

**PORT BURWELL SECONDARY  
WATER SYSTEM**

**WATER  
ONTARIO REGULATION 453/07  
FINANCIAL PLAN**

**FINANCIAL PLAN # 303-301**

JANUARY 24, 2011



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# 1. INTRODUCTION



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# 1. INTRODUCTION

## 1.1 Study Purpose

Watson & Associates Economists Ltd. (Watson) was retained by the Port Burwell Secondary Water System (the Port Burwell SWS) to prepare a water financial plan as part of the five submission requirements for the purposes of obtaining a municipal drinking water license as per the *Safe Drinking Water Act, 2002*. In general, a financial plan requires an in-depth analysis of capital and operating needs, a review of current and future demand versus supply, and consideration of available funding sources. This detailed financial planning and forecasting in regards to the Port Burwell SWS has already been completed and documented by Watson within the “Port Burwell Secondary Water System Rate Study Update - 2010, September 1, 2010” (2010 Rate Study). The objective of the report provided herein is to convert the findings of the 2010 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 (SDWA) 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”

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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.

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 SDWA 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 (SWSSA) cited above is not yet in force however, the standards that it directs will 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.



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

O.Reg. 453/07 provides the following parameters with regards to s.30 (1) part b of the SDWA for new water systems:

- Financial plans must be approved by resolution of the 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 Public Sector Accounting Board (PSAB)) for each year in which the financial plans apply;
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system.
- Financial plans are to be made available to the public upon request and at no charge;
- If a website is maintained, financial plans are to be made available to the public through publication on the Internet at no charge;
- Notice of the availability of the financial plans is to be given to the public, and
- Financial plan is 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 regards to s.30 (1) part b of the SDWA for existing water systems. The requirements for existing systems are summarized as follows:

- Financial plans must be approved by resolution of the Governing Body;
- 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

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surplus/deficit (i.e. the components of a “Statement of Operations” as per the PSAB) for each year in which the financial plans apply;

- Financial plans must present financial position itemized by total financial assets, total liabilities, net debt, non-financial assets, and tangible capital assets (i.e. the components of a “Statement of Financial Position” as per PSAB) for each year in which the financial plans apply; and
- gross cash receipts/payments itemized by operating transactions, capital transactions, investing transactions and financial transactions (i.e. the components of a “Statement of Cash Flow” as per PSAB) for each year in which the financial plans apply.
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system.
- Financial plans are to be made available to the public upon request and at no charge;
- If a website is maintained, financial plans are to be made available to the public through publication on the Internet at no charge;
- Notice of the availability of the financial plans is to be given to the public; and
- Financial plan is 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 SDWA, 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. The financial plan is to be completed and approved by the later of July 1, 2010 and the date that is six months after the first license is issued. Financial plans may be amended and additional information beyond what is prescribed can be included if deemed necessary.

Where a licence has been issued, the financial plan must contain on the front page, the appropriate financial plan number as set out in Schedule A of the Municipal Drinking Water Licence document

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### **1.2.5 Public Sector Accounting Board (PSAB) Requirements**

The components of the financial plans indicated by the regulation are consistent with the requirements for financial statement presentation as set out in section PS1200 of the Canadian Institute of Chartered Accountants (CICA) 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 recent reporting years. However, the format has changed to conform to the new requirements of PS1200 and PS3150 (see Figures 1-1 and 1-2). For example, the financial statements are to be reported on a full accrual accounting basis for 2009 and 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 a water system's financial position. Historically, water systems have reported their financial results 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, effective for the 2009 fiscal year, water systems (along with municipalities) were required to report additional information relating to the accounting treatment of tangible capital assets as indicated by the new 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 will be 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 requires further changes to the format of pre-2009 financial statements. From a financial planning perspective, this change is significant for water assets as they represent a significant portion of the Port Burwell SWS's total assets.

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The Statement of Cash Flow and the Statement of Change in Net Financial Assets/Debt (which is a new statement) 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 which provides 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 water systems pre-2009, have now 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)

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

### NEW FORMAT

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

### NEW FORMAT

<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**

**NEW STATEMENT**

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**



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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 SDWA 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: Life-cycle planning with mid-course corrections is preferable to planning over the short-term, or not planning at all.
- Principle #5: An asset management plan is a key input to the development of a financial plan.
- Principle #6: A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs.
- Principle #7: Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.

Principle #8: Financial plans are “living” documents that require continuous improvement. Comparing the accuracy of financial projections with actual results can lead to improved planning in the future.

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

The principles help form the framework for a sustainable financial plan. The substance of the financial plan may be derived from SWSSA which will require, once in force, water systems to assess the “full cost” of providing water services. Full cost as defined in subsections 3(7) and 4(7) includes:

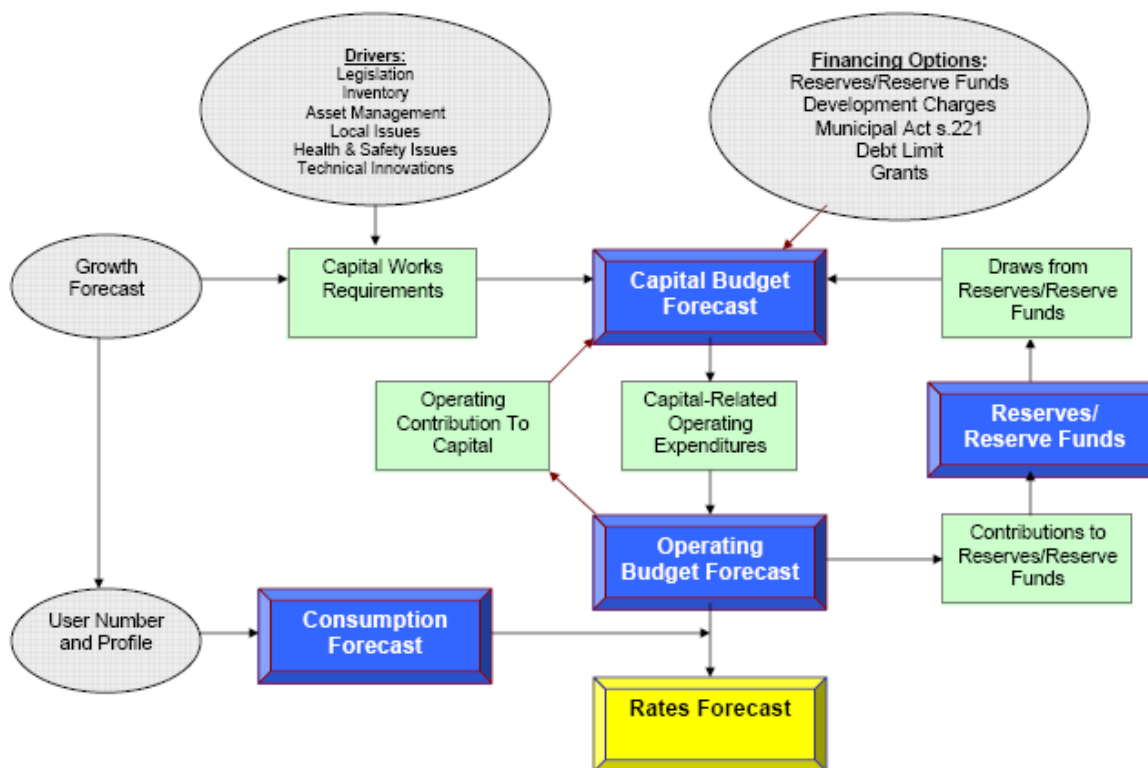
*“source protection, operating costs, financing costs, renewal and replacement costs and improvement costs associated with extracting, treating or distributing water to the public and collecting, treating or discharging waste water, and such other costs which may be specified by regulation.”*

Furthermore, water systems will be required to inventory and report their current infrastructure and how it will be maintained and managed going forward. Water systems will then be required to report on the full cost of services and how these costs will be recovered and paid for. The principles of SWSSA ensure that a long-term plan for sustainable asset management is developed and that all costs for providing water services are assessed so that there is sufficient funding for system needs.

## **2.2 Water Rate Study**

As noted above, Watson has already completed extensive financial planning as documented in the 2010 Rate Study conducted on behalf of the Port Burwell SWS. The study process was designed to address the “full cost” principles within SWSSA and does so in a manner that also reflects the guiding principles toward sustainable financial planning. Figure 2-1 below summarizes the process.

**FIGURE 2-1  
WATER RATE CALCULATION PROCESS**



As a result of employing this process, the 2010 Rate Study provides a sound financial plan for the Port Burwell SWS by providing:

- A detailed assessment of current and future capital needs including an analysis of potential funding sources (*Principles 2, 4, 5, 6, 9*);
- An analysis of fixed and variable operating costs in order to determine how they will be impacted by evolving infrastructure needs and system growth (*Principles 2, 3, 6, 7, 9*);
- A review and recommendation on rate structures that ensure revenues are equitable and sufficient to meet system needs (*Principles 2, 3, 6, 7, 9*); and
- A public process that involves ongoing consultation with the main stakeholders including the Port Burwell SWS staff, the Port Burwell SWS Board, 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 (*Principles 1, 9*).

The 2010 Rate Study was prepared to cover the period 2010 – 2015. However, as previously noted, financial plans must include a projection period of a minimum of six years. To meet this requirement, the financial plan includes one extra year (2016). The 2016 financial projections have been estimated using 2010 Rate Study assumptions and trends. The details of the financial plan arising from the 2010 Rate Study are contained in Appendix A.

A summary of the projected water rates for the Port Burwell SWS are as follows:

Description	2009	2010	2011	2012	2013	2014	2015
Total Water Billing Recovery	257,843	408,200	475,487	528,584	561,311	580,732	600,914
Total Consumption (m <sup>3</sup> )	279,654	260,000	262,700	265,620	268,570	271,370	274,390
<b>Constant Rate</b>	<b>\$1.42</b>	<b>\$1.57</b>	<b>\$1.81</b>	<b>\$1.99</b>	<b>\$2.09</b>	<b>\$2.14</b>	<b>\$2.19</b>

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### **3. APPROACH**





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## 3. APPROACH

### 3.1 Introduction

The 2010 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. This conversion process, when taken in conjunction with the opening balances from the 2009 financial statements, will help to establish the structure of the financial plan that will underpin the forecast. This chapter outlines the conversion process utilized and summarizes the adjustments made to prepare the financial plan.

### 3.2 Projection Process

The conversion from the existing modified cash basis used in the 2010 Water Rate Study to the full accrual reporting format required under O.Reg. 453/07 can be summarized in the following steps:

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

#### 3.2.1 **Calculate Tangible Capital Asset Balances**

In calculating tangible capital asset balances, existing and future purchased, developed, and/or contributed assets will need to be considered. For existing water tangible capital assets, an inventory has already been compiled and reported in the 2009 Financial Statements of the Port Burwell SWS as part of the effort to become compliant with PSAB 3150. As part of the Financial Statement reporting, the following calculations have been made to determine initial net book value:

- Historical cost up to the year prior to the first forecast year.
- Accumulated amortization up to the year prior to the first forecast year.

Future water capital needs have also been determined and summarized within the 2010 Rate Study. However, these estimates only represent future assets that the Port Burwell SWS anticipates purchasing or constructing without consideration for assets that are contributed by developers and other parties (at no or partial cost to the Port Burwell SWS). 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. Further, projected disposals of tangible capital assets can be incorporated into the calculation of net book value for each year of the forecast period, with recognition of related gains or losses.

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 projected Statement of Financial Position over the forecast period.

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

As discussed above, the 2010 Rate Study has been prepared using the modified cash basis, and therefore, must be converted to the full accrual basis. As per section 1.2.5, the new Statement of Operations eliminates and/or adds certain transactions which were reported using the modified cash basis by water systems before 2009. 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 Section 1.2.5) will need to be adjusted for and included within the new 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 section 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, needs to be removed, as they no longer qualify as an expense for reporting purposes. Principal payments will now be reported

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as a decrease in debt liability on the Statement of Financial Position. Finally, new expenses relating to tangible capital assets, such as amortization, write-offs, and (gain)/loss on disposal of assets will be reported via the Statement of Operations in order to capture the allocation of the cost of these assets to operating activities over their useful lives.

### **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 calculated, balances for the remaining items on the Statement of Financial Position are determined and recorded. 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, outstanding debt (principal only), are recorded and classified according to the new structure of the Statement of Financial Position as outlined in PS1200 and the 2009 Financial Statements.

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

The Statement of Cash Flow summarizes how the Port Burwell SWS financed its activities or in other words, how the costs of providing services were recovered. The statement is derived using initial balances from the 2009 Financial Statements, as well as comparative data from the Statement of Financial Position, and the current Statement of Operations.

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.

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### **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 Port Burwell SWS 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 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 with the Port Burwell SWS ledgers and/or financial statements.
- b. Amortization Expense The method and timing of amortization should be based on the Port Burwell SWS 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 2010 Rate Study.

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- d. Contributed Assets As noted earlier, contributed assets could represent a significant part of the Port Burwell SWS'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 (i.e. it first appeared on the 2009 financial statements) 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, accrued revenues (developer contributions), and/or other minor miscellaneous revenues.



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## 4. FINANCIAL PLAN





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## 4. FINANCIAL PLAN

### 4.1 Introduction

The following tables provide the complete financial plan for the Port Burwell SWS. 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 Port Burwell SWS. It is not an audited document<sup>1</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 Port Burwell SWS. The first important indicator is net financial assets/(debt), which is defined as the difference between financial assets and liabilities. This indicator provides an indication of the system’s “future revenue requirement”. A net financial asset position is where financial assets are greater than liabilities and implies that the system has the resources to finance future operations. Conversely, a net debt position implies that the future revenues generated by the system will be needed to finance past transactions as well as future operations. Table 4-1 indicates that the financial plan developed for the Port Burwell SWS forecasts financial assets exceeding liabilities in each year of the forecast period except 2015 and 2016. In 2015 liabilities increase substantially due to the planned issuance of \$2 million in debt to finance specific capital projects, with the impact continuing into 2016. However, net financial assets are projected to decline over the forecast period. This is a result of the planned 2015 debt as well as the decline in reserve/reserve fund balances (i.e. cash balance) over the forecast.

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

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

- Water tangible capital assets 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.
- 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 system 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 increase by approximately \$3.6 million over the forecast period. This indicates that the Port Burwell SWS 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 decreasing from 78% to 53% over the forecast period and as a result, the annual surplus improves from \$92,000 in 2010 to approximately \$374,000 by the end of the forecast period. It is important to note that an annual surplus is beneficial to ensure funding is available to non-expense costs such as tangible capital asset acquisitions, 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 over \$1.4 million to a 2009 accumulated surplus of \$2.6 million

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over the forecast period. This accumulated surplus, as indicated in Table 4-2, is predominately made up of reserve and reserve fund balances as well as historic 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 for the period 2010 - 2015, forecasted tangible capital asset acquisitions exceed forecasted annual surplus (net of amortization) resulting in a corresponding decrease in net financial assets in each year of that period. As discussed earlier under section 4.2.1, this is partially due to the decreasing level of reserves/reserve funds over the forecast. Tangible capital asset acquisitions are relatively significant each year, and are funded primarily through reserves/reserve funds and operating contributions. In 2016, forecasted annual surplus (net of amortization) exceeds forecasted tangible capital asset acquisitions, resulting in an increase in net financial assets in 2016. Maintaining a positive net financial asset balance allows for a long term plan of funding capital through accumulated surplus (i.e. reserves and reserve funds).

#### **4.2.4 Statement of Cash Flow (Table 4-4)**

The Statement of Cash Flow summarizes how the Water System is expected to generate and use cash resources during the planning 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), repay debt, and build internal reserves and reserve funds over the forecast period. The financial plan projects the cash position of the Port Burwell SWS's to decline from a balance of approximately \$329,000 at the beginning of 2010, to a bank indebtedness position of approximately \$42,000 by the end of the forecast.

Table 4-1  
 Port Burwell Secondary Water System  
 Statement of Financial Position (Water)  
 UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY  
 2010 - 2019

	Notes	Forecast						
		2010	2011	2012	2013	2014	2015	2016
<b>Financial Assets</b>								
Cash	1	325,739	236,905	156,102	121,981	85,597	55,317	-
Accounts Receivable	1	77,065	90,160	100,311	106,827	110,659	114,822	150,211
Total Financial Assets		402,804	327,065	256,413	228,808	196,256	170,139	150,211
<b>Liabilities</b>								
Bank Indebtedness		-	-	-	-	-	-	42,206
Accounts Payable & Accrued Liabilities	1	65,781	67,723	68,882	72,233	77,488	78,889	82,155
Debt (Principal only)	2	-	-	-	-	-	2,000,000	1,817,347
Deferred Revenue	3	-	-	-	-	-	-	-
Total Liabilities		65,781	67,723	68,882	72,233	77,488	2,078,889	1,941,708
Net Financial Assets/(Debt)		337,023	259,342	187,531	156,575	118,768	(1,908,750)	(1,791,497)
<b>Non-Financial Assets</b>								
Tangible Capital Assets	4	2,348,077	2,569,023	2,834,694	3,071,737	3,306,300	5,538,558	5,795,291
Inventory of Supplies		-	-	-	-	-	-	-
Prepaid Expenses		-	-	-	-	-	-	-
Total Non-Financial Assets		2,348,077	2,569,023	2,834,694	3,071,737	3,306,300	5,538,558	5,795,291
Accumulated Surplus/(Deficit)	5	2,685,100	2,828,365	3,022,225	3,228,312	3,425,068	3,629,808	4,003,794
<b>Financial Indicators (Forecast Only)</b>								
1) Increase/(Decrease) in Net Financial Assets		(49,620)	(77,681)	(71,811)	(30,956)	(37,807)	(2,027,518)	117,253
2) Increase/(Decrease) in Tangible Capital Assets		141,499	220,946	265,671	237,043	234,563	2,232,258	256,733
3) Increase/(Decrease) in Accumulated Surplus		91,879	143,265	193,860	206,087	196,756	204,740	373,986
<b>Total Change</b>		<b>(2,178,140)</b>	<b>(77,681)</b>	<b>(71,811)</b>	<b>(30,956)</b>	<b>(37,807)</b>	<b>(2,027,518)</b>	<b>117,253</b>

Table 4-2  
Port Burwell Secondary Water System  
Statement of Operations (Water)  
UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY  
2010 - 2019

	Notes	Forecast								
		2010	2011	2012	2013	2014	2015	2016		
<b>Water Revenue</b>										
Rate Based Revenue		408,200	475,487	528,584	561,311	580,732	600,914	600,914	789,516	
Earned Development Charges & Gas Tax Revenue	3	-	-	-	-	-	-	-	-	-
Developer Contributions	4	-	-	-	-	-	-	-	-	-
Other Revenue	6	2,500	5,000	6,000	8,000	9,000	11,000	11,000	11,000	
<b>Total Revenues</b>		410,700	480,487	534,584	569,311	589,732	611,914	611,914	800,516	
<b>Water Expenses</b>										
Operating Expenses	Sched. 4-1	262,520	270,268	274,895	288,267	309,239	314,832	314,832	327,863	
Interest on Debt	2	-	-	-	-	-	-	-	40,000	
Amortization	4	56,301	66,954	65,829	74,957	83,737	92,342	92,342	58,667	
Other		-	-	-	-	-	-	-	-	
<b>Total Expenses</b>		318,821	337,222	340,724	363,224	392,976	407,174	407,174	426,530	
<b>Annual Surplus/(Deficit)</b>		91,879	143,265	193,860	206,087	196,756	204,740	204,740	373,986	
Accumulated Surplus/(Deficit), beginning of year		2,593,221	2,685,100	2,828,365	3,022,225	3,228,312	3,425,068	3,629,808	3,629,808	
<b>Accumulated Surplus/(Deficit), end of year</b>	5	2,685,100	2,828,365	3,022,225	3,228,312	3,425,068	3,629,808	3,629,808	4,003,794	
<b>Note 5:</b>										
<b>Accumulated Surplus/(Deficit) is made up of:</b>										
Opening Reserve Balances										
Reserves: Capital/Operating										
Reserves: Development Charges										
Reserves: Other										
<b>Total Reserves Balance</b>										
Less: Debt Obligations and Deferred Revenue										
Add: Adjustment for TCA (Year of Implementation Only)	4									
<b>Total Opening Balance</b>		2,593,221	2,685,100	2,828,365	3,022,225	3,228,312	3,425,068	3,629,808	3,629,808	
Add: Contributions to/(from) Reserves (excl. DC reserves)										
Contributions to Reserves and Interest		43,180	179,619	259,689	281,044	280,493	297,082	297,082	250,000	
Transfers from Reserves		(92,800)	(257,300)	(331,500)	(312,000)	(318,300)	(324,600)	(315,400)	(315,400)	
<b>Total Change in Reserves</b>		(49,620)	(77,681)	(71,811)	(30,956)	(37,807)	(27,518)	(27,518)	(65,400)	
Add: Changes in TCA During the Year										
Capital Assets Purchased (net of disposals)	4	197,800	287,900	331,500	312,000	318,300	2,324,600	2,324,600	315,400	
Loss on Disposal of TCAs										
Amortization of Capital Assets	4	(56,301)	(66,954)	(65,829)	(74,957)	(83,737)	(92,342)	(92,342)	(58,667)	
<b>Total Changes in TCA</b>		141,499	220,946	265,671	237,043	234,563	2,232,258	2,232,258	256,733	
Subtract Changes in Debt Position										
New Debt	2	-	-	-	-	-	(2,000,000)	(2,000,000)	-	
Debt Repayment	2	-	-	-	-	-	-	-	182,653	
<b>Total Change in Debt</b>		-	-	-	-	-	(2,000,000)	(2,000,000)	182,653	
<b>Total Ending Balance</b>		2,685,100	2,828,365	3,022,225	3,228,312	3,425,068	3,629,808	3,629,808	4,003,794	
<b>Financial Indicators (Forecast Only)</b>										
1) Expense to Revenue Ratio		78%	70%	64%	64%	67%	67%	67%	53%	
2) Increase/(Decrease) in Accumulated Surplus		1,410,573	91,879	193,860	206,087	196,756	204,740	204,740	373,986	

Schedule 4-1  
 Port Burwell Secondary Water System  
 Schedule of Operating Expenses  
 UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY  
 2010 - 2019

	Notes	Forecast													
		2010	2011	2012	2013	2014	2015	2016							
<b>Expenditures</b>															
<b>Operating Costs</b>															
Primary Cost of Water		118,560	128,198	137,405	145,887	154,789	164,332	174,463							
Line Maintenance Contract		58,000	60,000	62,000	64,000	65,000	66,000	67,300							
Other (including training)		2,000	2,000	2,200	2,200	2,300	2,300	2,300							
SCADA Operations & Mtrc		7,300	8,250	8,500	8,800	9,200	9,500	9,700							
Water Operations Manager		14,000	14,500	14,500	15,000	15,500	16,000	16,300							
Admin Fees		5,800	6,000	6,200	6,400	6,500	6,600	6,700							
Audit Fee		4,500	10,500	2,800	2,900	11,000	3,400	3,500							
Studies & Reports		17,000	6,000	6,000	6,000	6,000	6,000	6,100							
Insurance		15,700	16,000	16,300	16,800	17,300	17,900	18,300							
Property Taxes		910	1,000	1,090	1,180	1,250	1,300	1,300							
Property Grounds Maintenance		1,050	1,100	1,150	1,200	1,250	1,300	1,300							
Building Maintenance		2,700	220	250	400	450	500	500							
Repairs		14,000	15,000	15,000	16,000	17,000	18,000	18,400							
Water Efficiency Program		1,000	1,500	1,500	1,500	1,700	1,700	1,700							
Operations and Maintenance (audited financial statement breakdown)		-	-	-	-	-	-	-							
Administrative (audited financial statement breakdown)		-	-	-	-	-	-	-							
Non TCA - Expenses from Capital Budget	7	-	-	-	-	-	-	-							
<b>TOTAL OPERATING EXPENSES</b>		<b>262,520</b>	<b>270,268</b>	<b>274,895</b>	<b>288,267</b>	<b>309,239</b>	<b>314,832</b>	<b>327,863</b>							

Table 4-3  
**Port Burwell Secondary Water System**  
**Statement of Changes in Net Financial Assets/Debt (Water)**  
**UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY**  
**2010 - 2019**

	Notes	Forecast								
		2010	2011	2012	2013	2014	2015	2016	2017	2018
Annual Surplus/(Deficit)		91,879	143,265	193,860	206,087	196,756	204,740	373,986		
Less: Acquisition of Tangible Capital Assets	4	(197,800)	(287,900)	(331,500)	(312,000)	(318,300)	(2,324,600)	(315,400)		
Add: Amortization of Tangible Capital Assets	4	56,301	66,954	65,829	74,957	83,737	92,342	58,667		
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-		
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-		
Add: Write-downs of Tangible Capital Assets		(49,620)	(77,681)	(71,811)	(30,956)	(37,807)	(2,027,518)	117,253		
Less: Acquisition of Supplies Inventory		-	-	-	-	-	-	-		
Less: Acquisition of Prepaid Expenses		-	-	-	-	-	-	-		
Add: Consumption of Supplies Inventory		-	-	-	-	-	-	-		
Add: Use of Prepaid Expenses		-	-	-	-	-	-	-		
Increase/(Decrease) in Net Financial Assets/(Net Debt)		(49,620)	(77,681)	(71,811)	(30,956)	(37,807)	(2,027,518)	117,253		
Net Financial Assets/(Net Debt), beginning of year		386,643	337,023	259,342	187,531	156,575	118,768	(1,908,750)		
Net Financial Assets/(Net Debt), end of year		337,023	259,342	187,531	156,575	118,768	(1,908,750)	(1,791,497)		
<b>Financial Indicators (Forecast Only)</b>		<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>		
1) Acquisition of Tangible Capital Assets (Cumulative)		197,800	485,700	817,200	1,129,200	1,447,500	3,772,100	4,087,500		
2) Annual Surplus/Deficit before Amortization (Cumulative)		148,180	358,399	618,088	899,132	1,179,625	1,476,707	1,909,360		
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)		0.75	0.74	0.76	0.80	0.81	0.39	0.47		

Table 4-4  
Port Burwell Secondary Water System  
Statement of Cash Flow - Indirect Method (Water)  
UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY  
2010 - 2019

	Notes	Forecast						
		2010	2011	2012	2013	2014	2015	2016
<b>Operating Transactions</b>								
Annual Surplus/Deficit		91,879	143,265	193,860	206,087	196,756	204,740	373,986
Add: Amortization of TCAs	4	56,301	66,954	65,829	74,957	83,737	92,342	58,667
Add: Loss on Disposal of TCAs		-	-	-	-	-	-	-
Less: Earned Deferred Revenue	3	-	-	-	-	-	-	-
Less: Developer Contributions		-	-	-	-	-	-	-
Add: Development Charge and Gas Tax Proceeds		-	-	-	-	-	-	-
Change in A/R (Increase)/Decrease		44,782	(13,095)	(10,151)	(6,516)	(3,832)	(4,163)	(35,389)
Change in A/P Increase/(Decrease)		1,132	1,942	1,159	3,351	5,255	1,401	3,266
Less: Interest Proceeds		-	-	-	-	-	-	-
Cash Provided by Operating Transactions		194,094	199,066	250,697	277,879	281,916	294,320	400,530
<b>Capital Transactions</b>								
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(197,800)	(287,900)	(331,500)	(312,000)	(318,300)	(2,324,600)	(315,400)
Cash Applied to Capital Transactions		(197,800)	(287,900)	(331,500)	(312,000)	(318,300)	(2,324,600)	(315,400)
<b>Investing Transactions</b>								
Proceeds from Investments		-	-	-	-	-	-	-
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	-
Cash Provided by (applied to) Investing Transactions		-	-	-	-	-	-	-
<b>Financing Transactions</b>								
Proceeds from Debt Issue	2	-	-	-	-	-	2,000,000	-
Less: Debt Repayment (principal only)	2	-	-	-	-	-	-	(182,653)
Cash Applied to Financing Transactions		(3,706)	(88,834)	(80,803)	(34,121)	(36,384)	(30,280)	(97,523)
Increase in Cash and Cash Equivalents		329,445	325,739	236,905	156,102	121,981	85,597	55,317
Cash and Cash Equivalents, beginning of year	1	325,739	236,905	156,102	121,981	85,597	55,317	(42,206)
Cash and Cash Equivalents, end of year	1							



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## NOTES TO FINANCIAL PLAN

The financial plan format as outlined in Chapter 4 closely approximates the full accrual format used by Water Systems (and municipalities) in 2009 and future years on their audited financial statements. However, the financial plan is not an audited document and contains various estimates. In this regard, Section 3 (2) of O.Reg. 453/07 states the following:

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

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

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

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

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

- A. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges
- C. Investing transactions that are acquisitions and disposal of investments
- E. Change in cash and cash equivalents during the year
- 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 Port Burwell SWS, initial balances for these items were obtained from the most recent audited financial statements of the system. For each year of the forecast, projections of revenues, expenses, debt requirements and other cash inflows and outflows were applied to these initial balances in order to determine annual balances for each forecasted year.

Significant assumptions used during the preparation of the financial plan have been documented below:

1. Cash, Receivables and Payables

Cash balances were determined by adjusting the opening cash balances obtained from the 2009 audited financial statements by the anticipated cash inflows and outflows for each applicable year of the forecast.

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

- a. Receivables: Based on historic levels of receivables as a percentage of annual revenue earned (source: prior years audited financial statements); and
- b. Payables: Based on historic levels of payables as a percentage of annual expenses incurred (source: prior years audited financial statements).

2. Debt

There was no outstanding debt at the end of 2009 however debt proceeds are anticipated during the forecast period.

Principal repayments for new debt over the forecast period are scheduled as follows:

Year	Principal Payments
2010	\$ -
2011	\$ -
2012	\$ -
2013	\$ -
2014	\$ -
2015	\$ -
2016	\$ 182,653
<b>Total</b>	<b>\$ 182,653</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

Deferred revenue is typically made up of items 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 (i.e. development charges for municipalities).

The Port Burwell SWS does not collect water development charges and thus deferred revenue is assumed to be zero over the forecast period.

### 4. Tangible Capital Assets

- Opening 2010 net book value of tangible capital assets includes water related assets in the following categories:
  - i. Infrastructure (i.e. mains)
  - ii. Facilities
  - iii. Land
- Amortization is calculated based on using the straight-line approach with no amortization in the year of acquisition or construction.
- Given the planned asset replacement forecast in the 2010 Rate Study, useful life on acquisitions is assumed to be equal to the weighted average useful life for all assets on hand in each respective asset category.
- Write-offs are assumed to equal \$0 for each year in the forecast period.
- Tangible capital assets are shown on a net basis. It is assumed that disposals occur when the asset is being replaced. To calculate the value of each asset disposal, the replacement value (of each new asset that has been identified as a “replacement”) has been deflated (by weighted average useful life for all assets on hand in the respective asset category) to an estimated historical cost. This figure was used to calculate disposals only.
- Gains/losses on disposal are assumed to be \$0 (it is assumed that historical cost is equal to accumulated amortization for all disposals).
- Residual value is assumed to be \$0 for all assets contained within the forecast period.
- Contributed Assets, as described in Section 3.2.1, are deemed to be insignificant/unknown during the forecast period and are therefore assumed to be \$0.
- The Port Burwell SWS does not have lead service piping in the water system.

The balance of tangible capital assets is summarized as follows:

Description	2010	2011	2012	2013	2014	2015	2016
Opening TCA Balance (Historical Cost)	4,027,375	4,225,175	4,513,075	4,844,575	5,156,575	5,474,875	7,799,475
Acquisitions	197,800	287,900	331,500	312,000	318,300	2,324,600	315,400
Disposals							
<b>Closing TCA Balance (Historical Cost)</b>	<b>4,225,175</b>	<b>4,513,075</b>	<b>4,844,575</b>	<b>5,156,575</b>	<b>5,474,875</b>	<b>7,799,475</b>	<b>8,114,875</b>
Opening Accumulated Amortization	1,820,797	1,877,098	1,944,052	2,009,881	2,084,838	2,168,575	2,260,917
Amortization Expense	56,301	66,954	65,829	74,957	83,737	92,342	58,667
Amortization on Disposal							
<b>Ending Accumulated Amortization</b>	<b>1,877,098</b>	<b>1,944,052</b>	<b>2,009,881</b>	<b>2,084,838</b>	<b>2,168,575</b>	<b>2,260,917</b>	<b>2,319,584</b>
<b>Net Book Value</b>	<b>2,348,077</b>	<b>2,569,023</b>	<b>2,834,694</b>	<b>3,071,737</b>	<b>3,306,300</b>	<b>5,538,558</b>	<b>5,795,291</b>

#### 5. Accumulated Surplus

Accumulated Surplus for the initial year of the forecast period is reconciled as follows:

Water	2009
Opening Reserve Balances	
Reserves: Development Charges	-
Reserves: Other	-
Reserves: Capital/Operating	420,573
<b>Total Reserves Balance</b>	<b>420,573</b>
Less: Debt Obligations and Deferred Revenue	-
Add: Adjustment for TCA (Year of Implementation Only)	2,098,848
<b>Total Opening Balance</b>	<b>2,519,421</b>
Add: Contributions to/(from) Reserves (excl. DC reserves)	
Contributions to Reserves and Interest	-
Transfers from Reserves	(33,930)
<b>Total Change in Reserves</b>	<b>(33,930)</b>
Add: Changes in TCA During the Year	
Capital Assets Purchased (net of disposals)	156,928
Amortization of Capital Assets	(49,198)
<b>Total Changes in TCA</b>	<b>107,730</b>
Subtract Changes in Debt Position	
New Debt	-
Debt Repayment	-
<b>Total Change in Debt</b>	<b>-</b>
<b>Total Ending Balance</b>	<b>2,593,221</b>

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

#### 6. Other revenue

Other revenue includes interest, service charges, connection fees, 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.



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## **5. PROCESS FOR FINANCIAL PLAN APPROVAL AND SUBMISSION TO THE PROVINCE**





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## 5. PROCESS FOR APPROVAL AND SUBMISSION TO THE PROVINCE

As provided in section 1.2, the requirement to prepare the financial plan is provided in Section 32 (5) 2 ii of the SDWA. 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 approval of the plan, public circulation, and filing is provided 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 of the system. (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 system'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 Water Drinking Act. (SDWA Section 32 (5) 2 ii)



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## 6. RECOMMENDATIONS



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## 6. RECOMMENDATIONS

This report presents the water financial plan for the Port Burwell SWS in accordance with the mandatory reporting formats for water system as detailed in O.Reg. 453/07. It is important to note that while mandatory, the financial plan is provided for the Board's interest and approval however, for decision making purposes, it may be more informative to rely on the information contained within the 2010 Rate Study. Nevertheless, the Board is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

1. The Port Burwell SWS Water Financial Plan prepared by Watson & Associates Economists Ltd. dated January 24, 2011 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. Submit the Financial Plan, the Board's Resolution approving the Financial Plan, and the Water Rate Study underpinning the Financial Plan, to the Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3 (1) 6)
4. Submit the Financial Plan, the Board's Resolution approving the Financial Plan, and the Water Rate Study underpinning the Financial Plan, to the Ministry of the Environment, satisfying the requirements under the Safe Drinking Water Act. (SDWA Section 32 (5) 2 ii))



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**APPENDIX A**  
**2010 WATER RATE STUDY – WATER SUMMARY**  
**TABLES**





**Table A-1**  
**Port Burwell Secondary Water System**  
**Water Service**  
**Capital Budget Forecast**  
 Inflated \$

Description	Total	Forecast											
		Actual 2009	2010	2011	2012	2013	2014	2015	2016				
<b><u>New Capital Expenditures</u></b>													
Equipment Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Tower	0	0	0	0	0	0	0	0	0	0	0	0	0
Meters/Chambers	36,200	0	30,600	0	0	0	0	0	0	0	0	0	5,600
SCADA	124,700	112,067	105,000	0	0	0	0	0	0	0	0	0	19,700
Sampling Stations	0	0	0	0	0	0	0	0	0	0	0	0	0
<b><u>Lifecycle Replacement Expend</u></b>													
Line Replacement (or relocation)	2,000,000	0	0	0	0	0	0	0	0	0	2,000,000	0	0
Line Replacement (or relocation)	90,600	0	25,000	25,500	26,000	0	0	0	0	0	0	0	14,100
Chambers - Structural Work	127,700	5,950	10,000	35,700	11,400	24,400	13,000	13,800	13,800	13,800	13,800	13,800	19,400
Chambers - Mechanical,Electrical	93,700	44,861	43,300	6,600	4,200	3,200	6,000	16,000	3,200	6,000	16,000	16,000	14,400
Curb Stop/Service Saddle Replacement Pgm	93,400	10,319	10,000	11,200	12,500	13,800	15,200	16,600	13,800	15,200	16,600	16,600	14,100
SCADA	25,500	0	0	0	0	0	10,800	11,000	0	10,800	11,000	11,000	3,700
Property/Buildings	15,700	0	3,000	6,100	900	1,000	1,100	1,200	1,000	1,100	1,200	1,200	2,400
Fire Hydrants	12,300	0	1,500	1,500	1,600	1,900	1,900	2,000	1,900	1,900	2,000	2,000	1,900
<b><u>Lifecycle Replacement - From Inventory</u></b>													
Air/Drain Chambers -	532,400	0	0	20,400	113,200	102,800	112,900	103,600	102,800	112,900	103,600	103,600	79,500
Meter Chambers - Mech/Elec/I&C	173,600	0	0	28,300	28,900	29,500	30,100	30,700	29,500	30,100	30,700	30,700	26,100
Port Burwell Water Tower	761,700	0	0	122,000	132,800	135,400	127,300	129,700	135,400	127,300	129,700	129,700	114,500
<b>Total Capital Expenditures</b>	<b>4,087,500</b>	<b>173,196</b>	<b>197,800</b>	<b>287,900</b>	<b>331,500</b>	<b>312,000</b>	<b>318,300</b>	<b>2,324,600</b>	<b>312,000</b>	<b>318,300</b>	<b>2,324,600</b>	<b>315,400</b>	<b>315,400</b>
<b><u>Capital Financing</u></b>													
Debtenture Requirements	2,000,000	0	0	0	0	0	0	2,000,000	0	0	2,000,000	0	0
Operating Contributions	135,600	139,266	105,000	30,600	0	0	0	0	0	0	0	0	0
Transfer from Capital Replacement Reserve	1,951,900	33,930	92,800	257,300	331,500	312,000	318,300	324,600	312,000	318,300	324,600	315,400	315,400
<b>Total Capital Financing</b>	<b>4,087,500</b>	<b>173,196</b>	<b>197,800</b>	<b>287,900</b>	<b>331,500</b>	<b>312,000</b>	<b>318,300</b>	<b>2,324,600</b>	<b>312,000</b>	<b>318,300</b>	<b>2,324,600</b>	<b>315,400</b>	<b>315,400</b>

**Table A-2**  
**Port Burwell Secondary Water System**  
**Water Service**  
**Schedule of Debenture Repayments**  
 Inflated \$

Internal Debenture Year	Principal (Inflated)	Actual 2009	Forecast									
			2010	2011	2012	2013	2014	2015	2016			
2010	0			0		0		0		0		0
2011	0				0		0		0		0	0
2012	0					0		0		0		0
2013	0						0		0		0	0
2014	0							0		0		0
2015	0								0		0	0
2016	0									0		0
<b>Total Annual Debt Charges</b>	<b>2,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>222,653</b>
												<b>222,653</b>

**Table A-3**  
**Port Burwell Secondary Water System**  
**Water Service**  
**Water Working Capital Reserves/ Reserve Funds Continuity**  
 Inflated \$

Description	2009	2010	2011	2012	2013	2014	2015	2016
Opening Balance	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Transfer from Operating	0	0	0	0	0	0	0	0
Transfer to Capital	0							
Transfer to Operating	0	0	0	0	0	0	0	0
Closing Balance	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000

**Table A-4**  
**Port Burwell Secondary Water System**  
**Water Service**  
**Capital Replacement Reserve (lifecycle) Continuity**  
 Inflated \$

Description	2009	2010	2011	2012	2013	2014	2015	2016
Opening Balance	405,573	371,643	322,023	244,343	172,531	141,575	103,768	76,250
Transfer from Operating	0	43,180	179,619	259,689	281,044	280,492	297,082	250,000
Transfer to Capital	33,930	92,800	257,300	331,500	312,000	318,300	324,600	315,400
Transfer to Operating	0	0	0	0	0	0	0	0
Closing Balance	\$371,643	\$322,023	\$244,343	\$172,531	\$141,575	\$103,768	\$76,250	\$10,850

**Table A-5**  
**Port Burwell Secondary Water System**  
**Water Services**

**Operating Budget Forecast**  
 Inflated \$

Description	Forecast									
	2009	2010	2011	2012	2013	2014	2015	2016		
<b>Expenditures</b>										
<b>Operating Costs</b>										
Primary Cost of Water	119,189	118,560	128,198	137,405	145,887	154,789	164,332	174,463		
Line Maintenance Contract	61,675	58,000	60,000	62,000	64,000	65,000	66,000	67,300		
Other (including training)	2,134	2,000	2,000	2,200	2,200	2,300	2,300	2,300		
SCADA Operations & Mtc	7,320	7,300	8,250	8,500	8,800	9,200	9,500	9,700		
Water Operations Manager	15,798	14,000	14,500	14,500	15,000	15,500	16,000	16,300		
Admin Fees	4,977	5,800	6,000	6,200	6,400	6,500	6,600	6,700		
Audit Fee	2,500	4,500	10,500	2,800	2,900	11,000	3,400	3,500		
Studies & Reports	11,315	17,000	6,000	6,000	6,000	6,000	6,000	6,100		
Insurance	14,206	15,700	16,000	16,300	16,800	17,300	17,900	18,300		
Property Taxes	869	910	1,000	1,090	1,180	1,250	1,300	1,300		
Property Grounds Maintenance	1,020	1,050	1,100	1,150	1,200	1,250	1,300	1,300		
Building Maintenance	75	2,700	220	250	400	450	500	500		
Repairs	13,269	14,000	15,000	15,000	16,000	17,000	18,000	18,400		
Water Efficiency Program	4,085	1,000	1,500	1,500	1,500	1,700	1,700	1,700		
<b>Sub Total Operating</b>	<b>258,431</b>	<b>262,520</b>	<b>270,268</b>	<b>274,895</b>	<b>288,267</b>	<b>309,239</b>	<b>314,832</b>	<b>327,863</b>		
<b>Capital-Related</b>										
Existing Debt										
New Debt	0	0	0	0	0	0	0	222,653		
Capital From Current	0	105,000	30,600	0	0	0	0	0		
<b>Sub Total Capital Related</b>	<b>0</b>	<b>105,000</b>	<b>30,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>222,653</b>		
<b>Total Expenditures</b>	<b>258,431</b>	<b>367,520</b>	<b>300,868</b>	<b>274,895</b>	<b>288,267</b>	<b>309,239</b>	<b>314,832</b>	<b>550,516</b>		
<b>Revenues</b>										
Base Charge										
Interest Income - Bank	588	2,500	5,000	6,000	8,000	9,000	11,000	11,000		
<b>Total Operating Revenue</b>	<b>588</b>	<b>2,500</b>	<b>5,000</b>	<b>6,000</b>	<b>8,000</b>	<b>9,000</b>	<b>11,000</b>	<b>11,000</b>		
Water Billing Recovery - Operating	257,843	365,020	295,868	268,895	280,267	300,239	303,832	539,516		
Lifecycle Reserve Contribution (\$)	0	43,180	179,619	259,689	281,044	280,492	297,082	250,000		
<b>Water Billing Recovery - Total</b>	<b>257,843</b>	<b>408,200</b>	<b>475,487</b>	<b>528,584</b>	<b>561,311</b>	<b>580,732</b>	<b>600,914</b>	<b>789,516</b>		

**Table A-6**  
**Port Burwell Secondary Water System**  
**Water Services**  
**Water Rate Forecast**  
 Inflated \$

Description	2009	2010	2011	2012	2013	2014	2015
Total Water Billing Recovery	257,843	408,200	475,487	528,584	561,311	580,732	789,516
Total Consumption (m <sup>3</sup> )	279,654	260,000	262,700	265,620	268,570	271,370	274,390
<b>Constant Rate</b>	<b>\$1.42</b>	<b>\$1.57</b>	<b>\$1.81</b>	<b>\$1.99</b>	<b>\$2.09</b>	<b>\$2.14</b>	<b>\$2.88</b>
Annual Increase in Rates	12.7%	10.6%	15.3%	9.9%	5.0%	2.4%	34.6%
<b>Costs Per Service Area:</b>							
Bayham	156,017	247,761	289,255	322,001	342,362	354,832	482,846
Central Elgin	14,179	22,231	25,630	28,616	30,054	30,773	42,009
Malahide	87,647	138,208	160,602	177,967	188,895	195,126	264,660
Total	257,843	408,200	475,487	528,584	561,311	580,732	789,516
<b>Percentage</b>							
Bayham	60.5%	60.7%	60.8%	60.9%	61.0%	61.1%	61.2%
Central Elgin	5.5%	5.4%	5.4%	5.4%	5.4%	5.3%	5.3%
Malahide	34.0%	33.9%	33.8%	33.7%	33.7%	33.6%	33.5%