



CITY OF HAMILTON

**PUBLIC WORKS DEPARTMENT
Hamilton Water Division**

and

**CORPORATE SERVICES DEPARTMENT
Financial Planning and Policy Division**

TO: Chair and Members Public Works Committee	WARD(S) AFFECTED: CITY WIDE
COMMITTEE DATE: January 13, 2014	
SUBJECT/REPORT NO: Water Infrastructure Financial Plan - (PW10043a/FCS10033a) (City Wide)	
SUBMITTED BY: Gerry Davis, CMA General Manager Public Works Department Mike Zegarac General Manager Finance and Corporate Services	PREPARED BY: Dan McKinnon (905) 546-2424, Extension 5941 Mark Bainbridge (905) 546-2424, Extension 5929
SIGNATURE:	Brian McMullen (905) 546-2424, Extension 4549

RECOMMENDATION

- (a) That the Hamilton “Water Infrastructure Financial Plan” as prescribed by O.Reg 453/07 be approved thereby demonstrating agreement that the Hamilton drinking water system is financially viable having the financial resources necessary to operate successfully over the next ten years;
- (b) That the Hamilton “Water Infrastructure Financial Plan” be released, for public review, and submitted to the Ontario Ministry of Municipal Affairs and Housing in response to Ontario Regulation 453/07 under the Safe Drinking Water Act, 2002;

- (c) That Appendix “A” attached to Report PW10043a/FCS10033a respecting the “Water Infrastructure Financial Plan” be approved.

EXECUTIVE SUMMARY

The Hamilton Water Division of Public Works has developed a Water Infrastructure Financial Plan (Financial Plan) to comply with Ontario’s legislative requirements under the Safe Drinking Water Act, 2002 and Ontario Regulation (O.Reg.) 453/07 entitled “Financial Plans”. This requirement is also referenced in the City license issued under O.Reg. 188/07 entitled “Licensing of Municipal Drinking Water Systems”. The first Financial Plan was created in 2009 to respond to new legislation. In order to maintain a valid license to produce and deliver municipal drinking water an updated Financial Plan is now required, coinciding with the license renewal process. This update is required to provide a new forward looking view of at least 6 years into the future. The Water Infrastructure Financial Plan, prepared under the Safe Drinking Water Act, and attached as Appendix “A” exceeds this minimum requirement and is based on City budgeting practice of developing 10-year forecasts. This plan, however, is different than financial information and budgets as it reflects a full accrual perspective. The Financial Plan conforms to accounting standards and principles applied to municipal governments effective as of 2009. The new full accrual basis of accounting reports tangible capital assets and the amortization expense of these assets over their useful life. The completed plan must be approved by a Council resolution in a statement which indicates agreement with the future financial viability of the drinking water system. This statement of agreement reflects an acknowledgement that the City’s water system is being provided with the appropriate financial resources to successfully continue operation over the next 10-year time frame. Submission of the Financial Plan to the Provincial Ministry of Municipal Affairs and Housing will take place in 2014 once council endorsement is received; this is required to meet our licensing requirements.

Following the guidance provided by provincial regulation, staff, with the support of a consulting team, have generated a 10-year financial forecast which reflects both monetary and capital assets. All water related investment requirements, as well as revenue sources, have been captured to provide an indication of future viability. The overall results of this new approach are moving us closer to a proactive asset management philosophy with respect to water systems. This direction is complementary to existing efforts adopted within the City of Hamilton to improve the management of physical assets.

Data produced from this work reflects available information generated through existing City processes, as well as calculated future projections, based on an understanding of water system assets and their lifecycles. Council is presented with 4 financial statements that make up the Water Infrastructure Financial Plan:

1. Statement of Financial Position (Balance Sheet)
2. Statement of Operations (Income Statement)

3. Statement of Cash Flow
4. Tangible Capital Assets (TCA) Continuity Schedule

Each statement noted above is provided in Appendix “A” detailing the relevant financial figures. Together these statements meet the provincial requirement to develop a financial plan under O.Reg 453/07.

The resulting Financial Statements produced through this process suggest that the water system is currently in a financially viable state over the next 10 years. This indicates that suitable financial resources are allocated to water systems over this time period based on planned capital expenditures and the cost to operate the system. The concept of the Financial Plan is premised on the principles of sustainable asset management, consistent with and affirming the City’s continued practice improvements in this area. It ties closely to the budget processes and will become a tool to assist in developing strategic directions for budgeting and long-term financial planning associated with the City’s water infrastructure. The resulting financial statements are a result of combined efforts between Public Works and Finance staff.

Legislative tools have introduced new municipal financial planning practices for drinking water systems reflecting the need for a full accrual basis of accounting. This process has introduced a move from an expenditure basis to an expense basis, requiring that financial reporting reflect the cost of services consumed within an accounting period. These costs now include capital amortization of City assets. This work contributes to our responsibilities as a licensed municipal drinking water supplier as well as continues our development of principles and practices consistent with the philosophy of proactive Infrastructure Asset Management.

Alternatives for Consideration - See Page 9

FINANCIAL / STAFFING / LEGAL IMPLICATIONS

Financial: Report PW10043a/FCS10033a provides information on the current status of the water infrastructure financial position. The information provided should be used as the basis for future planning and decision making in terms of guiding the collection of revenue reflecting the true cost of ownership and operation. Data can also be used to more effectively plan the pace of necessary expenditures at a strategic level.

Staffing: N/A

Legal: Report PW10043a/FCS10033a outlines the financial planning requirements described in O.Reg. 453 under the Safe Drinking Water Act, 2002. These requirements have implications on the City of Hamilton’s ability to meet current legislation and retain a Municipal Drinking Water System License. As part of the license renewal process, provincial authorities require the submission of the updated Financial Plan covering the minimum 6 year period, and proof that it has been approved by council.

HISTORICAL BACKGROUND

The recommendations contained within this report have City wide implications.

After the release of O.Reg. 453 in 2007, City staff in conjunction with financial consultants, engineering consultants, and other internal stakeholders undertook development of the first Financial Plan in 2009 and submitted the resulting report to council in 2010. This work identified the information and effort needed to develop the first municipal Water system financial plan. The result was a document that met the need to address new municipal accounting principles that reflect a full accrual accounting methodology. A similar process was applied again in 2013 to meet the same requirement under a Drinking Water License renewal process.

Report PW10043/FCS10033 from April 19, 2010, presented the first City of Hamilton Water Infrastructure Financial Plan. The update done in 2013 is a Financial Plan built upon the same basis as work done in 2009 and includes data reflecting the capital and operating status of all piping and facility assets, which make up the water treatment and distribution systems in the City of Hamilton. The need to prepare a financial plan is a regulatory compliance issue currently specific to the municipal water business unit. The Hamilton Water Division of Public Works has developed a Water Infrastructure Financial Plan to comply with Ontario's legislative requirements under the Safe Drinking Water Act, 2002 and Ontario Regulation (O.Reg.) 453/07 entitled "Financial Plans". This requirement is part of the provincial response to recommendations formulated as a result of water contamination events in Walkerton, Ontario during May 2000. The submission of a financial plan is a requirement for owners of municipal drinking water systems seeking to retain a license under O.Reg. 188/07 entitled "Licensing of Municipal Drinking Water Systems". As a condition of the municipal water system license obtained by the City of Hamilton, item 8.1 specifies that The owner of the drinking water system, shall prepare and approve financial plans for the system that satisfy the requirements prescribed under section 3 of O.Reg 453/07.

The concept of the Financial Plan is premised on principles that are also reflected in our corporate mission to be fiscally and socially responsible. This work is consistent with strong asset management practices and affirms continued development of improved processes to support future decision making. Work ties to annual budgets and will become a tool to assist in developing strategic directions for management of the City's water infrastructure.

The updated Financial Plan will be provided to the Provincial Ministry of Municipal Affairs and Housing and will also be made available to the public. A notice will be posted to make residents aware that a financial plan is available, documentation must be provided without charge, and posted on the municipality's website.

The financial planning work undertaken, includes a series of regulated financial statements for Hamilton water system infrastructure. It addresses two primary components, as follows:

1. Investment plan - a plan outlining the required investments in both facilities and linear systems for water, infrastructure to address the primary investment drivers, namely sustainability (i.e. deterioration of infrastructure), growth and compliance with new regulations and related system improvements. The growth component includes assets created by the City and assets donated from developers. In addition, cost for operations and maintenance are included in the investment needs for these assets.
2. Revenue plan - a series of financial statements outlining the financing (funding sources) of investments in the infrastructure. These statements summarize information related to the City's existing sources of revenue to fund infrastructure investments such as rates (water), development charges (DCs) and donated assets from developers for growth and other sources needed to fund activities not covered by rates or DCs, such as tax levies (i.e. property taxes) and government grants. Of note, the regulations do not currently require the municipality to show a revenue plan that demonstrates sustainability, i.e. full cost recovery for the investment plan but it will be able to demonstrate the existing level of investment by the City relative to identified and projected needs.

POLICY IMPLICATIONS/LEGISLATED REQUIREMENTS

The Water Infrastructure Financial Plan meets the intent of Provincial legislation and is a component of the drinking water system licensing requirements. Resulting information and conclusions are consistent with corporate strategic asset management initiatives and contribute to the intent of strategic Public Works business planning. Financial planning practice that incorporates a full cost of ownership perspective encourages the promotion of safe and secure water services for the people and businesses of this city. The Financial Plan supports the Hamilton Water Division's ability to deliver safe clean drinking water and, as a result, influences public health and quality of life.

The development of a drinking water quality management Operational Plan and accreditation of the Operating Authority are also relatively new license requirements. These components are achieved through the development of a Drinking Water Quality Management System (DWQMS) which is audited by an independent Accreditation Body. The DWQMS Operational Plan and its DWQMS Policy originally approved by Council on June 27, 2007 (PW07095) contains procedures that are reviewed and updated every three (3) years. These procedures developed under the DWQMS standard include a requirement for annual reviews of the adequacy of infrastructure for delivery of safe drinking water. This infrastructure review process has a direct relationship to financial resource allocation and will benefit from the holistic and strategic perspective that has been developed under the Water Infrastructure Financial Plan. The objective of these related works is to provide tools for the efficient and effective management of infrastructure. Together these processes look to support critical asset investments in order to reduce risks associated with service delivery, as well as optimize the cost of ownership. After the completion of the first Water

Infrastructure Financial Plan presented to council in 2010, updates like the one completed in 2013 will be required for each future license renewal. This is expected to be a five years recurrence; this Financial Plan was produced for the first of such renewals.

The Public Works Business Plan, Innovate Now -

The recommendations from this Report will assist in meeting Public Works' key goal, *to be recognized as the centre of environmental and innovative excellence in Canada*. In addition, implementing the recommendations will also assist Public Works in building on our Strategic Vision Drivers as follows:

- **Communities (Services our communities connect with and trust) -**

The Financial Plan for water infrastructure in Hamilton provides a strategic overview of the financial needs that are expected over a 10-year period. The approach adopted reflects strategic asset management philosophy which considers the full cost of ownership documenting capital and monetary changes within the business unit. This view helps identify what the full cost of ownership is and encourages long-term sustainability. In the long term this process allocates resources based on the use of assets ensuring that current and future generations pay for their use and are not expected to pay for amortization costs incurred by previous generations.

- **People (Skilled teams ready for any situation) -**

This program demonstrates the ability of our City staff to respond to important legislative changes and requirements that currently affect municipal water services. Development of the Financial Plan required the knowledge, integration and communication of several staffing groups. Reporting finances on a full accrual basis is a municipal exercise that is expected to make its way to other City business units. Staff has worked to develop this approach for water systems without the benefit of existing examples of how this process should be applied. The resulting work represents a forward thinking financial process which complements departmental objectives written into the Public Works business plan.

- **Process (Smart processes to match our needs) -**

Throughout the Financial Plan development process, reporting has been formulated to ensure that corporate and public interests are effectively addressed. This project contributes to the Triple Bottom Line approach to problem solving by considering the financial implications of programs which are developed to address social and environmental issues related to our water infrastructure. A detailed evaluation process was employed in order to present a financial perspective which incorporates our Hamilton-specific situation and reflects a tool that can help encourage a more sustainable approach to managing finances.

- **Finances (Sound finance management for the long haul) -**

Government policy and legislation have been considered in the development of this project. Work has been completed to meet the requirements of provincial legislation.

The basis for development of the Water Infrastructure Financial Plan is continual improvement toward sustainable funding formulas for water systems that function to provide service to the residents, businesses and industries within our community. The information generated provides a comprehensive perspective useful in guiding future decision making and budgeting.

Legislative policies affecting or impacting this Report include:

- Ontario Safe Drinking Water Act

RELEVANT CONSULTATION

In 2013 staff undertook a process of engaging internal groups within the Public Works and Corporate Services Departments to identify existing data, resources and limitations that would impact the development of the Water Infrastructure Financial Plan.

A process of coordinating several meetings to engage staff in the Financial Services Division, Financial Planning and Policy Division, Engineering Services Division, and the Hamilton Water Division was launched to collect information and leverage staff knowledge to provide input into the process. Staff were engaged based on interests and expertise related to existing accounting practice and corporate reporting of financial information returns, current development of water related budgets, water system licensing requirements, water system infrastructure, and relationship with sustainable asset management practice. These early meetings provided information from which project outcomes were developed forming the basis of information that would support the updated financial statements for this second municipal water system license term.

Once accepted by City Council, the information contained in this Financial Plan is required to be available to members of the public and submitted to the Province of Ontario.

ANALYSIS / RATIONALE FOR RECOMMENDATION

The Financial Plan created for City of Hamilton water infrastructure includes four key statements described below:

1. Statement of Financial Position

This statement highlights four key figures that describe the financial position of the City of Hamilton at the reporting date.

- (a) The cash resources of the government are its cash and cash equivalents.
- (b) The net debt position of the government is calculated as the difference between its liabilities and financial assets.
- (c) The non-financial assets of the government are assets that are, by nature, normally for use in service provision and include purchased, constructed,

developed, or leased tangible capital assets, inventories of supplies, and prepaid expenses.

- (d) The accumulated surplus or deficit of the government is calculated as the sum of the net debt of the government and its non-financial assets. This indicator represents the net assets of the government.

Each of the three remaining government financial statements illustrates the change in one of these aspects of the government's financial position.

2. Statement of Operations

This statement reports the surplus or deficit from operations in the accounting period. The statement displays the cost of City services provided in the period, the revenues recognized in the period and the difference between them. It measures, in monetary terms, the extent to which a government has maintained its net assets in the period.

3. Statement of Cash Flow

The statement of cash flow reports the change in cash and cash equivalents in the accounting period, and how the City of Hamilton financed its activities in the period and met its cash requirements.

4. Tangible Capital Assets (TCA) Continuity Schedule

The TCA Continuity Schedule reports the changes in value of tangible capital assets over the accounting period. This schedule is not a separate statement in the City's year-end Financial Statement but it is included in the notes to these Financial Statements.

It is a requirement in the regulations that these statements are provided for a minimum reporting period of 6 years. The information developed under this project includes these financial statements covering a period of 10 years. This is consistent with, and supports the City's water and wastewater rate budget process which covers a 10-year period. As part of the current legislated licensing program for municipal water systems, these statements are anticipated to require updates and re-submission to the province on a minimum interval of five years.

Financial Plan Conclusions

The resulting Financial Statements produced through this process suggest that the water system is currently in a financially viable state over the next 10 years. This indicates that suitable financial resources are allocated to water systems over this time period based on planned capital expenditures and the cost to operate the system. The four financial statements created under this project meet the legislated intent of O.Reg. 453. The City of Hamilton will be required to submit the content of Appendix "A" to the Ministry of Municipal Affairs and Housing in 2014 soon after approval by council.

ALTERNATIVES FOR CONSIDERATION

The approval of this Financial Plan by a Council resolution, and subsequent submission to the Ministry of Municipal Affairs and Housing is a legislated requirement under the Safe Drinking Water Act and the related O.Reg. 453 entitled “Financial Plans”. Council has the option to not submit an approved financial plan but in so doing will remove our ability to maintain a municipal drinking water systems license. Implications of this course of action could entail potential charges from the Ministry of the Environment or loss of municipal control over water system operation in Hamilton.

ALIGNMENT TO THE 2012 - 2015 STRATEGIC PLAN

Strategic Priority #1

A Prosperous & Healthy Community

WE enhance our image, economy and well-being by demonstrating that Hamilton is a great place to live, work, play and learn.

Strategic Objective

1.1 Healthy Community - Plan and manage the built environment

The work reflected in this report is an example of improvements being made to manage infrastructure assets related to water systems in Hamilton. Water systems are a core foundational element for any modern community. The goal of current and future financial planning work is to improve our Corporate ability to match financial resources to the needs of physical assets. This will provide the information necessary to make decisions that will protect system assets and public health related to water delivery. The outcome will be the provision of data to assist in programming more stable and appropriate user rates.

Strategic Priority #2

Valued & Sustainable Services

WE deliver high quality services that meet citizen needs and expectations, in a cost effective and responsible manner.

Strategic Objective

2.1 Financial Sustainability - Financially Sustainable City by 2020

It is recognized that the approach to full accrual accounting represented by the results of this project is a key to successfully moving toward principles of improved financial sustainability. Examining future asset requirements within Hamilton water systems and matching that against planned revenues begins to identify a more accurate basis for future decision making aimed at maintaining a

robust water delivery system. It is noted that there is no requirement to confirm sustainability. Work instead reflects an intent to provide the information necessary to better inform decision makers which may help to encourage greater financial stability over time.

2.2 Effective and sustainable growth management

One key component of the financial planning exercise is to capture the impact that growth has on City water system infrastructure. Examination of growth related assets including those contributed by developers has a significant impact on the system overall. The key aspect of reflecting these growth components is to adequately plan for the full life-cycle costs associated with new assets, as well as plan effective responses within operating and maintenance budgets to react to an increasing asset base.

2.3 Full life-cycle costing for capital

The focus of this financial planning exercise is to adequately point out the financial needs of infrastructure for water systems in the City of Hamilton. The development of this information is based on full cost accounting which considers costs associated with asset life-cycles and the corresponding depreciation of infrastructure. This methodology is one key factor in moving closer to long term sustainable practice.

2.4 Address infrastructure deficiencies and unfunded liabilities

The Water Infrastructure Financial Plan represents a perspective on the status of water systems as defined by new municipal accounting standards. The resulting statements in this report identify a more accurate financial view of water assets, and are a tool that can help point out where unfunded liabilities may exist. It is anticipated that continued reporting under a full-cost methodology will continue to provide information necessary to improve financial management.

Strategic Priority #3

Leadership & Governance

WE work together to ensure we are a government that is respectful towards each other and that the community has confidence and trust in.

Strategic Objective

3.1 Skilled, Innovative and Respectful Organization - A culture of excellence

This is the second financial planning exercise that includes a comprehensive approach to aspects of financial health including asset value and amortization. This work is a new approach that contributes to Strategic Municipal Asset Management principles which have been embraced by the City of Hamilton as a best management practice.

APPENDICES / SCHEDULES

Appendix "A" - Water Infrastructure Financial Plan

Water, Wastewater & Storm Water Financial Plan

REVISED INTERIM REPORT

Prepared for:

City of Hamilton

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RVA 132877

December 16, 2013

December 16, 2013

RVA 132877

City of Hamilton
Hamilton Water – Sustainable Initiatives
77 James St. North, Suite 400
Hamilton, Ontario
L8R 2K3

Attention: Andrea Bazzard, Project Manager, Planning

Dear Madam:

Re: Water, Wastewater & Storm Water Financial Plan – Revised Interim Report

We are pleased to submit our Revised Interim Report for the development of the City's water, wastewater and storm water Financial Plan. Due to the time frame associated with the City's application for a new license, the Financial Plan for the water system was developed before the Plans for the wastewater and storm water systems. This Interim Report describes the methodology and presents the results for this initial effort to complete the required Financial Statements for the water system to support the City's license application. A subsequent report will be prepared when the Financial Plans for the wastewater and storm water systems are completed at a later date.

The Financial Statements suggest that the water system is currently in a financially viable state over the next 10 years. This indicates that suitable financial resources are allocated to the system over this time period based on the planned capital expenditures and the cost to operate the system. Additional conclusions will be able to be drawn after the long-term review of the water system is completed in the subsequent phase of this project

We would be pleased to meet with you to discuss the report.

Yours very truly,

R.V. ANDERSON ASSOCIATES LIMITED



Nick Larson, MEPP, P.Eng.
Associate, Project Manager

Encls.

**WATER, WASTEWATER & STORM WATER
FINANCIAL PLAN**

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1.0 INTRODUCTION

In 2013 R.V. Anderson Associated Limited (RVA), with the support of TCA Consulting Limited, was retained by the City of Hamilton to prepare updated Financial Plans for the City of Hamilton's water, wastewater and storm water systems. The need to prepare a Financial Plan, in part, is a regulatory compliance issue specific to the water licensing requirements defined within the Drinking Water Quality Management System (DWQMS) and more specifically detailed under *Regulation 453/07 - Financial Plans* made under the Safe Drinking Water Act, 2002 (SDWA). In addition, however, the concept of the Financial Plan is premised on the principles of asset management consistent with and affirming the City's continued practice improvements in this area. It ties closely to the budget processes and is a tool to assist in developing strategic directions for budgeting and long term financial planning associated with the City's infrastructure.

Under SDWA *Regulation 453/07 – Financial*, the City of Hamilton is required to submit a Financial Plan to the Province of Ontario as a requirement of the issuance of a license for the operation of their potable water system. Due to the time frame associated with the City's application for a new license, the Financial Plan for the water system was developed before the Plans for the wastewater and storm water systems.

This document is an interim report that describes the methodology and presents the results for this initial effort to complete the required Financial Statements for the water system to support the City's license application. A subsequent report will be prepared when the Financial Plans for the wastewater and storm water systems are completed at a later date.

2.0 APPROACH

The approach to completing the Financial Plan for the water system followed the methodology that was used to develop the first Financial Plan for the water system in 2009.

The Financial Plan comprises a combination of a life cycle investment profile and a series of financial statements for each asset group. It addresses two primary components, as follows:

1. Investment plan - a plan that outlines the required investments in both facilities and linear systems for the water infrastructure to address the primary investment drivers, namely sustainability (i.e. deterioration of infrastructure), growth, and compliance with new regulations or other system enhancements. The growth component includes assets created by the City and assets donated from developers. In addition, costs for operations and maintenance are included in the investment needs for these assets.
2. Revenue plan - a series of financial statements outlining the financing (funding sources) of investments in the infrastructure. These statements summarize information related to the City's existing sources of revenue to fund infrastructure investments such as rates (water & sewer), development charges (DCs) and donated assets from developers for growth and other sources needed to fund activities not covered by rates or DCs, such as tax levies (i.e. property taxes) and government grants. Of note, the regulations do not currently require the municipality to show a revenue plan that demonstrates sustainability, i.e. full cost recovery for the investment plan but it will be able to demonstrate the existing level of investment by the City relative to identified and projected needs.

Financial Plan Documentation

In accordance with SDWA regulations, the Financial Plan will be represented in the following statements:

- Statement of Financial Position (Balance Sheet).

This statement highlights four key figures that describe the financial position of the City of Hamilton at the reporting date, including the City's cash resources, net debt position, non-financial assets and accumulated surplus or deficit.

In support of this Statement of Financial Position several additional statements are prepared. Each of the financial statements listed below illustrates the change in one of these aspects of the City's financial position.

- Statement of Operations (Income Statement)
- Statement of Cash Flow
- Tangible Capital Assets Continuity Schedule

These statements coincide with the Financial Plan requirements for water systems licensing based on the specific requirements of Section 4(iii) of Regulation 453/07. A further description of these statements is included later in *Section 4 - Financial Statements* of this report.

It is a requirement in the regulations that these statements are provided for a minimum reporting period of 6 years. The information developed in this project includes these financial statements covering a period of 10 years. This is consistent with and supports the City's budget process which covers a 10 year period.

This full report that will be submitted at a later date will also review the long-term infrastructure investment needs based on life-cycle information available, supporting the City's development of AM processes. This is intended to assist Hamilton in some long-term, strategic planning to move to a sustainable funding program for the financing of its infrastructure. The approach to this analysis is not summarized in this interim report.

3.0 SOURCES OF INFORMATION

The City's business processes were reviewed by members of the consulting team to determine the availability of information required to define investment needs for each of the three primary drivers (i.e. growth, sustainability and compliance/system enhancements) plus revenue and expense information available based on current activities. This required discussions with a number of the business units in both Financial Services and Public Works departments.

3.1 Investment Needs Information

Table 1 summarizes the information that was used to generate the investments needs for the 10 year Financial Plan for the water system.

3.2 Revenue and Expense Information

The information that was used to generate the revenue and expense information for the 10 year Financial Plan for the water system were derived from two sources, as follows:

- 2013 Rate Book for the current operating revenue of the water system. Future years were projected based on additional growth in the system.
- 2012 Financial Information Return for the current operating cost of the water system. Future years were projected based on inflation and additional growth in the system.

Table 1 – Information Sources used to develop the Investment Needs for the 10 Year Financial Statements for the Water System

Investment Category	Source of Data	Source of Funding	Comments
Sustainability	<ul style="list-style-type: none"> TCA data for listing of existing assets/asset pools Rate Book "Sustainable Asset Management" projects - for new infrastructure that will replace an existing asset over the next 10 years 	<ul style="list-style-type: none"> Rates 	New assets were amortized over the same amortization periods that are used in the City for existing TCA purposes.
Compliance / System Enhancements	<ul style="list-style-type: none"> Rate Book for "Master Plan" or "WQI" projects – for new infrastructure that the City will construct to improve the existing system that is not to service new development 	<ul style="list-style-type: none"> Rates 	
Growth - City developed assets	<ul style="list-style-type: none"> Rate Book for "Development Program" projects – for new infrastructure that the City will construct to service new development 	<ul style="list-style-type: none"> DCs 	
Growth - donated assets	<ul style="list-style-type: none"> Estimated based on growth information from the City – for infrastructure that will be constructed by developers to service new development and will be assumed by the City. 	<ul style="list-style-type: none"> Donated by private developers 	Only linear water assets were assumed to be donated through development.
Operations and Maintenance	<ul style="list-style-type: none"> 2012 Financial Information Return for the current operating cost of the water system. Future years were projected based on additional growth in the system. 	<ul style="list-style-type: none"> Rates 	Amortization expenses from the FIR were excluded from the calculations to project O&M costs.

4.0 FINANCIAL STATEMENTS

Commencing in 2009 municipalities moved from the “*modified accrual basis of accounting*” to “*full Accrual basis of accounting*”. The main change is that we have moved from an expenditure basis to an expense basis. Unlike expenditures, which are the cost of goods and services acquired by the government in the period, expenses are the cost of goods and services consumed in the accounting period,

Along with changing the basis of accounting, PSAB has created new Financial Statements. The following are terms taken from a variety of PSAB documents in order to assist in understanding the Financial Plan financial statements.

Full accrual basis of accounting recognizes the financial effects of transactions in the period(s) in which they occur irrespective of when the cash has been received or paid. It requires that tangible capital assets be reported on the balance sheet (statement of financial position) at historical cost and expensed (amortized) in the annual results of operations (statement of operations) over their estimated useful lives.

Statement of Financial Position

This statement highlights four key figures that describe the financial position of the City of Hamilton at the reporting date.

- (a) The cash resources of the government are its cash and cash equivalents.
- (b) The net debt position of the government is calculated as the difference between its liabilities and financial assets.
- (c) The non-financial assets of the government are assets that are, by nature, normally for use in service provision and include purchased, constructed, developed or leased tangible capital assets, inventories of supplies and prepaid expenses.
- (d) The accumulated surplus or deficit of the government is calculated as the sum of the net debt of the government and its non-financial assets. This indicator represents the net assets of the government.

Each of the three remaining government financial statements illustrates the change in one of these aspects of the government's financial position.

-
- (a) The *statement of operations* reports the surplus or deficit from operations in the accounting period. The statement displays the cost of City services provided in the period, the revenues recognized in the period and the difference between them. It measures, in monetary terms, the extent to which a government has maintained its net assets in the period.
- (b) The *statement of cash flow* reports the change in cash and cash equivalents in the accounting period, and how the City of Hamilton financed its activities in the period and met its cash requirements.
- (c) The TCA Continuity Schedule reports the changes in value of tangible capital assets over the accounting period. This schedule is not a separate statement in the City's yearend Financial Statements but it is included in the notes to these Financial Statements.

The following financial statements representing the Financial Plan for the Water System are included below:

1. Statement of Financial Position
2. Statement of Operations
3. Statement of Cash Flow
4. TCA Continuity Schedule.

In addition a Glossary of Terms follows the Financial Statements providing further explanations of the meaning and interpretation of specific categories or line item terms in the statements. These should be read in conjunction with the respective statements.

1. Statement of Financial Position for the Water System

**City of Hamilton - Water Infrastructure
Statement of Financial Position**

As at December 31 (in thousands of dollars)	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Financial Assets										
Cash	38,003	98,499	147,489	181,469	218,119	251,913	300,529	348,901	402,342	462,572
Accounts Receivable	26,279	27,777	29,363	31,043	32,822	34,705	36,700	38,813	41,051	43,422
Investments	35,618	37,648	39,797	42,073	44,484	47,036	49,740	52,604	55,637	58,850
Total	99,900	163,924	216,649	254,585	295,425	333,654	386,969	440,318	499,030	564,844
Liabilities										
Accounts payable & accrued liabilities	6,905	7,299	7,716	8,157	8,625	9,120	9,644	10,199	10,787	11,410
Deferred revenue - general	782	827	874	924	977	1,033	1,092	1,155	1,222	1,293
Deferred revenue - obligatory reserve funds	34,639	40,825	46,123	50,092	52,974	55,507	57,616	59,229	60,674	61,957
Long term debt	101,133	147,617	187,724	212,776	216,326	207,645	207,723	198,962	189,282	178,776
Post employment benefits	4,063	4,295	4,540	4,800	5,075	5,366	5,674	6,001	6,347	6,714
Total	147,522	200,863	246,977	276,749	283,977	278,671	281,749	275,546	268,312	260,150
Net Financial Assets (Liabilities)	-47,622	-36,939	-30,328	-22,164	11,448	54,983	105,220	164,772	230,718	304,694
Non Financial Assets										
Tangible Capital Assets	658,048	690,137	709,444	754,184	778,541	780,980	795,633	801,576	809,634	815,448
Tangible Capital Assets Under Construction	25,690	19,660	32,775	22,995	12,240	18,487	14,267	15,457	14,462	14,462
Inventory	815	861	910	962	1,017	1,075	1,137	1,202	1,271	1,344
Prepaid Expenses	447	472	499	528	558	590	624	660	698	738
Total	685,000	711,130	743,628	778,669	792,356	801,132	811,661	818,895	826,065	831,992
Accumulated Surplus	637,378	674,191	713,300	756,505	803,804	856,115	916,881	983,667	1,056,783	1,136,686

2. Statement of Operations for the Water System

**City of Hamilton - Water Infrastructure
Statement of Operations
For the year ended December 31,
(in thousands of dollars)**

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Revenues										
Water Rates	81,638	86,291	91,217	96,435	101,962	107,812	114,010	120,574	127,527	134,892
Government Grants	87	92	97	103	109	115	122	129	136	144
Development Charges	2,848	4,855	6,280	7,922	9,295	9,926	10,626	11,390	11,828	12,262
Contributed Tangible Capital Assets	5,870	5,870	5,870	6,751	6,751	6,751	9,686	9,686	9,686	9,686
Revenue from Other Municipalities	2,751	2,908	3,074	3,250	3,436	3,633	3,842	4,063	4,297	4,545
Investment Income	640	676	715	756	799	845	894	945	999	1,057
Other	3	3	3	3	3	3	3	3	3	3
Total Revenues	93,837	100,695	107,256	115,220	122,355	129,085	139,183	146,790	154,476	162,589
Expenses										
Salary & Benefits	12,180	12,424	12,672	12,925	13,184	13,448	13,717	13,991	14,271	14,556
Operating and General Expenditures	25,954	26,934	27,901	28,962	30,054	31,076	32,250	33,397	34,605	35,832
Amortization	17,449	18,710	19,530	20,393	21,321	21,831	22,203	22,539	22,820	23,079
Interest	2,798	5,814	8,044	9,735	10,497	10,419	10,247	10,077	9,664	9,219
Total Expenses	58,381	63,882	68,147	72,015	75,056	76,774	78,417	80,004	81,360	82,686
Annual Surplus (Deficit)	35,456	36,813	39,109	43,205	47,299	52,311	60,766	66,786	73,116	79,903
Accumulated surplus at beginning of year	601,922	637,378	674,191	713,300	756,505	803,804	856,115	916,881	983,667	1,056,783
Accumulated surplus at end of year	637,378	674,191	713,300	756,505	803,804	856,115	916,881	983,667	1,056,783	1,136,686

3. Statement of Cash Flow for the Water System

**City of Hamilton - Water Infrastructure
Statement of Cash Flow
For the year ended December 31,
(in thousands of dollars)**

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Operating transactions										
Annual Surplus/(Deficit)	35,456	36,813	39,109	43,205	47,299	52,311	60,766	66,786	73,116	79,903
Non- Cash items - amortization	17,449	18,710	19,530	20,393	21,321	21,831	22,203	22,539	22,820	23,079
Decrease (Increase) in accounts receivable	-1,414	-1,498	-1,586	-1,680	-1,779	-1,883	-1,995	-2,113	-2,238	-2,371
Increase (decrease) in accounts payable	372	394	417	441	468	495	524	555	588	623
Increase (decrease) in deferred revenue - general	42	45	47	50	53	56	59	63	67	71
Increase (decrease) in deferred revenue - obligatory	7,857	6,186	5,298	3,969	2,882	2,533	2,109	1,613	1,445	1,283
Increase (decrease) in post employment benefits	219	232	245	260	275	291	308	327	346	367
(Increase) decrease in inventory	-44	-46	-49	-52	-55	-58	-62	-65	-69	-73
(Increase) decrease in prepaid expenses	-24	-25	-27	-29	-30	-32	-34	-36	-38	-40
Cash provided by operating transactions	59,913	60,811	62,984	66,557	70,434	75,544	83,878	89,669	96,037	102,842
Capital transactions										
Acquisition of tangible capital assets	94,201	44,769	51,951	55,352	34,922	30,516	32,635	29,670	29,882	28,905
Cash applied to capital transactions	94,201	44,769	51,951	55,352	34,922	30,516	32,635	29,670	29,882	28,905
Investing transactions										
Increase (decrease) in investments	1,917	2,030	2,149	2,276	2,411	2,552	2,704	2,864	3,033	3,213
Cash provided by investing transactions	1,917	2,030	2,149	2,276	2,411	2,552	2,704	2,864	3,033	3,213
Financing transactions										
Debenture issued	75,001	52,671	48,591	35,506	15,350	3,940	13,500	5,530	5,400	5,400
Debenture principal payment	-3,519	-6,187	-8,485	-10,455	-11,801	-12,622	-13,423	-14,293	-15,081	-15,894
Cash provided by financing transactions	71,482	46,484	40,106	25,051	3,549	-8,682	77	-8,763	-9,681	-10,494
Increase (decrease) in cash	35,277	60,496	48,990	33,980	36,650	33,794	48,616	48,372	53,441	60,230
Cash, Beginning of Year	2,726	38,003	98,499	147,489	181,469	218,119	251,913	300,529	348,901	402,342
Cash, End of Year	38,003	98,499	147,489	181,469	218,119	251,913	300,529	348,901	402,342	462,572

4. Tangible Capital Asset Continuity Schedule for the Water System

City of Hamilton - Water Infrastructure
Tangible Capital Assets Continuity Schedule (in dollars)

Year	Jan 1 NBV	Cost (Historical Cost)				Amortization					Closing NBV
		Opening Balance	Additions	Disposals	Closing Balance	Opening Balance	Annual Amortization	Amortization Disposal	Closing Amortization		
2013	595,057,884	844,668,427	84,030,200	2,471,003	926,227,624	249,610,543	21,040,132	2,471,005	268,179,671	658,047,953	
2014	658,047,953	926,227,624	51,380,200	2,103,094	975,504,730	268,179,671	19,291,446	2,103,094	285,368,023	690,136,707	
2015	690,136,707	975,504,730	39,320,200	800,632	1,014,024,298	285,368,023	20,012,905	800,632	304,580,296	709,444,002	
2016	709,444,002	1,014,024,298	65,549,730	2,218,967	1,077,355,060	304,580,296	20,809,544	2,218,967	323,170,873	754,184,188	
2017	754,184,188	1,077,355,060	45,989,730	1,307,409	1,122,037,381	323,170,873	21,632,875	1,307,409	343,496,339	778,541,042	
2018	778,541,042	1,122,037,381	24,479,730	872,611	1,145,644,500	343,496,339	22,040,285	872,611	364,664,013	780,980,486	
2019	780,980,486	1,145,644,500	36,974,830	621,338	1,181,997,992	364,664,013	22,321,996	621,338	386,364,672	795,633,319	
2020	795,633,319	1,181,997,992	28,534,830	594,813	1,209,938,009	386,364,672	22,592,215	594,813	408,362,075	801,575,934	
2021	801,575,934	1,209,938,009	30,914,830	646,357	1,240,206,481	408,362,075	22,856,786	646,357	430,572,503	809,633,978	
2022	809,633,978	1,240,206,481	28,924,830	628,166	1,268,503,145	430,572,503	23,111,123	628,166	453,055,460	815,447,685	

5.0 SUMMARY AND CONCLUSIONS

The intent of this project was to prepare the City's Water System Financial Plan as a regulatory requirement under the Safe Drinking Water Act, Regulation 453/07 – Financial Plans. The Financial Statements in this report have been developed using readily available information. Where information was not available reasonable assumptions were made to fill any gaps.

The Financial Statements suggest that the water system is currently in a financially viable state over the next 10 years. This indicates that suitable financial resources are allocated to the system over this time period based on the planned capital expenditures and the cost to operate the system. Additional conclusions will be able to be drawn after the long-term review of the water system is completed in the subsequent phase of this project.

6.0 GLOSSARY OF TERMS

i. STATEMENT OF FINANCIAL POSITION

Financial Assets - assets that could be used to discharge existing liabilities or finance future operations and are not for consumption in the normal course of operations. Financial assets include cash, investments, accounts receivable, etc.

Physical assets (such as inventories of supplies, tangible capital assets), and leased assets are not financial assets. Control of such assets creates an opportunity to produce or supply goods and services, rent to others, use for administrative purposes or for the development, construction or repair of other tangible capital assets. Control of such assets does not give rise to a present right to receive cash or another financial asset.

Assets, such as prepaid expenses, for which the future economic benefit is the receipt of goods or services rather than the right to receive cash or another financial asset, are not financial assets. Similarly, certain deferred liabilities are not financial liabilities when the outflow of economic benefits associated with them is in the nature of goods or services rather than a contractual obligation to pay cash or another financial asset.

Liabilities - present obligations of a local government to others arising from past transactions or events, the settlement of which is expected to result in the future sacrifice of economic benefits. Liabilities have three essential characteristics:

- they embody a duty or responsibility to others, leaving a local government little or no discretion to avoid settlement of the obligation;
- the duty or responsibility to others entails settlement by future transfer or use of assets, provision of goods or services, or other form of economic settlement at a specified or determinable date, on occurrence of a specified event, or on demand;
- The transactions or events obligating the local government have already occurred.

Net Debt - a term used to describe the first indicator of a government's financial position. The net assets of a government represent the net economic resources recognizable by the government. The two dimensions of the government's financial position are combined to calculate this second indicator of a government's financial position, called its accumulated surplus or deficit.

Net debt is measured as the difference between a government's liabilities and financial assets. This difference bears directly on the government's future revenue requirements and on its ability to finance its activities and meet its liabilities and contractual obligations. Net debt provides a measure of the future revenues required to pay for past transactions and events. The extent of a government's net debt and the financial ability of the government to service that debt is an important test of the sustainability of that government. It is possible, however, that a government's financial assets could exceed its liabilities. In such circumstances, this indicator of a government's financial position would be called "net financial resources" and it would provide a measure of the net financial assets on hand that can provide resources to finance future operations.

A government's net debt is an important indicator of a government's financial position, highlighting the financial affordability of future government service provision. A net debt position represents a "lien" on the ability of the government to apply financial resources and future revenues to provide services. Non-financial assets are added to net debt to calculate the other indicator of a government's financial position — its accumulated surplus or deficit. Non-financial assets are "prepaid service potential". Reporting a government's recognized non-financial resources as part of its financial position provides information necessary for a more complete understanding of a government's debt position, financial position and future operating requirements.

Non-financial Assets - tangible capital assets and other assets such as prepaid expenses and inventories of supplies. Non-financial assets are acquired, constructed or developed assets that are normally employed to deliver local government services, may be consumed in the normal course of operations and are not for sale in the normal course of operations.

Certain non-financial resources are, however, not given accounting recognition in government financial statements. For example, all government intangibles, and all natural resources and Crown lands that have not been purchased by the government, are not given accounting recognition in government financial statements.

Accumulated Surplus or Deficit - calculated as the sum of the net debt of the government and its non-financial assets. This indicator represents the net assets of the government. The

accumulated surplus or deficit of a government, or its net assets, is the residual interest in its assets after deducting its liabilities.

ii. STATEMENT OF FINANCIAL POSITION

Revenues - including gains, can arise from: taxation; the sale of goods; the rendering of services; the use by others of local government economic resources yielding rent, interest, royalties or dividends; or receipt of contributions such as grants, donations and bequests. Revenues do not include borrowings, such as proceeds from debt issues or transfers from other local governmental units in a local government reporting entity.

Expenses - including losses, are decreases in economic resources, either by way of outflows or reductions of assets or incurrence of liabilities, resulting from the operations, transactions and events of the accounting period. Expenses include transfer payments due where no value is received directly in return. Expenses include the cost of economic resources consumed in, and identifiable with, the operations of the accounting period. For example, the cost of tangible capital assets is amortized to expenses as the assets are used in delivering local government programs. Expenses do not include debt repayments or transfers to other local governmental units in a local government reporting entity.

Surplus - a term used to describe the difference between the revenues and expenses in the period.

iii. STATEMENT OF CASH FLOWS

The statement of cash flow should report how a government generated and used cash and cash equivalents in the accounting period and the change in cash and cash equivalents in the period. The statement of cash flow should report the cash and cash equivalents at both the beginning and end of the accounting period.

The statement of cash flow should report cash flows during the period classified by:

- operating
- capital
- investing
- financing activities.

iv. TCA CONTINUITY SCHEDULE

This schedule is not a separate statement in the City's yearend Financial Statements but it is included in the notes to the Financial Statements.

The TCA Continuity Schedule reports the changes in value of tangible capital assets over time. The TCA Continuity Schedule should disclose, for each major category of tangible capital assets and in total:

- cost at the beginning and end of the period;
- additions in the period;
- disposals in the period;
- the amount of any write-downs in the period;
- the amount of amortization of the costs of tangible capital assets for the period;
- accumulated amortization at the beginning and end of the period; and
- net carrying amount at the beginning and end of the period.