,974	188,114,438	200,805,938	210,969,304	217,746,498	220,853,272	231,167,505	237,566,493	241,140,222	243,089,194
<b>Total Non-Financial Assets</b>		<b>170,304,974</b>	<b>188,114,438</b>	<b>200,805,938</b>	<b>210,969,304</b>	<b>217,746,498</b>	<b>220,853,272</b>	<b>231,167,505</b>	<b>237,566,493</b>	<b>241,140,222</b>	<b>243,089,194</b>
<b>Accumulated Surplus/(Deficit)</b>	5	<b>174,541,885</b>	<b>187,763,576</b>	<b>200,184,265</b>	<b>207,733,507</b>	<b>215,559,449</b>	<b>224,901,276</b>	<b>241,157,832</b>	<b>254,080,738</b>	<b>264,360,249</b>	<b>275,436,411</b>
<b>Financial Indicators</b>											
	<b>Total Change</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
1) Increase/(Decrease) in Net Financial Assets	32,055,787	3,945,481	(4,587,773)	(270,811)	(2,614,124)	1,048,748	6,235,053	5,942,323	6,523,918	6,705,782	9,127,190
2) Increase/(Decrease) in Tangible Capital Assets	75,151,753	2,367,533	17,809,464	12,691,500	10,163,366	6,777,194	3,106,774	10,314,233	6,398,988	3,573,729	1,948,972
3) Increase/(Decrease) in Accumulated Surplus	107,207,540	6,313,014	13,221,691	12,420,689	7,549,242	7,825,942	9,341,827	16,256,556	12,922,906	10,279,511	11,076,162

**Table 4-2**  
**Statement of Operations: Water Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Water Revenue</b>											
Base Charge Revenue		3,698,733	3,735,598	3,781,117	3,839,273	3,898,549	3,959,054	4,020,790	4,076,933	4,127,373	4,178,820
Rate Based Revenue		19,732,280	21,043,081	22,019,480	23,068,529	23,842,850	24,643,993	25,473,855	26,304,013	27,132,632	27,989,613
Earned Development Charges Revenue	3	268,125	4,503,380	5,501,824	143,000	416,500	724,500	3,794,500	3,131,500	158,000	460,000
Developer Contributions	4	-	1,886,000	-	-	-	-	-	-	-	-
Other Revenue	6	1,232,304	1,069,603	1,031,438	923,445	920,687	1,067,375	1,204,033	1,345,456	1,501,016	1,725,354
<b>Total Revenues</b>		<b>24,931,442</b>	<b>32,237,662</b>	<b>32,333,859</b>	<b>27,974,247</b>	<b>29,078,586</b>	<b>30,394,922</b>	<b>37,663,178</b>	<b>34,857,902</b>	<b>32,919,021</b>	<b>34,353,787</b>
<b>Water Expenses</b>											
Operating Expenses	Sch. 4-1	11,457,800	11,773,700	12,412,200	12,754,900	13,487,300	13,473,300	13,794,400	14,239,800	14,876,700	15,476,100
Interest on Debt	2	1,190,061	1,137,135	1,081,970	1,024,471	964,538	902,069	836,955	769,084	698,339	624,597
Amortization	4	5,453,467	5,572,536	5,870,500	6,080,634	6,218,806	6,078,226	6,157,767	6,290,012	6,409,271	6,502,028
Grand River Conservation Authority		517,100	532,600	548,500	565,000	582,000	599,500	617,500	636,100	655,200	674,900
<b>Total Expenses</b>		<b>18,618,428</b>	<b>19,015,971</b>	<b>19,913,170</b>	<b>20,425,005</b>	<b>21,252,644</b>	<b>21,053,095</b>	<b>21,406,622</b>	<b>21,934,996</b>	<b>22,639,510</b>	<b>23,277,625</b>
<b>Annual Surplus/(Deficit)</b>		<b>6,313,014</b>	<b>13,221,691</b>	<b>12,420,689</b>	<b>7,549,242</b>	<b>7,825,942</b>	<b>9,341,827</b>	<b>16,256,556</b>	<b>12,922,906</b>	<b>10,279,511</b>	<b>11,076,162</b>
Accumulated Surplus/(Deficit), beginning of year	5	168,228,871	174,541,885	187,763,576	200,184,265	207,733,507	215,559,449	224,901,276	241,157,832	254,080,738	264,360,249
Accumulated Surplus/(Deficit), end of year		174,541,885	187,763,576	200,184,265	207,733,507	215,559,449	224,901,276	241,157,832	254,080,738	264,360,249	275,436,411
<b>Note 5:</b>											
<b>Accumulated Surplus/(Deficit) Reconciliation:</b>											
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Reserve Balances</b>											
Reserves: Development Charges		2,912,366	(825,350)	(5,522,780)	(4,803,861)	(4,303,687)	(4,065,952)	(6,876,972)	(9,186,120)	(8,459,036)	(7,979,186)
Reserves: Capital/Other		31,930,106	26,031,719	24,395,128	20,357,724	19,923,261	24,612,633	28,944,161	33,789,414	38,745,785	46,049,822
<b>Total Reserves Balance</b>		<b>34,842,472</b>	<b>25,206,369</b>	<b>18,872,348</b>	<b>15,553,863</b>	<b>15,619,574</b>	<b>20,546,681</b>	<b>22,067,189</b>	<b>24,603,294</b>	<b>30,286,749</b>	<b>38,070,636</b>
Less: Debt Obligations and Deferred Revenue		(30,805,561)	(25,557,231)	(19,494,021)	(18,789,660)	(17,806,623)	(16,498,677)	(12,076,862)	(8,089,049)	(7,066,722)	(5,723,419)
Add: Tangible Capital Assets	4	170,304,974	188,114,438	200,805,938	210,969,304	217,746,498	220,853,272	231,167,505	237,566,493	241,140,222	243,089,194
<b>Total Ending Balance</b>		<b>174,541,885</b>	<b>187,763,576</b>	<b>200,184,265</b>	<b>207,733,507</b>	<b>215,559,449</b>	<b>224,901,276</b>	<b>241,157,832</b>	<b>254,080,738</b>	<b>264,360,249</b>	<b>275,436,411</b>
<b>Financial Indicators</b>											
	<b>Total Change</b>	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1) Expense to Revenue Ratio		75%	59%	62%	73%	73%	69%	57%	63%	69%	68%
2) Increase/(Decrease) in Accumulated Surplus	107,207,540	6,313,014	13,221,691	12,420,689	7,549,242	7,825,942	9,341,827	16,256,556	12,922,906	10,279,511	11,076,162

**Schedule 4-1**  
**Statement of Operating Expenses: Water Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Operating Expenses</b>											
Environmental Services Administration		626,400	645,200	664,600	684,700	705,200	726,300	748,100	770,500	793,600	817,500
Water Administration		2,987,200	3,076,900	3,169,200	3,264,400	3,362,300	3,463,300	3,567,200	3,674,000	3,784,400	3,898,000
Water Treatment Operations Administration		688,500	709,300	730,500	752,300	774,800	797,900	821,900	846,400	871,600	897,700
Treatment Operations		3,542,500	3,672,500	3,807,900	3,948,400	4,094,400	4,246,400	4,404,100	4,568,600	4,739,700	4,917,300
Equipment Maintenance		834,100	859,100	885,000	911,600	939,000	967,000	996,100	1,026,100	1,056,800	1,088,500
Building Maintenance		471,400	485,600	500,200	515,400	531,000	546,900	563,300	580,100	597,400	615,300
Water Distribution General		252,500	260,000	267,700	275,600	283,700	292,100	300,800	309,700	318,800	328,200
Maintenance Systems General		416,600	429,000	441,900	455,100	468,800	482,900	497,400	512,200	527,700	543,600
Maintenance of Meters		90,400	93,200	96,000	98,900	101,800	104,800	107,800	111,000	114,300	117,700
Maintenance of Hydrants		195,600	201,300	207,400	213,500	219,700	226,200	233,000	239,800	247,000	254,400
Maintenance of Mains and Valves		1,302,600	1,341,600	1,381,800	1,423,000	1,465,600	1,509,500	1,554,700	1,601,400	1,649,400	1,698,900
Non TCA - Expenses from Capital Budget	7	50,000	-	260,000	212,000	541,000	110,000	-	-	176,000	299,000
<b>TOTAL OPERATING EXPENSES</b>		<b>11,457,800</b>	<b>11,773,700</b>	<b>12,412,200</b>	<b>12,754,900</b>	<b>13,487,300</b>	<b>13,473,300</b>	<b>13,794,400</b>	<b>14,239,800</b>	<b>14,876,700</b>	<b>15,476,100</b>

**Table 4-3**  
**Statement of Changes in Net Financial Assets/Debt: Water Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Annual Surplus/(Deficit)		6,313,014	13,221,691	12,420,689	7,549,242	7,825,942	9,341,827	16,256,556	12,922,906	10,279,511	11,076,162
Less: Acquisition of Tangible Capital Assets	4	(7,821,000)	(23,382,000)	(18,562,000)	(16,244,000)	(12,996,000)	(9,185,000)	(16,472,000)	(12,689,000)	(9,983,000)	(8,451,000)
Add: Amortization of Tangible Capital Assets	4	5,453,467	5,572,536	5,870,500	6,080,634	6,218,806	6,078,226	6,157,767	6,290,012	6,409,271	6,502,028
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
		(2,367,533)	(17,809,464)	(12,691,500)	(10,163,366)	(6,777,194)	(3,106,774)	(10,314,233)	(6,398,988)	(3,573,729)	(1,948,972)
Increase/(Decrease) in Net Financial Assets/(Net Debt)		3,945,481	(4,587,773)	(270,811)	(2,614,124)	1,048,748	6,235,053	5,942,323	6,523,918	6,705,782	9,127,190
Net Financial Assets/(Net Debt), beginning of year		291,430	4,236,911	(350,862)	(621,673)	(3,235,797)	(2,187,049)	4,048,004	9,990,327	16,514,245	23,220,027
<b>Net Financial Assets/(Net Debt), end of year</b>		<b>4,236,911</b>	<b>(350,862)</b>	<b>(621,673)</b>	<b>(3,235,797)</b>	<b>(2,187,049)</b>	<b>4,048,004</b>	<b>9,990,327</b>	<b>16,514,245</b>	<b>23,220,027</b>	<b>32,347,217</b>

Financial Indicators	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1) Acquisition of Tangible Capital Assets (Cumulative)	7,821,000	31,203,000	49,765,000	66,009,000	79,005,000	88,190,000	104,662,000	117,351,000	127,334,000	135,785,000
2) Annual Surplus/Deficit before Amortization (Cumulative)	11,766,481	30,560,708	48,851,897	62,481,773	76,526,521	91,946,574	114,360,897	133,573,815	150,262,597	167,840,787
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)	1.50	0.98	0.98	0.95	0.97	1.04	1.09	1.14	1.18	1.24

**Table 4-4**  
**Statement of Cash Flow – Indirect Method: Water Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Operating Transactions</b>											
Annual Surplus/Deficit		6,313,014	13,221,691	12,420,689	7,549,242	7,825,942	9,341,827	16,256,556	12,922,906	10,279,511	11,076,162
Add: Amortization of TCA's	4	5,453,467	5,572,536	5,870,500	6,080,634	6,218,806	6,078,226	6,157,767	6,290,012	6,409,271	6,502,028
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Earned Deferred Revenue	3	(268,125)	(4,503,380)	(5,501,824)	(143,000)	(416,500)	(724,500)	(3,794,500)	(3,131,500)	(158,000)	(460,000)
Less: Developer Contributions		-	(1,886,000)	-	-	-	-	(3,170,000)	-	-	-
Add: Deferred Revenue Proceeds		846,363	765,664	804,393	861,919	916,674	962,235	983,480	822,352	885,084	939,850
Change in A/R (Increase)/Decrease		(82,987)	(143,930)	(110,290)	(119,241)	(90,997)	(94,032)	(97,293)	(96,889)	(96,293)	(99,496)
Change in A/P Increase/(Decrease)		66,486	68,563	70,896	73,176	75,542	78,065	80,690	83,351	86,218	89,086
Less: Interest Proceeds		(930,003)	(758,205)	(710,538)	(592,943)	(580,289)	(716,873)	(843,034)	(973,556)	(1,117,915)	(1,330,655)
Cash Provided by Operating Transactions		11,398,215	12,336,939	12,843,826	13,709,787	13,949,178	14,924,948	15,573,666	15,916,676	16,287,876	16,716,975
<b>Capital Transactions</b>											
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(7,821,000)	(21,496,000)	(18,562,000)	(16,244,000)	(12,996,000)	(9,185,000)	(13,302,000)	(12,689,000)	(9,983,000)	(8,451,000)
Cash Applied to Capital Transactions		(7,821,000)	(21,496,000)	(18,562,000)	(16,244,000)	(12,996,000)	(9,185,000)	(13,302,000)	(12,689,000)	(9,983,000)	(8,451,000)
<b>Investing Transactions</b>											
Proceeds from Investments		930,003	758,205	710,538	592,943	580,289	716,873	843,034	973,556	1,117,915	1,330,655
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	-	-	-	-
Cash Provided by (applied to) Investing Transactions		930,003	758,205	710,538	592,943	580,289	716,873	843,034	973,556	1,117,915	1,330,655
<b>Financing Transactions</b>											
Proceeds from Debt Issue	2	-	-	-	-	-	-	-	-	-	-
Less: Debt Repayment (Principal only)	2	(1,257,689)	(1,310,615)	(1,365,780)	(1,423,279)	(1,483,212)	(1,545,681)	(1,610,795)	(1,678,666)	(1,749,411)	(1,823,153)
Cash Applied to Financing Transactions		(1,257,689)	(1,310,615)	(1,365,780)	(1,423,279)	(1,483,212)	(1,545,681)	(1,610,795)	(1,678,666)	(1,749,411)	(1,823,153)
Increase in Cash and Cash Equivalents		3,249,529	(9,711,471)	(6,373,416)	(3,364,549)	50,255	4,911,140	1,503,905	2,522,566	5,673,380	7,773,477
Cash and Cash Equivalents, beginning of year	1	31,173,539	34,423,068	24,711,597	18,338,181	14,973,632	15,023,887	19,935,027	21,438,932	23,961,498	29,634,878
<b>Cash and Cash Equivalents, end of year</b>	<b>1</b>	<b>34,423,068</b>	<b>24,711,597</b>	<b>18,338,181</b>	<b>14,973,632</b>	<b>15,023,887</b>	<b>19,935,027</b>	<b>21,438,932</b>	<b>23,961,498</b>	<b>29,634,878</b>	<b>37,408,355</b>

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## Water Notes to Financial Plan

The financial plan format, as outlined in Chapter 4, closely approximates the full accrual format used by municipalities (2009 onward) on their audited financial statements. The financial plan, however, 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); and
- 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; and
- 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 of Brantford, 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 receivables and accrued receivables as a percentage of annual revenues, applied to projected water revenues (source: provided by City staff); and
  - b) Payables: Based on historical levels of municipal-wide payables as a percentage of annual municipal expenses incurred, applied to projected water expenses (source: prior years audited financial statement).
- ## 2. Debt

Outstanding water related debt at the end of 2014 was \$28,950,884 with no additional debt proceeds anticipated throughout the forecast period. *Principal* repayments for existing debt over the forecast period are scheduled as follows:

Year	Principal Payments
2015	1,257,689
2016	1,310,615
2017	1,365,780
2018	1,423,279
2019	1,483,212
2020	1,545,681
2021	1,610,795
2022	1,678,666
2023	1,749,411
2024	1,823,153
<b>Total</b>	<b>\$ 15,248,281</b>

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/Accounts Receivable-Other

Deferred revenue is made up of water development charge reserve fund 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 (accounts receivable – other) for financial reporting purposes.

### 4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water-related assets in the following categories:
  - i. Infrastructure;
  - ii. Vehicles and Equipment;
  - iii. Water Meters;
  - iv. Land Improvements; and
  - v. Facilities.
- Amortization is calculated based on the straight-line approach, assuming a half year's amount of amortization in the year of acquisition for new capital.
- Given the planned asset replacement forecast in the 2015 Rate Study, useful life on acquisitions is assumed to be equal to typical values assigned by the City for each 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 disposals are assumed to be \$0 (it is assumed that historical cost is equal to accumulated amortization for all disposals).
- Residual value is assumed to be \$0 for all assets contained within the forecast period.

- Contributed Assets, as described in subsection 3.2.1, are shown on the Statement of Operations as revenue earned in the year of contribution.
- The City is unaware of any specific lead service piping in the City water system.

The balance of tangible capital assets is summarized as follows:

Asset Historical Cost	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Tangible Capital Asset Balance	237,540,135	244,802,402	267,615,860	284,941,036	300,267,068	312,596,522	321,301,007	337,124,612	349,055,927	358,227,533
Acquisitions	7,821,000	23,382,000	18,562,000	16,244,000	12,996,000	9,185,000	16,472,000	12,689,000	9,983,000	8,451,000
Disposals	558,733	568,542	1,236,824	917,968	666,546	480,515	648,395	757,685	811,394	678,147
<b>Closing Tangible Capital Asset Balance</b>	<b>244,802,402</b>	<b>267,615,860</b>	<b>284,941,036</b>	<b>300,267,068</b>	<b>312,596,522</b>	<b>321,301,007</b>	<b>337,124,612</b>	<b>349,055,927</b>	<b>358,227,533</b>	<b>366,000,386</b>
Opening Accumulated Amortization	69,602,694	74,497,428	79,501,422	84,135,098	89,297,764	94,850,024	100,447,735	105,957,107	111,489,434	117,087,311
Amortization Expense	5,453,467	5,572,536	5,870,500	6,080,634	6,218,806	6,078,226	6,157,767	6,290,012	6,409,271	6,502,028
Amortization on Disposal	558,733	568,542	1,236,824	917,968	666,546	480,515	648,395	757,685	811,394	678,147
<b>Ending Accumulated Amortization</b>	<b>74,497,428</b>	<b>79,501,422</b>	<b>84,135,098</b>	<b>89,297,764</b>	<b>94,850,024</b>	<b>100,447,735</b>	<b>105,957,107</b>	<b>111,489,434</b>	<b>117,087,311</b>	<b>122,911,192</b>
<b>Net Book Value</b>	<b>170,304,974</b>	<b>188,114,438</b>	<b>200,805,938</b>	<b>210,969,304</b>	<b>217,746,498</b>	<b>220,853,272</b>	<b>231,167,505</b>	<b>237,566,493</b>	<b>241,140,222</b>	<b>243,089,194</b>

## 5. Accumulated Surplus

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

Water	2015 Opening Accumulated Surplus
<b>Reserve Balances</b>	
Reserves: Development Charges	2,334,128
Reserves: Capital/Other	29,242,314
<b>Total Reserves Balance</b>	<b>31,576,442</b>
Less: Debt Obligations and Deferred Revenue	(31,285,012)
Add: Tangible Capital Assets	167,937,441
<b>Total Opening Balance</b>	<b>168,228,871</b>

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

## 6. Other Revenue

Other revenue includes inspection fees, cost recoveries, service charges, penalties and other non-operating general 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.

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

As mentioned in Section 1.2, the requirement to prepare the financial plan is provided in Section 32 (5) 2 ii of the S.D.W.A. Proof of the preparation of a financial plan is one of the submission requirements for municipal drinking water licensing and, upon completion, must be submitted to the Ministry of the Environment. As part of O.Reg. 453/07, the process established for plan approval, public circulation and filing is set out as follows:

1. The financial plan must be approved by resolution 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 Ministry of the Environment 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)



## 6. Recommendations

This report presents the water and wastewater financial plan for the City of Brantford 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 the 2015 Rate Study. Nevertheless, Council is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

1. The City of Brantford Water and Wastewater Financial Plan prepared by Watson & Associates Economists Ltd. dated May 26, 2015 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. The Financial Plan, the Council Resolution approving the Financial Plan, and the Water and Wastewater Rate Study underpinning the Financial Plan be submitted to the Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3 (1) 6)
4. The Financial Plan, the Council Resolution approving the Financial Plan, and the Water and Wastewater Rate Study underpinning the Financial Plan be submitted to the Ministry of the Environment, satisfying the requirements under the Safe Drinking Water Act. (S.D.W.A. Section 32 (5) 2 ii)



# **Appendix A – 2015 Water and Wastewater Rate Study – Summary Tables**



Table A-1  
City of Brantford  
Water Service  
Capital Budget Forecast  
Inflated \$

Description	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Capital Expenditures</b>										
Murray St (Dalhousie St to Colborne St) (W/WWW/STM/RD) (L1-359, L1-360, L1-361, L1-362, L1-363)	-	-	-	-	-	-	-	-	-	-
Brantwood Park Rd (Dunson St. to Trotter Ln.)	-	-	-	-	-	-	-	-	-	-
Gladstone Ave (Erie Ave to West End) (W/WWW/STM/RD) (L1-576, L1-577)	-	-	-	-	-	-	-	-	-	-
GIS Geospatial Database Conversion	-	-	-	-	-	-	-	-	-	-
Public Works Activity Tracking and Asset Management Tool	-	-	-	-	-	-	-	-	-	-
Alexander Dr (Grand River Ave to Webster St) (W/WWW/STM/RD) (L1-1142, L1-1143, L1-1144, L1-1145)	-	-	-	-	-	-	-	-	-	-
Southglen Rd (Greenfield Rd to Dead-End) & Wycliffe Ln (Greenfield Rd to Southglen Rd)	-	-	-	-	-	-	-	-	-	-
WADE AVENUE (END OF STREET to SIMPSON STREET)	-	-	-	-	-	-	-	-	-	-
Buckingham St (Sandra St to Memorial Dr)	-	-	-	-	-	-	-	-	-	-
Baldwin Ave (Full Length) (W/WWW/STM/RD)	-	-	-	-	-	-	-	-	-	-
James Ave (Colborne St to Lyndhurst St)	-	-	-	-	-	-	-	-	-	-
OAK STREET (RICHARDSON STREET to WALNUT STREET)	284,000	-	-	-	-	-	-	-	-	-
WINNIET STREET (GILKISON STREET to OAK STREET)	326,000	-	-	-	-	-	-	-	-	-
BRUNSWICK STREET (CATHARINE AVENUE)	180,000	-	-	-	-	-	-	-	-	-
Brett St (Colborne St to Mary St)	403,000	-	-	-	-	-	-	-	-	-
CATHARINE AVENUE (BRUNSWICK STREET to WALNUT STREET)	-	-	353,000	-	-	-	-	-	-	-
CATHARINE AVENUE (BRUNSWICK STREET to SIMPSON STREET)	-	-	-	159,000	1,759,000	-	-	-	-	-
Dalhousie (Clarence3 St to Brant Ave) Full corridor reconstruction (W/WWW/STM/RD)	-	-	-	-	-	-	-	-	-	-
CATHARINE AVENUE (BRUNSWICK STREET to WALNUT STREET)	2,052,000	-	-	-	-	-	-	-	-	-
Holborne St (Full)	299,000	-	-	-	-	-	-	-	-	-
Somerset Rd (Somerset Rd to King George Rd)	149,000	-	-	-	-	-	-	-	-	-
William St (Bedford St to Richmond St) (W/WWW/STM/RD) (Phase 2 of 2)	564,000	-	-	-	-	-	-	-	-	-
Campbell St (Stanley St to Dead-End)	-	-	-	-	-	370,000	-	-	-	-
Henry St (Harris Ave to Freeborn Ave)	303,000	-	-	-	-	-	-	-	-	-
Eglin St (Empsey St to Hachborn)	-	-	-	-	-	138,000	-	-	-	-
Eglin St (Stanley Street to Rawdon St)	48,000	465,000	-	-	375,000	-	-	-	-	-
Eglin St (Rawdon to Murray)	-	-	-	34,000	254,000	-	-	-	-	-
Old Farm Rd (Oriole Pkwy to Pwerline Rd)	-	-	-	45,000	-	-	-	-	-	-
Darling St (Rawdown St to Stanley St)	22,000	128,000	-	-	-	-	-	-	-	-
Colborne St (Downtown) - Clarence St to Brant Ave (W/WWW/STM/RD) - Coordinated with PN162	-	-	-	3,714,000	-	-	-	-	-	-
Clara Cr (Colborne St to Colborne St)	98,000	563,000	-	-	-	-	-	-	-	-
Dalhousie St (Drummond St to Stanley St) (W/WWW/STM/RD)	99,000	569,000	-	-	-	-	-	-	-	-
Sixth Ave (Division St to Lida St) (W/WWW/STM/RD)	51,000	294,000	-	-	-	-	-	-	-	-
Brier Park Rd (Blackfriar Ln to Fairview Dr)	-	-	-	-	-	-	-	-	194,000	1,119,000
Henry St (Freeborn Ave to Earl Ave)	147,000	847,000	-	-	-	-	-	-	-	-
Carolina Dr (Hillier Cres to Hillier Cres)	72,000	411,000	-	-	-	-	-	-	-	-
Belvedere Blvd (Hayhurst Rd to Buckingham St)	59,000	338,000	-	-	-	-	-	-	-	-
North Park St (Charing Cross St. to Morton Ave)	69,000	395,000	-	-	-	-	-	-	-	-
Twelfth Ave (Wellington St to Darling St)	11,000	58,000	-	-	-	-	-	-	-	-
Miles Ave (Balmoral Dr to Somerset Rd)	32,000	183,000	-	-	-	-	-	-	-	-
Morning Dew Dr (Brier Park Rd to Brier Park Rd)	43,000	247,000	-	-	-	-	-	-	-	-
Ivanhoe Rd (Ashgrove Ave to Oriole Pkwy)	29,000	167,000	-	-	240,000	-	-	-	-	-
Oriole Parkway (Beechwood Ave. to Ivanhoe Rd)	-	-	-	41,000	-	-	-	-	-	-
Grand St (Dundas St to St George St)	32,000	74,000	-	-	-	-	-	-	-	-

Description	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Maple Ave (Palmerston Ave to Dufferin Ave)	19,000	108,000	-	-	-	-	-	-	-	-
North Park St. (Dundas St Charing Cross St.)	112,000	-	655,000	-	-	-	-	-	-	-
Brighton Ave (Huron St to Superior St) (W/WWW/STM/RD)	-	-	72,000	-	-	-	-	-	-	-
St Paul Ave (Grand River Ave to Brant Ave) (W/WWW/STM/RD)	-	274,000	1,586,000	-	-	-	-	-	-	-
Seventh Ave (Lida St to Whitehead St)	-	98,000	564,000	-	-	-	-	-	-	-
Harvard Ave (Gillie Cr to Buckingham St)	-	81,000	463,000	-	-	-	-	-	-	-
Nelson St (Stanley St to Park Rd N)	-	83,000	474,000	-	-	-	-	-	-	-
Banbury Rd (Brantwood Park Rd to Enfield Cres (2nd exit 360m east of Brantwood Park Rd))	-	146,000	839,000	-	-	-	-	-	-	-
Rowanwood Ave (Colborne St to Lyndhurst St)	-	71,000	410,000	-	-	-	-	-	-	-
Tenth Ave (Lida St to Division St)	-	49,000	280,000	-	-	-	-	-	-	-
McMurray St (Terrace Hill St to Lawrence St)	-	-	22,000	127,000	-	-	-	-	-	-
Division St (Tenth Ave to Sixth Ave)	-	84,000	481,000	-	-	-	-	-	-	-
Hayhurst Rd (Belvedere Blvd to Memorial Dr)	-	37,000	210,000	-	-	-	-	-	-	-
Frank St (Grand River Ave to Webster St)	-	-	252,000	-	-	-	-	-	-	-
Birkett Ln (River Rd to Erie Ave)	-	119,000	690,000	-	-	-	-	-	-	-
Greenwich ST (Murray St to 475m east of Murray St)	-	-	-	263,000	-	-	-	-	-	-
Herbert St (Full) - Watermain Replacement	-	-	-	83,000	477,000	-	-	-	-	-
Pontiac St (Marlene Ave to Marie Ave) (W/WWW/STM/RD)	-	-	-	17,000	95,000	-	-	-	-	-
Marlene Ave (Pontiac St to River Rd) (W/WWW/STM/RD)	-	-	-	17,000	96,000	-	-	-	-	-
Chestnut Ave (Palmerston Ave to Dufferin Ave) (W/WWW/STM/RD)	69,000	399,000	-	-	-	-	-	-	-	-
Norwich St (Sherwood Dr to Colborne St W) (W/WWW/STM/RD)	-	-	58,000	335,000	-	-	-	-	-	-
Marie Ave (Dead-End to Tecumseh St) (W/WWW/STM/RD)	-	-	22,000	123,000	-	-	-	-	-	-
Palmerston Ave (Chestnut Ave to St Paul Ave) (W/WWW/STM/RD)	-	-	50,000	285,000	-	-	-	-	-	-
West St (Charing Cross St to Edmondson St)	-	-	593,000	3,422,000	-	-	-	-	-	-
Hampton St (Morley Ave to Rowanwood Ave)	-	-	36,000	206,000	-	-	-	-	-	-
Beverly Rd (Colborne St to Chatham St)	-	-	69,000	397,000	-	-	-	-	-	-
Queen St (Chatham St to Sheridan St)	-	-	33,000	191,000	-	-	-	-	-	-
Clarence St (Grey St to Elgin St)	-	-	132,000	762,000	-	-	-	-	-	-
Locks Rd (Colborne St to Glenwood Dr) (L3-117)	-	-	22,000	121,000	-	-	-	-	-	-
Wellington St (Stanley St to Park Rd N)	-	-	250,000	1,439,000	-	-	-	-	-	-
Elgin St (Clarence St to Murray St)	-	-	279,000	1,612,000	-	-	-	-	-	-
Albion St (Henrietta St to Bedford St) (W/WWW/STM/RD) - Pending Decision regarding Albion Water Pumping Station	-	-	-	64,000	364,000	-	-	-	-	-
Raleigh St (Full Street including Easement) (W/WWW/STM/RD)	58,000	330,000	-	-	-	-	-	-	-	-
Chatham St (Stanley St to Park Rd) (W/WWW/STM/RD)	-	-	-	233,000	1,345,000	-	-	-	-	-
Barry Dr (Bell Ln to Dead-End)	-	-	-	66,000	379,000	-	-	-	-	-
White Owl Cres (Viscount Rd to Viscount Rd)	-	-	-	218,000	1,257,000	-	-	-	-	-
Graham Ave (Dead-End to Catherine Ave)	-	-	-	79,000	455,000	-	-	-	-	-
Bridge Over Grand River Replacement (Currently Out of Service)	-	-	-	16,000	92,000	-	-	-	-	-
Tranquility St (Bernard Ave to Memorial Dr)	-	-	-	178,000	1,028,000	-	-	-	-	-
Sydenham St (Dublin St to Charing Cross St)	-	-	-	92,000	528,000	-	-	-	-	-
Cumberland St (Full Street including Easement)	-	-	-	173,000	999,000	-	-	-	-	-
Avondale Cres (Hamilton Ave to Lyndhurst St)	-	-	-	75,000	435,000	-	-	-	-	-
Avondale St (Hamilton Ave to Dead-End)	-	-	-	109,000	628,000	-	-	-	-	-
St George St (Queensway Dr to Tollgate Rd)	-	-	-	37,000	682,000	-	-	-	-	-
Waterloo St (Brant Ave to Peart St) (W/WWW/STM/RD)	-	-	-	-	38,000	215,000	-	-	-	-
Sheridan St (Rawdon St to Fourth Ave) (W/WWW/STM/RD)	-	-	-	-	87,000	500,000	-	-	-	-
Grey St (Fourth Ave to Wayne Gretzky Pkwy) (W/WWW/STM/RD)	-	-	-	-	137,000	793,000	-	-	-	-
Alfred St (Colborne St to Dalhousie St)	-	-	-	-	13,000	72,000	-	-	-	-
Buffalo St. (Rushton Ave. to East End) (W/WWW/STM/RD)	-	-	-	-	-	57,000	328,000	-	-	-
Water SCADA Upgrades	100,000	102,000	104,000	106,000	108,000	110,000	113,000	115,000	117,000	120,000
Water Service Replacements/Renewals	300,000	306,000	312,000	318,000	325,000	331,000	338,000	345,000	351,000	359,000
Lead Water Service Replacement Program	-	102,000	-	106,000	-	110,000	-	115,000	-	-
Pre Engineering for 2017 Capital Construction Projects (Survey, Geotechnical Investigations, Utility Coordination)	97,000	-	-	-	-	-	-	-	-	-
Albion Water Booster Station Capital Upgrades	250,000	-	-	-	-	-	-	-	-	-
Accommodation Strategy Phase 1 - New Centralized Vehicle Maintenance and Works Yard	300,000	4,284,000	-	-	-	-	-	-	-	-

Description	Forecast										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Accommodation Strategy Phase 2 - Operational Yard Improvements (400 Grand River Avenue)	-	-	780,000	-	-	-	-	-	-	-	-
<b>Growth Related:</b>	-	-	-	-	-	-	-	-	-	-	
<b>Outside Intensification Area - Distribution:</b>	-	-	-	-	-	-	-	-	-	-	
West of Conklin Watermain 4	-	-	-	-	-	-	3,523,000	-	-	-	
West of Conklin Watermain 6	-	2,095,000	-	-	-	-	-	-	-	-	
West of Conklin Watermain 7	-	615,000	2,816,000	-	-	-	-	-	-	-	
King George Road Watermain	-	-	-	-	-	-	-	-	-	-	
North West Brantford Watermain 1	-	-	-	-	-	-	651,000	2,977,000	-	-	
North West Brantford Watermain 10	-	-	-	-	-	576,000	2,639,000	-	-	-	
<b>Intensification Area - Distribution:</b>	-	-	-	-	-	-	-	-	-	-	
Water Distribution System General Intensification Upgrades	269,000	275,000	280,000	286,000	291,000	297,000	303,000	309,000	316,000	322,000	
<b>Storage and Treatment:</b>	-	-	-	-	-	-	-	-	-	-	
West Brant Water Storage Facility Construction	-	7,465,000	-	-	-	-	-	-	-	-	
Brantford WTP Raw Water Intake/Canal Upgrade	250,000	1,040,000	4,763,000	-	-	-	-	-	-	-	
<b>Studies:</b>	-	-	-	-	-	-	-	-	-	-	
<b>Growth Related:</b>	-	-	-	-	-	-	-	-	-	-	
Master Planning Studies	-	-	-	-	271,000	-	-	-	-	299,000	
<b>Non-Growth Related:</b>	-	-	-	-	-	-	-	-	-	-	
Cast/Ductile Watermain Condition Assessment	-	-	104,000	-	-	110,000	-	-	117,000	-	
Water Treatment Plant Optimization Study	-	-	156,000	159,000	162,000	-	-	-	-	-	
Emergency Water Supply Study	-	-	-	-	-	-	-	-	-	-	
Water and Wastewater System Financial Sustainability Plan	-	-	-	53,000	-	-	-	-	59,000	-	
Water Booster Station and Reservoir Condition Assessment Study	50,000	-	-	-	-	-	-	-	-	-	
SCADA Master Plan	-	-	-	-	108,000	-	-	-	-	-	
<b>Lifecycle:</b>	-	-	-	-	-	-	-	-	-	-	
Fleet Replacement	-	97,000	222,000	297,000	103,000	13,000	125,000	208,000	211,000	108,000	
Water Facilities	-	-	-	-	-	-	-	-	-	-	
WTP, Reservoir and/or Building Upgrades	200,000	153,000	156,000	159,000	162,000	166,000	169,000	172,000	176,000	179,000	
Watermains	-	-	-	-	-	-	5,293,000	5,399,000	5,507,000	-	
Unspecified Watermain Replacement	-	-	-	-	-	-	2,737,000	2,791,000	2,847,000	5,975,000	
Unspecified Full Corridor Reconstruction (Watermain Replacement)	-	-	-	-	-	-	-	-	-	-	
Water Meter Replacement Program	225,000	230,000	234,000	239,000	244,000	248,000	253,000	258,000	264,000	269,000	
<b>Total Capital Expenditures</b>	<b>7,871,000</b>	<b>23,382,000</b>	<b>18,822,000</b>	<b>16,466,000</b>	<b>13,537,000</b>	<b>9,295,000</b>	<b>16,472,000</b>	<b>12,689,000</b>	<b>10,169,000</b>	<b>8,750,000</b>	
<b>Capital Financing</b>											
Direct Development Contributions	-	1,886,000	-	-	-	-	3,170,000	-	-	-	
Development Charges Reserve Fund	288,125	4,503,380	5,501,824	143,000	416,500	724,500	3,794,500	3,131,500	158,000	460,000	
Non-Growth Related Debuture Requirements	-	-	-	-	-	-	-	-	-	-	
Growth Related Debuture Requirements	-	-	-	-	-	-	-	-	-	-	
Operating Contributions	-	-	-	-	-	-	-	-	-	-	
Lifecycle Reserve Fund	-	-	-	-	-	-	-	-	-	-	
Water Reserve	7,602,875	16,992,620	13,320,177	16,313,000	13,120,500	8,570,500	9,507,500	9,657,500	10,001,000	8,290,000	
<b>Total Capital Financing</b>	<b>7,871,000</b>	<b>23,382,000</b>	<b>18,822,000</b>	<b>16,466,000</b>	<b>13,537,000</b>	<b>9,295,000</b>	<b>16,472,000</b>	<b>12,689,000</b>	<b>10,169,000</b>	<b>8,750,000</b>	

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

Debenture Year	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2015	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-	-	-
<b>Total Annual Debt Charges</b>	-	-	-	-	-	-	-	-	-	-

**Table A-3**  
**City of Brantford**  
**Water Service**  
**Schedule of Growth Related Debenture Repayments**  
 Inflated \$

Debenture Year	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2015	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-	-	-
<b>Total Annual Debt Charges</b>	-	-	-	-	-	-	-	-	-	-

**Table A-4**  
City of Brantford  
Water Service  
Water Reserves/ Reserve Funds Continuity  
Inflated \$

Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Balance	29,242,314	31,930,106	26,031,720	24,395,127	20,357,724	19,923,261	24,612,632	28,944,160	33,425,413	38,381,785
Transfer from Operating	9,360,663	10,336,028	10,973,046	11,662,653	12,105,748	12,542,998	12,995,995	13,429,197	13,839,456	14,263,382
Transfer from DC Reserve Fund (Repayment of Loan for PPB)	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	7,602,875	16,992,620	13,320,177	16,313,000	13,120,500	8,570,500	9,507,500	9,557,500	10,001,000	8,290,000
Transfer to DC Reserve (Loan for PPB)	-	-	-	-	-	-	-	364,000	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	31,000,103	25,273,514	23,684,590	19,764,780	19,342,972	23,895,759	28,101,126	32,451,857	37,263,869	44,355,167
Interest	930,003	758,205	710,538	592,943	580,289	716,873	843,034	973,556	1,117,916	1,330,655

**Table A-5**  
City of Brantford  
Water Service  
Water Development Charges Reserve Fund Continuity  
Inflated \$

Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Balance	2,334,128	2,912,366	(825,350)	(5,522,780)	(4,803,861)	(4,303,687)	(4,065,952)	(6,876,972)	(8,822,119)	(8,095,036)
Development Charge Proceeds	761,537	789,703	965,251	1,001,837	1,042,024	1,080,661	1,183,780	1,079,307	1,120,861	1,161,652
Transfer from Water Reserve (Loan for PPB)	-	-	-	-	-	-	-	364,000	-	-
Transfer to Capital	288,125	4,503,380	5,501,824	143,000	416,500	724,500	3,794,500	3,131,500	158,000	460,000
Transfer to Water Reserve (Repayment of Loan for PPB)	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	2,827,540	(801,311)	(5,361,922)	(4,663,943)	(4,178,337)	(3,947,526)	(6,676,672)	(8,565,165)	(7,859,258)	(7,393,384)
Interest	84,826	(24,039)	(160,856)	(139,918)	(125,350)	(118,426)	(200,300)	(256,955)	(235,778)	(221,802)
Required from Development Charges	268,125	4,503,380	5,501,824	143,000	416,500	724,500	3,794,500	3,131,500	158,000	460,000

**Table A-6**  
City of Brantford  
Water Service  
Water Lifecycle Reserve Fund Continuity  
Inflated \$

Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Balance	-	-	-	-	-	-	-	-	-	-
Transfer from Operating	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	-	-	-	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-	-	-	-

Table A-7  
City of Brantford  
Water Services  
Operating Budget Forecast  
Inflated \$

Description	Forecast											
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
<b>Operating Expenditures</b>												
<b>ENVIRONMENTAL SRVCS ADMIN</b>												
Full-Time Reg Earnings	394,500	406,300	418,500	431,100	444,000	457,300	471,000	485,100	499,700	514,700		
Part-Time Reg Earnings	20,600	21,200	21,800	22,500	23,200	23,900	24,600	25,300	26,100	26,900		
Overtime Earnings	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000		
Employee Benefits	107,100	110,300	113,600	117,000	120,500	124,100	127,800	131,600	135,500	139,600		
General Supplies	33,500	34,500	35,500	36,600	37,700	38,800	40,000	41,200	42,400	43,700		
Printing	13,400	13,800	14,200	14,600	15,000	15,500	16,000	16,500	17,000	17,500		
Advertising	12,600	13,000	13,400	13,800	14,200	14,600	15,000	15,500	16,000	16,500		
Postage	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000		
Professional Services	30,900	31,800	32,800	33,800	34,800	35,800	36,800	38,000	39,100	40,300		
Transfer To Grca	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,600	6,800	7,000		
Other Internal Charges	5,500	5,700	5,900	6,100	6,300	6,500	6,700	6,900	7,100	7,300		
<b>GRAND RIVER CONSERVATION AUTHORITY</b>												
Professional Services	10,300	10,600	10,900	11,200	11,500	11,800	12,200	12,600	13,000	13,400		
Transfer To Grca	1,023,900	1,054,600	1,086,200	1,118,800	1,152,400	1,187,000	1,222,600	1,259,300	1,297,100	1,336,000		
<b>WATER ADMINISTRATION</b>												
Employee Benefits	64,900	66,800	68,800	70,900	73,000	75,200	77,500	79,800	82,200	84,700		
Employee Memberships	20,600	21,200	21,800	22,500	23,200	23,900	24,600	25,300	26,100	26,900		
Corp Mbrshps & Subscriptions	28,800	29,700	30,600	31,500	32,400	33,400	34,400	35,400	36,500	37,600		
Professional Services	20,600	21,200	21,800	22,500	23,200	23,900	24,600	25,300	26,100	26,900		
Interest On Deposits	5,700	5,900	6,100	6,300	6,500	6,700	6,900	7,100	7,300	7,500		
Bad Debt Expense	28,800	29,700	30,600	31,500	32,400	33,400	34,400	35,400	36,500	37,600		
Overhead Charges	1,912,600	1,970,000	2,029,100	2,090,000	2,152,700	2,217,300	2,283,800	2,352,300	2,422,900	2,495,600		
Insurance Premiums & Claims	206,500	212,700	219,100	225,700	232,500	239,500	246,700	254,100	261,700	269,600		
Internal Copy Service	300	300	300	300	300	300	300	300	300	300		
Other Internal Charges	698,400	719,400	741,000	763,200	786,100	809,700	834,000	859,000	884,800	911,300		
<b>WATER TREATMENT OPER ADMIN</b>												
Full-Time Reg Earnings	379,400	390,800	402,500	414,600	427,000	439,800	453,000	466,600	480,600	495,000		
Part-Time Reg Earnings	10,300	10,600	10,900	11,200	11,500	11,800	12,200	12,600	13,000	13,400		
Overtime Earnings	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800	4,900	5,000		
Employee Benefits	99,800	102,800	105,900	109,100	112,400	115,800	119,300	122,900	126,600	130,400		
Payroll Burden Allocation	(10,300)	(10,600)	(10,900)	(11,200)	(11,500)	(11,800)	(12,200)	(12,600)	(13,000)	(13,400)		
Office Supplies	9,300	9,600	9,900	10,200	10,500	10,800	11,100	11,400	11,700	12,100		
Uniforms/Clothing	10,300	10,600	10,900	11,200	11,500	11,800	12,200	12,600	13,000	13,400		
Meals	2,900	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800		
Computer Hardware	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400	3,500		
Furniture	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,600	6,800	7,000		
Telephone-Landline	61,800	63,700	65,600	67,600	69,600	71,700	73,900	76,100	78,400	80,800		
Mobile Devices	10,800	11,100	11,400	11,700	12,100	12,500	12,900	13,300	13,700	14,100		
Printing	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000		
Advertising	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000		
Postage	3,600	3,700	3,800	3,900	4,000	4,100	4,200	4,300	4,400	4,500		
Registration Fees	36,100	37,200	38,300	39,400	40,600	41,800	43,100	44,400	45,700	47,100		
Accommodation & Other	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,600	6,800	7,000		
Travelling Expenses	6,800	7,000	7,200	7,400	7,600	7,800	8,000	8,200	8,400	8,700		
Lease - Equipment	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500		
Fleet Charges	45,500	46,900	48,300	49,700	51,200	52,700	54,300	55,900	57,600	59,300		
Other Internal Charges	500	500	500	500	500	500	500	500	500	500		
<b>TREATMENT OPERATIONS</b>												
Full-Time Reg Earnings	602,000	620,100	638,700	657,900	677,600	697,900	718,800	740,400	762,600	785,500		
Overtime Earnings	15,500	16,000	16,500	17,000	17,500	18,000	18,500	19,100	19,700	20,300		
Employee Benefits	150,800	155,300	160,000	164,800	169,700	174,800	180,000	185,400	191,000	196,700		
Payroll Burden Allocation	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)		
Medical & Emergency Supplies	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500		

Description	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Salt And Sand	4,600	4,700	4,800	4,900	5,000	5,200	5,400	5,600	5,800	6,000
Meals	100	100	100	100	100	100	100	100	100	100
Diesel Fuel	7,200	7,400	7,600	7,800	8,000	8,200	8,400	8,700	9,000	9,300
Propane	100	100	100	100	100	100	100	100	100	100
Chemicals	14,700	15,400	16,200	17,000	17,900	18,800	19,700	20,700	21,700	22,800
Aluminum	679,800	700,200	721,200	742,800	765,100	788,100	811,700	836,100	861,200	887,000
Ammonia Gas	67,000	71,100	73,200	73,200	75,400	77,700	80,000	82,400	84,900	87,400
Chemicals - LI27A	51,500	53,000	54,600	56,200	57,900	59,600	61,400	63,200	65,100	67,100
Chlorine	77,300	79,600	82,000	84,500	87,000	89,600	92,300	95,100	98,000	100,900
Sodium Fluoride	15,500	16,000	16,500	17,000	17,500	18,000	18,500	19,100	19,700	20,300
Sulphur Dioxide	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Sodium Meta-Bisulfite	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Liquid Oxygen	77,300	79,600	82,000	84,500	87,000	89,600	92,300	95,100	98,000	100,900
Equipment	20,600	21,200	21,800	22,500	23,200	23,900	24,600	25,300	26,100	26,900
Electricity	1,186,500	1,245,800	1,308,100	1,373,500	1,442,200	1,514,300	1,590,000	1,669,500	1,753,000	1,840,700
Natural Gas	67,100	69,100	71,200	73,300	75,500	77,800	80,100	82,500	85,000	87,600
Waste Removal	138,000	142,100	146,400	150,800	155,300	160,000	164,800	169,700	174,800	180,000
Courier	4,600	4,700	4,800	4,900	5,000	5,200	5,400	5,600	5,800	6,000
Professional Services	82,400	84,900	87,400	90,000	92,700	95,500	98,400	101,400	104,400	107,500
Fleet Charges	8,600	8,900	9,200	9,500	9,800	10,100	10,400	10,700	11,000	11,300
Other Internal Charges	267,800	275,800	284,100	292,600	301,400	310,400	319,700	329,300	339,200	349,400
<b>EQUIPMENT MAINTENANCE</b>										
Full-Time Reg Earnings	347,800	358,200	368,900	380,000	391,400	403,100	415,200	427,700	440,500	453,700
Overtime Earnings	30,900	31,800	32,800	33,800	34,800	35,800	36,900	38,000	39,100	40,300
Employee Benefits	88,600	91,300	94,000	96,800	99,700	102,700	105,800	109,000	112,300	115,700
Payroll Burden Allocation	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
General Supplies	267,800	275,800	284,100	292,600	301,400	310,400	319,700	329,300	339,200	349,400
Medical & Emergency Supplies	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,600	6,800	7,000
Small Tools	3,300	3,400	3,500	3,600	3,700	3,800	3,900	4,000	4,100	4,200
Lubricants	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800	4,900	5,000
Chemicals	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500
Equipment	8,200	8,400	8,700	9,000	9,300	9,600	9,900	10,200	10,500	10,800
Equipment R&M	54,600	56,200	57,900	59,600	61,400	63,200	65,100	67,100	69,100	71,200
Rental - Equipment	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Fleet Charges	22,000	22,700	23,400	24,100	24,800	25,500	26,300	27,100	27,900	28,700
<b>BUILDING MAINTENANCE</b>										
General Supplies	20,600	21,200	21,800	22,500	23,200	23,900	24,600	25,300	26,100	26,900
Medical & Emergency Supplies	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Cleaning Supplies	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	3,900	4,000
Taxes Paid On City Prop.	307,200	316,400	325,900	335,700	345,800	356,200	366,900	377,900	389,200	400,900
Building R&M	72,100	74,300	76,500	78,800	81,200	83,600	86,100	88,700	91,400	94,100
Snow Removal	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,600	6,800	7,000
Waste Removal	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	3,900	4,000
Janitorial Services	30,900	31,800	32,800	33,800	34,800	35,800	36,900	38,000	39,100	40,300
Dry Cleaning & Laundry	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000
Fleet Charges	8,600	8,900	9,200	9,500	9,800	10,100	10,400	10,700	11,000	11,300
Other Internal Charges	17,500	18,000	18,500	19,100	19,700	20,300	20,900	21,500	22,100	22,800
<b>WATER DIST GENERAL</b>										
Full-Time Reg Earnings	196,100	202,000	208,100	214,300	220,700	227,300	234,100	241,100	248,300	255,700
Overtime Earnings	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Employee Benefits	33,700	34,700	35,700	36,800	37,900	39,000	40,200	41,400	42,600	43,900
Payroll Burden Allocation	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	3,900	4,000
General Supplies	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	3,900	4,000
Meals	400	400	400	400	400	400	400	400	400	400
Electricity	700	700	700	700	700	700	700	700	700	700
Insurance Claims	300	300	300	300	300	300	300	300	300	300
Equipment R&M	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Fleet Charges	10,500	10,800	11,100	11,400	11,700	12,100	12,500	12,900	13,300	13,700
Other Internal Charges	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100

Description	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>MAINTENANCE SERVICES - GEN.</b>										
Full-Time Reg Earnings	194,100	199,900	205,900	212,100	218,500	225,100	231,900	238,900	246,100	253,500
Overtime Earnings	25,800	26,600	27,400	28,200	29,000	29,900	30,800	31,700	32,700	33,700
Employee Benefits	48,300	49,700	51,200	52,700	54,300	55,900	57,600	(13,900)	61,100	62,900
Payroll Burden Allocation	(11,300)	(11,600)	(11,900)	(12,300)	(12,700)	(13,100)	(13,500)	(13,900)	(14,300)	(14,700)
General Supplies	20,600	21,200	21,800	22,500	23,200	23,900	24,600	25,300	26,100	26,900
Meals	500	500	500	500	500	500	500	500	500	500
Contractor Repairs & Maintenance	20,600	21,200	21,800	22,500	23,200	23,900	24,600	25,300	26,100	26,900
Fleet Charges	73,700	75,900	78,200	80,500	82,900	85,400	88,000	90,600	93,300	96,100
Other Internal Charges	44,300	45,600	47,000	48,400	49,900	51,400	52,900	54,500	56,100	57,800
<b>MAINTENANCE OF METERS</b>										
Full-Time Reg Earnings	55,200	56,900	58,600	60,400	62,200	64,100	66,000	68,000	70,000	72,100
Overtime Earnings	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Employee Benefits	15,100	15,600	16,100	16,600	17,100	17,600	18,100	18,600	19,200	19,800
Payroll Burden Allocation	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	3,900	4,000
Equipment R&M	15,500	16,000	16,500	17,000	17,500	18,000	18,500	19,100	19,700	20,300
<b>MAINTENANCE OF HYDRANTS - GEN</b>										
Full-Time Reg Earnings	70,500	72,600	74,800	77,000	79,300	81,700	84,200	86,700	89,300	92,000
Overtime Earnings	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Employee Benefits	17,900	18,400	19,000	19,600	20,200	20,800	21,400	22,000	22,700	23,400
Payroll Burden Allocation	25,800	26,600	27,400	28,200	29,000	29,900	30,800	31,700	32,700	33,700
General Supplies	30,900	31,800	32,800	33,800	34,800	35,800	36,900	38,000	39,100	40,300
Meals	100	100	100	100	100	100	100	100	100	100
Equipment R&M	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800	4,900	5,000
Fleet Charges	34,500	35,500	36,600	37,700	38,800	40,000	41,200	42,400	43,700	45,000
Other Internal Charges	10,300	10,600	10,900	11,200	11,500	11,800	12,200	12,600	13,000	13,400
<b>MAINT. OF MAINS &amp; VALVES - GEN</b>										
Full-Time Reg Earnings	452,900	466,500	480,500	494,900	509,700	525,000	540,800	557,000	573,700	590,900
Part-Time Reg Earnings	25,800	26,600	27,400	28,200	29,000	29,900	30,800	31,700	32,700	33,700
Overtime Earnings	41,200	42,400	43,700	45,000	46,400	47,800	49,200	50,700	52,200	53,800
Employee Benefits	133,300	137,300	141,400	145,600	150,000	154,500	159,100	163,900	168,800	173,900
Payroll Burden Allocation	(20,600)	(21,200)	(21,800)	(22,500)	(23,200)	(23,900)	(24,600)	(25,300)	(26,100)	(26,900)
General Supplies	82,400	84,900	87,400	90,000	92,700	95,500	98,400	101,400	104,400	107,500
Medical & Emergency Supplies	7,200	7,400	7,600	7,800	8,000	8,200	8,400	8,700	9,000	9,300
Construction Material&Supplies	72,100	74,300	76,500	78,800	81,200	83,600	86,100	88,700	91,400	94,100
Meals	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Small Tools	8,200	8,400	8,700	9,000	9,300	9,600	9,900	10,200	10,500	10,800
Contractor Repairs & Maintenance	164,800	169,700	174,800	180,000	185,400	191,000	196,700	202,600	208,700	215,000
Bad Debt Expense	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Fleet Charges	157,700	162,400	167,300	172,300	177,500	182,800	188,300	193,900	199,700	205,700
Other Internal Charges	175,100	180,400	185,800	191,400	197,100	203,000	209,100	215,400	221,900	228,600
<b>Sub Total Operating</b>	<b>12,442,000</b>	<b>12,838,900</b>	<b>13,249,300</b>	<b>13,672,900</b>	<b>14,110,200</b>	<b>14,562,100</b>	<b>15,029,200</b>	<b>15,511,700</b>	<b>16,010,800</b>	<b>16,526,500</b>
<b>Capital-Related</b>										
Existing Debt WTP (Principal) - Non-Growth Related	879,678	918,450	958,931	1,001,196	1,045,324	1,091,397	1,139,500	1,189,724	1,242,161	1,296,910
Existing Debt WTP (Interest) - Non-Growth Related	855,421	816,649	776,168	733,903	689,775	643,702	595,598	545,375	492,937	438,189
Existing Debt WTP Upgrade (Principal) - Non-Growth Related	378,011	392,165	406,849	422,083	437,888	454,284	471,294	488,942	507,250	526,243
Existing Debt WTP Upgrade (Interest) - Non-Growth Related	334,640	320,486	305,802	290,568	274,763	258,367	241,357	223,709	205,401	186,408
New Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Transfer To Revenue Fund	517,100	532,600	548,600	565,100	582,100	599,600	617,600	636,100	655,200	674,900
Transfer To Reserve Fund	9,360,663	10,336,028	10,973,046	11,682,653	12,465,748	13,329,998	14,285,995	15,342,197	16,400,456	17,560,382
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
<b>Sub Total Capital Related</b>	<b>12,325,513</b>	<b>13,316,378</b>	<b>13,969,396</b>	<b>14,695,503</b>	<b>15,495,598</b>	<b>16,372,447</b>	<b>17,345,195</b>	<b>18,417,047</b>	<b>19,594,406</b>	<b>20,874,632</b>
<b>Total Expenditures</b>	<b>24,767,513</b>	<b>26,155,278</b>	<b>27,218,696</b>	<b>28,368,403</b>	<b>29,605,798</b>	<b>30,934,547</b>	<b>32,374,395</b>	<b>33,928,747</b>	<b>35,605,206</b>	<b>37,401,132</b>

Description	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Revenues</b>										
Base Charge/Minimum Bill	3,698,733	3,735,598	3,781,117	3,839,273	3,898,549	3,959,054	4,020,790	4,076,933	4,127,373	4,178,820
<u>ENVIRONMENTAL SRVCS ADMIN</u>										
Departmental Recoveries	60,000	61,800	63,700	65,600	67,600	69,600	71,700	73,900	76,100	78,400
Admin Chrgs Recovery Sewer	137,600	141,700	146,000	150,400	154,900	159,500	164,300	169,200	174,300	179,500
<u>GRAND RIVER CONSERVATION AUTHORITY</u>										
Contrib Frm Rev Fund	1,034,200	1,065,200	1,097,200	1,130,100	1,164,000	1,198,900	1,234,900	1,271,900	1,310,100	1,349,400
<u>WATER ADMINISTRATION</u>										
User Fees	-	-	-	-	-	-	-	-	-	-
Sale Of Bulk Water	-	-	-	-	-	-	-	-	-	-
<u>MAINTENANCE SERVICES - GEN.</u>										
Inspection Fees	25,800	26,600	27,400	28,200	29,000	29,900	30,800	31,700	32,700	33,700
User Fees	10,300	10,600	10,900	11,200	11,500	11,800	12,200	12,600	13,000	13,400
Departmental Recoveries	500	500	500	500	500	500	500	500	500	500
<u>NEW REMOTE, INSTAL, UPGRDE MITR</u>										
Billable Recoveries History	41,200	42,400	43,700	45,000	46,400	47,800	49,200	50,700	52,200	53,800
<u>MAINTENANCE OF HYDRANTS - GEN</u>										
User Fees	9,300	9,600	9,900	10,200	10,500	10,800	11,100	11,400	11,700	12,100
Departmental Recoveries	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000
<u>MAINT OF MAINS &amp; VALVES - GEN</u>										
User Fees	15,500	16,000	16,500	17,000	17,500	18,000	18,500	19,100	19,700	20,300
Contributions from Development Charges Reserve Fund	-	-	-	-	-	-	-	-	-	-
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
<b>Total Operating Revenue</b>	5,035,233	5,112,198	5,199,217	5,299,873	5,402,949	5,508,454	5,616,690	5,720,733	5,820,573	5,922,920
Water Billing Recovery - Operating	19,732,280	21,043,081	22,019,480	23,068,529	23,842,850	24,643,993	25,473,855	26,304,013	27,132,632	27,989,613
Lifecycle Reserve Contribution (\$)										
<b>Water Billing Recovery - Total</b>	19,732,280	21,043,081	22,019,480	23,068,529	23,842,850	24,643,993	25,473,855	26,304,013	27,132,632	27,989,613

Table A-8  
City of Brantford  
Water Services  
Water Rate Forecast  
Initiated \$

Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Water Billing Recovery	19,732,280	21,043,081	22,019,480	23,068,529	23,842,850	24,643,993	25,473,855	26,304,013	27,132,632	27,989,613
Total Consumption (m <sup>3</sup> ) (Adjusted for Min. Bill)	10,915,683	10,975,441	11,057,333	11,161,961	11,268,600	11,377,454	11,488,520	11,589,526	11,680,270	11,772,826
<b>Constant Rate</b>	1.81	1.92	1.99	2.07	2.12	2.17	2.22	2.27	2.32	2.38
<b>Annual Percentage Change</b>	3.4%	6.1%	3.9%	3.8%	2.4%	2.4%	2.4%	2.4%	2.3%	2.3%

Table A-9  
City of Brantford  
Wastewater Service  
Capital Budget Forecast  
Inflated \$

Description	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Capital Expenditures</b>										
Murray St (Dalhousie St to Colborne St) (W/WWW/STM/RD)	-	-	-	-	-	-	-	-	-	-
Gladstone Ave (Erie Ave to West End) (W/WWW/STM/RD)	-	-	-	-	-	-	-	-	-	-
Alexander Dr (Grand River Ave to Webster St) (W/WWW/STM/RD)	-	-	-	-	-	-	-	-	-	-
St.Paul Ave (King George Rd to Charing Cross St) (W/WWW/STM/RD)	-	-	-	-	-	-	-	-	-	-
GIS Geospatial Database Conversion	-	-	-	-	-	-	-	-	-	-
Public Works Activity Tracking and Asset Management Tool	125,000	-	-	-	-	-	-	-	-	-
Baldwin Ave (Full Length) (W/WWW/STM/RD)	-	-	-	-	-	-	-	-	-	-
Sewer Rehabilitation and Lining Program	789,000	854,000	925,000	688,000	649,000	662,000	676,000	689,000	703,000	717,000
William Street (Richmond to West Street) (W/WWW/STM/RD) (Phase 1 of 2)	-	-	-	-	-	-	-	-	-	-
Allenby Ave. (Erie Ave. to Webling St.) (W/WWW/STM/RD)	248,000	-	-	-	-	-	-	-	-	-
Lorne Cres (Full including Dufferin Ave from Lorne Cres to Lorne Cres) (W/WWW/STM/RD)	402,000	-	-	-	-	-	-	-	-	-
William St (Bedford St to Richmond St) (W/WWW/STM/RD) (Phase 2 of 2)	678,000	-	-	-	-	-	-	-	-	-
Colborne St (Downtown) - Clarence St to Brant Ave (W/WWW/STM/RD) - Coordinated with PN162	-	-	-	413,000	-	-	-	-	-	-
Elgin St (Stanley Street to Rawdon St)	32,000	318,000	-	-	-	-	-	-	-	-
Dalhousie St (Drummond St to Stanley St) (W/WWW/STM/RD)	94,000	539,000	-	24,000	262,000	-	-	-	-	-
Sixth Ave (Division St to Lida St) (W/WWW/STM/RD)	48,000	275,000	-	-	-	-	-	-	-	-
Wastewater Collection System Flow Monitoring and Sampling	150,000	102,000	-	-	-	-	-	-	-	-
Grand St (Dundas St to St George St)	13,000	184,000	-	-	-	-	-	-	-	-
Darling St (Rawdon St to Stanley St)	20,000	112,000	-	-	-	-	-	-	-	-
Maple Ave (Palmerston Ave to Dufferin Ave)	16,000	91,000	-	-	-	-	-	-	-	-
Brighton Ave (Huron St to Superior St) (W/WWW/STM/RD)	-	-	65,000	-	-	-	-	-	-	-
St.Paul Ave (Grand River Ave to Brant Ave) (W/WWW/STM/RD)	-	227,000	1,315,000	-	-	-	-	-	-	-
Frank St (Grand River Ave to Webster St)	-	-	312,000	-	-	-	-	-	-	-
Pontiac St (Marlene Ave to Marie Ave) (W/WWW/STM/RD)	-	-	-	16,000	92,000	-	-	-	-	-
Marlene Ave (Pontiac St to River Rd) (W/WWW/STM/RD)	-	-	-	13,000	74,000	-	-	-	-	-
Chestnut Ave (Palmerston Ave to Dufferin Ave) (W/WWW/STM/RD)	51,000	294,000	-	-	-	-	-	-	-	-
Norwich St (Sherwood Dr to Colborne St W) (W/WWW/STM/RD)	-	-	54,000	312,000	-	-	-	-	-	-
Marie Ave (Dead-End to Tecumseh St) (W/WWW/STM/RD)	-	-	24,000	135,000	-	-	-	-	-	-
Palmerston Ave (Chestnut Ave to St Paul Ave) (W/WWW/STM/RD)	-	-	46,000	265,000	-	-	-	-	-	-
Albion St (Henrietta St to Bedford St) (W/WWW/STM/RD) - Pending Decision regarding Albion Water Pumping Station	-	-	-	60,000	349,000	-	-	-	-	-
Raleigh St (Full Street including Easement) (W/WWW/STM/RD)	48,000	277,000	-	-	-	-	-	-	-	-
Chatham St (Stanley St to Park Rd) (W/WWW/STM/RD)	-	-	-	229,000	1,325,000	-	-	-	-	-
Waterloo St (Brant Ave to Pearl St) (W/WWW/STM/RD)	-	-	-	-	28,000	159,000	-	-	-	-
Sheridan St (Rawdon St to Fourth Ave) (W/WWW/STM/RD)	-	-	-	-	67,000	386,000	-	-	-	-
Grey St (Fourth Ave to Wayne Gretzky Pkwy) (W/WWW/STM/RD)	-	-	-	-	120,000	693,000	-	-	-	-
Alfred St (Colborne St to Dalhousie St)	-	-	-	-	13,000	72,000	-	-	-	-
Dalhousie (Clarence St to Brant Ave) Full corridor reconstruction (W/WWW/STM/RD)	-	-	-	159,000	1,759,000	-	-	-	-	-
Buffalo St. (Rushon Ave. to East End) (W/WWW/STM/RD)	-	-	-	-	-	49,000	277,000	-	-	-
Sunset Avenue and Watson Ave (w/wwr/d/stm) - Full corridor reconstruction	-	51,000	301,000	-	-	-	-	-	-	-
Disinfection and Outfall Upgrades at Brantford WWTP	-	153,000	780,000	5,306,000	-	-	-	-	-	-
Primary Clarifier Upgrade at Brantford WWTP	-	102,000	1,040,000	1,061,000	-	-	-	-	-	-
Pumping Station Mechanical and Process Improvements	200,000	-	208,000	-	162,000	-	169,000	-	176,000	-

Description	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Wastewater Treatment, Mechanical and Process Improvements	-	-	-	-	-	-	-	-	-	-
Wastewater Collection System Mainline Rehabilitation/Spot Repairs	300,000	306,000	312,000	531,000	541,000	552,000	563,000	574,000	586,000	598,000
Private Sewer Lateral Replacement Grant Program	100,000	102,000	104,000	106,000	108,000	110,000	113,000	115,000	117,000	120,000
Wastewater Collection System Public Sewer Lateral Rehabilitation and Repairs	150,000	153,000	156,000	159,000	162,000	166,000	169,000	172,000	176,000	179,000
Greenwich Sanitary Pump Station Operational Investigation and Remediation	150,000	-	-	-	-	-	-	-	-	-
Manhole Rehabilitation Program	-	-	-	398,000	406,000	414,000	422,000	431,000	439,000	448,000
Wastewater Facility Computerized Control and Data Systems Upgrades	100,000	102,000	-	-	-	-	-	-	-	-
Wastewater Facilities Engineering Drawing Development	-	-	-	-	-	-	-	-	-	-
RAS, WAS and Biosolids Processes Upgrades at Brantford WWTP (Design and Construction)	2,650,000	-	-	-	-	-	-	-	-	-
Digester Clean-Out Program at Brantford WWTP	-	765,000	780,000	796,000	-	-	-	-	-	-
Operational Building Upgrade at Brantford WWTP	-	-	78,000	424,000	-	-	-	-	-	-
Pre Engineering for 2017 Capital Construction Projects (Survey, Geotechnical Investigations, Utility Coordination)	97,000	-	-	-	-	-	-	-	-	-
Accommodation Strategy Phase 1 - New Centralized Vehicle Maintenance and Works Yard	300,000	4,284,000	-	-	-	-	-	-	-	-
Accommodation Strategy Phase 2 - Operational Yard Improvements (400 Grand River Avenue)	-	-	780,000	-	-	-	-	-	-	-
<b>Growth Related:</b>										
<b>Outside Intensification Area - Distribution:</b>										
West Conklin Trunk Sewer	-	-	-	-	-	-	-	-	-	-
West Conklin Sub-Trunk Sewer 2	-	-	-	-	-	-	773,000	-	-	-
West Conklin Sub-Trunk Sewer 3	-	-	-	-	-	-	1,976,000	-	-	-
West Conklin Sub-Trunk Sewer 4	-	2,153,000	-	-	-	-	-	-	-	-
West Conklin Sub-Trunk Sewer 5	-	-	1,550,000	-	-	-	-	-	-	-
Oakhill Drive Sewer Upgrade	-	777,000	3,612,000	4,329,000	-	-	-	-	-	-
Grand River Twinned Residential Force mains & Pumping Station	-	-	-	-	-	-	-	5,771,000	-	-
Northwest Extension Trunk Sewer	-	-	-	-	-	-	1,240,000	-	-	-
Northwest Extension Sub Trunk Sewer 1	-	-	-	-	-	-	452,000	2,101,000	-	-
Hardy Rd Sewer Upgrade	55,000	254,000	-	-	-	-	-	-	-	-
<b>Intensification Area - Distribution:</b>										
Sanitary Collection System General Intensification Upgrades	324,000	330,000	337,000	343,000	350,000	357,000	364,000	372,000	379,000	387,000
Greenwich Sewer Upgrade	437,000	2,035,000	-	-	-	-	-	-	-	-
Empey Diversion Structure Sanitary Manhole Diversion	-	-	40,000	181,000	-	-	-	-	-	-
Structure - Wayne Gretzky Parkway & Henry Street - Empey PS drainage area)	-	-	-	-	-	-	-	-	-	-
<b>Pumping Station:</b>										
Grand River Residential Sewage Pumping Station	-	-	-	-	-	-	-	-	-	-
Empey SPS Pumps Upgrade	-	394,000	2,007,000	-	-	-	-	-	-	-
<b>Studies:</b>										
<b>Growth Related:</b>										
Master Servicing Plan Update	-	-	-	-	271,000	-	-	-	-	299,000
<b>Non-Growth Related:</b>										
Sanitary Pumping Station Facility Condition Assessment	-	-	-	-	54,000	-	-	-	-	-
Wastewater Collection System Trunkline Condition Assessment	-	-	52,000	-	-	55,000	-	-	59,000	-
Manhole Condition Assessment Program	75,000	-	78,000	-	81,000	-	84,000	-	88,000	-
RAS, WAS and Biosolids Processes Upgrade at Brantford WWTP (Study)	-	-	-	-	-	-	-	-	-	-
Wastewater Treatment Optimization Study	150,000	153,000	-	53,000	-	-	-	-	-	-
Water and Wastewater System Financial Sustainability Plan	-	-	-	-	-	-	-	-	59,000	-
SCADA Master Plan	-	-	-	-	108,000	-	-	-	-	-

Description	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Lifecycle:</b>										
Fleet Replacement	300,000	184,000	-	340,000	87,000	497,000	90,000	40,000	-	233,000
Wastewater Facilities	-	-	-	-	-	-	-	-	-	-
Unspecified Full Corridor Reconstruction (Sanitary Sewers)	-	-	-	-	-	-	5,631,000	5,743,000	5,858,000	5,975,000
Water Meter Replacement Program	225,000	230,000	234,000	239,000	244,000	248,000	253,000	258,000	264,000	269,000
Total Capital Expenditures	8,327,000	15,801,000	15,190,000	16,580,000	7,312,000	4,420,000	13,252,000	16,266,000	8,904,000	9,225,000
<b>Capital Financing</b>										
Direct Development Contributions		1,736,000	1,317,000	4,329,000	446,000		2,170,000			
Development Charges Reserve Fund	380,500	2,314,500	3,833,000	262,000		178,500	2,453,000	8,058,000	189,500	492,500
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-
Growth Related Debenture Requirements	-	-	-	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-	-	-	-
Lifecycle Reserve Fund	-	-	-	-	-	-	-	-	-	-
Wastewater Reserve	7,946,500	11,750,500	10,040,000	11,989,000	6,866,000	4,241,500	8,629,000	8,208,000	8,714,500	8,732,500
Total Capital Financing	8,327,000	15,801,000	15,190,000	16,580,000	7,312,000	4,420,000	13,252,000	16,266,000	8,904,000	9,225,000

**Table A-10**  
**City of Brantford**  
**Wastewater Service**  
**Schedule of Non-Growth Related Debenture Repayments**  
 Inflated \$

Debenture Year	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2015										
2016										
2017										
2018										
2019										
2020										
2021										
2022										
2023										
2024										
<b>Total Annual Debt Charges</b>										

**Table A-11**  
**City of Brantford**  
**Wastewater Service**  
**Schedule of Growth Related Debenture Repayments**  
 Inflated \$

Debenture Year	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2015										
2016										
2017										
2018										
2019										
2020										
2021										
2022										
2023										
2024										
<b>Total Annual Debt Charges</b>										

**Table A-12**  
**City of Brantford**  
**Wastewater Service**  
**Wastewater Reserves/ Reserve Funds Continuity**  
 Inflated \$

Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Balance	26,520,547	27,904,396	26,233,748	25,063,081	23,801,144	28,128,672	35,691,964	39,275,865	41,670,354	46,009,135
Transfer from Operating	8,517,600	9,315,762	9,607,340	10,033,825	10,374,246	10,765,220	11,068,944	11,449,789	11,713,210	11,980,201
Transfer from DC Reserve Fund (Repayment of Loan for PPB)	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	7,946,500	11,750,500	10,040,000	11,989,000	6,866,000	4,241,500	8,629,000	8,208,000	8,714,500	8,732,500
Transfer to DC Reserve (Loan for PPB)	-	-	1,468,000	-	-	-	-	2,061,000	-	-
Transfer to Operating	27,091,647	25,469,659	24,333,088	23,107,906	27,309,390	34,652,392	38,131,908	40,456,654	44,669,063	49,256,836
Closing Balance	812,749	764,090	729,993	693,237	819,282	1,039,572	1,143,957	1,213,700	1,340,072	1,477,705
Interest	-	-	-	-	-	-	-	-	-	-

**Table A-13**  
**City of Brantford**  
**Wastewater Service**  
**Wastewater Development Charges Reserve Fund Continuity**  
 Inflated \$

Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Balance	4,294,387	4,535,433	2,810,347	1,098,524	1,525,549	1,802,439	2,388,763	718,304	(4,722,303)	(4,316,637)
Development Charge Proceeds	489,446	507,559	621,181	644,592	670,391	695,249	761,620	693,936	720,894	747,117
Transfer from Wastewater Reserve (Loan for PPB)	-	-	1,468,000	-	-	-	-	2,061,000	-	-
Transfer from Capital - Closed/Delayed Projects	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	380,500	2,314,500	3,833,000	262,000	446,000	178,500	2,453,000	8,058,000	189,500	492,500
Transfer to Wastewater Reserve (Repayment of Loan for PPB)	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	4,403,333	2,728,492	1,066,528	1,481,116	1,749,940	2,319,187	697,382	(4,584,761)	(4,190,909)	(4,062,020)
Interest	132,100	81,855	31,996	44,433	52,498	69,576	20,921	(137,543)	(125,727)	(121,861)
Required from Development Charges	380,500	2,314,500	3,833,000	262,000	446,000	178,500	2,453,000	8,058,000	189,500	492,500

**Table A-14**  
**City of Brantford**  
**Wastewater Service**  
**Wastewater Lifecycle Reserve Fund Continuity**  
 Inflated \$

Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Balance	-	-	-	-	-	-	-	-	-	-
Transfer from Operating	-	-	-	-	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	-	-	-	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-	-	-	-

Table A-15  
City of Brantford  
Wastewater Services  
Operating Budget Forecast  
Inflated \$

Description	Forecast										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
<b>Operating Expenditures</b>											
WASTEWATER ADMINISTRATION											
Employee Benefits	10,000	10,300	10,600	10,900	11,200	11,500	11,800	12,200	12,600	13,000	
Employee Memberships	400	400	400	400	400	400	400	400	400	400	
Taxes Paid On City Prop.	120,300	123,900	127,600	131,400	135,300	139,400	143,600	147,900	152,300	156,900	
Professional Services	15,500	16,500	17,000	17,000	17,500	18,000	18,500	19,100	19,700	20,300	
Wastewater Collection	3,425,300	3,528,100	3,633,900	3,742,900	3,855,200	3,970,900	4,090,000	4,212,700	4,339,100	4,469,300	
Bad Debt Expense	25,800	26,600	27,400	28,200	29,000	29,900	30,800	31,700	32,700	33,700	
Overhead Charges	865,400	891,400	918,100	945,600	974,000	1,003,200	1,033,300	1,064,300	1,096,200	1,129,100	
Insurance Premiums & Claims	218,300	224,800	231,500	238,400	245,600	253,000	260,600	268,400	276,500	284,800	
Other Internal Charges	370,100	381,200	392,600	404,400	416,500	429,000	441,900	455,200	468,900	483,000	
WASTEWATER COLL PUMPNG STN											
Taxes Paid On City Prop.	51,100	52,600	54,200	55,800	57,500	59,200	61,000	62,800	64,700	66,600	
Wastewater Treatment	442,500	355,800	366,500	377,500	388,800	400,400	412,400	424,800	437,500	450,600	
WASTEWATER COLL SYS MNT											
Full-Time Reg Earnings	550,300	566,800	583,800	601,300	619,300	637,900	657,000	676,700	697,000	717,900	
Part-Time Reg Earnings	20,600	21,200	21,800	22,500	23,200	23,900	24,600	25,300	26,100	26,900	
Overtime Earnings	69,500	71,600	73,700	75,900	78,200	80,500	82,900	85,400	88,000	90,600	
Employee Benefits	151,200	155,700	160,400	165,200	170,200	175,300	180,600	186,000	191,600	197,300	
Medical & Emergency Supplies	14,400	14,800	15,200	15,700	16,200	16,700	17,200	17,700	18,200	18,700	
Construction Material&Supplies	72,100	74,300	76,500	78,800	81,200	83,600	86,100	88,700	91,400	94,100	
Equipment, Material & Supplies	200	200	200	200	200	200	200	200	200	200	
Uniforms/Clothing	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400	3,500	
Meals	400	400	400	400	400	400	400	400	400	400	
Electricity	4,100	4,200	4,300	4,400	4,500	4,600	4,700	4,800	4,900	5,000	
Data Communications	4,700	4,800	4,900	5,000	5,200	5,400	5,600	5,800	6,000	6,200	
Permits	3,600	3,700	3,800	3,900	4,000	4,100	4,200	4,300	4,400	4,500	
Registration Fees	25,800	26,600	27,400	28,200	29,000	29,900	30,800	31,700	32,700	33,700	
Contractor Repairs & Maintenance	46,900	48,300	49,700	51,200	52,700	54,300	55,900	57,600	59,300	61,100	
Bad Debt Expense	200	200	200	200	200	200	200	200	200	200	
Fleet Charges	366,700	377,700	389,000	400,700	412,700	425,100	437,900	451,000	464,500	478,400	
Other Internal Charges	67,000	69,000	71,100	73,200	75,400	77,700	80,000	82,400	84,900	87,400	
<b>COMPLIANCE ADMIN.FP2</b>											
Full-Time Reg Earnings	203,200	209,300	215,600	222,100	228,800	235,700	242,800	250,100	257,600	265,300	
Employee Benefits	48,500	50,000	51,500	53,000	54,600	56,200	57,900	59,600	61,400	63,200	
Uniforms/Clothing	400	400	400	400	400	400	400	400	400	400	
Meals	200	200	200	200	200	200	200	200	200	200	
Mobile Devices	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	
Licenses	200	200	200	200	200	200	200	200	200	200	
Registration Fees	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	
Mileage - Training	400	400	400	400	400	400	400	400	400	400	
Per Diem	500	500	500	500	500	500	500	500	500	500	
Accommodation & Other	800	800	800	800	800	800	800	800	800	800	
Travelling Expenses	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	

Description	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>COMPLIANCE CONTROL INSPECT</b>										
Full-Time Reg Earnings	389,200	400,900	412,900	425,300	438,100	451,200	464,700	478,600	493,000	507,800
Part-Time Reg Earnings	9,300	9,600	9,900	10,200	10,500	10,800	11,100	11,400	11,700	12,100
Overtime Earnings	7,200	7,400	7,600	7,800	8,000	8,200	8,400	8,700	9,000	9,300
Employee Benefits	115,700	119,200	122,800	126,500	130,300	134,200	138,200	142,300	146,600	151,000
Office Supplies	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Construction Material&Supplies	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,600	6,800	7,000
Uniforms/Clothing	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	3,900	4,000
Meals	200	200	200	200	200	200	200	200	200	200
Chemicals	15,500	16,000	16,500	17,000	17,500	18,000	18,500	19,100	19,700	20,300
Equipment	30,900	31,800	32,800	33,800	34,800	35,800	36,900	38,000	39,100	40,300
Furniture	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Books - Reference	200	200	200	200	200	200	200	200	200	200
Telephone-Landline	5,200	5,400	5,600	5,800	6,000	6,200	6,400	6,600	6,800	7,000
Mobile Devices	4,300	4,400	4,500	4,600	4,700	4,800	4,900	5,000	5,200	5,400
Printing	300	300	300	300	300	300	300	300	300	300
Advertising	500	500	500	500	500	500	500	500	500	500
Registration Fees	9,200	9,500	9,800	10,100	10,400	10,700	11,000	11,300	11,600	11,900
Per Diem	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Accommodation & Other	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Travelling Expenses	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Equipment R&M	4,000	4,200	4,300	4,400	4,500	4,600	4,700	4,800	4,900	5,000
Waste Removal	6,200	6,400	6,600	6,800	7,000	7,200	7,400	7,600	7,800	8,000
Dry Cleaning & Laundry	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000
Professional Services	20,600	21,200	21,800	22,500	23,200	23,900	24,600	25,300	26,100	26,900
Fleet Charges	94,200	97,000	99,900	102,900	106,000	109,200	112,500	115,900	119,400	123,000
Internal Copy Service	200	200	200	200	200	200	200	200	200	200
Other Internal Charges	87,600	90,200	92,900	95,700	98,600	101,600	104,600	107,700	110,900	114,200
<b>WATER QUALITY &amp; DWQOMS</b>										
Full-Time Reg Earnings	153,300	157,900	162,600	167,500	172,500	177,700	183,000	188,500	194,200	200,000
Overtime Earnings	10,300	10,600	10,900	11,200	11,500	11,800	12,200	12,600	13,000	13,400
Employee Benefits	41,300	42,500	43,800	45,100	46,500	47,900	49,300	50,800	52,300	53,900
Medical & Emergency Supplies	500	500	500	500	500	500	500	500	500	500
Uniforms/Clothing	300	300	300	300	300	300	300	300	300	300
Meals	100	100	100	100	100	100	100	100	100	100
Chemicals	500	500	500	500	500	500	500	500	500	500
Mobile Devices	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700
Postage	100	100	100	100	100	100	100	100	100	100
Licenses	300	300	300	300	300	300	300	300	300	300
Registration Fees	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,800	2,900	3,000
Travelling Expenses	500	500	500	500	500	500	500	500	500	500
Fleet Charges	10,900	11,200	11,500	11,800	12,200	12,600	13,000	13,400	13,800	14,200
Sub Total Operating	8,242,600	8,389,600	8,640,600	8,899,300	9,166,000	9,440,500	9,723,000	10,014,100	10,314,400	10,623,200
<b>Capital-Related</b>										
Existing Debt (Principal) - Growth Related	-	-	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Growth Related	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Existing Debt (Principal) - Non-Growth Related	-	-	-	-	-	-	-	-	-	-
Existing Debt (Interest) - Non-Growth Related	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Principal)	-	-	-	-	-	-	-	-	-	-
New Non-Growth Related Debt (Interest)	-	-	-	-	-	-	-	-	-	-
Transfer To Revenue Fund	517,100	532,600	548,600	565,100	582,100	599,600	617,600	636,100	655,200	674,900
Transfer To Reserve Fund	8,517,600	9,315,762	9,607,340	10,033,825	10,374,246	10,765,220	11,068,944	11,449,789	11,713,210	11,980,201
Transfer to Capital	-	-	-	-	-	-	-	-	-	-
Sub Total Capital Related	9,034,700	9,848,362	10,155,940	10,598,925	10,956,346	11,364,820	11,686,544	12,085,889	12,368,410	12,655,101
<b>Total Expenditures</b>	<b>17,277,300</b>	<b>18,237,962</b>	<b>18,796,540</b>	<b>19,498,225</b>	<b>20,122,346</b>	<b>20,805,320</b>	<b>21,409,544</b>	<b>22,099,989</b>	<b>22,682,810</b>	<b>23,278,301</b>

Description	Forecast									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Revenues</b>										
WASTEWATER ADMINISTRATION										
High Strength Surcharge	350,000	350,000	350,000	350,000	350,000	300,000	250,000	200,000	150,000	100,000
Sewage/Service Charge	293,600	302,400	311,500	320,800	330,400	340,300	350,500	361,000	371,800	383,000
Penalty On A/R	72,100	74,300	76,500	78,800	81,200	83,600	86,100	88,700	91,400	94,100
Departmental Recoveries	669,500	689,600	710,300	731,600	763,500	776,100	799,400	823,400	848,100	873,500
WASTEWATER COLL SYS MNT										
User Fees	19,600	20,200	20,800	21,400	22,000	22,700	23,400	24,100	24,800	25,500
COMPLIANCE ADMIN:FP2										
Admin Chrgs Recovery Water	191,100	196,800	202,700	208,800	215,100	221,600	228,200	235,000	242,100	249,400
COMPLIANCE CONTROL INSPECT										
High Strength Surcharge	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
WATER QUALITY & DWQMS										
Admin Chrgs Recovery Water	222,000	228,700	235,600	242,700	250,000	257,500	265,200	273,200	281,400	289,800
Other Revenue	-	-	-	-	-	-	-	-	-	-
Contributions from Development Charges Reserve Fund	-	-	-	-	-	-	-	-	-	-
Contributions from Reserves / Reserve Funds	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	1,827,900	1,872,000	1,917,400	1,964,100	2,012,200	2,011,800	2,012,800	2,015,400	2,019,600	2,025,300
Wastewater Billing Recovery - Operating	15,449,400	16,365,962	16,879,140	17,534,125	18,110,146	18,793,520	19,396,744	20,084,589	20,663,210	21,253,001
Lifecycle Reserve Contribution (\$)										
<b>Wastewater Billing Recovery - Total</b>	<b>15,449,400</b>	<b>16,365,962</b>	<b>16,879,140</b>	<b>17,534,125</b>	<b>18,110,146</b>	<b>18,793,520</b>	<b>19,396,744</b>	<b>20,084,589</b>	<b>20,663,210</b>	<b>21,253,001</b>

Table A-16  
 City of Brantford  
 Wastewater Services  
 Wastewater Rate Forecast

	Inflated \$										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Total Wastewater Billing Recovery	15,449,400	16,365,962	16,879,140	17,534,125	18,110,146	18,793,520	19,396,744	20,084,589	20,663,210	21,253,001	
Total Consumption (m <sup>3</sup> ) (Adjusted for Min. Bill)	8,982,209	9,041,968	9,123,859	9,228,487	9,335,127	9,443,980	9,555,046	9,656,052	9,746,797	9,839,352	
Constant Rate	1.72	1.81	1.85	1.90	1.94	1.99	2.03	2.08	2.12	2.16	
<b>Annual Percentage Change</b>	<b>2%</b>	<b>5%</b>	<b>2%</b>	<b>3%</b>	<b>2%</b>	<b>3%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>

## **Appendix B – Wastewater Financial Plan**



**Figure B-1**  
**Conversion Adjustments**  
**Statement of Operations (Wastewater)**

Modified Cash Basis	Budget 2015	Adjustments		Full Accrual Budget 2015	Accrual Basis
		DR	CR		
<b>Revenues</b>					<b>Revenues</b>
Rate Based Revenue	15,449,400		380,500	15,449,400	Rate Based Revenue
Other Revenue <sup>1</sup>	1,827,900		812,749	2,640,649	Earned Development Charges and Gas Tax Revenue
<b>Total Revenues</b>	<b>17,277,300</b>			<b>18,470,549</b>	<b>Total Revenues</b>
<b>Expenditures</b>					<b>Expenses</b>
Operating <sup>2</sup>	8,242,600	150,000		8,392,600	Operating Expenses
Other (GRCA)	517,100			517,100	Other (GRCA)
Capital					
Transfers to Reserves	8,517,600		8,517,600		
		4,048,694		4,048,694	Amortization
<b>Total Expenditures</b>	<b>17,277,300</b>			<b>12,958,394</b>	<b>Total Expenses</b>
<b>Net Expenditures</b>	<b>-</b>			<b>5,512,155</b>	<b>Annual Surplus/(Deficit)</b>
Increase (decrease) in amounts to be recovered	-			146,607,891	Accumulated Surplus/(Deficit), beginning of year
<b>Change in Fund Balances</b>	<b>-</b>	<b>5,512,155</b>		<b>152,120,046</b>	<b>Accumulated Surplus/(Deficit), end of year</b>
<b>TOTAL ADJUSTMENTS<sup>3</sup></b>		<b>9,710,849</b>	<b>9,710,849</b>		

**Notes:**

- 1 Other revenue adjusted to include interest earned on Wastewater Capital Reserve Funds
- 2 Operating expense adjusted to include capital expenditures not meeting the definition of tangible capital assets (Studies)
- 3 The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)

**Figure B-2**  
**Conversion Adjustments**  
**Statement of Financial Position (Wastewater)**

Modified Cash Basis	Budget 2015	Adjustments		Full Accrual Budget 2015	Accrual Basis
		DR	CR		
<b>ASSETS</b>					<b>ASSETS</b>
<b>Financial Assets</b>					<b>Financial Assets</b>
Cash	32,032,059			32,032,059	Cash
Accounts Receivable	1,831,659			1,831,659	Accounts Receivable
<i>Total Financial Assets</i>	<i>33,863,718</i>			<i>33,863,718</i>	<i>Total Financial Assets</i>
<b>LIABILITIES</b>					<b>Liabilities</b>
Accounts Payable & Accrued Liabilities	1,423,889			1,423,889	Accounts Payable & Accrued Liabilities
Deferred Revenue	4,535,433			4,535,433	Deferred Revenue
<i>Total Liabilities</i>	<i>5,959,322</i>			<i>5,959,322</i>	<i>Total Liabilities</i>
<b>Net Assets/(Debt)</b>	<b>27,904,396</b>			<b>27,904,396</b>	<b>Net Financial Assets/(Debt)</b>
		124,365,650	150,000	124,215,650	<b>Non-Financial Assets</b>
				<b>124,215,650</b>	Tangible Capital Assets
					<b>Total Non-Financial Assets</b>
<b>Municipal Position</b>					
Wastewater Reserves	27,904,396	27,904,396			
Development Charge Reserve Fund	4,535,433	4,535,433			
Amounts to be Recovered	(4,535,433)		4,535,433		
<b>Total Municipal Position</b>	<b>27,904,396</b>		152,120,046	<b>152,120,046</b>	<b>Accumulated Surplus/(Deficit), end of year</b>
<b>TOTAL ADJUSTMENTS</b>		<b>156,805,479</b>	<b>156,805,479</b>		

**Note:** The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)

**Table B-1**  
**Statement of Financial Position: Wastewater Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Financial Assets</b>											
Cash	1	32,032,059	28,556,741	25,658,223	24,792,540	29,376,455	37,500,385	39,398,541	36,329,009	41,063,937	45,912,740
Accounts Receivable	1	1,831,659	1,936,637	1,996,024	2,071,484	2,138,059	2,211,165	2,275,252	2,348,954	2,410,349	2,473,052
Accounts Receivable - Other	3	-	-	369,476	-	-	-	749,696	8,251,303	7,845,637	7,712,881
<b>Total Financial Assets</b>		<b>33,863,718</b>	<b>30,493,378</b>	<b>28,023,723</b>	<b>26,864,024</b>	<b>31,514,514</b>	<b>39,711,550</b>	<b>42,423,489</b>	<b>46,929,266</b>	<b>51,319,923</b>	<b>56,098,673</b>
<b>Liabilities</b>											
Accounts Payable & Accrued Liabilities	1	1,423,889	1,449,283	1,492,642	1,537,332	1,583,404	1,630,823	1,679,624	1,729,911	1,781,787	1,835,132
Deferred Revenue	3	4,535,433	2,810,347	-	57,549	334,438	920,763	-	-	-	-
<b>Total Liabilities</b>		<b>5,959,322</b>	<b>4,259,630</b>	<b>1,492,642</b>	<b>1,594,881</b>	<b>1,917,842</b>	<b>2,551,586</b>	<b>1,679,624</b>	<b>1,729,911</b>	<b>1,781,787</b>	<b>1,835,132</b>
<b>Net Financial Assets/(Debt)</b>		<b>27,904,396</b>	<b>26,233,748</b>	<b>26,531,081</b>	<b>25,269,143</b>	<b>29,596,672</b>	<b>37,159,964</b>	<b>40,743,865</b>	<b>45,199,355</b>	<b>49,538,136</b>	<b>54,263,541</b>
<b>Non-Financial Assets</b>											
Tangible Capital Assets	4	124,215,650	135,642,582	146,406,174	158,248,692	160,404,553	159,874,079	168,083,444	179,142,411	182,619,309	186,055,987
<b>Total Non-Financial Assets</b>		<b>124,215,650</b>	<b>135,642,582</b>	<b>146,406,174</b>	<b>158,248,692</b>	<b>160,404,553</b>	<b>159,874,079</b>	<b>168,083,444</b>	<b>179,142,411</b>	<b>182,619,309</b>	<b>186,055,987</b>
<b>Accumulated Surplus/(Deficit)</b>	5	<b>152,120,046</b>	<b>161,876,330</b>	<b>172,937,255</b>	<b>183,517,835</b>	<b>190,001,225</b>	<b>197,034,043</b>	<b>208,827,309</b>	<b>224,341,766</b>	<b>232,157,445</b>	<b>240,319,528</b>
<b>Financial Indicators</b>											
	<b>Total Change</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
1) Increase/(Decrease) in Net Financial Assets	27,742,994	1,383,849	(1,670,648)	297,333	(1,261,938)	4,327,529	7,563,292	3,583,901	4,455,490	4,338,781	4,725,405
2) Increase/(Decrease) in Tangible Capital Assets	65,968,643	4,128,306	11,426,932	10,763,592	11,842,518	2,155,861	(530,474)	8,209,365	11,058,967	3,476,898	3,436,678
3) Increase/(Decrease) in Accumulated Surplus	93,711,637	5,512,155	9,756,284	11,060,925	10,580,580	6,483,390	7,032,818	11,793,266	15,514,457	7,815,679	8,162,083

**Table B-2**  
**Statement of Operations: Wastewater Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Wastewater Revenue</b>											
Rate Based Revenue		15,449,400	16,365,962	16,879,140	17,534,125	18,110,146	18,793,520	19,396,744	20,084,589	20,663,210	21,253,001
Earned Development Charges Revenue	3	380,500	2,314,500	3,833,000	262,000	446,000	178,500	2,453,000	8,058,000	189,500	492,500
Developer Contributions	4	-	1,736,000	1,317,000	4,329,000	-	-	2,170,000	-	-	-
Other Revenue	6	2,640,649	2,636,090	2,647,393	2,657,337	2,831,483	3,051,372	3,156,757	3,229,101	3,359,671	3,503,004
<b>Total Revenues</b>		<b>18,470,549</b>	<b>23,052,552</b>	<b>24,676,533</b>	<b>24,782,462</b>	<b>21,387,629</b>	<b>22,023,392</b>	<b>27,176,501</b>	<b>31,371,690</b>	<b>24,212,381</b>	<b>25,248,505</b>
<b>Wastewater Expenses</b>											
Operating Expenses	Sch. B-1	8,392,600	8,542,600	8,640,600	8,952,300	9,437,000	9,440,500	9,723,000	10,014,100	10,373,400	10,922,200
Amortization	4	4,048,694	4,221,068	4,426,408	4,684,482	4,885,139	4,950,474	5,042,635	5,207,033	5,368,102	5,489,322
Loss on Disposal of Tangible Capital Assets		517,100	532,600	548,600	565,100	582,100	599,600	617,600	636,100	655,200	674,900
<b>Total Expenses</b>		<b>12,958,394</b>	<b>13,296,268</b>	<b>13,615,608</b>	<b>14,201,882</b>	<b>14,904,239</b>	<b>14,990,574</b>	<b>15,383,235</b>	<b>15,857,233</b>	<b>16,396,702</b>	<b>17,086,422</b>
<b>Annual Surplus/(Deficit)</b>		<b>5,512,155</b>	<b>9,756,284</b>	<b>11,060,925</b>	<b>10,580,580</b>	<b>6,483,390</b>	<b>7,032,818</b>	<b>11,793,266</b>	<b>15,514,457</b>	<b>7,815,679</b>	<b>8,162,083</b>
Accumulated Surplus/(Deficit), beginning of year	5	146,607,891	152,120,046	161,876,330	172,937,255	183,517,835	190,001,225	197,034,043	208,827,309	224,341,766	232,157,445
Accumulated Surplus/(Deficit), end of year		152,120,046	161,876,330	172,937,255	183,517,835	190,001,225	197,034,043	208,827,309	224,341,766	232,157,445	240,319,528
<b>Note 5:</b>											
<b>Accumulated Surplus/(Deficit) Reconciliation:</b>		<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Reserve Balances</b>											
Reserves: Development Charges		4,535,433	2,810,347	(369,476)	57,549	334,438	920,763	(749,696)	(8,251,303)	(7,845,637)	(7,712,881)
Reserves: Capital/Other		27,904,396	26,233,748	26,531,081	25,269,143	29,596,672	37,159,964	40,743,865	45,199,355	49,538,136	54,263,541
<b>Total Reserves Balance</b>		<b>32,439,829</b>	<b>29,044,095</b>	<b>26,161,605</b>	<b>25,326,692</b>	<b>29,931,110</b>	<b>38,080,727</b>	<b>39,994,169</b>	<b>36,948,052</b>	<b>41,692,499</b>	<b>46,550,660</b>
Less: Debt Obligations and Deferred Revenue		(4,535,433)	(2,810,347)	369,476	(57,549)	(334,438)	(920,763)	749,696	8,251,303	7,845,637	7,712,881
Add: Tangible Capital Assets	4	124,215,650	135,642,582	146,406,174	158,248,692	160,404,553	159,874,079	168,083,444	179,142,411	182,619,309	186,055,987
<b>Total Ending Balance</b>		<b>152,120,046</b>	<b>161,876,330</b>	<b>172,937,255</b>	<b>183,517,835</b>	<b>190,001,225</b>	<b>197,034,043</b>	<b>208,827,309</b>	<b>224,341,766</b>	<b>232,157,445</b>	<b>240,319,528</b>
<b>Financial Indicators</b>											
	<b>Total Change</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
1) Expense to Revenue Ratio		70%	58%	55%	57%	70%	68%	57%	51%	68%	68%
2) Increase/(Decrease) in Accumulated Surplus	93,711,637	5,512,155	9,756,284	11,060,925	10,580,580	6,483,390	7,032,818	11,793,266	15,514,457	7,815,679	8,162,083

**Schedule B-1**  
**Schedule of Operating Expenses: Wastewater Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Operating Expenses</b>											
Wastewater Administration		5,051,100	5,202,700	5,358,600	5,519,200	5,684,700	5,855,300	6,030,900	6,211,900	6,398,400	6,590,500
Wastewater Collection Pumping Station		493,600	408,400	420,700	433,300	446,300	459,600	473,400	487,600	502,200	517,200
Wastewater Collection System Maintenance		1,400,300	1,442,200	1,485,200	1,529,700	1,575,600	1,622,900	1,671,500	1,721,500	1,773,200	1,826,100
Compliance Administration		258,600	266,300	274,200	282,300	290,700	299,300	308,200	317,300	326,700	336,300
Compliance Control and Inspection		817,000	841,400	866,500	892,400	919,000	946,200	974,100	1,002,900	1,032,800	1,063,600
Water Quality and DWQMS		222,000	228,600	235,400	242,400	249,700	257,200	264,900	272,900	281,100	289,500
Non TCA - Expenses from Capital Budget	7	150,000	153,000	-	53,000	271,000	-	-	-	59,000	299,000
<b>TOTAL OPERATING EXPENSES</b>		<b>8,392,600</b>	<b>8,542,600</b>	<b>8,640,600</b>	<b>8,952,300</b>	<b>9,437,000</b>	<b>9,440,500</b>	<b>9,723,000</b>	<b>10,014,100</b>	<b>10,373,400</b>	<b>10,922,200</b>

**Table B-3**  
**Statement of Changes in Net Financial Assets/Debt: Wastewater Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Annual Surplus/(Deficit)		5,512,155	9,756,284	11,060,925	10,580,580	6,483,390	7,032,818	11,793,266	15,514,457	7,815,679	8,162,083
Less: Acquisition of Tangible Capital Assets	4	(8,177,000)	(15,648,000)	(15,190,000)	(16,527,000)	(7,041,000)	(4,420,000)	(13,252,000)	(16,266,000)	(8,845,000)	(8,926,000)
Add: Amortization of Tangible Capital Assets	4	4,048,694	4,221,068	4,426,408	4,684,482	4,885,139	4,950,474	5,042,635	5,207,033	5,368,102	5,489,322
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
		(4,128,306)	(11,426,932)	(10,763,592)	(11,842,518)	(2,155,861)	530,474	(8,209,365)	(11,058,967)	(3,476,898)	(3,436,678)
Increase/(Decrease) in Net Financial Assets/(Net Debt)		1,383,849	(1,670,648)	297,333	(1,261,938)	4,327,529	7,563,292	3,583,901	4,455,490	4,338,781	4,725,405
Net Financial Assets/(Net Debt), beginning of year		26,520,547	27,904,396	26,233,748	26,531,081	25,269,143	29,596,672	37,159,964	40,743,865	45,199,355	49,538,136
<b>Net Financial Assets/(Net Debt), end of year</b>		<b>27,904,396</b>	<b>26,233,748</b>	<b>26,531,081</b>	<b>25,269,143</b>	<b>29,596,672</b>	<b>37,159,964</b>	<b>40,743,865</b>	<b>45,199,355</b>	<b>49,538,136</b>	<b>54,263,541</b>

Financial Indicators	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1) Acquisition of Tangible Capital Assets (Cumulative)	8,177,000	23,825,000	39,015,000	55,542,000	62,583,000	67,003,000	80,255,000	96,521,000	105,366,000	114,292,000
2) Annual Surplus/Deficit before Amortization (Cumulative)	9,560,849	23,538,201	39,025,534	54,290,596	65,659,125	77,642,417	94,478,318	115,199,808	128,383,589	142,034,994
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)	1.17	0.99	1.00	0.98	1.05	1.16	1.18	1.19	1.22	1.24

**Table B-4**  
**Statement of Cash Flow – Indirect Method: Wastewater Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Operating Transactions</b>											
Annual Surplus/Deficit		5,512,155	9,756,284	11,060,925	10,580,580	6,483,390	7,032,818	11,793,266	15,514,457	7,815,679	8,162,083
Add: Amortization of TCA's	4	4,048,694	4,221,068	4,426,408	4,684,482	4,885,139	4,950,474	5,042,635	5,207,033	5,368,102	5,489,322
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Earned Deferred Revenue	3	(380,500)	(2,314,500)	(3,833,000)	(262,000)	(446,000)	(178,500)	(2,453,000)	(8,058,000)	(189,500)	(492,500)
Less: Developer Contributions		-	(1,736,000)	(1,317,000)	(4,329,000)	-	-	(2,170,000)	-	-	-
Add: Deferred Revenue Proceeds		621,546	589,414	653,177	689,025	722,889	764,825	782,541	556,393	595,166	625,256
Change in A/R (Increase)/Decrease		86,702	(104,978)	(59,387)	(75,460)	(66,575)	(73,106)	(64,087)	(73,702)	(61,395)	(62,703)
Change in A/P Increase/(Decrease)		41,486	25,394	43,359	44,690	46,072	47,419	48,801	50,287	51,876	53,345
Less: Interest Proceeds		(812,749)	(764,090)	(729,993)	(693,237)	(819,282)	(1,039,572)	(1,143,957)	(1,213,700)	(1,340,071)	(1,477,705)
Cash Provided by Operating Transactions		9,117,334	9,672,592	10,244,489	10,639,080	10,805,633	11,504,358	11,836,199	11,982,768	12,239,857	12,297,098
<b>Capital Transactions</b>											
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(8,177,000)	(13,912,000)	(13,873,000)	(12,198,000)	(7,041,000)	(4,420,000)	(11,082,000)	(16,266,000)	(8,845,000)	(8,926,000)
Cash Applied to Capital Transactions		(8,177,000)	(13,912,000)	(13,873,000)	(12,198,000)	(7,041,000)	(4,420,000)	(11,082,000)	(16,266,000)	(8,845,000)	(8,926,000)
<b>Investing Transactions</b>											
Proceeds from Investments		812,749	764,090	729,993	693,237	819,282	1,039,572	1,143,957	1,213,700	1,340,071	1,477,705
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	-	-	-	-
Cash Provided by (applied to) Investing Transactions		812,749	764,090	729,993	693,237	819,282	1,039,572	1,143,957	1,213,700	1,340,071	1,477,705
Increase in Cash and Cash Equivalents		1,753,083	(3,475,318)	(2,898,518)	(865,683)	4,583,915	8,123,930	1,898,156	(3,069,532)	4,734,928	4,848,803
Cash and Cash Equivalents, beginning of year	1	30,278,976	32,032,059	28,556,741	25,658,223	24,792,540	29,376,455	37,500,385	39,398,541	36,329,009	41,063,937
<b>Cash and Cash Equivalents, end of year</b>	<b>1</b>	<b>32,032,059</b>	<b>28,556,741</b>	<b>25,658,223</b>	<b>24,792,540</b>	<b>29,376,455</b>	<b>37,500,385</b>	<b>39,398,541</b>	<b>36,329,009</b>	<b>41,063,937</b>	<b>45,912,740</b>

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## Wastewater Notes to Financial Plan

The financial plan format, as outlined in Chapter 4, closely approximates the full accrual format used by municipalities (2009 onward) on their audited financial statements. The financial plan, however, 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); and
- C. Net debt (i.e. the difference between A and B above).

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

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

In order to show a balanced financial plan in a full accrual format for the City of Brantford, some of the items listed above have been estimated given that the City does not maintain all financial asset and liability data separately for wastewater. 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 receivables and accrued receivables as a percentage of annual revenues, applied to projected wastewater revenues (source: provided by City staff); and
- b) Payables: Based on historical levels of municipal-wide payables as a percentage of annual municipal expenses incurred, applied to projected wastewater expenses (source: prior years audited financial statement).

2. Debt

The City has no wastewater-related outstanding debt at the end of 2014 and do not anticipate any debt proceeds over the forecast period.

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/Accounts Receivable-Other

Deferred revenue is made up of wastewater development charge reserve fund 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 (accounts receivable – other) for financial reporting purposes.

#### 4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes wastewater-related assets in the following categories:
  - i. Infrastructure;
  - ii. Land Improvements; and
  - iii. Facilities.
- Amortization is calculated based on the straight-line approach, assuming a half year's amount of amortization in the year of acquisition for new capital.
- Given the planned asset replacement forecast in the 2015 Rate Study, useful life on acquisitions is assumed to be equal to the weighted average useful life for all assets on hand in the respective asset category.
- Write-offs are assumed to equal \$0 for each year in the forecast period.
- Tangible capital assets are shown on a net basis. It is assumed that disposals occur when the asset is being replaced, 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 disposals are assumed to be \$0 (it is assumed that historical cost is equal to accumulated amortization for all disposals).
- Residual value is assumed to be \$0 for all assets contained within the forecast period.
- Contributed Assets, as described in subsection 3.2.1, are shown on the Statement of Operations as revenue earned in the year of contribution.

The balance of tangible capital assets is summarized as follows:

Asset Historical Cost	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Tangible Capital Asset Balance	209,979,500	217,364,727	232,424,871	246,721,369	261,931,008	268,515,742	272,194,246	284,871,142	300,605,551	308,888,329
Acquisitions	8,177,000	15,648,000	15,190,000	16,527,000	7,041,000	4,420,000	13,252,000	16,266,000	8,845,000	8,926,000
Disposals	791,773	587,856	893,502	1,317,361	456,266	741,496	575,104	531,591	562,222	764,776
<b>Closing Tangible Capital Asset Balance</b>	<b>217,364,727</b>	<b>232,424,871</b>	<b>246,721,369</b>	<b>261,931,008</b>	<b>268,515,742</b>	<b>272,194,246</b>	<b>284,871,142</b>	<b>300,605,551</b>	<b>308,888,329</b>	<b>317,049,553</b>
Opening Accumulated Amortization	89,892,156	93,149,077	96,782,289	100,315,195	103,682,316	108,111,189	112,320,167	116,787,698	121,463,140	126,269,020
Amortization Expense	4,048,694	4,221,068	4,426,408	4,684,482	4,885,139	4,950,474	5,042,635	5,207,033	5,368,102	5,489,322
Amortization on Disposal	791,773	587,856	893,502	1,317,361	456,266	741,496	575,104	531,591	562,222	764,776
<b>Ending Accumulated Amortization</b>	<b>93,149,077</b>	<b>96,782,289</b>	<b>100,315,195</b>	<b>103,682,316</b>	<b>108,111,189</b>	<b>112,320,167</b>	<b>116,787,698</b>	<b>121,463,140</b>	<b>126,269,020</b>	<b>130,993,566</b>
<b>Net Book Value</b>	<b>124,215,650</b>	<b>135,642,582</b>	<b>146,406,174</b>	<b>158,248,692</b>	<b>160,404,553</b>	<b>159,874,079</b>	<b>168,083,444</b>	<b>179,142,411</b>	<b>182,619,309</b>	<b>186,055,987</b>

## 5. Accumulated Surplus

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

Wastewater	2015 Opening Accumulated Surplus
<b>Reserve Balances</b>	
Reserves: Development Charges	4,294,387
Reserves: Capital/Other	26,520,547
<b>Total Reserves Balance</b>	<b>30,814,934</b>
Less: Debt Obligations and Deferred Revenue	(4,294,387)
Add: Tangible Capital Assets	120,087,344
<b>Total Opening Balance</b>	<b>146,607,891</b>

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

## 6. Other Revenue

Other revenue includes high strength surcharges, service charges, cost recoveries, penalties and other non-operating general 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.