July 10, 2015

Report To: Mayor & Council

From: Doug Brown, Manager Operations & Facilities

SUBJECT: Endorsement of Long Term (2015 to 2021) Financial Plan For Water and Wastewater Systems

The Town's first Municipal Drinking Water licence (licence # 224-601) is due to expire on July 26, 2016. See attached a full copy of drinking water licence No. 224-601. An application for licence renewal must be submitted by January 26, 2016. In order to renew the municipal drinking water licence an up-dated long term financial plan must be in place for six years starting in the year the licence would expire.

The Town retained BMA Management Consultants to prepare the financial plans for the water and wastewater systems in accordance to Ontario Regulation 453/07. See attached a draft copy of the long-range financial plan for both systems. In summary the financial plan indicates approximately a 2.617% increase in revenue is required in each year over the next six (6) years to achieve financial sustainability.

The Town is required to submit the financial plan to the Ministry of Municipal Affairs & Housing prior to January 26, 2016. The financial plan must be approved by a resolution of Council. It should be clearly stated that this financial plan is a guideline or tool to assist Council and Administration in establishing the water and wastewater rates for any given year.

The Operations & Facilities Executive committee recommends the following;

1) That the Long Range Financial Plan for both the Water and Wastewater Systems for the period 2015 to 2021 prepared by BMA Management Consulting Inc. is accepted and that a separate resolution is prepared.

2) That a copy of the Long Range Financial Plan for both the Water and Wastewater Systems be forwarded to the Ministry of Municipal Affairs & Housing prior to January 26, 2016.

Respectfully submitted

Doug Brown, P. Eng.
Operations and Facilities Manager

Council approval of this report will ensure the following;

1) That the Long Range Financial Plan for both the Water and Wastewater Systems for the period 2015 to 2021 prepared by BMA Management Consulting Inc. is accepted and that a separate resolution is prepared.

2) That a copy of the Long Range Financial Plan for both the Water and Wastewater Systems be forwarded to the Ministry of Municipal Affairs & Housing prior to January 26, 2016.

RECOMMENDED

SEP 09 2015

DIV. MNG. _____

EXECUTIVE COMM. _____

Ontario

MUNICIPAL DRINKING WATER LICENCE

Licence Number: 224-101
Issue Number: 1

Pursuant to the *Safe Drinking Water Act*, 2002, S.O. 2002, c. 32, and the regulations made thereunder and subject to the limitations thereof, this municipal drinking water licence is issued under Part V of the *Safe Drinking Water Act*, 2002, S.O. 2002, c. 32 to:

The Corporation of the Town of Fort Frances

320 Portage Avenue
Fort Frances, ON P9A 3P9

For the following municipal residential drinking water system:

Fort Frances Drinking Water System

This municipal drinking water licence includes the following:

Schedule	Description
Schedule A	Drinking Water System Information
Schedule B	General Conditions
Schedule C	System-Specific Conditions
Schedule D	Conditions for Relief from Regulatory Requirements

DATED at TORONTO this 29th day of July, 2011

Signature

Indra R. Prashad, P.Eng.
Director
Part V, *Safe Drinking Water Act*, 2002

Schedule A: Drinking Water System Information

System Owner	**The Corporation of the Town of Fort Frances**
Licence Number	**224-101**
Drinking Water System Name	**Fort Frances Drinking Water System**
Schedule A Issue Date	**July 29th, 2011**

The following information is applicable to the above drinking water system and forms part of this licence:

Licence

Licence Issue Date	July 29, 2011
Licence Expiry Date	July 27, 2016
Application for Licence Renewal Date	January 26, 2016

Drinking Water Works Permit

Drinking Water System Name	Permit Number	Issue Date
Fort Frances Drinking Water System	224-201	July 19, 2011

Permits to Take Water

Water Taking Location	Permit Number	Issue Date
Rainy River	7280-6UAMD9	July 12, 2006

Financial Plans

The Financial Plan Number for the Financial Plan required to be developed for this drinking water system in accordance with O. Reg. 453/07 shall be:	224-301
Alternately, if one Financial Plan is developed for all drinking water systems owned by the owner, the Financial Plan Number shall be:	224-301A

Accredited Operating Authority

Drinking Water System or Operational Subsystems	Accredited Operating Authority	Operational Plan Number
Fort Frances Drinking Water System	The Corporation of the Town of Fort Frances	224-401

Schedule B: General Conditions

System Owner	**The Corporation of the Town of Fort Frances**
Licence Number	**224-101**
Drinking Water System Name	**Fort Frances Drinking Water System**
Schedule B Issue Date	**July 29th, 2011**

1.0 Definitions

1.1 Words and phrases not defined in this licence and the associated drinking water works permit shall be given the same meaning as those set out in the SDWA and any regulations made in accordance with that act, unless the context requires otherwise.

1.2 In this licence and the associated drinking water works permit:

"**adverse effect**", "**contaminant**" and "**natural environment**" shall have the same meanings as in the EPA;

"**alteration**" may include the following in respect of this drinking water system:

(a) An addition to the system,
(b) A modification of the system,
(c) A replacement of part of the system, and
(d) An extension of the system;

"**compound of concern**" means a contaminant that, based on generally available information, may be emitted from a component of the drinking water system to the atmosphere in a quantity that is significant either in comparison to the relevant point of impingement limit or if a point of impingement limit is not available for the compound, then based on generally available toxicological information, the compound has the potential to cause an adverse effect as defined by the EPA at a point of impingement;

"**Director**" means a Director appointed pursuant to section 6 of the SDWA for the purposes of Part V of the SDWA;

"**drinking water works permit**" means the drinking water works permit for the drinking water system as identified in Schedule A of this licence;

"emission summary table" means the table that was prepared by a Professional Engineer in accordance with O. Reg. 419/05 and the procedure document listing the appropriate point of impingement concentrations of each compound of concern emitted from a component of the drinking water system and providing comparison to the corresponding point of impingement limit;

"EPA" means the *Environmental Protection Act*, R.S.O. 1990, c. E.19;

"**financial plan**" means the financial plan required by O. Reg. 453/07 and the conditions of this licence;

"**licence**" means this municipal drinking water licence for the municipal drinking water system identified in Schedule A of this licence;

"**operational plan**" means an operational plan developed in accordance with the Director's Directions – Minimum Requirements for Operational Plans made under the authority of subsection 15(1) of the SDWA;

"**owner**" means the owner of the drinking water system as identified in Schedule A of this licence;

"**point of impingement**" means any point in the natural environment that is not on the same property as the source of the contaminant and as defined by section 2 of O. Reg. 419/05;

"**point of impingement limit**" means the appropriate standard from Schedule 1, 2 or 3 of O. Reg. 419/05 and if a standard is not provided for a compound of concern, the appropriate criteria listed in the Ministry of the Environment publication titled "Summary of Standards and Guidelines to support Ontario Regulation 419: Air Pollution – Local Air Quality (including Schedule 6 of O. Reg. 419 on Upper Risk Thresholds)", dated February 2008, as amended;

"**procedure document**" means the Ministry of the Environment procedure titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated July 2005, as amended;

"**Professional Engineer**" means a Professional Engineer who has been licenced to practice in the Province of Ontario;

"**provincial officer**" means a provincial officer appointed pursuant to section 8 of the SDWA;

"**publication NPC-205**" means the Ministry of the Environment publication titled "Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban)" dated October 1995, as amended;

"**publication NPC-207**" means the Ministry of the Environment draft technical publication titled "Impulse Vibration in Residential Buildings" dated November 1983, supplementing the Ministry of the Environment "Model Municipal Noise Control By-law, Final Report" dated August 1978;

"**publication NPC-232**" means the Ministry of the Environment publication titled "Sound Level Limits for Stationary Sources in Class 3 Areas (Rural)" dated October 1995, as amended;

"**SDWA**" means the *Safe Drinking Water* Act, 2002, S.O. 2002, c. 32;

"**sensitive populations**" means any one or a combination of the following locations where the health effects of nitrogen oxides emissions from emergency generator(s) shall be considered using the point of impingement limit instead of the Ministry of the Environment screening level for emergency generator(s):

(a) health care units (e.g., hospitals and nursing homes),
(b) primary/junior public schools,
(c) day-care facilities, and
(d) playgrounds;

2.0 Applicability

2.1 In addition to any other requirements, the drinking water system identified above shall be established, altered and operated in accordance with the conditions of the drinking water works permit and this licence.

3.0 Licence Expiry

3.1 This licence expires on the date identified as the licence expiry date in Schedule A of this licence.

4.0 Licence Renewal

4.1 Any application to renew this licence shall be made on or before the date identified as the application for licence renewal date set out in Schedule A of this licence.

5.0 Compliance

5.1 The owner and operating authority shall ensure that any person authorized to carry out work on or to operate any aspect of the drinking water system has been informed of the SDWA, all applicable regulations made in accordance with that act, the drinking water works permit and this licence and shall take all reasonable measures to ensure any such person complies with the same.

6.0 Licence and Drinking Water Works Permit Availability

6.1 At least one copy of this licence and the drinking water works permit shall be stored in such a manner that they are readily viewable by all persons involved in the operation of the drinking water system.

7.0 Permits to Take Water

7.1 A permit to take water identified in Schedule A of this licence is associated with the taking of water for purposes of the operation of the drinking water system and is the applicable permit on the date identified as the Schedule A Issue Date.

8.0 Financial Plan

8.1 The owner of the drinking water system, by the later of July 1, 2010 and the date that is six months after the date the first licence for the system is issued, shall prepare and approve financial plans for the system that satisfy the requirements prescribed under section 3 of O. Reg. 453/07.

8.2 The owner of the drinking water system shall ensure that every financial plan prepared in accordance with subsections 2 (1) and 3 (1) of O. Reg. 453/07 contains on the front page of the financial plan, the appropriate financial plan number as set out in Schedule A of this licence.

9.0 Interpretation

9.1 Where there is a conflict between the provisions of this licence and any other document, the following hierarchy shall be used to determine the provision that takes precedence:

9.1.1 The SDWA;

9.1.2 A condition imposed in this licence that explicitly overrides a prescribed regulatory requirement;

9.1.3 A condition imposed in the drinking water works permit that explicitly overrides a prescribed regulatory requirement;

9.1.4 Any regulation made under the SDWA;

9.1.5 Any provision of this licence that does not explicitly override a prescribed regulatory requirement;

9.1.6 Any provision of the drinking water works permit that does not explicitly override a prescribed regulatory requirement;

9.1.7 Any application documents listed in this licence, or the drinking water works permit from the most recent to the earliest; and

9.1.8 All other documents listed in this licence, or the drinking water works permit from the most recent to the earliest.

9.2 If any requirement of this licence or the drinking water works permit is found to be invalid by a court of competent jurisdiction, the remaining requirements of this licence and the drinking water works permit shall continue to apply.

9.3 The issuance of and compliance with the conditions of this licence and the drinking water works permit does not:

9.3.1 Relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including the *Environmental Assessment Act*, R.S.O. 1990, c. E.18; and

9.3.2 Limit in any way the authority of the appointed Directors and provincial officers of the Ministry of the Environment to require certain steps be taken or to require the owner to furnish any further information related to compliance with the conditions of this licence or the drinking water works permit.

9.4 For greater certainty, nothing in this licence or the drinking water works permit shall be read to provide relief from regulatory requirements in accordance with section 46 of the SDWA, except as expressly provided in the licence or the drinking water works permit.

10.0 Adverse Effects

10.1 Nothing in this licence or the drinking water works permit shall be read as to permit:

10.1.1 The discharge of a contaminant into the natural environment that causes or is likely to cause an adverse effect; or

10.1.2 The discharge of any material of any kind into or in any waters or on any shore or bank thereof or into or in any place that may impair the quality of the water of any waters.

10.2 All reasonable steps shall be taken to minimize and ameliorate any adverse effect on the natural environment or impairment of the quality of water of any waters resulting from the operation of the drinking water system including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.

10.3 Fulfillment of one or more conditions imposed by this licence or the drinking water works permit does not eliminate the requirement to fulfill any other condition of this licence or the drinking water works permit.

11.0 Change of Owner or Operating Authority

11.1 This licence is not transferable without the prior written consent of the Director.

11.2 The owner shall notify the Director in writing of a change of any operating authority identified in Schedule A of this licence.

12.0 Information to be Provided

12.1 Any information requested by a Director or a provincial officer concerning the drinking water system and its operation, including but not limited to any records required to be kept by this licence or the drinking water works permit, shall be provided upon request.

13.0 Records Retention

13.1 Except as otherwise required in this licence or the drinking water works permit, any records required by or created in accordance with this licence or the drinking water works permit, other than the records specifically referenced in section 12 of O. Reg. 170/03, shall be retained for at least 5 years and made available for inspection by a provincial officer, upon request.

14.0 Chemicals and Materials

14.1 All chemicals and materials used in the alteration or operation of the drinking water system that come into contact with water within the system shall meet all applicable standards set by both the American Water Works Association ("AWWA") and the American National Standards Institute ("ANSI") safety criteria standards NSF/60 and NSF/61.

14.2 The most current chemical and material product registration documentation from a testing institution accredited by either the Standards Council of Canada or by the American National Standards Institution ("ANSI") shall be available at all times for each chemical and material used in the operation of the drinking water system that comes into contact with water within the system.

14.3 Conditions 14.1 and 14.2 do not apply in the case of the following:

14.3.1 Water pipe and pipe fittings meeting AWWA specifications made from ductile iron, cast iron, PVC, fibre and/or steel wire reinforced cement pipe or high density polyethylene (HDPE);

14.3.2 Articles made from stainless steel, glass, HDPE or Teflon®;

14.3.3 Cement mortar for watermain lining and for water contacting surfaces of concrete structures made from washed aggregates and Portland cement;

14.3.4 Food grade oils and lubricants; or

14.3.5 Any particular chemical or material where the owner has written documentation signed by the Director that indicates that the Ministry of the Environment is satisfied that the chemical or material is acceptable for use within the drinking water system and the chemical or material is only used as permitted by the documentation.

15.0 Drawings

15.1 All drawings and diagrams in the possession of the owner that show any treatment subsystem as constructed shall be retained by the owner unless the drawings and diagrams are replaced by a revised or updated version showing the subsystem as constructed subsequent to the alteration.

15.2 Any alteration to any treatment subsystem shall be incorporated into process flow diagrams, process and instrumentation diagrams, and record drawings and diagrams within one year of the substantial completion of the alteration.

15.3 Process flow diagrams and process and instrumentation diagrams for any treatment subsystem shall be kept in a place, or made available in such a manner, that they may be readily viewed by all persons responsible for all or part of the operation of the drinking water system.

16.0 Operations and Maintenance Manual

16.1 An up-to-date operations and maintenance manual or manuals shall be maintained and applicable parts of the manual or manuals shall be made available for reference by all persons responsible for all or part of the operation or maintenance of the drinking water system.

16.2 The operations and maintenance manual or manuals, shall include at a minimum:

16.2.1 The requirements of this licence and associated procedures;

16.2.2 The requirements of the drinking water works permit for the drinking water system;

16.2.3 Procedures for monitoring and recording the in-process parameters necessary for the control of any treatment subsystem and for assessing the performance of the drinking water system;

16.2.4 Procedures for the operation and maintenance of monitoring equipment;

16.2.5 Contingency plans and procedures for the provision of adequate equipment and material to deal with emergencies, upset conditions and equipment breakdown;

16.2.6 Procedures for dealing with complaints related to the drinking water system, including the recording of the nature of the complaint and any investigation and corrective action taken in respect of the complaint;

16.3 Procedures necessary for the operation and maintenance of any alterations to the drinking water system shall be incorporated into the operations and maintenance manual or manuals prior to those alterations coming into operation.

Schedule C: System-Specific Conditions

System Owner	**The Corporation of the Town of Fort Frances**
Licence Number	**224-101**
Drinking Water System Name	**Fort Frances Drinking Water System**
Schedule C Issue Date	**July 29th, 2011**

1.0 Performance Limits

Rated Capacity

1.1 For each treatment subsystem listed in column 1 of Table 1, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed the value identified as the rated capacity in column 2 of the same row.

Table 1: Rated Capacity

Column 1 Treatment Subsystem Name	Column 2 Rated Capacity (m^3/day)
Fort Frances Water Treatment Plant	17,000

1.2 Despite condition 1.1, a treatment subsystem may be operated temporarily at a daily volume above the value set out in column 2 of Table 1 for the purposes of fighting a large fire or for the maintenance of the drinking water system.

1.3 Condition 1.2 does not authorize the discharge into the distribution system of any water that does not otherwise meet all of the requirements of this licence and all other regulatory requirements, including compliance with the Ontario Drinking Water Quality Standards.

Maximum Flow Rates

1.4 For each treatment subsystem listed in column 1 of Table 2, the maximum flow rate of water that flows into a treatment subsystem component listed in column 2 shall not exceed the value listed in column 3 of the same row.

Table 2: Maximum Flow Rates

Column 1 Treatment Subsystem Name	Column 2 Treatment Subsystem Component	Column 3 Maximum Flow Rate (L/s)
Not Applicable	Not Applicable	Not Applicable

Residue Management

1.5 In respect of an effluent discharged into the natural environment from a treatment subsystem or treatment subsystem component listed in column 1 of Table 3:

1.5.1 The annual average concentration of a test parameter identified in column 2 shall not exceed the value in column 3 of the same row; and

1.5.2 The maximum concentration of a test parameter identified in column 2 shall not exceed the value in column 4 of the same row.

Table 3: Residue Management

Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Test Parameter	Column 3 Annual Average Concentration (mg/L)	Column 4 Maximum Concentration (mg/L)
Not Applicable	Not Applicable	Not Applicable	Not Applicable

UV Disinfection Equipment Performance

1.6 For each treatment subsystem or treatment subsystem component listed in column 1 of Table 4, the UV disinfection equipment shall be operated such that a continuous pass-through UV dose is maintained throughout the life time of the UV lamp(s) that is at least the minimum continuous pass-through UV dose set out in column 2 of the same row.

Table 4: UV Disinfection Equipment Performance

Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Minimum Continuous Pass-Through UV Dose (mJ/cm^2)
Not Applicable	Not Applicable

2.0 Flow Measurement and Recording Requirements

2.1 For each treatment subsystem identified in column 1 of Table 1 and in addition to any other flow measurement and recording that may be required, continuous flow measurement and recording shall be undertaken for:

2.1.1 The flow rate and daily volume of treated water that flows from the treatment subsystem to the distribution system.

2.1.2 The flow rate and daily volume of water that flows into the treatment subsystem.

2.2 For each treatment subsystem component identified in column 2 of Table 2 and in addition to any other flow measurement and recording that may be required, continuous flow measurement and recording shall be undertaken for the flow rate and daily volume of water that flows into the treatment subsystem component.

2.3 Where a rated capacity from Table 1 or a maximum flow rate from Table 2 is exceeded, the following shall be recorded:

2.3.1 The difference between the measured amount and the applicable rated capacity or maximum flow rate specified in Table 1 or Table 2;

2.3.2 The time and date of the measurement;

2.3.3 The reason for the exceedance; and

2.3.4 The duration of time that lapses between the applicable rated capacity or maximum flow rate first being exceeded and the next measurement where the applicable rated capacity or maximum flow rate is no longer exceeded.

3.0 Calibration of Flow Measuring Devices

3.1 All flow measuring devices must be checked and calibrated in accordance with the manufacturer's instructions.

3.2 If the manufacturer's instructions do not indicate how often to check and calibrate a flow measuring device, the equipment must be checked and calibrated at least once every year during which the drinking water system is in operation.

4.0 Additional Sampling, Testing and Monitoring

Drinking Water Health and Non-Health Related Parameters

4.1 For each treatment subsystem or treatment subsystem component identified in column 1 of Tables 5 and 6 and in addition to any other sampling, testing and monitoring that may be required, sampling, testing and monitoring shall be undertaken for a test parameter listed in column 2 at the sampling frequency listed in column 3 and at the monitoring location listed in column 4 of the same row.

Table 5: Drinking Water Health Related Parameters

Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Test Parameter	Column 3 Sampling Frequency	Column 4 Monitoring Location
Not Applicable	Not Applicable	Not Applicable	Not Applicable

Table 6: Drinking Water Non-Health Related Parameters			
Column 1 Treatment Subsystem or Treatment Subsystem Component Name	**Column 2 Test Parameter**	**Column 3 Sampling Frequency**	**Column 4 Monitoring Location**
Not Applicable	Not Applicable	Not Applicable	Not Applicable

Environmental Discharge Parameters

4.2 For each treatment subsystem or treatment subsystem component identified in column 1 of Table 7 and in addition to any other sampling, testing and monitoring that may be required, sampling, testing and monitoring shall be undertaken for a test parameter listed in column 2 using the sample type identified in column 3 at the sampling frequency listed in column 4 and at the monitoring location listed in column 5 of the same row.

4.3 For the purposes of Table 7:

4.3.1 Manual Composite means the mean of at least three grab samples taken during a discharge event, with one sample being taken immediately following the commencement of the discharge event, one sample being taken approximately at the mid-point of the discharge event and one sample being taken immediately before the end of the discharge event; and

4.3.2 Automated Composite means samples must be taken during a discharge event by an automated sampler at a minimum sampling frequency of once per hour.

4.4 Any sampling, testing and monitoring for the test parameter Total Suspended Solids shall be performed in accordance with the requirements set out in the publication "Standard Methods for the Examination of Water and Wastewater", 21st Edition, 2005, or as amended from time to time by more recently published editions.

Table 7: Environmental Discharge Parameters				
Column 1 Treatment Subsystem or Treatment Subsystem Component Name	**Column 2 Test Parameter**	**Column 3 Sample Type**	**Column 4 Sampling Frequency**	**Column 5 Monitoring Location**
Fort Frances Water Treatment Plant	Suspended Solids	Composite	Quarterly	Point of discharge to Rainy River

UV Disinfection Equipment

4.5 For each treatment subsystem or treatment subsystem component listed in column 1 of Table 8 and in addition to any other sampling, analysis and recording that may be required, continuous monitoring and recording with a minimum testing/reading and recording frequency of every four (4) hours shall be carried out for the test parameters set out in column 3 of the same row.

Table 8: UV Disinfection Equipment

Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Control Strategy	Column 3 Test Parameter
Fort Frances Water Treatment Plant	Not Applicable	Not Applicable

5.0 Studies Required

5.1 Not applicable

Schedule D: Conditions for Relief from Regulatory Requirements

System Owner	**The Corporation of the Town of Fort Frances**
Licence Number	**224-101**
Drinking Water System Name	**Fort Frances Drinking Water System**
Schedule D Issue Date	**July 29th, 2011**

1.0 Lead Regulatory Relief

1.1 Any relief from regulatory requirements previously authorized by the Director in respect of the drinking water system under section 38 of the SDWA in relation to the sampling, testing or monitoring requirements contained in Schedule 15.1 of O. Reg. 170/03 shall remain in force until such time as Schedule 15.1 of O. Reg. 170/03 is amended after June 1, 2009.

2.0 Other Regulatory Relief

2.1 Not Applicable.

Town of Fort Frances
Water and Wastewater Long Range Financial Plan Forecast (2016-2021)

O. Reg. 453/07 Financial Plan
May 2015

Table of Contents

Introduction 1
- Review of Regulatory and Legislative Requirements 2
- Principles of Financial Sustainability 4
- Importance of a Long Range Financial Plan 5
- General Approach to Preparing the Town's LRFP 5
- The LRFP is Dynamic—Regular Updates Will Be Undertaken 6

Financial Plan Development 7
- Model Development 8
  - Asset Renewal/Replacement 9
  - Reserves and Revenue Stability 10
  - Debt 11
- Summary—Financial Policies and Strategies 12
- Forecast Key Assumptions 13
- Summary of Rate Revenue Requirements 14
- Water and Wastewater Capital Budget 15

Reporting Requirements—O.Reg. 453/07 16

Water and Wastewater Reporting Requirements—O.Reg. 453/07 17
- Statement of Financial Operations—Water 18
- Statement of Cash Flow/Cash Receipts—Water 19
- Statement of Financial Position—Water 20
- Statement of Financial Operations—Wastewater 21
- Statement of Cash Flow/Cash Receipts—Wastewater 22
- Statement of Financial Position—Wastewater 23

Introduction

Review of Regulatory and Legislative Requirements

The Town of Fort Frances, along with other Ontario municipalities that are responsible for the provision of drinking water, are required to meet the requirements set out in the Financial Plans Regulations O.Reg.453/07. While the regulations are directed at **water systems**, the approach, as encouraged by the Province and being undertaken by the Town, was to undertake a similar process for the Town's **wastewater systems**.

The Town of Fort Frances is taking a proactive approach and has recognized the need for a long-term financial planning process that assesses the financial implications of current and proposed policies as well as Council approved decisions in its water and wastewater operations. The goal is to ensure that the Town's water and wastewater operations are in a sound financial position and services can be provided on a sustainable basis.

Ontario Reg. 453/07 provides the following parameters with regards to s.30 (1) part b of the Safe Drinking Water Act for new water systems:

- The financial plan must be approved by Council resolution (or governing body) indicating that the drinking water system is financially viable;
- The financial plan 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);
- The financial plan 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 PSAB) for each year in which the financial plans apply;
- The financial plan is 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; and
- Notice of the availability of the financial plans is to be given to the public.

There are three statements that must be completed, in accordance with the O. Reg. 453/07. These include:

Statement of Operations

The ***Statement of Operations*** summarizes the revenues and operating expenses for a given period.

Statement of Cash Flows

The ***Statement of Cash Flows*** reports on how activities were financed for a given period which provides a measure of the changes in cash for that period.

Statement of Financial Position

The ***Statement of Financial Position*** reports on whether enough revenue was generated in a period to cover the expenses in the period and whether sufficient resources have been generated to support current and future activities.

The categories of financial information have been developed to ensure:

- that they provide a sound picture of the financial position of a drinking water system;
- that they are aligned with municipal financial statements prepared on a full accrual accounting basis, and
- consistent financial planning for municipal water services.

The goal is to provide the Town with a realistic and informed view of operating and capital expenditures needed over time to maintain the integrity and health of its physical infrastructure and to accommodate growth and new environmental standards. As such, a Long Range Financial Plan (LRFP) creates a more purposeful approach to long-term financial management and helps align short term actions with long term financial strategies.

This document puts the Town's water financial condition in perspective, discusses the current challenges and risks and provides a sustainable financial forecast. The plan also provides a framework for guiding the annual budget and the financial planning over a longer horizon. The LRFP helps to understand the implications that today's decisions have on future budgets. The LRFP has been prepared to meet the regulatory requirements. It does not represent a formal multi-year budget. The approval of the budget is undertaken annually. The LRFP is a living document that needs to be updated as assumptions and economic conditions change.

Principles of Financial Sustainability

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.

The LRFP will be instrumental in the Town's ability to meet the Provincial reporting requirements included in O.Reg. 453/07 for water operations and has been developed in recognition of the above noted principles.

Importance of a Long Range Financial Plan

A LRFP is a framework to guide the Town in planning and decision -making:

- Examines fiscal trends (past and future);
- Identifies fiscal issues and opportunities;
- Increases communication & awareness;
- Stimulates long-term thinking;
- Helps establish fiscal policies and goals;
- Reasonable degree of stability and predictability in the rate burden;
- A fair sharing in the distribution of resources between current and future ratepayers;
- Sustainable cash flows;
- Maximizes its financial flexibility; and
- Minimizes financial vulnerability during economic downturns.

General Approach to Preparing the Town's LRFP

The LRFP identifies the key financial strategies that will influence the building of a sustainable long-term financial future and takes into account:

- Expected expenses and capital outlays for each year of the plan;
- Expected revenues for each year;
- Financial performance measures; and
- Sensitivity analysis on key assumptions.

The LRFP is Dynamic—Regular Updates Will Be Undertaken

Although great effort has been made to present accurate financial projections, based upon the data available at this time, a LRFP is a dynamic document and should be updated and re-evaluated, on an ongoing basis. As such, the 2015 Water and Wastewater LRFP should be considered a work-in-progress.

It is not an exercise in precision, rather it is intended for use as a forecasting tool to ensure that the Town is on the right course to meet its financial obligations and future challenges. The intent is to provide Council with regular updates to this document, so it will be useful in the ongoing cycle of business planning and budgeting.

Financial plans are only required to be updated in conjunction with every application for licence renewal (i.e. every 5 years), however, there are many potential circumstances that could occur within the short to medium term that would affect the assumptions in the projections for operating and capital. Council priorities, planning policies, changes to service levels, consumption projections and infrastructure requirements, will certainly lead to changes and the LRFP should be adjusted to reflect these changes as they occur.

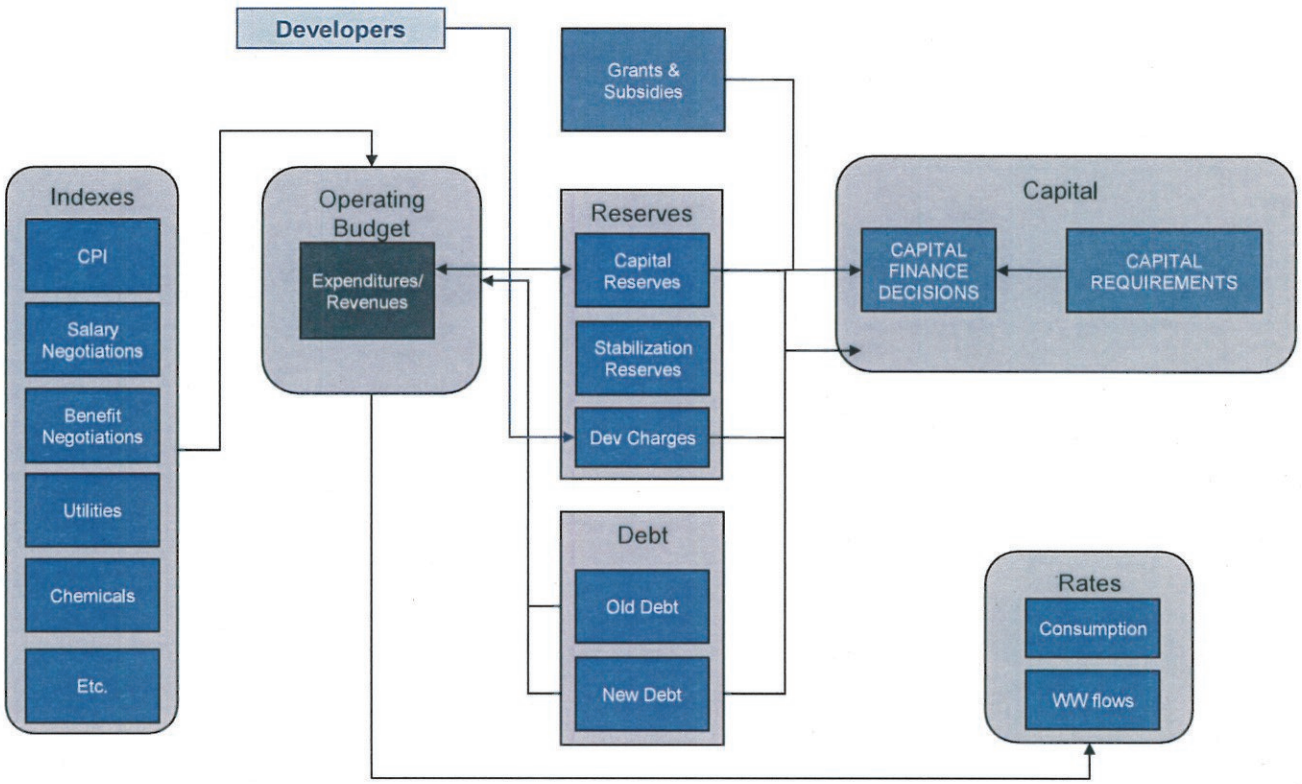
It is anticipated that updates to the LRFP will:

- Amend the assumptions, projections and strategies, as required, based on changes in the municipal environment;
- Continue building awareness of future changes in current operating and capital spending and funding levels;
- Assist the Town in determining the extent of its financial challenges;
- Reconfirm the key financial goals and strategies that should guide future planning; and
- Spur the development of actions in future business plans that would respond to the long-term strategies.

Financial Plan Development

Model Development

The LRFP is developed based on an analysis of all factors impacting the capital and operating budget, including financing plans, consumption and wastewater flow forecasts. This forecast also includes assumptions with respect to growth and development charge revenues, interest rates impacting reserves and debt issuance. As shown below, due to the inter-relationship between all components of the plan, changes in any of the assumptions will potentially have an impact throughout the LRFP.



Asset Renewal/Replacement

The full cost of managing the Town's water and wastewater systems has been taken into consideration in calculating the revenue requirements for the supply of water and the treatment of wastewater. The approach undertaken in the analysis of lifecycle costing was to use the PSAB and asset management plan data to develop a replacement schedule based on the useful life and estimated replacement cost.

The Town's assets include approximately 70 kms of water pipelines and 57 kms of sanitary sewer mains. In addition, the Town has treatment plants, valves, hydrants, standpipes, vehicles/ equipment and manholes. The following table provides a summary of the water and wastewater assets.

	Historical Cost	Replacement Cost	Annual Amortization Based on Historical Costs	Annual Amortization per Asset Mgmt Strategy
	(000's)	(000's)	(000's)	(000's)
Water/WW				
Water	$ 31,010	$ 66,700	$ 538	$ 1,293
Wastewater	$ 24,383	$ 57,100	$ 466	$ 1,121
Total	$ 55,393	$ 123,800	$ 1,004	$ 2,414

The Town has $31 million in water assets (based on historical costs) and $24.4 million in wastewater assets. On a replacement cost basis, this is estimated to be $66.7 million in water assets and $57.1 million in wastewater assets.

The annual amortization provides an estimate of the amount of monies that should be annually set aside for the future replacement/refurbishment of the existing assets. The annual amortization based on replacement cost is $2.4 million. This is based on the Town's Asset Management Strategy which was undertaken in 2014.

In 2015, the Town contributed approximately $2.0 million toward the replacement of capital assets as follows:

- $1.9 million toward its capital reserves
- $0.1 million in debt principal payments

	Water (000's)	WW (000's)	Combined (000's)
Annual Contributions to Capital			
To Capital and Reserve Funds	$ 1,047	$ 901	$ 1,949
To Debt Principal Payments		$ 103	$ 103
Total Contribution to Capital	$ 1,047	$ 1,005	$ 2,052
Replacement Amortization Expense	$ 1,293	$ 1,121	$ 2,414
Funding Gap (Replacement Amortization)	$ (246)	$ (116)	$ (362)

As shown above, the combined annual funding gap in 2015 is $362,000 based on a replacement costing. This will be addressed in the long range financial plan to move the Town toward financial sustainability.

The capital requirements from 2015-2021 based on replacement costs and useful life of the assets is estimated at $19.1 million ($10 million for water and $9.1 million for wastewater).

The Town of Fort Frances, like other municipalities in Ontario, has to fund programs and services it provides within a limited funding framework. The Town must address rising costs and aging infrastructure with relatively flat revenue streams and limited ability to modify the services it provides.

The recommended strategy in this report is to gradually address the infrastructure backlog as well as meet the replacement requirements of assets as they become due for replacement over the next 6 years. Ratepayer affordability must be taken into consideration and therefore a phase-in strategy has been developed to gradually move toward a fully funded asset management financial plan to address the existing backlog and the annual underfunding of the capital program.

Reserves and Revenue Stability

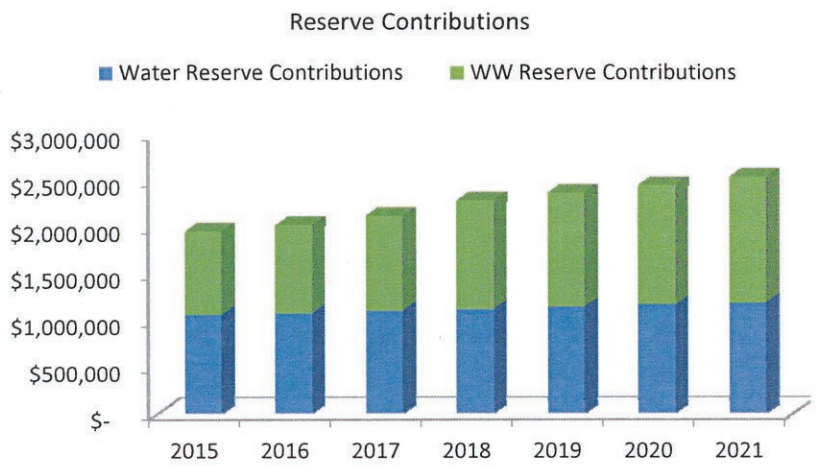
A Reserve and Reserve Fund is a financial provision or amount that is designated for a future purpose that extends beyond the current fiscal year. While its balance may vary over the course of a year, the Reserve/Reserve Fund is carried forward from one fiscal year to the next to facilitate multi-year financial planning.

Reserves/Reserve Funds can be established to meet specific liabilities such as the replacement/acquisition of capital assets or to protect against known risks or unforeseen circumstances that may create financial difficulties. The purpose for maintaining reserves/reserve funds includes:

- To provide rate stabilization in the face of variable and uncontrollable factors;
- To provide financing for one-time or short term requirements without permanently impacting the water/ww rates;
- To make provisions for replacements/renewals/acquisitions of assets/infrastructure that are currently being consumed
- To avoid spikes in funding requirements for large capital projects by reducing their reliance on long-term debt borrowings;
- To smooth the rate impact of major capital projects on the operating budget;
- To provide a source of internal financing;
- To ensure adequate and sustainable cash flows; and
- To provide **financial sustainability**

The Town's water and wastewater capital reserves are used for rate stabilization and capital expenditures. The Town's consolidated Water/Wastewater Reserves is $6.9 million by the end of 2014. The recommended strategy is to gradually increase the contributions to reserves to have sufficient funds to support the capital program as well as to provide revenue stability for the operations. The strategy is built on the principle that the reserves will be used to fund the replacement or refurbishment of existing assets and will be funded through calculated annual contributions from the Operating Budget based on capital replacement costs.

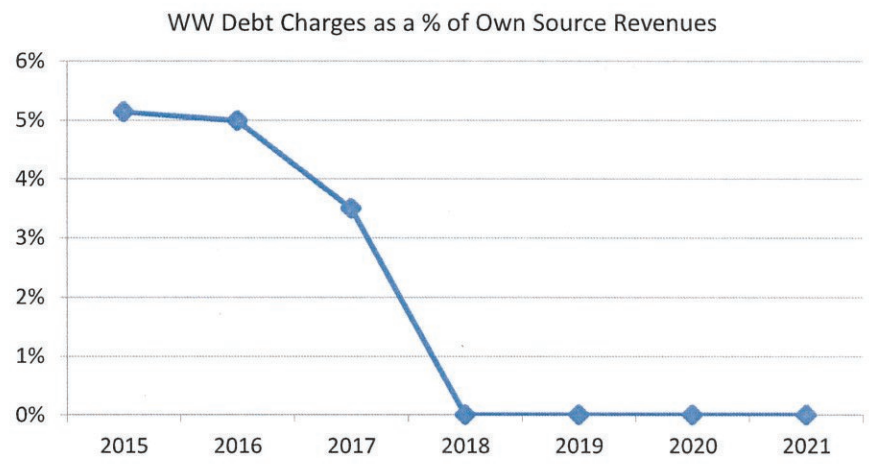
The following graph provides the annual contributions to the reserves to meet the capital program and provide sufficient revenue stability. By 2019, the annual contribution to the water and wastewater reserve will equal the annual replacement amortization which is required to fund the replacement of existing assets.



Debt

Debt levels and their related annual costs are important long-term obligations that must be managed within the available resources. An effective debt management policy provides guidelines for the Town to manage debt. Debt servicing costs are low, well within industry standards. The existing policy is to keep debt service costs at 15% or less of the rate revenue requirements.

The Town currently has $0.3 million in debt outstanding in wastewater. There is no further debt required over the next six years. Debt will be retired by the end of 2017. The Town's debt is well below the existing policy.



Summary—Financial Policies and Strategies

The following summarizes the existing financial policies and strategies:

- ***The Town will maintain all Water/Wastewater infrastructure in a state of good repair by implementing life cycle costing and providing adequate annual contributions to the replacement reserves to fund the future rehabilitation/replacement of assets.***
- ***To ensure that the reserves also provide for revenue stabilization, it is recommended that the water and wastewater reserves be maintained at approximately 10% or greater of the water and wastewater annual revenues.***
- ***Future debt service payments will be made while ensuring the following:***
  - ***The provision of essential services is not jeopardized.***
  - ***Financial flexibility is maintained by ensuring that there are sufficient revenues to meet unanticipated expenditures and accommodate revenue fluctuations.***
  - ***Outstanding debt obligations will not threaten long-term financial stability.***
  - ***The amount of outstanding debt will not place an undue burden on local ratepayers.***
- ***The Town's Water and Wastewater debt charges ratio as a percentage of own source revenues, will not exceed 15% as considered acceptable by credit rating agencies.***
- ***The Town will update the LRFP as new information becomes available that could materially change the forecast.***

Forecast Key Assumptions

The following provides the key assumptions in the Forecast:

- ***Capital Projects***—Water and Wastewater Capital Forecast is based on the capital needs as identified by the Town. The plan includes $8.3 million for water and $7.2 million for wastewater capital expenditures for over the next 6 years (2016-2021).
- ***Water & Wastewater Capital Reserves***—The opening balance for 2015 Water and Wastewater Capital Reserves and Reserve Funds are based on the year-end balance for 2014.
- ***Sources of Financing***—Capital Reserves were used as the sole source of financing.
- ***Debt*** - no new debt will be issued over the next six years.
- ***Expenditure & Revenue Increases***—based on:
  - Salary, wage and benefit increases 2.0% annually;
  - Miscellaneous expenses increases of 2.0% annually; and
  - Other revenues 2%.
- ***Disposals***—assumes no disposals of tangible capital assets.
- ***Useful Life***—based on the Town's tangible capital asset policies.
- ***Reserve Contributions***—The annual contribution to reserves varies annually based on an assumed 2% for water and 5% rate revenue requirement increase annually.
- ***Reserve Interest***—Assumes 2% annual interest earned on reserve balances
- ***Service Standards***—Water and wastewater programs are maintained at their current service levels.

Summary of Rate Revenue Requirements

The Town's objective in establishing the Water and Wastewater rates is to avoid large fluctuations from year to year and to ensure rates are set at a level to adequately cover current operating costs, maintain and repair the Town's existing asset base and replace assets where appropriate.

Efforts are being made in this plan to gradually grow/maintain the reserves to provide a source of funding for the ongoing replacement/ refurbishment of capital assets. The following tables reflect the forecast rate revenue requirements.

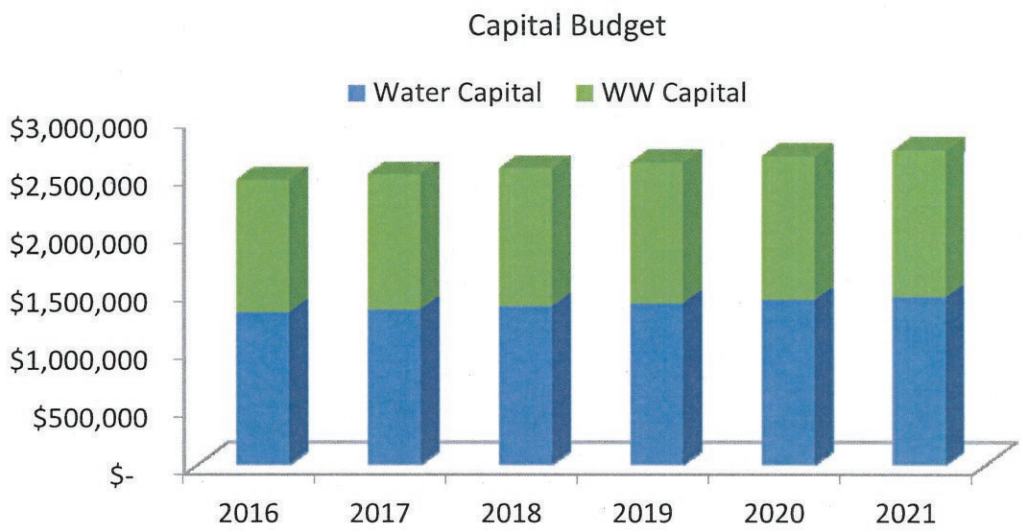
	2015	2016	2017	2018	2019	2020	2021
Water Rate Revenue Requirements	$2,522,892	$2,573,350	$2,624,817	$2,677,313	$2,730,859	$2,785,477	$2,841,186
Wastewater Rate Revenue Requirements	$2,359,937	$2,431,736	$2,506,307	$2,585,495	$2,672,240	$2,762,472	$2,856,347
Total Rate Revenue Requirements	$4,882,829	$5,005,086	$5,131,124	$5,262,808	$5,403,100	$5,547,948	$5,697,534
$ change		$ 122,257	$ 126,038	$ 131,684	$ 140,291	$ 144,849	$ 149,585
% change		2.5%	2.5%	2.6%	2.7%	2.7%	2.7%

As shown above the annual increases in consolidated water and wastewater rate revenue requirements is 2.5% to 2.7% from 2015 to 2021.

Water and Wastewater Capital Budget

As shown below, the Town's 6-year Water Capital Budget is $8.3 million and the Wastewater Capital Budget is $7.2 million.

Capital Budget							
	2016	2017	2018	2019	2020	2021	Total
Water	$1,318,860	$1,345,237	$1,372,142	$1,399,585	$1,427,576	$1,456,128	$ 8,319,528
WW	$1,143,420	$1,166,288	$1,189,614	$1,213,406	$1,237,675	$1,262,428	$ 7,212,832
Total	$2,462,280	$2,511,526	$2,561,756	$2,612,991	$2,665,251	$2,718,556	$15,532,360
Capital Financing							
Reserves	$2,462,280	$2,511,526	$2,561,756	$2,612,991	$2,665,251	$2,718,556	$15,532,360
Grants	$ -	$ -	$ -	$ -	$ -	$ -	
Debt	$ -	$ -	$ -	$ -	$ -	$ -	
Total	$2,462,280	$2,511,526	$2,561,756	$2,612,991	$2,665,251	$2,718,556	$15,532,360



Reporting Requirements—O.Reg. 453/07

Water and Wastewater Financial Plan—O.Reg. 453/07—Introduction

The Financial Plan has been prepared in accordance with the regulation (O.Reg. 453/07) made under the Safe Drinking Water Act. The Financial Plan regulation requires that the plans be updated every five years along with the request for the renewal of the drinking water licence. This ongoing update will assist in revisiting the assumptions made to develop the operating and funding plans as well as reassessing the needs for capital renewal and major maintenance expenses. The following provides a summary of the three statements:

- ***Statement of Financial Operations***—This statement summarizes the revenues and expenditures. The expenditures include ongoing operating costs plus asset amortization. This statement indicates that the system and its asset base are projected to be maintained with funds being available each year for future capital renewal or major maintenance. As shown in the statements of financial operations, the Town is generating excess revenues over expenses including amortization for water and wastewater throughout the forecast period.
- ***Cash Receipts or Gross Cash Payments (Cash Flows)*** —The cash flow statement summarizes how the water system is expected to generate and utilize cash resources. The transactions that generate and use cash include the projection of cash to be received from revenues, cash to be used for operating expenditures and financing charges, cash projected to be used to acquire capital assets and projected financial transactions that are the proceeds from debt or debt principal repayment.
- ***Financial Position —Highlights***:
  - ***Net Financial Assets***—An important feature of a water and wastewater system is its net financial assets. A positive number indicates that the system has the resources to deal with future capital and other needs. A negative number indicates that past capital and other investments must be financed from future revenues. Water and wastewater net financial assets are in a positive position throughout the forecast. No debt was required throughout the term.
  - ***Tangible Capital Assets (Net Book Value)*** - Water systems have a great deal of resources tied up in tangible capital assets and managing these assets is critical to maintaining current and future levels of service. An increase in net book value of tangible capital assets is an indication that assets have been renewed faster than they were used. A decrease in net book value indicates that assets are being used, or amortized, faster than they are renewed. The net book value is projected to increase for water and wastewater indicating that assets are being renewed faster than they are being used.
  - ***Accumulated Surplus***—A third financial indicator that is reflected in the financial position statement is the accumulated surplus. This indicator represents cash on hand plus the net book value of tangible capital assets less debt. The accumulated surplus is forecast to increase from 2015 to 2021 for both water and wastewater.

Statement of Financial Operations—Water

	2015	2016	2017	2018	2019	2020	2021
Water Total Revenues							
Rate Revenues	$ 2,522,892	$ 2,573,350	$ 2,624,817	$ 2,677,313	$ 2,730,859	$ 2,785,477	$ 2,841,186
Miscellaneous Revenues	$ 40,836	$ 41,653	$ 42,486	$ 43,335	$ 44,202	$ 45,086	$ 45,988
Monthly Meter Replacement Revenue	$ 19,533	$ 19,924	$ 20,322	$ 20,729	$ 21,143	$ 21,566	$ 21,997
Interest Revenue	$ 108,724	$ 97,601	$ 94,542	$ 91,323	$ 87,937	$ 84,378	$ 80,643
Total Revenues	$ 2,691,985	$ 2,732,527	$ 2,782,167	$ 2,832,700	$ 2,884,141	$ 2,936,507	$ 2,989,814
Water Total Expenses							
Operating Expenses							
Administration	$ 505,887	$ 516,005	$ 526,325	$ 536,851	$ 547,588	$ 558,540	$ 569,711
Water Service Connections	$ 148,786	$ 151,762	$ 154,797	$ 157,893	$ 161,051	$ 164,272	$ 167,557
Water Meter Maintenance	$ 12,961	$ 13,220	$ 13,485	$ 13,754	$ 14,029	$ 14,310	$ 14,596
Water Distribution System Maintenance	$ 219,019	$ 223,399	$ 227,867	$ 232,425	$ 237,073	$ 241,815	$ 246,651
Total Water Treatment Plant	$ 527,009	$ 537,549	$ 548,300	$ 559,266	$ 570,451	$ 581,861	$ 593,498
Water Storage Facility	$ 122,199	$ 124,643	$ 127,136	$ 129,679	$ 132,272	$ 134,918	$ 137,616
Total Operating Expenses	$ 1,535,861	$ 1,566,578	$ 1,597,910	$ 1,629,868	$ 1,662,465	$ 1,695,715	$ 1,729,629
Debt Charges							
Debt Charges - Interest Payments	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Amortization Expense							
Water Assets	$ 576,827	$ 598,808	$ 621,228	$ 644,097	$ 667,424	$ 691,217	$ 715,486
Total Expenses	$ 2,112,688	$ 2,165,386	$ 2,219,138	$ 2,273,965	$ 2,329,889	$ 2,386,931	$ 2,445,115
Annual Surplus/(Deficit)	$ 579,297	$ 567,141	$ 563,029	$ 558,735	$ 554,252	$ 549,576	$ 544,700

The annual surplus stays relative flat ranging between $545,000 to $580,000 which provides additional funds for the replacement of assets.

Statement of Cash Flow/Cash Receipts—Water

	2015	2016	2017	2018	2019	2020	2021
Total Revenues	$ 2,691,985	$ 2,732,527	$ 2,782,167	$ 2,832,700	$ 2,884,141	$ 2,936,507	$ 2,989,814
Cash Paid For							
Operating Costs	$ 1,535,861	$ 1,566,578	$ 1,597,910	$ 1,629,868	$ 1,662,465	$ 1,695,715	$ 1,729,629
Debt Repayment - Debt Interest	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cash Provided From Operating Transactions	$ 1,156,124	$ 1,165,949	$ 1,184,257	$ 1,202,832	$ 1,221,676	$ 1,240,793	$ 1,260,185
Capital Transactions							
Acquisition of TCA	$ 1,712,268	$ 1,318,860	$ 1,345,237	$ 1,372,142	$ 1,399,585	$ 1,427,576	$ 1,456,128
Finance Transactions							
Proceeds from Debt Issues							
Debt Repayment - Principal	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Increase/(Decrease) in Cash Equivalents	$ (556,144)	$ (152,911)	$ (160,980)	$ (169,310)	$ (177,909)	$ (186,784)	$ (195,943)
Cash and Cash Equivalents at Beginning Balance	$ 5,436,176	$ 4,880,032	$ 4,727,120	$ 4,566,140	$ 4,396,830	$ 4,218,922	$ 4,032,138
Cash and Cash Equivalents at Ending Balance	$ 4,880,032	$ 4,727,120	$ 4,566,140	$ 4,396,830	$ 4,218,922	$ 4,032,138	$ 3,836,195

The reserve position decreased from $4.8 million in 2015 to $3.8 million in 2021. While there is decline, the water reserve is healthy.

Statement of Financial Position—Water

	2015	2016	2017	2018	2019	2020	2021
Financial Assets							
Cash	$ 4,880,032	$ 4,727,120	$ 4,566,140	$ 4,396,830	$ 4,218,922	$ 4,032,138	$ 3,836,195
Liabilities							
Debt - Principal Outstanding							
Net Financial Assets	$ 4,880,032	$ 4,727,120	$ 4,566,140	$ 4,396,830	$ 4,218,922	$ 4,032,138	$ 3,836,195
Non-Financial Assets							
Tangible Capital Assets	$ 28,589,561	$ 29,309,613	$ 30,033,622	$ 30,761,667	$ 31,493,828	$ 32,230,187	$ 32,970,830
Accumulated Surplus/Deficit	$ 33,469,593	$ 34,036,734	$ 34,599,762	$ 35,158,497	$ 35,712,749	$ 36,262,325	$ 36,807,025
Cash as a % of Net Fixed Assets	17.1%	16.1%	15.2%	14.3%	13.4%	12.5%	11.6%
Debt as a % of Net Fixed Assets	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Accumulated Surplus is comprised of the following:							
Reserves	$ 4,880,032	$ 4,727,120	$ 4,566,140	$ 4,396,830	$ 4,218,922	$ 4,032,138	$ 3,836,195
Investment in Tangible Capital Assets	$ 28,589,561	$ 29,309,613	$ 30,033,622	$ 30,761,667	$ 31,493,828	$ 32,230,187	$ 32,970,830
Debt Outstanding	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ 33,469,593	$ 34,036,734	$ 34,599,762	$ 35,158,497	$ 35,712,749	$ 36,262,325	$ 36,807,025

The accumulated surplus increases from $33.5 million to $36.8 million due to an increase in tangible capital assets.

Statement of Financial Operations—Wastewater

	2015	2016	2017	2018	2019	2020	2021
Wastewater Total Revenues							
Rate Revenues	$ 2,359,937	$ 2,431,736	$ 2,506,307	$ 2,585,495	$ 2,672,240	$ 2,762,472	$ 2,856,347
Miscellaneous Revenues	$ 26,500	$ 27,030	$ 27,571	$ 28,122	$ 28,684	$ 29,258	$ 29,843
Interest Revenue	$ 29,574	$ 13,001	$ 9,320	$ 6,737	$ 6,436	$ 6,821	$ 7,955
Total Revenues	$ 2,416,011	$ 2,471,767	$ 2,543,198	$ 2,620,354	$ 2,707,361	$ 2,798,551	$ 2,894,146
Wastewater Total Expenses							
Operating Expenses							
Administration	$ 307,515	$ 313,665	$ 319,939	$ 326,337	$ 332,864	$ 339,521	$ 346,312
Sewer Mains	$ 239,138	$ 243,921	$ 248,799	$ 253,775	$ 258,851	$ 264,028	$ 269,308
Service Connections	$ 115,013	$ 117,313	$ 119,660	$ 122,053	$ 124,494	$ 126,984	$ 129,523
Sewage Treatment Plant	$ 700,725	$ 714,740	$ 729,034	$ 743,615	$ 758,487	$ 773,657	$ 789,130
Total Operating Expenses	$ 1,362,391	$ 1,389,639	$ 1,417,432	$ 1,445,780	$ 1,474,696	$ 1,504,190	$ 1,534,274
Debt Charges							
Debt Charges - Interest Payments	$ 19,291	$ 11,924	$ 4,019	$ -	$ -	$ -	$ -
Amortization Expense							
Wastewater Assets	$ 490,632	$ 509,689	$ 529,127	$ 548,954	$ 569,178	$ 589,806	$ 610,846
Total Expenses	$ 1,872,314	$ 1,911,252	$ 1,950,578	$ 1,994,734	$ 2,043,873	$ 2,093,995	$ 2,145,120
Annual Surplus/(Deficit)	$ 543,697	$ 560,515	$ 592,620	$ 625,620	$ 663,487	$ 704,556	$ 749,026

Currently there is a surplus of $543,700. At the end of the plan (2021), there is a surplus of $749,000 which provides additional funds for the replacement of assets.

Statement of Cash Flow/Cash Receipts—Wastewater

	2015	2016	2017	2018	2019	2020	2021
Total Revenues	$ 2,416,011	$ 2,471,767	$ 2,543,198	$ 2,620,354	$ 2,707,361	$ 2,798,551	$ 2,894,146
Cash Paid For							
Operating Costs	$ 1,362,391	$ 1,389,639	$ 1,417,432	$ 1,445,780	$ 1,474,696	$ 1,504,190	$ 1,534,274
Debt Repayment - Debt Interest	$ 19,291	$ 11,924	$ 4,019	$ -	$ -	$ -	$ -
Cash Provided From Operating Transactions	$ 1,034,329	$ 1,070,204	$ 1,121,747	$ 1,174,574	$ 1,232,665	$ 1,294,361	$ 1,359,872
Capital Transactions							
Acquisition of TCA	$ 1,925,169	$ 1,143,420	$ 1,166,288	$ 1,189,614	$ 1,213,406	$ 1,237,675	$ 1,262,428
Finance Transactions							
Proceeds from Debt Issues							
Proceeds from Grants	$ 165,606	$ -	$ -	$ -	$ -	$ -	$ -
Debt Repayment - Principal	$ (103,444)	$ (110,827)	$ (84,617)	$ -	$ -	$ -	$ -
Increase/(Decrease) in Cash Equivalents	$ (828,678)	$ (184,043)	$ (129,158)	$ (15,040)	$ 19,258	$ 56,687	$ 97,444
Cash and Cash Equivalents at Beginning Balance	$ 1,478,721	$ 650,043	$ 466,001	$ 336,843	$ 321,802	$ 341,061	$ 397,748
Cash and Cash Equivalents at Ending Balance	$ 650,043	$ 466,001	$ 336,843	$ 321,802	$ 341,061	$ 397,748	$ 495,192

By the end of 2015, it is estimated that the reserves will be $650,000. There is an initial reduction in the reserve balance but by 2021, the reserve balance is forecast to increase through a gradual increase in contributions.

Statement of Financial Position—Wastewater

	2015	2016	2017	2018	2019	2020	2021
Financial Assets							
Cash	$ 650,043	$ 466,001	$ 336,843	$ 321,802	$ 341,061	$ 397,748	$ 495,192
Liabilities							
Debt - Principal Outstanding	$ 103,444	$ 110,827	$ 84,617	$ -	$ -	$ -	$ -
Net Financial Assets	$ 546,599	$ 355,174	$ 252,226	$ 321,802	$ 341,061	$ 397,748	$ 495,192
Non-Financial Assets							
Tangible Capital Assets	$ 23,613,132	$ 24,246,863	$ 24,884,024	$ 25,524,684	$ 26,168,913	$ 26,816,782	$ 27,468,364
Accumulated Surplus/Deficit	$ 24,159,731	$ 24,602,037	$ 25,136,250	$ 25,846,486	$ 26,509,973	$ 27,214,529	$ 27,963,555
Cash as a % of Net Fixed Assets	2.8%	1.9%	1.4%	1.3%	1.3%	1.5%	1.8%
Debt as a % of Net Fixed Assets	0.4%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%
Accumulated Surplus is comprised of the following:							
Reserves	$ 650,043	$ 466,001	$ 336,843	$ 321,802	$ 341,061	$ 397,748	$ 495,192
Investment in Tangible Capital Assets	$ 24,159,731	$ 24,246,863	$ 24,884,024	$ 25,524,684	$ 26,168,913	$ 26,816,782	$ 27,468,364
Debt Outstanding	$ (103,444)	$ (110,827)	$ (84,617)	$ -	$ -	$ -	$ -
Total	$ 24,706,331	$ 24,602,037	$ 25,136,250	$ 25,846,486	$ 26,509,973	$ 27,214,529	$ 27,963,555

The accumulated surplus increases from $24.7 million to $28.0 million over the forecast period.