

# UNION WATER SUPPLY SYSTEM

## WATER ONTARIO REGULATION 453/07 FINANCIAL PLAN

### FINANCIAL PLAN # 041-301

April 29, 2014



Plaza Three  
101-2000 Argentia Rd.  
Mississauga, Ontario  
Canada L5N 1V9

Phone: (905) 272-3600

Fax: (905) 272-3602

e-mail: [info@watson-econ.ca](mailto:info@watson-econ.ca)

[www.watson-econ.ca](http://www.watson-econ.ca)

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## CONTENTS

	<u>Page</u>
<b>1. INTRODUCTION</b>	
1.1 Study Purpose	1-1
1.2 Background	1-1
1.2.1 Financial Plans 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	1-3
1.2.5 Public Sector Accounting Board (PSAB) Requirements	1-4
<b>2. SUSTAINABLE FINANCIAL PLANNING</b>	
2.1 Introduction	2-1
2.2 <i>Sustainable Water and Sewage Systems Act</i>	2-1
2.3 <i>Water Opportunities Act (Bill 72)</i>	2-2
2.4 Water Rate Study	2-2
<b>3. APPROACH</b>	
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 Statements of Cash Flow and Change in Net Financial Assets/Debt	3-4
3.2.5 Verification and Note Preparation	3-6
<b>4. FINANCIAL PLAN</b>	
4.1 Introduction	4-1
4.2 Water Financial Plan	4-1
4.2.1 Statement of Financial Position	4-1
4.2.2 Statement of Operations	4-2
4.2.3 Statement of Change in Net Assets/Debt	4-2
4.2.4 Statements of Change in Cash Flow	4-3
<b>5. PROCESS FOR FINANCIAL PLAN APPROVAL AND SUBMISSION TO THE PROVINCE</b>	5-1
<b>6. RECOMMENDATIONS</b>	6-1
 <u>APPENDICES</u>	
A 2014 WATER RATE STUDY – SUMMARY TABLES	A-1



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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 Union Water Supply System (UWSS) 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 UWSS's water systems has already been completed and documented by Watson within the "Union Water Supply System Water Rate Study, April 16, 2014" (2014 Rate Study). The objective of the report provided herein is to convert the findings of the 2014 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"

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 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 regards to s.30 (1) part b of the SDWA 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 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 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 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 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.

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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.

### **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 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 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 existing financial statements. From a financial planning perspective, this change is significant for water assets as they can represent a significant portion of 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 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
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>

### 2009 AND FUTURE

<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**





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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 municipal council.

### 2.2 Sustainable Water and Sewage Systems Act

The *Sustainable Water and Sewage Systems Act* (SWSSA) 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

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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; create opportunities for economic development and clean-technology jobs; and 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 storm water.

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.

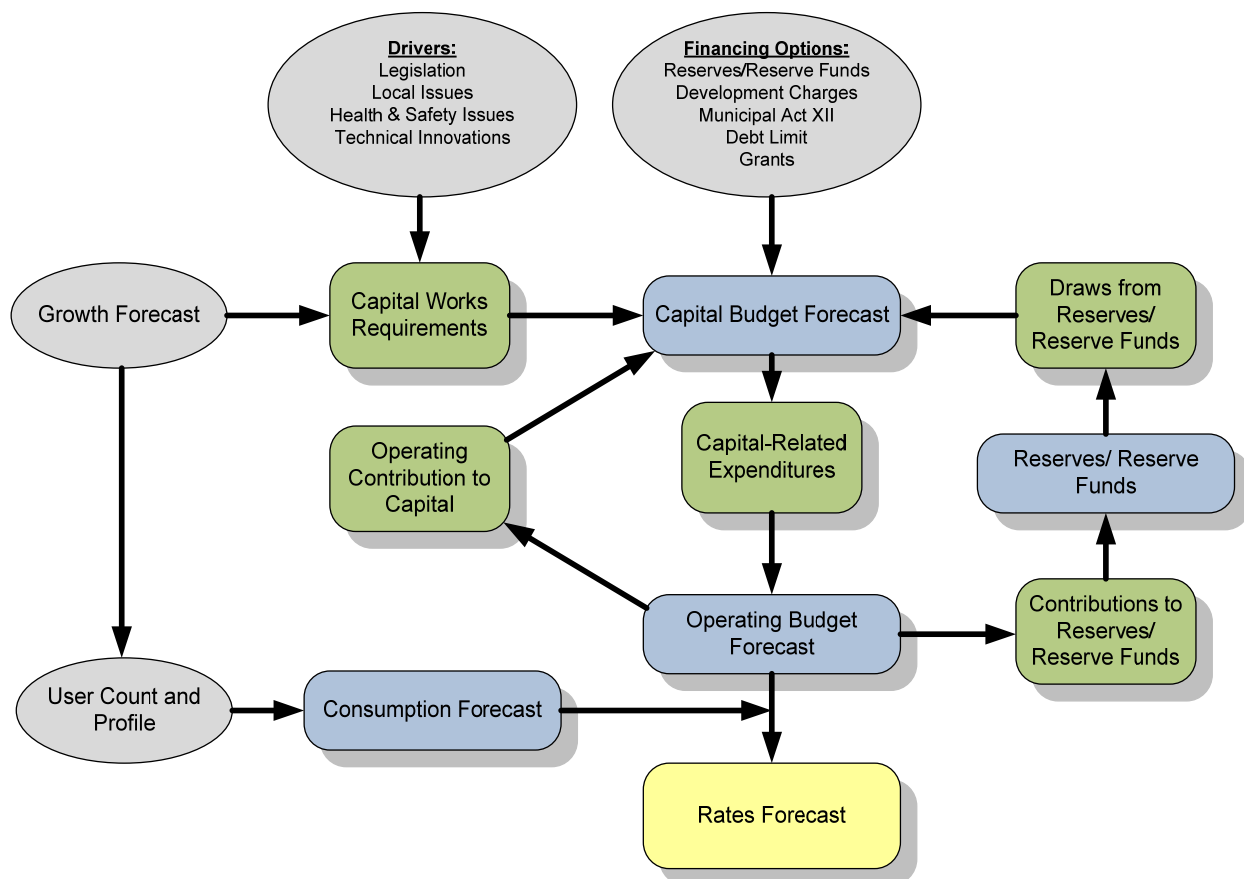
Where a Board has jurisdiction over a service, the plan (and any plan amendments) must be approved by the municipality in which the municipal service is provided, before submission to the Minister. The Minister may also direct preparation of joint or partially joint plans.

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

### **2.4 Water Rate Study**

As noted above, Watson has already completed extensive financial planning as documented in the 2014 Rate Study conducted on behalf of UWSS. 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 RATE CALCULATION PROCESS**



As a result of employing this process, the 2014 Rate Study provides a sound financial plan for UWSS's water 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 UWSS staff, the 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.

The details of the financial plan arising from the 2014 Rate Study are contained in Appendix A.



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### **3. APPROACH**



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## 3. APPROACH

### 3.1 Overview

The 2014 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.

### 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
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 2014 Rate Study as well as part of UWSS's annual PSAB 3150 compliance processes. Given the prospective nature of the 2014 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<sup>3</sup> are made to determine net book value:

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

Future water capital needs have also been determined and summarized within the 2014 Rate Study. However, these estimates only represent future assets that UWSS anticipates purchasing or constructing without consideration for assets that are contributed by developers

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and other parties (at no or partial cost to UWSS). 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 section 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 Section 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 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 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.



**FIGURE 3-1**  
**The Union Water Supply System**  
**Conversion Adjustments**  
**Statement of Operations (Water)**

Rate Study (Modified Cash) Basis	Budget		Adjustments		Full Accrual Budget 2014	Financial Plan (Accrual) Basis
	2014		DR	CR		
<b>Revenues</b>						<b>Revenues</b>
Rate Based Revenue	7,446,263				7,446,263	Rate Based Revenue
Transfers from Reserves	140,000		140,000			
Other Revenue	33,000			142,657	175,656	Other Revenue
<b>Total Revenues</b>	<b>7,619,263</b>				<b>7,621,919</b>	<b>Total Revenues</b>
<b>Expenditures</b>						<b>Expenses</b>
Operating Capital	3,783,366		55,000		3,838,366	Operating Expenses
Transfers to Reserves	100,000			100,000		
Transfers to Capital	-			-		
Debt Repayment (Principal & Interest)	3,735,897		1,099,981	1,910,106	1,825,791	Interest on Debt
			-		1,099,981	Amortization
					-	Loss on Disposal of Tangible Capital Assets
<b>Total Expenditures</b>	<b>7,619,263</b>				<b>6,764,138</b>	<b>Total Expenses</b>
<b>Net Expenditures</b>						<b>Annual Surplus/(Deficit)</b>
Increase (decrease) in amounts to be recovered	-				857,781	Accumulated Surplus/(Deficit), beginning of year
<b>Change in Fund Balances</b>			857,781	-	<b>38,297,690</b>	<b>Accumulated Surplus/(Deficit), end of year</b>
<b>TOTAL ADJUSTMENTS</b>			<b>2,152,762</b>	<b>2,152,763</b>		

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

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### **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, outstanding debt (principal only), are recorded and classified according to the structure of the Statement of Financial Position as outlined in PS1200.

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

The Statement of Cash Flow summarizes how UWSS 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.

**FIGURE 3-2**  
**The Union Water Supply System**  
**Conversion Adjustments**  
**Statement of Financial Position (Water)**

Modified Cash Basis	Budget 2014	Adjustments		Full Accrual Budget 2014	Financial Plan (Accrual) Basis
		DR	CR		
<b>ASSETS</b>					<b>ASSETS</b>
<b>Financial Assets</b>					<b>Financial Assets</b>
Cash	16,197,290			16,197,289	Cash
Accounts Receivable	620,287			620,287	Accounts Receivable
<i>Total Financial Assets</i>	16,817,577			16,817,576	<i>Total Financial Assets</i>
<b>LIABILITIES</b>					<b>Liabilities</b>
Accounts Payable & Accrued Liabilities	1,295,279			1,295,278	Accounts Payable & Accrued Liabilities
Gross Long-term Liabilities	17,096,057			17,096,057	Debt (Principal only)
Deferred Revenue	-			-	Deferred Revenue
Other	-			-	Other
<i>Total Liabilities</i>	18,391,336			18,391,335	<i>Total Liabilities</i>
<b>Net Assets/(Debt)</b>	<b>(1,573,759)</b>			<b>(1,573,759)</b>	<b>Net Financial Assets/(Debt)</b>
		39,926,449	55,000	39,871,449	<b>Non-Financial Assets</b>
		-		-	Tangible Capital Assets
		-		-	Inventory of Supplies
					Prepaid Expenses
					<b>Total Non-Financial Assets</b>
<b>Municipal Position</b>					
Water Reserves	15,522,298	15,522,298	-		
Amounts to be Recovered	(17,096,057)	-	17,096,057		
<b>Total Municipal Position</b>	<b>(1,573,759)</b>		38,297,690	<b>38,297,690</b>	<b>Accumulated Surplus/(Deficit), end of year</b>
<b>TOTAL ADJUSTMENTS</b>		<b>55,448,747</b>	<b>55,448,747</b>		

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

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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 UWSS 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 UWSS's ledgers.
- b. Amortization Expense The method and timing of amortization should be based on UWSS'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 2014 Rate Study.
- d. Contributed Assets As noted earlier, contributed assets could represent a significant part of UWSS'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.

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- 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





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## 4. FINANCIAL PLAN

### 4.1 Introduction

The following tables provide the complete financial plan for UWSS'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 UWSS's water system. 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 UWSS's water system. The first important indicator is net financial assets/(debt), which is defined as the difference between financial assets and liabilities. This indicator provides an indication of the system's "future revenue requirement". A net financial asset position is where financial assets are greater than liabilities and implies that the system has the resources to finance future operations. Conversely, a net debt position implies that the future revenues generated by the system will be needed to finance past transactions, as well as future operations. Table 4-1 indicates that in 2014, due to existing debt balances, UWSS's water system will be in a net debt position of approximately \$1.57 million. However, after 2014, the financial plan forecasts an improving net financial asset/(debt) position (moving from a net debt position to a net financial asset position in 2016). The net financial asset position is projected to grow to approximately \$2.54 million by the end of 2019.

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 for municipalities as part of PS3150 compliance and is significant from a financial planning perspective for the following reasons:

- 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.
- The annual maintenance required by these assets has an enduring impact on water operational budgets.

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

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 decrease by approximately \$1.34 million over the forecast period. This indicates that UWSS is expected to incur amortization and disposal costs that exceed investments (i.e. acquisitions) in tangible capital assets over the next 6 year 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 ranging from 86% to 93% over the forecast period and as a result, annual surplus ranges from \$489,006 to \$1,063,232. 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 \$4.51 million to the opening accumulated surplus balance 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 forecasted tangible capital asset acquisitions (net of amortization for the year) exceed the forecasted annual surplus for 2014 and 2015, resulting in a decrease in net financial assets during these years. In each of the subsequent years (i.e. 2016 to 2019), forecasted annual surplus exceeds forecasted tangible capital asset acquisitions (net of amortization for the year) resulting in increases in net financial assets in each year. This allows for a long term plan

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of funding capital through accumulated surplus (i.e. reserves and reserve funds). This is evidenced by the ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions ranging between 1.80 and 8.90 over the forecast period<sup>1</sup>.

#### **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 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) and build internal reserves and reserve funds over the forecast period. The financial plan projects the cash position of UWSS's water system to remain relatively constant, from a balance of approximately \$16.2 million at the beginning of 2014, to just over \$15 million by the end of 2019. For further discussions, on projected cash balances please refer to the Notes to the Financial Plan.

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

**TABLE 4-1**  
**The Union Water Supply System**  
**Statement of Financial Position: Water Services**  
**UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY**  
**2014 - 2023**

	Notes	Forecast						
		2014	2015	2016	2017	2018	2019	
<b>Financial Assets</b>								
Cash	1	16,197,289	15,886,958	15,735,951	15,467,338	14,218,132	15,043,005	
Accounts Receivable	1	620,287	588,807	601,109	614,580	627,324	642,271	
Total Financial Assets		16,817,576	16,475,765	16,337,060	16,081,918	14,845,456	15,685,276	
<b>Liabilities</b>								
Accounts Payable, Accrued Liabilities & Due to Related Party	1	1,295,278	1,298,647	1,306,156	1,310,795	1,316,411	1,314,980	
Debt (Principal only)	2	17,096,057	15,438,374	14,550,960	13,756,544	12,854,536	11,832,756	
Deferred Revenue	3	-	-	-	-	-	-	
Total Liabilities		18,391,335	16,737,021	15,857,116	15,067,339	14,170,947	13,147,736	
<b>Net Financial Assets/(Debt)</b>		<b>(1,573,759)</b>	<b>(261,256)</b>	<b>479,944</b>	<b>1,014,579</b>	<b>674,509</b>	<b>2,537,540</b>	
<b>Non-Financial Assets</b>								
Tangible Capital Assets	4	39,871,449	39,047,952	38,928,103	39,149,928	40,208,051	39,408,252	
Total Non-Financial Assets		39,871,449	39,047,952	38,928,103	39,149,928	40,208,051	39,408,252	
<b>Accumulated Surplus/(Deficit)</b>	5	<b>38,297,690</b>	<b>38,786,696</b>	<b>39,408,047</b>	<b>40,164,507</b>	<b>40,882,560</b>	<b>41,945,792</b>	
<b>Financial Indicators</b>								
1) Increase/(Decrease) in Net Financial Assets	Total Change	2014	2015	2016	2017	2018	2019	
	5,849,061	1,737,762	1,312,503	741,200	534,635	(340,070)	1,863,031	
2) Increase/(Decrease) in Tangible Capital Assets	(1,343,178)	(879,981)	(823,497)	(119,849)	221,825	1,058,123	(799,799)	
3) Increase/(Decrease) in Accumulated Surplus	4,505,883	857,781	489,006	621,351	756,460	718,053	1,063,232	

**TABLE 4-2**  
**The Union Water Supply System**  
**Statement of Operations: Water Services**  
**UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY**  
**2014 - 2023**

	Notes	Forecast						
		2014	2015	2016	2017	2018	2019	
<b>Water Revenue</b>								
Rate Based Revenue		7,446,263	7,068,360	7,216,045	7,377,751	7,530,737	7,710,168	
Other Revenue	6	175,656	172,238	170,791	168,219	155,921	164,252	
Total Revenues		7,621,919	7,240,598	7,386,836	7,545,970	7,686,658	7,874,420	
<b>Water Expenses</b>								
Operating Expenses	Sch. 4-1	3,838,366	3,954,197	4,097,965	4,181,050	4,415,296	4,350,727	
Interest on Debt	2	1,825,791	1,718,898	1,582,671	1,500,285	1,411,432	1,310,662	
Amortization	4	1,099,981	1,078,497	1,084,849	1,108,175	1,141,877	1,149,799	
Loss on Disposal of Tangible Capital Assets		-	-	-	-	-	-	
Total Expenses		6,764,138	6,751,592	6,765,485	6,789,510	6,968,605	6,811,188	
<b>Annual Surplus/(Deficit)</b>		<b>857,781</b>	<b>489,006</b>	<b>621,351</b>	<b>756,460</b>	<b>718,053</b>	<b>1,063,232</b>	
Accumulated Surplus/(Deficit), beginning of year	5	37,439,909	38,297,690	38,786,696	39,408,047	40,164,507	40,882,560	
Accumulated Surplus/(Deficit), end of year		38,297,690	38,786,696	39,408,047	40,164,507	40,882,560	41,945,792	
<b>Note 5:</b>								
<b>Accumulated Surplus/(Deficit) Reconciliation:</b>								
<b>Reserve Balances</b>								
Reserves: Capital/Other		15,522,298	15,177,118	15,030,904	14,771,123	13,529,045	14,370,296	
<b>Total Reserves Balance</b>		<b>15,522,298</b>	<b>15,177,118</b>	<b>15,030,904</b>	<b>14,771,123</b>	<b>13,529,045</b>	<b>14,370,296</b>	
Less: Debt Obligations and Deferred Revenue		(17,096,057)	(15,438,374)	(14,550,960)	(13,756,544)	(12,854,536)	(11,832,756)	
Add: Tangible Capital Assets	4	39,871,449	39,047,952	38,928,103	39,149,928	40,208,051	39,408,252	
<b>Total Ending Balance</b>		<b>38,297,690</b>	<b>38,786,696</b>	<b>39,408,047</b>	<b>40,164,507</b>	<b>40,882,560</b>	<b>41,945,792</b>	
<b>Financial Indicators</b>								
1) Expense to Revenue Ratio		89%	93%	92%	90%	91%	86%	
2) Increase/(Decrease) in Accumulated Surplus		4,505,883	489,006	621,351	756,460	718,053	1,063,232	

**SCHEDULE 4-1**  
**The Union Water Supply System**  
**Schedule of Operating Expenses: Water Services**  
**UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY**  
**2014 - 2023**

	Notes	Forecast						
		2014	2015	2016	2017	2018	2019	
<b>Operating Expenses</b>								
<i>Fixed Costs (Office Overhead, Rents and Services)</i>								
Salaries		145,452	148,361	151,328	154,355	157,442	160,591	
Benefits - Full time		39,300	40,086	40,887	41,705	42,539	43,390	
Office supplies		1,500	1,500	2,000	2,000	2,000	2,000	
Board expenses		1,500	1,500	1,500	1,500	1,500	1,500	
Dues, Memberships, Subsc		3,000	3,000	3,500	3,500	3,500	3,500	
Mileage		1,000	1,000	1,500	1,500	1,500	1,500	
Training		4,000	4,000	8,000	8,000	8,000	8,000	
Professional Development		4,000	4,000	8,000	8,000	8,000	8,000	
Meeting Expenses		1,000	1,000	2,000	2,000	2,000	2,000	
Uniforms/Clothing		500	500	500	500	500	500	
Legal/Professional fees		20,000	20,000	20,000	20,000	20,000	20,000	
Audit Fees		12,500	12,500	12,500	12,500	12,500	12,500	
Property Taxes		145,000	145,000	145,000	145,000	145,000	145,000	
Small capital items		20,000	20,000	15,000	15,000	15,000	15,000	
Sundry		250	250	250	250	250	250	
Learning Assistance		20,000	20,000	20,000	20,000	20,000	20,000	
Communications		1,500	1,500	1,500	1,500	1,500	1,500	
Postage & Courier		500	500	500	500	500	500	
Advertising & Promotion		3,500	3,500	7,000	7,000	7,000	7,000	
Insurance		15,000	15,000	15,000	15,000	15,000	15,000	
Donations & Grants		3,000	3,000	5,000	5,000	5,000	5,000	
<i>Variable Costs (OCWA &amp; Hydro)</i>								
OCWA Operating Union and Cottam		2,465,864	2,583,000	2,712,000	2,766,240	2,821,565	2,877,996	
Electricity and Natural Gas		875,000	900,000	925,000	950,000	975,000	1,000,000	
Non Tangible Capital Asset Expenses from Capital	7	55,000	25,000	-	-	150,000	-	
<b>TOTAL OPERATING EXPENSES</b>		<b>3,838,366</b>	<b>3,954,197</b>	<b>4,097,965</b>	<b>4,181,050</b>	<b>4,415,296</b>	<b>4,350,727</b>	

**TABLE 4-3**  
**The Union Water Supply System**  
**Statement of Changes in Net Financial Assets/Debt: Water Services**  
**UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY**  
**2014 - 2023**

	Notes	Forecast						
		2014	2015	2016	2017	2018	2019	
Annual Surplus/(Deficit)		857,781	489,006	621,351	756,460	718,053	1,063,232	
Less: Acquisition of Tangible Capital Assets	4	(220,000)	(255,000)	(965,000)	(1,330,000)	(2,200,000)	(350,000)	
Add: Amortization of Tangible Capital Assets	4	1,099,981	1,078,497	1,084,849	1,108,175	1,141,877	1,149,799	
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	
		879,981	823,497	119,849	(221,825)	(1,058,123)	799,799	
Increase/(Decrease) in Net Financial Assets/(Net Debt)		1,737,762	1,312,503	741,200	534,635	(340,070)	1,863,031	
Net Financial Assets/(Net Debt), beginning of year		(3,311,521)	(1,573,759)	(261,256)	479,944	1,014,579	674,509	
<b>Net Financial Assets/(Net Debt), end of year</b>		<b>(1,573,759)</b>	<b>(261,256)</b>	<b>479,944</b>	<b>1,014,579</b>	<b>674,509</b>	<b>2,537,540</b>	
<b>Financial Indicators</b>								
1) Acquisition of Tangible Capital Assets (Cumulative)		220,000	475,000	1,440,000	2,770,000	4,970,000	5,320,000	
2) Annual Surplus/Deficit before Amortization (Cumulative)		1,957,762	3,525,265	5,231,465	7,096,100	8,956,030	11,169,061	
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)		8.90	7.42	3.63	2.56	1.80	2.10	

**TABLE 4-4**  
**The Union Water Supply System**  
**Statement of Cash Flow - Indirect Method: Water Services**  
**UNAUDITED: FOR FINANCIAL PLANNING PURPOSES ONLY**  
**2014 - 2023**

	Notes	Forecast						
		2014	2015	2016	2017	2018	2019	
<b>Operating Transactions</b>								
Annual Surplus/Deficit		857,781	489,006	621,351	756,460	718,053	1,063,232	
Add: Amortization of TCA's	4	1,099,981	1,078,497	1,084,849	1,108,175	1,141,877	1,149,799	
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	
Change in A/R (Increase)/Decrease		(58,241)	31,480	(12,302)	(13,471)	(12,744)	(14,947)	
Change in A/P (Increase)/(Decrease)		146,496	3,369	7,509	4,639	5,617	(1,432)	
Less: Interest Proceeds		(142,657)	(139,239)	(137,791)	(135,219)	(122,921)	(131,251)	
Cash Provided by Operating Transactions		1,903,360	1,463,113	1,563,616	1,720,584	1,729,882	2,065,401	
<b>Capital Transactions</b>								
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	
Less: Cash Used to acquire Tangible Capital Assets	4	(220,000)	(255,000)	(965,000)	(1,330,000)	(2,200,000)	(350,000)	
Cash Applied to Capital Transactions		(220,000)	(255,000)	(965,000)	(1,330,000)	(2,200,000)	(350,000)	
<b>Investing Transactions</b>								
Proceeds from Investments		142,657	139,239	137,791	135,219	122,921	131,251	
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	
Cash Provided by (applied to) Investing Transactions		142,657	139,239	137,791	135,219	122,921	131,251	
<b>Financing Transactions</b>								
Proceeds from Debt Issue	2	-	-	-	-	-	-	
Less: Debt Repayment (Principal only)	2	(1,910,106)	(1,657,683)	(887,414)	(794,416)	(902,009)	(1,021,779)	
Cash Applied to Financing Transactions		(1,910,106)	(1,657,683)	(887,414)	(794,416)	(902,009)	(1,021,779)	
Increase in Cash and Cash Equivalents		(84,089)	(310,331)	(151,007)	(268,613)	(1,249,206)	824,873	
Cash and Cash Equivalents, beginning of year	1	16,281,378	16,197,289	15,886,958	15,735,951	15,467,338	14,218,132	
<b>Cash and Cash Equivalents, end of year</b>	<b>1</b>	<b>16,197,289</b>	<b>15,886,958</b>	<b>15,735,951</b>	<b>15,467,338</b>	<b>14,218,132</b>	<b>15,043,005</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. 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

The assumptions used have been documented below:

1. Cash, Receivables and Payables

Cash balances were estimated over the forecast period by taking the system's existing cash balance and forecasting cash inflows and outflows for each year, based on the forecasts provided in the 2014 Rate Study.

Receivable and payable balances throughout the forecast period were estimated based on comparing more recent receivable and payable balances to revenue and expenses totals respectively. This relationships of receivables to revenues and payables to expenses were used to forecast future receivables and payables using the forecasted revenues and expenses in each year.

2. Debt

Outstanding water related debt at the end of 2013 was \$19 million, with no additional debt proceeds anticipated throughout the forecast period. Principal repayments over the forecast period are scheduled as follows:

Year	Principal Payments
2014	1,910,106
2015	1,657,683
2016	887,414
2017	794,416
2018	902,009
2019	1,021,779
<b>Total</b>	<b>\$ 7,173,407</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 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. The Union Water Supply System does not collect water development charges, therefore deferred revenue is assumed to be zero over the forecast period.

#### 4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water related assets in the following categories:
  - i. Linear Assets
  - ii. Buildings
  - iii. Equipment
  - iv. Land/Land Improvements
- Amortization is calculated based on the straight-line approach with one half (1/2) amortization in the year of acquisition or construction.
- Given the planned asset replacement forecast in the 2014 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, unless the asset is documented as a new asset. The value of each asset disposal is calculated by estimating the original purchase/construction date and deflating current replacement cost values to those estimated dates in order to calculate original historical cost.
- Gains/losses on disposal are assumed to be \$0 (it is assumed that historical cost is equal to accumulated amortization for all disposals).
- Residual value is assumed to be \$0 for all assets contained within the forecast period.
- 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.
- UWSS is unaware of any specific lead service piping in the water system.

The balance of tangible capital assets is summarized as follows:

<b>Asset Historical Cost</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Opening Tangible Capital Asset Balance	59,108,567	59,306,744	59,532,737	60,409,916	61,589,700	63,686,114
Acquisitions	220,000	255,000	965,000	1,330,000	2,200,000	350,000
Disposals	21,823	29,007	87,821	150,216	103,586	11,046
<b>Closing Tangible Capital Asset Balance</b>	<b>59,306,744</b>	<b>59,532,737</b>	<b>60,409,916</b>	<b>61,589,700</b>	<b>63,686,114</b>	<b>64,025,068</b>
Opening Accumulated Amortization	18,357,137	19,435,295	20,484,785	21,481,813	22,439,772	23,478,063
Amortization Expense	1,099,981	1,078,497	1,084,849	1,108,175	1,141,877	1,149,799
Amortization on Disposal	21,823	29,007	87,821	150,216	103,586	11,046
<b>Ending Accumulated Amortization</b>	<b>19,435,295</b>	<b>20,484,785</b>	<b>21,481,813</b>	<b>22,439,772</b>	<b>23,478,063</b>	<b>24,616,816</b>
<b>Net Book Value</b>	<b>39,871,449</b>	<b>39,047,952</b>	<b>38,928,103</b>	<b>39,149,928</b>	<b>40,208,051</b>	<b>39,408,252</b>

5. Accumulated Surplus

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

Water	2014 Opening Accumulated Surplus
<b>Reserve Balances</b>	
Reserves: Capital/Other	15,694,641
<b>Total Reserves Balance</b>	<b>15,694,641</b>
Less: Debt Obligations and Deferred Revenue	(19,006,162)
Add: Tangible Capital Assets	40,751,430
<b>Total Opening Balance</b>	<b>37,439,909</b>

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

6. Other revenue

Other revenue includes investment income, sundry revenue 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 mentioned 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 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. (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 Union Water Supply System 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 the Board's interest and approval however, for decision making purposes, it may be more informative to rely on the information contained within the 2014 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 Union Water Supply System Water Financial Plan prepared by Watson & Associates Economists Ltd. dated April 25, 2014 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. The Financial Plan and the Board Resolution approving 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 and the Board Resolution approving the Financial Plan be submitted to the Ministry of the Environment, satisfying the requirements under the Safe Drinking Water Act. (SDWA Section 32 (5) 2 ii)<sup>1</sup>

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



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**APPENDIX A**  
**2014 WATER RATE STUDY – SUMMARY TABLES**



Table A-1  
 Union Water  
 Water Service  
 Capital Budget Forecast  
 Inflated \$

Description	Total	Forecast					
		2014	2015	2016	2017	2018	2019
<b>Capital Expenditures</b>							
Clarifier #2 Major Maintenance	25,000	25,000	-	-	-	-	-
Carbon Scrubber System Upgrade	15,000	15,000	-	-	-	-	-
Wastewater Pumps Replacement	10,000	10,000	-	-	-	-	-
High Lift Compressor #2 Replacement	15,000	15,000	-	-	-	-	-
PLC Upgrade for Main Generator B and Cottam Generator	20,000	20,000	-	-	-	-	-
UWSS Communication System Upgrades	30,000	30,000	-	-	-	-	-
Turbidity Meter Replacements (4 of 16)	20,000	20,000	-	-	-	-	-
Cottam MCC PLC Upgrade	20,000	20,000	-	-	-	-	-
Water Meter Replacements	20,000	20,000	-	-	-	-	-
Residuals Management	20,000	20,000	-	-	-	-	-
Water Rate Financial Plan	30,000	30,000	-	-	-	-	-
LED	50,000	50,000	-	-	-	-	-
Water Demand/Usage Study	25,000	25,000	-	-	-	-	-
Master Plan Update	150,000	150,000	-	-	-	-	150,000
Low Lift Pump 3	20,000	20,000	-	-	-	-	-
Low Lift Pump 4	20,000	-	-	20,000	-	-	-
Low Lift Pump 6	20,000	-	-	-	20,000	-	-
New Maintenance Shop Building	250,000	-	-	-	250,000	-	-
Clarifier 2	150,000	-	-	150,000	-	-	-
Clarifier 3	150,000	-	-	-	150,000	-	-
Filter 2	350,000	-	-	-	350,000	-	-
Filter 3	-	-	-	-	-	-	-
Filter 4	350,000	-	-	-	-	350,000	-
High Lift Pump 1 *(Note 2) Diesel Pump	35,000	35,000	-	-	-	-	-
High Lift Pump 3	35,000	-	-	35,000	-	-	-
High Lift Pump 4	35,000	-	-	-	35,000	-	-
High Lift Pump 8	40,000	-	-	40,000	-	-	-
High Lift Pump 9	40,000	-	-	40,000	-	-	-
Power Factor Capacitors for Energy Management	20,000	20,000	-	-	-	-	-
System upgrade and Maintenance	10,000	10,000	-	-	-	-	-
Turbidity Meter Replacement -	20,000	20,000	-	-	-	-	-
Facility Enhancements - General	30,000	30,000	-	-	-	-	-
Booster Pump 4	20,000	-	-	20,000	-	-	-
Surge Tanks (2)	10,000	-	-	10,000	-	-	-
Kingsville Tower	500,000	-	-	-	500,000	-	-
Essex Tower	500,000	-	-	500,000	-	-	-
Water Meter Replacement/Upgrades	70,000	20,000	20,000	25,000	25,000	-	-
Cottam 12-inch main replacement- EA	600,000	-	-	-	-	350,000	250,000
Waste Lagoon Excavation - north lagoon	100,000	-	-	-	-	-	100,000
Waste Lagoon Excavation - south lagoon	100,000	-	-	-	-	-	-
Lagoon Residuals Materials Management	-	100,000	-	-	-	-	-
Improvements to Residuals Management System (e.g. Connection to Kingsville Sewer System; or Installation of Centrifuge, etc.)	1,625,000	-	-	125,000	-	-	-
<b>Total Capital Expenditures</b>	<b>5,550,000</b>	<b>275,000</b>	<b>280,000</b>	<b>965,000</b>	<b>1,330,000</b>	<b>2,350,000</b>	<b>350,000</b>

Description	Total	Forecast					
		2014	2015	2016	2017	2018	2019
<b>Capital Financing</b>							
Grant Funding	-	-	-	-	-	-	-
Municipal Act	-	-	-	-	-	-	-
Operating Contributions	-	-	-	-	-	-	-
Water Reserve	5,550,000	275,000	280,000	965,000	1,330,000	2,350,000	350,000
Non-Growth Related Debenture Requirements	-	-	-	-	-	-	-
Total Capital Financing	5,550,000	275,000	280,000	965,000	1,330,000	2,350,000	350,000



**Table A-2**  
**Union Water**  
**Water Service**  
**Schedule of Debenture Repayments**  
 Inflated \$

Debenture Year	Principal (Inflated)	Forecast					
		2014	2015	2016	2017	2018	2019
2014	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-
<b>Total Annual Debt Charges</b>							

**Table A-3a**  
**Union Water**  
**Water Service**  
**UWSS Settlement Reserve**  
 Inflated \$

Description	2014	2015	2016	2017	2018	2019
Opening Balance	10,374,000	10,396,940	10,420,109	10,443,510	10,467,146	10,491,017
Transfer from Operating	-	-	-	-	-	-
Transfer from Capital	-	-	-	-	-	-
Transfer to Capital	-	-	-	-	-	-
Transfer to Operating	80,000	80,000	80,000	80,000	80,000	80,000
Closing Balance	10,294,000	10,316,940	10,340,109	10,363,510	10,387,146	10,411,017
Interest	102,940	103,169	103,401	103,635	103,871	104,110
Interest Rate	1%					

Note: Opening Reserve Fund Balance represents 50% of 2012 Year end Wholesale Rates Reserve Fund

**Table A-3b**  
**Union Water**  
**Water Service**  
**Water Capital Reserve Funds Continuity**  
 Inflated \$

Description	2014	2015	2016	2017	2018	2019
Opening Balance	4,206,666	4,011,383	3,643,033	3,473,419	3,190,003	1,924,053
Transfer from Operating	100,000	537,961	820,995	1,075,000	1,125,000	1,200,000
Transfer from Capital	-	-	-	-	-	-
Transfer to Capital	275,000	280,000	965,000	1,330,000	2,350,000	350,000
Transfer to Operating	60,000	662,380	60,000	60,000	60,000	60,000
Closing Balance	3,971,666	3,606,964	3,439,028	3,158,419	1,905,003	2,714,053
Interest	39,717	36,070	34,390	31,584	19,050	27,141
Interest Rate	1%					

Note: Opening Reserve Fund Balance represents 2012 year end Wholesale Rates Reserve Fund

2014 Opening Balance not available but expected to be the same as 2013 opening balance

Table A-4  
 Union Water  
 Water Services  
 Operating Budget Forecast  
 Inflated \$

Description	Forecast					
	2014	2015	2016	2017	2018	2019
<b>Expenditures</b>						
<u>Fixed Costs (Office Overhead, Rents and Services)</u>						
Salaried	145,452	148,361	151,328	154,355	157,442	160,591
Benefits - Full time	39,300	40,086	40,887	41,705	42,539	43,390
Office supplies	1,500	1,500	2,000	2,000	2,000	2,000
Board expenses	1,500	1,500	1,500	1,500	1,500	1,500
Dues, Memberships, Subsc	3,000	3,000	3,500	3,500	3,500	3,500
Mileage	1,000	1,000	1,500	1,500	1,500	1,500
Training	4,000	4,000	8,000	8,000	8,000	8,000
Professional Development	4,000	4,000	8,000	8,000	8,000	8,000
Meeting Expenses	1,000	1,000	2,000	2,000	2,000	2,000
Uniforms/Clothing	500	500	500	500	500	500
Legal/Professional fees	20,000	20,000	20,000	20,000	20,000	20,000
Audit Fees	12,500	12,500	12,500	12,500	12,500	12,500
Property Taxes	145,000	145,000	145,000	145,000	145,000	145,000
Small capital items	20,000	20,000	15,000	15,000	15,000	15,000
Sundry	250	250	250	250	250	250
Leamington Assistance	20,000	20,000	20,000	20,000	20,000	20,000
Communications	1,500	1,500	1,500	1,500	1,500	1,500
Postage & Courier	500	500	500	500	500	500
Advertising & Promotion	3,500	3,500	7,000	7,000	7,000	7,000
Insurance	15,000	15,000	15,000	15,000	15,000	15,000
Donations & Grants	3,000	3,000	5,000	5,000	5,000	5,000
<b>Total Fixed Costs</b>	<b>442,502</b>	<b>446,197</b>	<b>460,965</b>	<b>464,810</b>	<b>468,731</b>	<b>472,731</b>
<u>Variable Costs (OCWA &amp; Hydro)</u>						
OCWA Operating Union and Cottam	2,465,864	2,583,000	2,712,000	2,766,240	2,821,565	2,877,996
Electricity and Natural Gas	875,000	900,000	925,000	950,000	975,000	1,000,000
<b>Total Variable Costs</b>	<b>3,340,864</b>	<b>3,483,000</b>	<b>3,637,000</b>	<b>3,716,240</b>	<b>3,796,565</b>	<b>3,877,996</b>
<b>Total Fixed and Variable Costs</b>	<b>3,783,366</b>	<b>3,929,197</b>	<b>4,097,965</b>	<b>4,181,050</b>	<b>4,265,296</b>	<b>4,350,727</b>
Capital-Related						
DEBT SERVICE						
Sun Life Debt Obligation	2,239,195	2,257,578	2,276,080	2,294,701	2,313,441	2,332,441
Woodslee Credit Union	755,368	377,670	-	-	-	-
OSIFA	388,010	388,010	194,005	-	-	-
Leamington WM	353,324	353,324	-	-	-	-
TRANSFERS						
Transfer to Capital	-	-	-	-	-	-
Transfer to Lifecycle Reserve Fund	100,000	537,961	820,995	1,075,000	1,125,000	1,200,000
<b>Sub Total Capital Related</b>	<b>3,835,897</b>	<b>3,914,543</b>	<b>3,291,080</b>	<b>3,369,701</b>	<b>3,438,441</b>	<b>3,532,441</b>
<b>Total Expenditures</b>	<b>7,619,263</b>	<b>7,843,740</b>	<b>7,389,045</b>	<b>7,550,751</b>	<b>7,703,737</b>	<b>7,883,168</b>
<b>Revenues</b>						
Investment Income (Operations)	15,000	15,000	15,000	15,000	15,000	15,000
Sundry Revenue	18,000	18,000	18,000	18,000	18,000	18,000
Reserve Income (Wholesale)	60,000	662,380	60,000	60,000	60,000	60,000
Reserve Income (MFP)	80,000	80,000	80,000	80,000	80,000	80,000
<b>Total Operating Revenue</b>	<b>173,000</b>	<b>775,380</b>	<b>173,000</b>	<b>173,000</b>	<b>173,000</b>	<b>173,000</b>
<b>Water Billing Recovery - Total</b>	<b>7,446,263</b>	<b>7,068,360</b>	<b>7,216,045</b>	<b>7,377,751</b>	<b>7,530,737</b>	<b>7,710,168</b>

Table A-5  
 Union Water  
 Water Services  
 Water Rate Forecast  
 Inflated \$

Description	2014	2015	2016	2017	2018	2019
Total Water Billing Recovery	7,446,263	7,068,360	7,216,045	7,377,751	7,530,737	7,710,168
<b>Constant Rate</b>						
Total Volume (gallons)	2,895,068,533					
<b>Constant Rate (\$ per 1000 gallons)</b>	<b>2.57</b>					
<b>Declining Block Structure</b>						
Volume Forecast By Block (gallons)						
Block 1		1,891,385,269	1,897,955,269	1,904,525,269	1,911,095,269	1,917,665,269
Block 2 (121 over 3,996,750 annually)		1,032,668,449	1,032,668,449	1,032,668,449	1,032,668,449	1,032,668,449
Check Total Volume		2,924,053,718	2,930,623,718	2,937,193,718	2,943,763,718	2,950,333,718
<b>Declining Block Rates (\$/1000 gal)</b>						
Block 1		<b>2.62</b>	<b>2.67</b>	<b>2.72</b>	<b>2.77</b>	<b>2.82</b>
Block 2		<b>2.04</b>	<b>2.08</b>	<b>2.13</b>	<b>2.17</b>	<b>2.22</b>

