

# Huron East Water and Wastewater Financial Plan



Brussels Water System  
Seaforth/Egmondville Water System  
Vanastra Water System  
Brucefield Water System

Brussels Sanitary Sewage System  
Seaforth Sanitary Sewage System  
Vanastra Sanitary Sewage System

February 2, 2010

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## PREAMBLE

Pursuant to the provisions of the Safe Drinking Water Act, 2002 Regulation 453/07 has been enacted which requires, as a condition of a municipal drinking water licence, that Financial Plans be prepared for municipal water systems. Financial Plans are also encouraged for wastewater systems.

To assist with the interpretation of Ontario Regulation 453/07, the Ministry of the Environment (MOE) has published a guide entitled "*Towards Financially Sustainable Drinking- Water and Wastewater Systems*". The guide will be referred to frequently in the development of Financial Plans for the;

- Brussels Water System
- Seaforth/Egmondville Water System
- Vanastra Water System
- Brucefield Water System
  
- Brussels Sanitary Sewage System
- Seaforth Sanitary Sewage System
- Vanastra Sanitary Sewage System

Ontario Regulation 453/07 (hereinafter referred to as O.Reg. 453/07) is attached as Appendix "A" and the MOE publication "*Towards Financially Sustainable Drinking – Water and Wastewater Systems* (hereinafter referred to as FSDWW Guide) is attached as Appendix "B".

### **Requirements and Guiding Principles:**

Section 3 of O.Reg. 453/07 provides the Financial Plan requirements for licence renewals as follows:

#### **Financial plan requirements; licence renewal**

**3.** (1) For the purposes of clause (b) of the definition of “financial plans” in subsection 30 (1) of the Act, the following requirements are prescribed for financial plans that are required by subsection 1 (2) or a condition that is included in a municipal drinking-water licence under subsection 1 (3) to satisfy the requirements of this section:

1. The financial plans must be approved by a resolution that is passed by,
  - i. the council of the municipality, if the owner of the drinking-water system is a municipality, or
  - ii. the governing body of the owner, if the owner of the drinking-water system has a governing body and is not a municipality.
2. The financial plans must apply to a period of at least six years.
3. The first year to which the financial plans must apply must be the year determined in accordance with the following rules:
  - i. If the financial plans are required by subsection 1 (2), the first year to which the financial plans must apply must be the year in which the drinking-water system’s existing municipal drinking-water licence would otherwise expire.
  - ii. If the financial plans are required by a condition that was included in a municipal drinking-water licence under subsection 1 (3), the first year to which the financial plans must apply must be the later of 2010 and the year in which the first licence for the system was issued.
4. Subject to subsection (2), for each year to which the financial plans apply, the financial plans must include the following:
  - i. Details of the proposed or projected financial position of the drinking-water system itemized by,
    - A. total financial assets,
    - B. total liabilities,
    - C. net debt,
    - D. non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies and prepaid expenses, and
    - E. changes in tangible capital assets that are additions, donations, write downs and disposals.
  - ii. Details of the proposed or projected financial operations of the drinking-water system itemized by,
    - A. total revenues, further itemized by water rates, user charges and other revenues,

- B. total expenses, further itemized by amortization expenses, interest expenses and other expenses,
  - C. annual surplus or deficit, and
  - D. accumulated surplus or deficit.
- iii. Details of the drinking-water system's proposed or projected gross cash receipts and gross cash payments itemized by,
  - A. operating transactions, that are cash received from revenues, cash paid for operating expenses and finance charges,
  - B. capital transactions, that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets,
  - C. investing transactions, that are acquisitions and disposal of investments,
  - D. financing transactions, that are proceeds from the issuance of debt and debt repayment,
  - E. changes in cash and cash equivalents during the year, and
  - F. cash and cash equivalents at the beginning and end of the year.
- iv. Details of the extent to which the information described in subparagraphs i, ii and iii relates directly to the replacement of lead service pipes as defined in section 15.1- 3 of Schedule 15.1 to Ontario Regulation 170/03 (Drinking-Water Systems), made under the Act.

5. The owner of the drinking-water system must,

- i. make the financial plans available, on request, to members of the public who are served by the drinking-water system without charge,
- ii. make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet, and
- iii. provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring the notice to the attention of members of the public who are served by the drinking-water system.

6. The owner of the drinking-water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing.

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

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

Sections 4 and 5 of O.Reg. 453/07 provide details of the format of the Financial Plan (Section 4) and public notification (Section 5).

## **Alternative requirements for two or more drinking-water systems**

4. If section 3 applies to the financial plans of two or more drinking-water systems that are solely owned by the same owner, the requirements prescribed by the section may, as an alternative, be satisfied by financial plans that comply with the section but treat those systems as if they were one drinking-water system.

## **Amendment of financial plans**

5. Sections 2 or 3 do not prevent financial plans from being amended.

The FSDWW guide provides nine principles to help develop Financial Plans and to assist with the transition towards financial sustainability. The guidelines listed below will assist with the development and review of rate structures for Huron East Water and Wastewater Systems.

- 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.

## **Historical Background**

The Municipality of Huron East is an amalgamated municipality (2001) comprised of the former Town of Seaforth, the Village of Brussels and the Townships of Grey, McKillop and Tuckersmith.

The Seaforth Public Utilities Commission and Brussels Public Utilities Commission provided their respective municipalities with water services. The Township of Tuckersmith provided municipal water services for the urban areas of Vanastra, Egmondville and Brucefield.

Municipal sewage services were provided under contract with the Ontario Clean Water Agency to Seaforth, Brussels and Vanastra. In 2001, the Municipality of Huron East contracted the operation of all municipal water and wastewater plants to Azurix, North American (American Water).

In 2001 the Municipality of Huron East physically connected the Seaforth and Egmondville water systems and decommissioned the Egmondville wells.

Upgrades to the Brussels, Brucefield and Vanastra systems to meet new water regulations from the Ministry of Environment were completed in 2003 and upgrades to Seaforth were completed in 2009.

## **Historical Rates**

Rates have been revised by Huron East Council on two occasions since the 2001 amalgamation. Rates were revised in 2003 to eliminate the deficits created by upgrades under the OSTAR program within 10 years and to provide funding for future replacement. In 2007 water and sewage rates were reviewed by Council in the context of the following:

- i) While rates were established in 2003 at a level to eliminate the deficit for production upgrades within 10 years, the rates provided little if any funding for upgrades and/or replacement of the distribution system.
- ii) That in systems that were primarily financed from user rate charges, that any area rated taxation for these systems should be built into the rates
  - Brussels water system receives \$25,000 from area rated taxation to the Brussels Ward
  - Seaforth sewage system receives \$130,000 from area rated taxation to the Seaforth Ward
- iii) That the policy of maintaining the same basic flat rate charge in Brussels and Seaforth be continued and that the sewage rates be set so that there is no difference in base rates between Seaforth and Brussels.
- iv) There continues to be a high degree of uncertainty on the future costs of Provincial regulations affecting municipal water systems.

As part of the 2007 rate review the financial status of all water systems was reviewed to determine if rates established in 2003 were meeting the goal of eliminating the deficits within 10 years. With 6 years remaining on this 2003 projection, it was determined that;

- a) The deficit for the Brussels water system would be eliminated in 7.26 years.
- b) The deficit of the Brucefield water system would be eliminated in 8 years.
- c) The Vanastra water system is supplied water by the Clinton Public Utilities Commission. Under a previous 10-year agreement with the Clinton PUC, water

rates were charged to the former Tuckersmith Township at 150% of the Clinton rate for a period of 10 years ending in 2008 whereby the Vanastra rate would be the same as the Clinton rate. The Clinton PUC had dramatically increased rates in 2005 without directly notifying Huron East resulting in a net operating deficit of \$28,000 at the end of 2006.

- d) The Seaforth water system did not have any deficit, but had not completed the required OSTAR upgrades which involved the drilling of a new production well completed in 2008. It was determined that the analysis used for the Brussels system would be used to establish rates for the Seaforth system in the interim.

In 2007, two of the three systems (Seaforth and Vanastra) had major capital expenditures either in progress or projected within 2 years. Seaforth and Brussels sewer surcharges were currently 103% and 105% respectively of the water rates. Given the decision noted above to use the Brussels water rates to establish rates for the Seaforth water system and the level of capital expenditures for the Seaforth system, it was decided to move the Seaforth sewage rate surcharge to 105% of the water rates, similar to Brussels. Sewage costs for Vanastra have typically been recovered as a tax levy on the entire urban area of Vanastra → Council decided to continue with this method of collecting costs.

In developing the rate structure for the water systems, Huron East used a 2:1 ratio.

For each dollar of operating expenses an additional dollar was required for debt and capital upgrades resulting in a revenue requirement of two dollars.

The following chart provides a history of the water and sewer rates that have been utilized in Huron East since amalgamation.

<b>Huron East Water Rates (2001-2009)</b>			
<b>Table 1</b>			
	<b><u>2001-2002</u></b>	<b><u>2003-2006</u></b>	<b><u>2007-2009</u></b>
<b><u>Brussels Water</u></b>			
Flat Rate-monthly charge	\$11	\$20.50	\$30
<b><u>Metered rates</u></b>			
→1st 5000 gallons	\$11	n/a	n/a
→consumption > 5000 gallons	\$2/1000 gallons	n/a	n/a
Meter Charge	n/a	\$3.75/month	\$3.75/month
Flat Consumption Rate	n/a	\$3.75/1000 gallons	\$5.50/1000 gallons
<b><u>Miscellaneous Charges</u></b>			
Connection charges	\$450	\$1,000	\$1,000
Out of Town	double	double	double
Huronlea-monthly	\$826.45	\$1,613.35	\$2,361

<b><u>Seaforth/Egmondville Water</u></b>			
Flat Rate-Monthly charge	\$15	\$20.50	\$30
<b><u>Metered Rates</u></b>			
→meter charge	\$3.75	\$3.75	\$3.75
→1st 8000 gallons	\$3.75/1000	\$5.12/1000	\$7.49/1000
→2nd 8000 gallons	\$3.10/1000	\$4.73/1000	\$6.92/1000
→balance of consumption	\$2.46/1000	\$3.36/1000	\$4.92/1000
<b><u>Miscellaneous Charges</u></b>			
Connection charges	\$800	\$1,000	\$1,000
<b><u>Vanastra Water</u></b>			
→Residential Meter Charge	\$8.75/month	\$8.75/month	\$8.75/month
→Residential Consumption	\$3.18/1000 gallons	\$3.73/1000 gallons	\$8.41/1000 gallons
→Com/Ind Meter Charge	\$11.25/month	\$11.25/month	\$11.25/month
→Com/Ind Consumption	\$3.18/1000 gallons	\$3.73/1000 gallons	\$8.41/1000 gallons
<b><u>Miscellaneous Charges</u></b>			
Residential Connection Charge	\$2,500	\$2,500	\$2,500
Comm/Ind Connection Charge	\$3,000	\$3,000	\$3,000
<b><u>Brucefield Water</u></b>			
Flat Rate-Monthly Charge	\$15	\$33.33	\$45
<b><u>Miscellaneous Charges</u></b>			
→Residential Connection Charge	\$2,500	\$2,500	\$2,500
→Com/Ind Connection Charge	\$3,000	\$3,000	\$3,000

<b>Huron East Sanitary Sewage Rates (2001 - 2009)</b>			
<b>Table 2</b>			
	<b><u>2001-2002</u></b>	<b><u>2003-2006</u></b>	<b><u>2007-2009</u></b>
<b><u>Brussels Sewage</u></b>			
Flat Rate-monthly charge	\$23.50	\$21.50	\$31.50
<b><u>Miscellaneous Charges</u></b>			
Connection Charges	\$850	---	\$1,000
Out of Town	1.5 times	1.5 times	1.5 times
Huronlea-monthly	\$1,387.04	\$1,269.04/month	\$1,859.29/month
<b><u>Seaforth Sewage</u></b>			
Flat Rate-monthly charge	\$15.45	\$21.12	\$31.50
Connection charge	---	---	\$1,000
<b><u>Vanastra Sewage</u></b>			
Tax Levy	\$90,000	\$100,000	\$175,000
Connection Charges - Residential	\$2,500	---	\$1,000
- Commercial	\$3,000	---	\$1,000

### **Development of a Financial Plan**

O.Reg. Paragraph 4 of subsection 3(1) provides the requirements of Financial Plans. These requirements are shown below and many are marked with an asterisk. Subsection 3.2 of the Regulations allows certain categories of information to be excluded from the Financial Plans if it is not known at the time the plan is prepared.

### **Financial Plans for Existing Drinking-Water Systems:**

Paragraph 4 of subsection 3(1) of the Regulation requires that Financial Plans include the following:

- i. Details of the proposed or projected financial position of the drinking-water system itemized by,
  - A. total financial assets\*
  - B. total liabilities,\*
  - C. net debt,\*
  - D. non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies and prepaid expenses, and
  - E. changes in tangible capital assets that are additions, donations, write downs and disposals.
- ii. Details of the proposed or projected financial operations of the drinking-water system itemized by,
  - A. total revenues, further itemized by water rates, user charges and other revenues,
  - B. total expenses, further itemized by amortization expenses, interest expenses and other expenses,

- C. annual surplus or deficit, and
  - D. accumulated surplus or deficit.
- iii. Details of the drinking-water system's proposed or projected gross cash receipts and gross cash payments itemized by,
- A. operating transactions, that are cash received from revenues, cash paid for operating expenses and finance charges,\*
  - B. capital transactions, that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets,
  - C. investing transactions, that are acquisitions and disposal of investments,\*
  - D. financing transactions, that are proceeds from the issuance of debt and debt repayment,
  - E. changes in cash and cash equivalents during the year,\* and
  - F. cash and cash equivalents at the beginning and end of the year.\*
- iv. Details of the extent to which the information described in subparagraphs i, ii and iii relates directly to the replacement of lead service pipes as defined in section 15.1 – 3 of Schedule 15.1 to Ontario Regulation 170/03 (Drinking-Water Systems), made under the Act.

\* Subsection 3(2) of the Regulation permits certain categories of information to be excluded from the Financial Plans if it is not known to the owner at the time the plan was prepared. This provision recognizes that some financial information may be consolidated on a municipal level across numerous departments and it may be difficult for that information to be allocated to the drinking-water system (e.g. total liabilities and net debt). If the information is known for the drinking-water system, however, it would have to be included in Financial Plans.

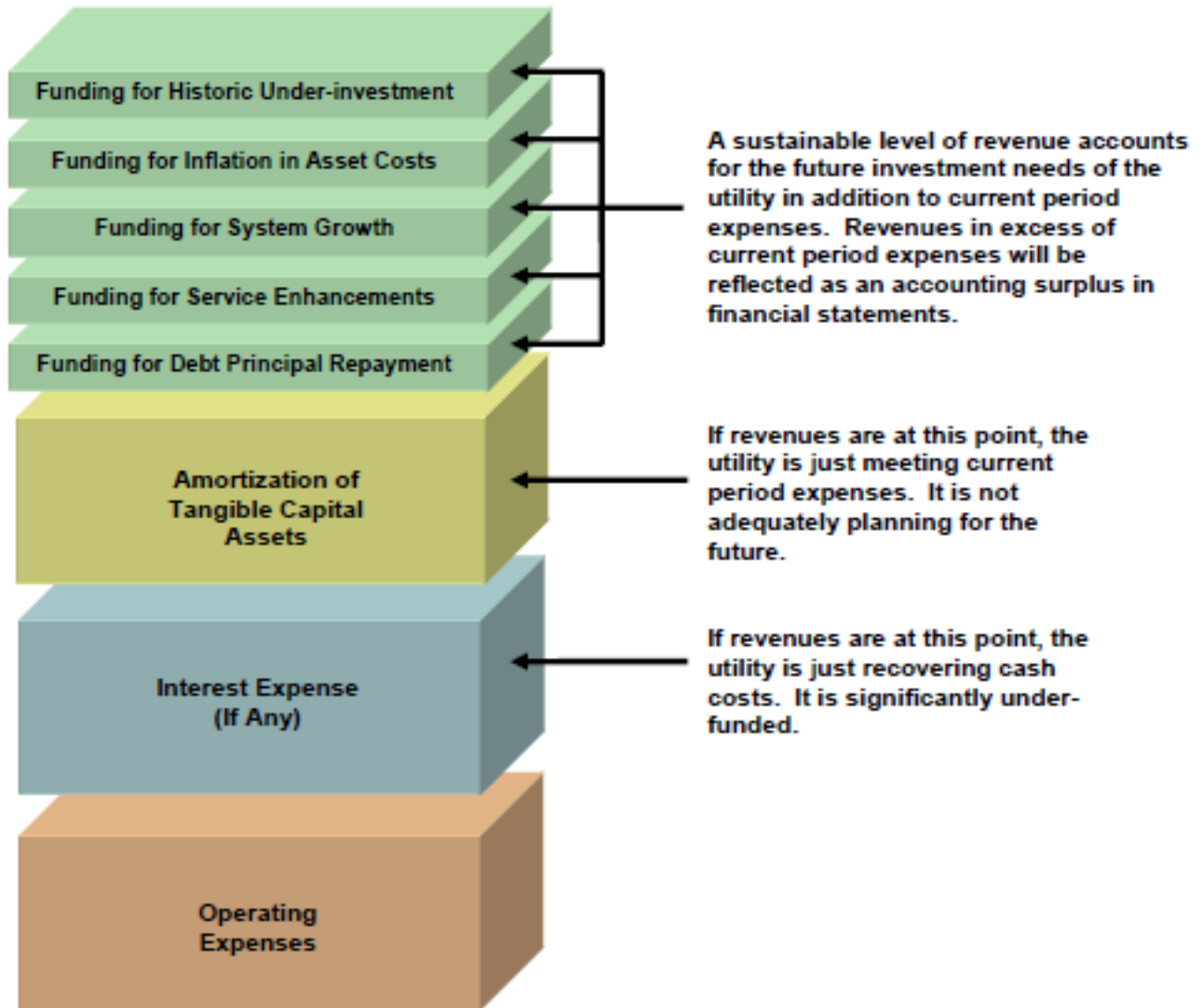
Huron East Council acknowledges the provisions of Subsection 3.2 and wishes to expand the intent of this section. Council recognizes and appreciates the details required by the Financial Plan – the details and resulting analysis will provide stability to the water and wastewater systems in the form of a justified rate structure. While much of the detail and terminology is present in both the existing financial statements and rate calculations, the transition to statements fully compliant with PSAB 3150 is currently occurring with the preparation and audit of the Municipality's 2009 financial statements. The preparation and more importantly the presentation of the 2009 audited statements will likely occur sometime after July, 1, 2010 and for that reason, this plan will be considered as a "Draft Plan" for approval by Council. The "Draft Plan" will be for a period of no less than six years and will demonstrate an understanding of and compliance with the intent of O.Reg. 453/07. Furthermore, Council will utilize the provisions of Section 5 of O.Reg. 453/07 to review and amend the Financial Plan as audited financial statements which are fully PSAB 3150 compliant, become available.

The FSDWW guide suggests a five step process to preparing a Financial Plan.

**1. Determine Service Needs**

- determination of a method to properly measure the cost of services being provided
- suggests a building block approach to create an understanding and awareness of costs which includes four distinct components.

*Figure 1-1 – A Building-block Approach to Determining Utility Needs*



## **2. Determination of Current Period Expenses**

- includes operating expenses and the relationship between capital expenditures and amortization expense
- careful consideration is required to ensure that current capital expenditures are not less than future amortization expenses under accrual accounting

## **3. Long Term Capital Expenditure Planning**

- must identify the need to move beyond simply accounting for current period expenses
- a recognition of the need for accounting surpluses to address the impacts of inflation in capital replacement costs, growth and any historic under-investment

## **4. Preparation of Funding Plans**

- address how the additional funds needed to cover projected operating and capital needs will be raised
- expected that operating revenues will exceed operating expenses and that capital funding sources would be available through some or all of the following:
  - i) cash flow from operations
  - ii) a draw on cash reserves
  - iii) new debt issuance

## **5. Revenue Sources and Rate Structures**

- a number of revenue sources available for consideration
- can be structured and collected in different ways

## **Methodology In Determining Asset Values**

The Municipality of Huron East has recognized that the replacement value of its water and sanitary sewer assets are likely the largest combined value of any class of its assets. The Municipality of Huron East also recognizes the difficulty in assigning current values to assets for two reasons:

- a) the linear assets are buried and their condition is sometimes difficult to determine
- b) Huron East is an amalgamation of five municipalities and historical records for some assets are difficult to locate

By in large, historical data has been obtained from the construction of water plants and sanitary sewage plants and their associated buildings. For the purposes of the analysis, using various resources from the Ontario Municipal Benchmarking Initiative (OMBI), an asset lifespan of 50 years has been used, which is at the high end of the range in the FSDWW Guide.

Determining the age and value of the water distribution and sanitary sewer collection systems has provided a challenge to the Municipality of Huron East. While relatively good mapping and historical construction dates are available for most of the sanitary sewer collection systems, the data, simply because of the age of some of the systems, is not as consistent for the water distribution systems. The material type of segments of the water

distribution systems have been used to estimate the construction periods and hence the remaining useful life. Current replacement values are based on a per metre basis. Replacement values are deflated to provide historical values which are then projected into the depreciated value of the assets. Useful life of the assets has been calculated using guidelines from OMBI and B. M. Ross and Associates Limited guidelines for this area.

## **Rate Calculations**

### **Methodology**

A brief synopsis of each system will be provided to provide historical information that will be useful in the analysis of rates. Huron East Council has given some consideration in their 2007 rate review to the issues of providing funding for historic under-investment by establishing rates on a 2:1 ratio; for each \$1 of operating expenses and additional \$1 is required for capital replacement resulting in a revenue requirement of \$2. Although 2008 under PSAB 3150 is deemed to be a “comparable year” for the purposes of showing asset balances, the analysis for rate structures will use ending 2008 “cash” balances as the commencement for the rate review. 2008 provides a point-in-time view of the “cash” position of these systems and 2009 represents a “transition” year between the cash and accrual systems. The analysis will remove 2009 capital expenditures from the calculations and replace with an amortization expense based on the “current value replacement cost”. As the Financial Plans are reviewed and revised, amortization expenses will be revised to reflect amortization based on replacement values until historical values are completed and verified through the municipal audit.

## **Financial Position of Huron East Water & Sanitary Sewage Systems**

As noted in the methodology for the rate calculations, the cash position of the systems at the end of 2008 will be used to commence a rate calculation for each system.

	<u>Accumulated Surplus/(Deficit)</u>	<u>Reserves</u>	<u>Net Position December 31,2008</u>
Brussels Water	\$31,824	\$34,305	\$66,129
Seaforth/Egmondville Water	(\$62,976)	--	(\$62,976)
Brucefield Water	(\$12,012)	--	(\$12,012)
Vanastra Water	(\$79,251)	--	(\$79,251)
Brussels Sewage	(\$3,996)	\$530,198	\$526,202
Seaforth Sewage	(\$2,411)	\$463,766	\$461,355
Vanastra Sewage	(\$612,272)	--	(\$612,272)

### **Rate Determination Model**

- a brief description of each system will be provided
- rates will be analyzed in two components
  - a) ability to cover operating expenses. Operating expenses will now include an amortization expense based on the current replacement value of the assets. Once audited financial statements are available, amortization expenses will be revised during the next review of the Financial Plan. Council acknowledges that depreciation based on the current replacement costs of a system will be higher than the actual depreciation amounts, but if rates reflect the higher amortization amount, funds will be generated to assist with historic under-investment in assets.
  - b) assuming that 2009 “capital” expenditures are reflective of either the desired level of capital expenditures or the required level of expenditures, rates will be analyzed in conjunction with the cash position of the systems and their ability to cover the anticipated level of capital expenditures.

### **Brussels Water System (Table 3)**

A 1983 report by Maitland Engineering Services indicated that the Brussels water system consisted of 8410 metres of cast iron water mains, most of which dated back to the establishment of the system in 1951. The system currently has just over 10,000 metres of water mains in total. Given that a useful life of 50 years has been used for cast iron water mains, the cast iron water mains remaining have little if any remaining book value and are nearing the end of their useful life. While the former Brussels PUC had certainly replaced some of the cast iron water mains, this program has been escalated by the Municipality of Huron East. Since 2001, more than 1600 metres of cast iron water main has been replaced through infrastructure renewal projects in Brussels. However, there is still a significant amount of cast iron water main which should be replaced and infrastructure renewal projects involving storm drainage improvements will be coordinated with cast iron water main replacement, with a significant area in the vicinity of Brussels Well 1 being a priority area.

### **Seaforth Water System (Table 4)**

The former Seaforth PUC appears to have replaced a significantly higher percentage of its cast iron water mains than the Brussels PUC, but there are still a significant percentage of cast iron water mains. While the book value of these assets is little if anything, they are not causing significant maintenance issues at this time. The Municipality of Huron East through a progressive infrastructure renewal program will certainly target streets for reconstruction that contain cast iron water mains, but the program will be somewhat dependent on the condition of the road surface. Rates will however be reflective of the need to replace cast iron water mains in the near future.

### **Vanastra Water System (Table 5)**

The Vanastra water system is not significantly older than the Brussels and Seaforth systems, but the replacement of the water distribution infrastructure is part of the greater issue being the need to replace most of the sanitary sewage collection system. Of the four water systems in Huron East, Vanastra is somewhat unique in that it doesn't produce its own water – water is purchased through an agreement with Central Huron (Clinton). The “purchased” water and the associated costs with maintaining its own distribution system contributes to higher operating costs for this system. As an older system, this system is affected by historic under-investment in future capital needs that is likely reflective of many older utility systems across the Province. The immediate priority for this system is to eliminate its current cash deficit while recognizing that any capital acquisitions will have to be financed through debentures

### **Brucefield Water System (Table 6)**

The Brucefield water system is the smallest of the four Huron East systems, but is also the newest being installed in 1974. While there are no immediate capital needs, this system does not have any capital reserves. Rates will be structured in such a way to gradually increase water rates to provide funding to cover historic under-funding for future capital replacement.

**Brussels Waterworks System - Rate Calculation**

**Table 3**

**Operating Expenses**

2009 Operating Expenses	\$ 132,225
2009 Plant Amortization	\$ 10,400
2009 Distribution System Amortization <sup>1</sup>	<u>\$ 68,000</u>

**Total Operating Expenses**

\$ 210,625

**Cash Position**

Cash Position, Dec 31, 2008	\$ 66,129
2009 Capital Expenditures	<u>\$ 14,000</u>

**Cash Position, December 31, 2009 exclusive of 2009 operations**

\$ 52,129

Expenses have been increase by 2% for inflation while revenues have been increased by between 5% and 6.67% over the same period to provide additional funds to improve the cash position of the system. Improving the cash position of the system recognizes historic underfunding for future capital replacement

	2009	2010	2011	2012	2013	2014	2015
Revenues(water rates)	\$ 251,692	\$ 285,251	\$ 302,030	\$ 318,810	\$ 335,589	\$ 352,369	\$ 369,148
Miscellaneous Revenues	\$ 9,000	\$ 9,000	\$ 9,000	\$ 9,000	\$ 9,000	\$ 9,000	\$ 9,000
Operating Expenses	-\$ 132,225	-\$ 134,870	-\$ 137,567	-\$ 140,318	-\$ 143,125	-\$ 145,987	-\$ 148,907
Amortization Expenses	-\$ 78,400	-\$ 79,968	-\$ 81,567	-\$ 83,199	-\$ 84,863	-\$ 86,560	-\$ 88,291
Opening Cash Position <sup>2</sup>	\$ 52,129	\$ 102,196	\$ 181,609	\$ 273,506	\$ 377,799	\$ 494,401	\$ 623,222
Cash, Ending of Period	<u>\$ 102,196</u>	<u>\$ 181,609</u>	<u>\$ 273,506</u>	<u>\$ 377,799</u>	<u>\$ 494,401</u>	<u>\$ 623,222</u>	<u>\$ 764,173</u>
Annual Increase	n/a	13.33%	5.88%	5.56%	5.26%	5.00%	4.76%
<b>Projected Monthly Rates</b>	\$ 30.00	\$ 34.00	\$ 36.00	\$ 38.00	\$ 40.00	\$ 42.00	\$ 44.00
<b>Metered Rates</b>							
→Monthly Meter Rate	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75
→Consumption per 1000 gallons	\$ 5.50	\$ 6.23	\$ 6.60	\$ 6.97	\$ 7.33	\$ 7.70	\$ 8.07
<b>Connection Charge</b>	\$ 1,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500

<sup>1</sup> Distribution system amortization is based on current replacement value - actual amortization will be less but if rates cover amortization at this level, funds are being provided for historic underfunding of system

<sup>2</sup> Opening cash position is the ending 2008 cash position less 2009 capital expenditures

## Seaforth Waterworks System - Rate Calculation

**Table 4**

Operating Expenses	
2009 Operating Expenses	\$ 314,167
2009 Plant Amortization	\$ 56,000
2009 Distribution System Amortization <sup>1</sup>	<u>\$ 132,000</u>
Total Operating Expenses	<u><u>\$ 502,167</u></u>
 <b>Cash Position</b>	
Cash Position, Dec 31, 2008	-\$ 62,976
2009 Capital Expenditures	<u>\$ 422,500</u>
<b>Cash Position, December 31, 2009 exclusive of 2009 operations</b>	<u><u>-\$ 485,476</u></u>

Expenses have been increased by 2% for inflation while revenues have been increased by between 5% and 6.67% over the same period to provide additional funds to improve the cash position of the system. Improving the cash position of the system recognizes historic underfunding for future capital replacement

	2009	2010	2011	2012	2013	2014	2015
Revenues (Water Rates)	\$ 649,400	\$ 649,400	\$ 692,693	\$ 735,987	\$ 779,280	\$ 822,573	\$ 865,867
Miscellaneous Revenues	\$ 24,400	\$ 24,400	\$ 24,400	\$ 24,400	\$ 24,400	\$ 24,400	\$ 24,400
Operating Expenses	-\$ 314,617	-\$ 320,909	-\$ 327,328	-\$ 333,874	-\$ 340,552	-\$ 347,363	-\$ 354,310
Amortization Expenses	-\$ 188,000	-\$ 191,760	-\$ 195,595	-\$ 199,507	-\$ 203,497	-\$ 207,567	-\$ 211,719
Opening Cash Position <sup>2</sup>	-\$ 485,476	-\$ 314,293	-\$ 153,162	\$ 41,008	\$ 268,014	\$ 527,645	\$ 819,688
Cash, Ending of Period	<u>-\$ 314,293</u>	<u>-\$ 153,162</u>	<u>\$ 41,008</u>	<u>\$ 268,014</u>	<u>\$ 527,645</u>	<u>\$ 819,688</u>	<u>\$ 1,143,927</u>
 Annual Increase	n/a	0.00%	6.67%	6.25%	5.88%	5.56%	5.26%
 <b>Projected Monthly Rates</b>	\$ 30.00	\$ 30.00	\$ 32.00	\$ 34.00	\$ 36.00	\$ 38.00	\$ 40.00
 <b>Metered Rates</b>	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75	\$ 3.75
→Monthly Meter Rate							
<b>Consumption Rate/1000 gallons</b>							
→1st 8000 gallons	\$ 7.49	\$ 7.49	\$ 7.99	\$ 8.49	\$ 8.99	\$ 9.49	\$ 9.99
→2nd 8000 gallons	\$ 6.92	\$ 6.92	\$ 7.38	\$ 7.84	\$ 8.30	\$ 8.77	\$ 9.23
→Balance of consumption	\$ 4.92	\$ 4.92	\$ 5.25	\$ 5.58	\$ 5.90	\$ 6.23	\$ 6.56
 <b>Connection Charge</b>	\$ 1,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500

<sup>1</sup> Distribution system amortization is based on current replacement value - actual amortization will be less but if rates cover amortization at this level, funds are being provided for historic underfunding of system

<sup>2</sup> Opening cash position is the ending 2008 cash position less 2009 capital expenditures

**Vanastra Waterworks System - Rate Calculation**

**Table 5**

**Operating Expenses**

2009 Operating Expenses	\$ 150,557	
2009 Plant Amortization	\$ 5,400	
2009 Distribution System Amortization <sup>1</sup>	\$ 38,100	
<b>Total Operating Expenses</b>		\$ 194,057

**Cash Position**

Cash Position, Dec 31, 2008	-\$ 79,251	
2009 Capital Expenditures	\$ -	
<b>Cash Position, December 31, 2009 exclusive of 2009 operations</b>		<b>-\$ 79,251</b>

In 2010 the cost of water supplied by the Municipality of Central Huron is projected to increase by 11%. All other operating expenses have been increased by 2%. In 2010 it is necessary to raise water revenues by 33% to simply maintain the ending 2009 cash position. Operating expenses have been increased by 2% for inflation from 2011 to 2015 inclusive. Operating revenues are projected to increase over the same period by 5% annually to improve the cash position of the system

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Revenues (Water Rates)	\$ 150,000	\$ 172,500	\$ 198,375	\$ 218,213	\$ 240,034	\$ 264,037	\$ 290,441
Miscellaneous Revenues <sup>3</sup>	\$ 62,775	\$ 6,975	\$ 6,975	\$ 6,975	\$ 6,975	\$ 6,975	\$ 6,975
Operating Expenses	-\$ 150,557	-\$ 162,000	-\$ 165,240	-\$ 168,545	-\$ 171,916	-\$ 175,354	-\$ 178,861
Amortization Expenses	-\$ 43,500	-\$ 44,370	-\$ 45,257	-\$ 46,163	-\$ 47,086	-\$ 48,028	-\$ 48,988
Opening Cash Position <sup>2</sup>	-\$ 79,251	-\$ 60,533	-\$ 87,428	-\$ 92,575	-\$ 82,095	-\$ 54,088	-\$ 6,457
<b>Cash, Ending of Period</b>	<b>-\$ 60,533</b>	<b>-\$ 87,428</b>	<b>-\$ 92,575</b>	<b>-\$ 82,095</b>	<b>-\$ 54,088</b>	<b>-\$ 6,457</b>	<b>\$ 63,109</b>
Annual Increase	n/a	15%	15%	10%	10%	10%	10%
Meter Charges	\$ 26,250	\$ 30,188	\$ 34,716	\$ 38,187	\$ 42,006	\$ 46,206	\$ 50,827
Consumption Charges	\$ 123,750	\$ 142,313	\$ 163,659	\$ 180,025	\$ 198,028	\$ 217,831	\$ 239,614
	\$ 150,000	\$ 172,500	\$ 198,375	\$ 218,213	\$ 240,034	\$ 264,037	\$ 290,441

**Meter Charges**

→residential	\$ 8.75	\$ 10.06	\$ 11.57	\$ 12.73	\$ 14.00	\$ 15.40	\$ 16.94
→commercial	\$ 11.25	\$ 12.94	\$ 14.88	\$ 16.37	\$ 18.00	\$ 19.80	\$ 21.78
<b>Consumption/1000 gallons</b>	\$ 8.41	\$ 9.67	\$ 11.12	\$ 12.23	\$ 13.46	\$ 14.80	\$ 16.28

**Connection Charge**

→residential	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500
→commercial	\$ 3,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500

<sup>1</sup> Distribution system amortization is based on current replacement value - actual amortization will be less but if rates cover amortization at this level, funds are being provided for historic underfunding of system

<sup>2</sup> Opening cash position is the ending 2008 cash position less 2009 capital expenditures

<sup>3</sup> An annual amount of \$6,975. has been provided to both the Brussels and Seaforth water systems for the provision of hydrants for enhanced fire protection. This amount has not been provided to Vanastra →an infusion of \$62,775 ( 9 years@ \$6975) has been put into this system and an annual payment of \$6975 is projected for 2010-2015 inclusive

**Brucefield Waterworks System - Rate Calculation**

**Table 6**

Operating Expenses	
2009 Operating Expenses	\$ 31,353
2009 Plant Amortization	\$ 6,500
2009 Distribution System Amortization <sup>1</sup>	\$ 17,350
	<hr/>
Total Operating Expenses	\$ 55,203
<b>Cash Position</b>	
Cash Position, Dec 31, 2008	-\$ 12,012
2009 Capital Expenditures	\$ -
	<hr/>
<b>Cash Position, December 31, 2009 exclusive of 2009 operations</b>	<b>-\$ 12,012</b>

Expenses have been increased by 2% for inflation while revenues have been increased by between 3.45% & 6.67% over the same period to provide additional funds to improve the cash position of the system. Improving the cash position of the system recognizes historic underfunding for future capital replacement

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Revenues	\$ 50,760	\$ 54,144	\$ 57,528	\$ 60,912	\$ 64,296	\$ 67,680	\$ 71,064
Operating Expenses	-\$ 31,553	-\$ 32,184	-\$ 32,828	-\$ 33,484	-\$ 34,154	-\$ 34,837	-\$ 35,534
Amortization Expenses	-\$ 23,850	-\$ 24,327	-\$ 24,814	-\$ 25,310	-\$ 25,816	-\$ 26,332	-\$ 26,859
Capital Asset Acquisitions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Opening Cash Position <sup>2</sup>	-\$ 12,012	-\$ 16,655	-\$ 19,022	-\$ 19,135	-\$ 17,017	-\$ 12,691	-\$ 6,181
Cash, Ending of Period	-\$ 16,655	-\$ 19,022	-\$ 19,135	-\$ 17,017	-\$ 12,691	-\$ 6,181	\$ 2,490
	<hr/>						
Annual Increase	n/a	6.67%	6.25%	5.88%	5.56%	5.26%	5.00%
<b>Projected Monthly Flat Rates</b>	\$ 45.00	\$ 48.00	\$ 51.00	\$ 54.00	\$ 57.00	\$ 60.00	\$ 63.00
<b>Connection Charge</b>							
→residential	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500
→commercial	\$ 3,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500

<sup>1</sup> Distribution system amortization is based on current replacement value - actual amortization will be less but if rates cover amortization at this level, funds are being provided for historic underfunding of system

<sup>2</sup> Opening cash position is the ending 2008 cash position less 2009 capital expenditures

### **Brussels Sewage System (Table 7)**

The Brussels sewage system, installed in 1980 is the newest of all Huron East utilities and enjoys the best cash position of the utilities. At the time of amalgamation sewage rates were 213% of the water rates which has contributed to this cash position. Sewage rates were lowered slightly in 2003 to allow a significant increase in water rates. Sewage rates are proposed to be increased at the same percentage as the Brussels water rates, but will not increase as much initially to allow more room for an acceptable water rate increase. The rates will still allow the cash position of the system to increase significantly over the six year period.

### **Seaforth Sewage System (Table 8)**

The Seaforth sewage system has been installed in 3 stages, being 1955, 1962 and 1975. Similar to the Brussels system, sewage rates have historically been a higher percentage of the water rates, but they were only slightly higher at 103% of the water rate at the time of amalgamation. While the Seaforth system also has a significant cash position, there is also an immediate need to upgrade the sewage plant to meet its current demand and anticipated future demand from the adjacent urban area of Egmondville. The timing of the expansion is somewhat unknown at this time as Egmondville is currently undergoing a Class Environmental Assessment Process for the possible extension of services. However, the Seaforth system does not have a sufficient cash position to cover an upgrade to the sewage plant to meet the needs of Seaforth, and for that reason, the sewage rate has been increased at a higher percentage than the Seaforth water rate to improve the cash position of the sewage system.

### **Vanastra Sewage System (Table 9)**

The Vanastra sewage system is the oldest of the three Huron East sewage systems with most of it being installed between 1945 and 1950. A 1989 assessment by BM Ross and Associates noted "... *the general state of deterioration, given its age and amount of use is more severe than would be anticipated... construction techniques are the suspected cause of the premature deterioration.*" Recently installed upgrades at the sewage treatment plant have left this system with a significant accumulate deficit. Similar to the Vanastra water system, it is proposed to make significant increases to the sewage tax levy to eliminate the operating deficit while realizing that capital acquisitions, which will involve the replacement of a significant amount of the collection system in the near future, will have to be debentured.

**Brussels Sanitary Sewage System - Rate Calculation**

**Table 7**

Operating Expenses	
2009 Operating Expenses	\$ 146,135
2009 Plant Amortization	\$ 27,000
2009 Collection System Amortization <sup>1</sup>	<u>\$ 33,800</u>
<b>Total Operating Expenses</b>	<u><u>\$ 206,935</u></u>
 <b>Cash Position</b>	
Cash Position, Dec 31, 2008	\$ 526,202
2009 Capital Expenditures	<u>\$ 10,000</u>
<b>Cash Position, December 31, 2009 exclusive of 2009 operations</b>	<u><u>\$ 516,202</u></u>

Expenses have been increased by 2% for inflation while revenues have been increased by between 1.59% & 5% over the same period to provide additional funds to improve the cash position of the system. Improving the cash position of the system recognizes historic underfunding for future capital replacement

	2009	2010	2011	2012	2013	2014	2015
Revenues(sewage rates)	\$ 218,945	\$ 222,420	\$ 236,322	\$ 250,223	\$ 264,124	\$ 278,025	\$ 291,927
Miscellaneous Revenues	\$ 21,466	\$ 21,466	\$ 21,466	\$ 21,466	\$ 21,466	\$ 21,466	\$ 21,466
Operating Expenses	-\$ 146,135	-\$ 149,058	-\$ 152,039	-\$ 155,080	-\$ 158,181	-\$ 161,345	-\$ 164,572
Amortization Expenses	-\$ 60,800	-\$ 62,016	-\$ 63,256	-\$ 64,521	-\$ 65,812	-\$ 67,128	-\$ 68,471
Opening Cash Position <sup>2</sup>	\$ 516,202	\$ 549,678	\$ 582,491	\$ 624,983	\$ 677,071	\$ 738,668	\$ 809,686
Cash, Ending of Period	<u>\$ 549,678</u>	<u>\$ 582,491</u>	<u>\$ 624,983</u>	<u>\$ 677,071</u>	<u>\$ 738,668</u>	<u>\$ 809,686</u>	<u>\$ 890,037</u>
 Annual Revenue Increase	n/a	1.59%	6.25%	5.88%	5.56%	5.26%	5.00%
 Projected Monthly Rates	\$ 31.50	\$ 32.00	\$ 34.00	\$ 36.00	\$ 38.00	\$ 40.00	\$ 42.00
 <b>Metered Rates</b>							
→% of residential rate	105%	94.12%	94.44%	94.74%	95%	95.24%	95.45%
 Connection Charge	\$ 1,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500

<sup>1</sup> Collection system amortization is based on current replacement value - actual amortization will be less but if rates cover amortization at this level, funds are being provided for historic underfunding of system

<sup>2</sup> Opening cash position is the ending 2008 cash position less 2009 capital expenditures

**Seaforth Sanitary Sewer System - Rate Calculation**

**Table 8**

Operating Expenses	
2009 Operating Expenses	\$ 292,294
2009 Plant Amortization	\$ 47,300
2009 Collection System Amortization <sup>1</sup>	\$ 77,750
Total Operating Expenses	<u>\$ 417,344</u>
<b>Cash Position</b>	
Cash Position, Dec 31, 2008	\$ 461,355
2009 Capital Expenditures	\$ 70,000
<b>Cash Position, December 31, 2009 exclusive of 2009 operations</b>	<u><u>\$ 391,355</u></u>

Expenses have been increased by 2% for inflation while revenues have been increased by between 1.59% & 5% over the same period to provide additional funds to improve the cash position of the system. Improving the cash position of the system recognizes historic underfunding for future capital replacement

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Revenues(sewage rates)	\$ 455,000	\$ 520,000	\$ 548,889	\$ 577,778	\$ 606,667	\$ 635,556	\$ 664,444
Miscellaneous Revenues	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000
Operating Expenses	-\$ 292,294	-\$ 298,140	-\$ 304,103	-\$ 310,185	-\$ 316,388	-\$ 322,716	-\$ 329,171
Amortization Expenses	-\$ 125,050	-\$ 127,551	-\$ 130,102	-\$ 132,704	-\$ 135,358	-\$ 138,065	-\$ 140,827
Opening Cash Position <sup>2</sup>	\$ 461,355	\$ 609,011	\$ 813,320	\$ 1,038,004	\$ 1,282,893	\$ 1,547,813	\$ 1,832,587
Cash, Ending of Period	<u>\$ 609,011</u>	<u>\$ 813,320</u>	<u>\$ 1,038,004</u>	<u>\$ 1,282,893</u>	<u>\$ 1,547,813</u>	<u>\$ 1,832,587</u>	<u>\$ 2,137,035</u>
 Annual Increase	n/a	14.29%	5.56%	5.26%	5.00%	4.76%	4.55%
 <b>Projected Monthly Rates</b>	\$ 31.50	\$ 36.00	\$ 38.00	\$ 40.00	\$ 42.00	\$ 44.00	\$ 46.00
 <b>Metered Rates</b>							
→% of residential rate	105%	120%	118.75%	117.65%	116.67%	115.79%	115%
 <b>Connection Charge</b>	\$ 1,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500

<sup>1</sup> Collection system amortization is based on current replacement value - actual amortization will be less but if rates cover amortization at this level, funds are being provided for historic underfunding of system

<sup>2</sup> Opening cash position is the ending 2008 cash position less 2009 capital expenditures

**Vanastra Sanitary Sewer System - Rate Calculation**  
**Table 9**

Operating Expenses

2009 Operating Expenses	\$ 84,957
2009 Plant Amortization	\$ 29,800
2009 Collection System Amortization	<u>\$ 41,750</u>
<b>Total Operating Expenses</b>	<b><u>\$ 156,507</u></b>

**Cash Position**

Cash Position, Dec 31, 2008	-\$ 612,272
2009 Capital Expenditures	<u>\$ -</u>
<b>Cash Position, December 31, 2009 exclusive of 2009 operations</b>	<b><u>-\$ 612,272</u></b>

Expenses have been increased by 2% for inflation while revenues have been increased annually by 10% over the same period to provide additional funds to improve the cash position of the system. Improving the cash position of the system recognizes historic underfunding for future capital replacement

	2009	2010	2011	2012	2013	2014	2015
Revenues	\$ 175,000	\$ 197,750	\$ 221,480	\$ 248,058	\$ 277,825	\$ 311,163	\$ 348,503
Operating Expenses	-\$ 84,957	-\$ 86,656	-\$ 88,389	-\$ 90,157	-\$ 91,960	-\$ 93,799	-\$ 95,675
Amortization Expenses	-\$ 71,550	-\$ 72,981	-\$ 74,441	-\$ 75,929	-\$ 77,448	-\$ 78,997	-\$ 80,577
Opening Cash Position <sup>2</sup>	-\$ 612,272	-\$ 593,779	-\$ 555,666	-\$ 497,016	-\$ 415,045	-\$ 306,629	-\$ 168,262
<b>Cash, Ending of Period</b>	<b><u>-\$ 593,779</u></b>	<b><u>-\$ 555,666</u></b>	<b><u>-\$ 497,016</u></b>	<b><u>-\$ 415,045</u></b>	<b><u>-\$ 306,629</u></b>	<b><u>-\$ 168,262</u></b>	<b><u>\$ 3,989</u></b>
Annual Increase	n/a	13%	12%	12%	12%	12%	12%

**Connection Charge**

→residential	\$ 1,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500
→commercial	\$ 1,000	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500

<sup>1</sup> Collection system amortization is based on current replacement value - actual amortization will be less but if rates cover amortization at this level, funds are being provided for historic underfunding of system

<sup>2</sup> Opening cash position is the ending 2008 cash position less 2009 capital expenditures

**Table 10- Summary of Projected Water and Wastewater Rates**

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Brussels Water	\$ 30.00	\$ 34.00	\$ 36.00	\$ 38.00	\$ 40.00	\$ 42.00	\$ 44.00
Brussels Sewer	\$ 31.50	\$ 32.00	\$ 34.00	\$ 36.00	\$ 38.00	\$ 40.00	\$ 42.00
<b>Total Brussels</b>	<b>\$ 61.50</b>	<b>\$ 66.00</b>	<b>\$ 70.00</b>	<b>\$ 74.00</b>	<b>\$ 78.00</b>	<b>\$ 82.00</b>	<b>\$ 86.00</b>
Seaforth Water	\$ 30.00	\$ 30.00	\$ 32.00	\$ 34.00	\$ 36.00	\$ 38.00	\$ 40.00
Seaforth Sewer	\$ 31.50	\$ 36.00	\$ 38.00	\$ 40.00	\$ 42.00	\$ 44.00	\$ 46.00
<b>Total Seaforth</b>	<b>\$ 61.50</b>	<b>\$ 66.00</b>	<b>\$ 70.00</b>	<b>\$ 74.00</b>	<b>\$ 78.00</b>	<b>\$ 82.00</b>	<b>\$ 86.00</b>
<b>Brucefield Water</b>	<b>\$ 45.00</b>	<b>\$ 48.00</b>	<b>\$ 51.00</b>	<b>\$ 54.00</b>	<b>\$ 57.00</b>	<b>\$ 60.00</b>	<b>\$ 63.00</b>
Vanastra Water-residential meter	\$ 8.75	\$ 10.06	\$ 11.57	\$ 12.73	\$ 14.00	\$ 15.40	\$ 16.94
Charge per 1000 gallons	\$ 8.41	\$ 9.67	\$ 11.12	\$ 12.23	\$ 13.46	\$ 14.80	\$ 16.28
<b>Monthly bill based on 4000 gallons</b>	<b>\$ 42.39</b>	<b>\$ 48.74</b>	<b>\$ 56.05</b>	<b>\$ 61.65</b>	<b>\$ 67.84</b>	<b>\$ 74.60</b>	<b>\$ 82.06</b>

**Table 11 - Water and Wastewater Rates in Surrounding Municipalities**

	Flat Rates (monthly)	Metered Rates
<b>Municipality of Huron East (2007)</b>		
→Brussels Water (461 flat rates, 8 metered)	\$ 30.00	\$3.75 /monthly metre charge \$5.50 /1000 gallons
→Brussels Sewage (429 flat rates)	\$ 31.50	
→Seaforth Water (1106 flat rates, 94 metered)	\$ 30.00	\$3.75 /monthly metre charge \$7.49 /1000 gallons for 1st 8000 gallons \$6.92 /1000 gallons for 2nd 8000 gallons \$4.92 /balance of consumption
→Seaforth Sewage (905 flat rates)	\$ 31.50	
→Vanastra Water (250 flat rates )	n/a	\$8.75 /monthly metre charge \$8.41 /1000 gallons
→Vanastra Sewage (250 flat rates )		tax levy
→Brucefield Water (90 flat rates )	\$ 45.00	
<b>Municipality of Ashfield-Colbourne-Wawonosh <sup>1</sup></b>		
→Huron Sands Water (48 flat rates )	\$ 39.58	
→Century Heights Water (58 flat rates )	\$ 50.00	
→Dungannon Water (104 flat rates )	\$ 37.50	
<b>Goderich<sup>2</sup></b>		
→Goderich Water	\$ 36.53	\$3.34 /monthly metre charge \$5.63 /1000 gallons for 1st 8000 gallons
→Goderich Sewer	\$ 36.61	
<b>Municipality of Morris-Turnberry <sup>3</sup></b>		
→Belgrave Water	\$ 54.66	
<b>Municipality of South Huron <sup>4</sup></b>		
→Exeter Water		\$20.23 /monthly metre charge \$27.97 /monthly pipeline debt charge \$8.00 /1000 gallons
→Exeter Sewage		\$6.73 /monthly metre charge \$3.08 /1000 gallons metered water
<b>Municipality of North Huron <sup>5</sup></b>		
→Belgrave Water	\$ 40.00	
→Blyth Water	\$ 40.00	
→Blyth Sewage	\$ 20.00	
→Wingham Water		\$22.50 /monthly metre charge \$3.41 /1000 gallons
→Wingham Sewage	\$ 30.00	
<b>Municipality of Central Huron <sup>6</sup></b>		
→Rural Water	\$ 63.12	
→Clinton Water		\$28.98 /monthly metre charge \$6.22 /1000 gallons
→Clinton Sewage		\$28.98 /monthly metre charge \$4.36 /1000 gallons metered water

- 1 Asfield-Cobourne-Wawaonsh rates are for 2009 - no indication of source of rates
- 2 Goderich rates are proposed rates effective September 1, 2010. Rates have been based on a 2005 BM Ross report which recommned rate increases of between 11 and 12% annually for 5 years plus the rate of inflation. Unsure if all rate increases have been implemented
- 3 Belgrave water rate is for 2009 - no indication of source of rates
- 4 South Huron rates have been based on a 2008 study by CN Watson. Approximately 8400 customers on water ( includes ward of Stehpen and approximately 6,000 on sewage. Pipeline debt charge in anticipated for 25 years.
- 5 North Huron rates were based on a study by BM Ross and Associations and came into effect on October 1, 2009
- 6 Central Huron rates are based on a 2005 study by CN Watson

### **Additional Sources of Funding**

Huron East Council has moved away from cross subsidization of the systems through property taxes to develop rate structures that provide and awareness of true costs and financial sustainability. The community of Vanastra is a unique community with a relatively high ratio of industrial/commercial assessment to residential assessment. Included in the industrial/commercial assessment are significant properties with either vacant land or vacant buildings and the sewage plant capacity must be maintained for these properties. Cross subsidization of rates is not an issue as the entire system is funded through a tax levy for the Vanastra community which is clearly indicated on the municipal tax bill for the community. Water rates for the Vanastra community are based on actual consumption.

The Municipality has also put in place a by-law relating to the discharge of wastewater into the municipal sewage systems which incorporates heavy loading charges for industry.

The Municipality of Huron East, in developing its rate structure for water and sewage rates, has also reviewed its connection charges to the systems for infill development. Connection fees were calculated using recent capital expenditures for OSTAR compliance and historical costs for sewage plant improvements.

### **Lead Service Lines**

Section 3(i)(iv) requires the Financial Plan to contain details relating directly to the replacement of lead service pipes. The Municipality of Huron East conducts a lead monitoring and testing program to be in compliance with Ministry of Environment requirements. To date, sampling has not provided any indication of lead service pipes (which may be indicative of the age of the systems). However, if lead service pipes are encountered, the Municipality of Huron East will proactively encourage the replacement of the service lines.

### **Transparency, Review and Renewal**

Huron East Council has consistently maintained a very transparent process with respect to water and sewage rates and has engaged public dialogue with respect to rates. Such dialogue and feedback was instrumental in setting fair and affordable rates for downtown business owners with accessory residential apartments. The dialogue was useful for two reasons.

1. it assisted Council and business owners to develop a better appreciation of the needs of both parties
2. it encouraged most of the downtown commercial area in Seaforth and to a lesser extent in Brussels, to install meters which provided a more equitable system for landlords and tenants.

The Financial Plan has been developed by the Huron East Water and Sewer Committee. The Committee's meetings have been attended by the local press who have provided coverage in local newspapers. The Committee followed Huron East's public notification policies by publishing an advertisement in three local newspapers the week before the Plan was being considered by Council and the Plan was posted to the Huron East website.

Earlier in this document it was indicated that it was anticipated that Council would utilize the provisions of Section 5 of O.Reg. 453/07 to review and amend the Plan to incorporate the 2009 audited statements of the Municipality and to align the presentation of the Plan with PSAB 3150 requirements. Council will likely review the Financial Plan, at least initially, on an annual basis as the transition to PSAB 3150 occurs.

## **SUMMARY**

The Financial Sustainable Drinking – Water and Wastewater Systems guide provided some guiding principles to develop Financial Plans. It is useful to consider these principles in the context of the Plan that has been developed.

***Principle #1: Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system(s) to which they relate.***

Council has continued to use its public notice policies that would normally relate to budget notices to the Financial Plan. Past experience with public engagement and dialogue provided a better understanding of the impact of water and sewer rates in downtown core commercial/residential areas, particularly Seaforth and this experience supports public engagement and transparency.

***Principle #2: An integrated approach to planning among water, wastewater, and storm water systems is desirable given the inherent relationship among these services.***

The exercise to compile historical information on linear water, wastewater, storm water and road assets has provided invaluable information that supports an integrated approach to renewal of these assets – particularly in Brussels (water and stormwater) and Vanastra (water, wastewater and stormwater).

***Principle #3: Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services.***

Water and wastewater systems are completely user-pay systems and Council has recognized the need to compensate systems such as the Brussels, Seaforth and Vanastra water systems for the value they provide to fire protective services (hydrants).

***Principle #4: Life-cycle planning with mid-course corrections is preferable to planning over the short-term, or not planning at all.***

The inventory that has been compiled along with documented evidence of its date/condition is instrumental to the life-cycle planning process.

***Principle #5: An asset management plan is a key input to the development of a financial plan.***

The inventory data is a key first step to an asset management plan, but the asset management plan has to be expanded to provide scheduled repair/replacement of assets. A fully developed asset management plan will be the corner piece of the 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.***

The Financial Plan represents the third time in the past eight years that Huron East Council has revisited and revised water and wastewater rates. The rate structures that have been developed over the years and projected into the future allows all systems to provide reliable services that meet or exceed environmental protection standards while providing a reasonable amount of capital for future rehabilitation and replacement needs. The only

exception to the last point are the Vanastra water and wastewater systems; Vanastra's infrastructure was for the most part all installed at the same time, now more than 60 years ago and it has all become old at the same time. Vanastra has little available capital for replacement needs and will likely be required to debenture much of its new infrastructure.

***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.***

Council acknowledges that benefits of metering (fairness and conservation) but is also cognizant that any significant move to additional metering will involve all four water systems and not just one. Several systems such as Brussels have identified a more important need in replacing deteriorated cast iron water mains over metering. However, Vanastra is already metered and most of the downtown core commercial and industrial customers in Seaforth are metered.

***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.***

It has already been previously stated that Council, at least initially, intends to review the Financial Plan on an annual basis.

***Principle #9: Financial plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff, and municipal council.***

The Financial Plan has been developed using base PSAB 3150 information that was compiled as a joint effort by several municipal staff with assistance from consulting engineers. The draft Financial Plan has been closely scrutinized and revised by the Huron East Water and Sewer Committee prior to being presented to Council for approval.

## APPENDIX 'A'

### ONTARIO REGULATION 453/07

made under the

### SAFE DRINKING WATER ACT, 2002

Made: August 8, 2007

Filed: August 14, 2007

Published on e-Laws: August 15, 2007

Printed in *The Ontario Gazette*: September 1, 2007

### FINANCIAL PLANS

#### Requirement to prepare financial plans

1. (1) A person who makes an application under clause 32 (1) (b) of the Act for a municipal drinking-water licence shall, before making the application, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 2.

(2) A person who makes an application under subsection 32 (4) of the Act for the renewal of a municipal drinking-water licence shall, before making the application, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 3.

(3) As a condition in a municipal drinking-water licence that is issued in response to an application made under section 33 of the Act for a municipal drinking-water licence, the Director shall include a requirement that 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, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 3.

(4) The Director shall include, as a condition in a municipal drinking-water licence, the requirement set out in subsection (3) in any amendments to a license made after the application, if the condition is not satisfied at the time when the amendment is made.

#### Financial plan requirements; new systems

2. For the purposes of clause (b) of the definition of “financial plans” in subsection 30 (1) of the Act, the following requirements are prescribed for financial plans that are required by subsection 1 (1) to satisfy the requirements of this section:

1. The financial plans must be approved by a resolution that indicates that the drinking-water system is financially viable and that is passed by,

i. the council of the municipality, if the owner of the drinking-water system is a municipality, or

ii. the governing body of the owner, if the owner of the drinking-water system has a governing body and is not a municipality.

2. The financial plans,

i. must include a statement that the financial impacts of the drinking-water system have been considered, and

ii. must apply for a period of at least six years.

3. The first year to which the financial plan must apply is the year in which the drinking-water system is expected to first serve the public.

4. For each year in which the financial plans apply, the financial plans must include details of the proposed or projected financial operations of the drinking-water system itemized by,

i. total revenues, further itemized by water rates, user charges and other revenues,

ii. total expenses, further itemized by amortization expenses, interest expenses and other expenses,

iii. annual surplus or deficit, and

iv. accumulated surplus or deficit.

5. The owner of the drinking-water system must,

i. make the financial plans available, on request, to members of the public who are served by the drinking-water system without charge,

ii. make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet, and

iii. provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring the notice to the attention of members of the public who are served by the drinking-water system.

6. The owner of the drinking-water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing.

Financial plan requirements; licence renewal

**3.** (1) For the purposes of clause (b) of the definition of “financial plans” in subsection 30 (1) of the Act, the following requirements are prescribed for financial plans that are required by subsection 1 (2) or a condition that is included in a municipal drinking-water licence under subsection 1 (3) to satisfy the requirements of this section:

1. The financial plans must be approved by a resolution that is passed by,

- i. the council of the municipality, if the owner of the drinking-water system is a municipality, or
- ii. the governing body of the owner, if the owner of the drinking-water system has a governing body and is not a municipality.

2. The financial plans must apply to a period of at least six years.

3. The first year to which the financial plans must apply must be the year determined in accordance with the following rules:

- i. If the financial plans are required by subsection 1 (2), the first year to which the financial plans must apply must be the year in which the drinking-water system's existing municipal drinking-water licence would otherwise expire.

- ii. If the financial plans are required by a condition that was included in a municipal drinking-water licence under subsection 1 (3), the first year to which the financial plans must apply must be the later of 2010 and the year in which the first licence for the system was issued.

4. Subject to subsection (2), for each year to which the financial plans apply, the financial plans must include the following:

- i. Details of the proposed or projected financial position of the drinking-water system itemized by,

- A. total financial assets,

- B. total liabilities,

- C. net debt,

- D. non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies and prepaid expenses, and

- E. changes in tangible capital assets that are additions, donations, write downs and disposals.

- ii. Details of the proposed or projected financial operations of the drinking-water system itemized by,

- A. total revenues, further itemized by water rates, user charges and other revenues,

- B. total expenses, further itemized by amortization expenses, interest expenses and other expenses,

- C. annual surplus or deficit, and

- D. accumulated surplus or deficit.

- iii. Details of the drinking-water system's proposed or projected gross cash receipts and gross cash payments itemized by,

A. operating transactions, that are cash received from revenues, cash paid for operating expenses and finance charges,

B. capital transactions, that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets,

C. investing transactions, that are acquisitions and disposal of investments,

D. financing transactions, that are proceeds from the issuance of debt and debt repayment,

E. changes in cash and cash equivalents during the year, and

F. cash and cash equivalents at the beginning and end of the year.

iv. Details of the extent to which the information described in subparagraphs i, ii and iii relates directly to the replacement of lead service pipes as defined in section 15.1- 3 of Schedule 15.1 to Ontario Regulation 170/03 (Drinking-Water Systems), made under the Act.

5. The owner of the drinking-water system must,

i. make the financial plans available, on request, to members of the public who are served by the drinking-water system without charge,

ii. make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet, and

iii. provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring the notice to the attention of members of the public who are served by the drinking-water system.

6. The owner of the drinking-water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing.

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

1. Sub-subparagraphs 4 i A, B and C of subsection (1).

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

Alternative requirements for two or more drinking-water systems

**4.** If section 3 applies to the financial plans of two or more drinking-water systems that are solely owned by the same owner, the requirements prescribed by the section may, as an alternative, be satisfied by financial plans that comply with the section but treat those systems as if they were one drinking-water system.

Amendment of financial plans

5. Sections 2 or 3 do not prevent financial plans from being amended.

Additional information

6. The requirements of this Regulation do not prevent a person from providing additional information in financial plans prepared for the purpose of meeting the requirements of the Act.

Commencement

**7. This Regulation comes into force on the day it is filed.**

Made by:

LAUREL C. BROTEN

*Minister of the Environment*

Date made: August 8, 2007.