

**THE CORPORATION OF THE TOWNSHIP OF MCGARRY**

**BY-LAW 2014-09**

**BEING A BY-LAW TO ADOPT FINANCIAL PLANS FOR THE TOWNSHIP  
WATER AND WASTEWATER SYSTEMS**

**WHEREAS**, Ontario Regulation 453/07 made under the Safe Water Drinking Act requires Municipalities develop a financial plan for their Water Drinking Systems.


**AND WHEREAS** the Municipality also wishes to have a financial plan for the Wastewater System.

**AND WHEREAS** Council retained the Ontario Clean Water Agency to prepare the required plans,

**NOW THEREFORE** Council of the Township McGarry hereby enacts as follows:

1. That the financial plan, as prepared under Ontario Regulation 453/07 for the Virginiatown-Kearns Drinking Water System attached to and forming Appendix "A" to this By-Law, be adopted.
2. That the financial plan for the Township of McGarry Waste Water System, attached to and forming Appendix "B" to this By-Law, be adopted.
3. That this By-Law shall take effect on the date of its passing.

Read three times and passed this 11<sup>th</sup> day of February, 2014.

  
REEVE

  
CLERK-TREASURER

APPENDIX "A"  
BY-LAW 2014-09

The Township of McGarry  
Virginiatown-Kearns Drinking Water System

Financial Plan

#280-301

January 31, 2014



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

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## **1. Introduction**

The Corporation of the Township of McGarry (the Township) has retained the Ontario Clean Water Agency (OCWA) to develop a financial plan for the Virginiatown-Kearns Drinking Water System in order to comply with the financial plan regulation (O. Reg. 453/07) made under the Safe Drinking Water Act.

The financial plan contained herein has been prepared in accordance with O. Reg. 453/07, as well as the provisions of the financial planning guidelines published by the Ministry of the Environment (MOE) in August, 2007 entitled "Toward Financially Sustainable Drinking-Water and Wastewater Systems".

The financial plan was prepared for the Virginiatown-Kearns Drinking Water System (DWS), based on information supplied by the Township, including, future capital and major maintenance projects, water system financial information, as well as tangible capital asset information that the Township generated in accordance with the Public Sector Accounting Board (PSAB) standard PS 3150 requirements.

The information supplied by the Township was used to generate a financial operating plan which forecasted future annual expenditure requirements from the year 2011 through to 2020. A revenue plan, relying mostly on user fees was generated to support the expenditure requirements outlined in the operating plan. The information generated in the operating and revenue plans along with the tangible capital asset information was used to develop a financial plan for the Virginiatown-Kearns DWS covering the period from 2011 to 2017.

### **1.1 Legislative Context to Financial Planning**

There have been a number of legislative initiatives affecting water system management and operations over the past decade. These initiatives were a result of the water borne illness tragedy in Walkerton in 2000. Following this event, the Government of Ontario established a public inquiry chaired by the Honourable Dennis O'Connor to look into the tragedy. The Inquiry Report recommended a comprehensive approach to the delivery of safe drinking water in Ontario.

The MOE has responded to the Inquiry recommendations by making legislative changes. One change directly related to the development of this Financial Plan was the passage of the Safe Drinking Water Act, 2002 (SDWA). It requires owners of a municipal drinking water system to apply for and obtain a Municipal Drinking Water Licence. There are five elements that must be in place in order for the owner of a drinking water system to obtain a licence:

- 1) A Drinking Water Works Permit to establish or alter a drinking-water system.
- 2) An accepted Operational Plan. The Drinking Water Quality Management Standard (DWQMS) is the standard upon which operational plans are based. The plan documents an operating authority's quality management system (QMS).
- 3) An Accredited Operating Authority. A third party audit of an operating authority's QMS will be the basis for accreditation.

- 4) A Permit to Take Water.
- 5) A Financial Plan that must be prepared and approved in accordance with the prescribed requirements in the Financial Plans Regulation.

Under section 30 of the SDWA, the Financial Plan element of the licence program must either be prepared in accordance with the Sustainable Water and Sewage System Act, 2002 (SWSSA) or in accordance with the requirements set by the Minister of the Environment. SWSSA regulations have not been published. Accordingly, the requirements set by the Minister of Environment apply as per the 2007 MOE guidelines.

Regulation 453/07 of the Safe Drinking Water Act was passed in 2007 and contains two key provisions that apply to an existing water system:

1. A person who makes an application under 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 of Reg. 453/07. O. Reg. 453/07, S. 1(1).
2. 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 Reg. 453/07. O. Reg. 453, S. 1(3).

Several other provisions are also set out in the regulation that must be met by a municipality operating a water system:

- The financial plan must be approved by a resolution that is passed by the Council of the municipality.
- The financial plan must apply to a period of at least six years.
- The first year to which the financial plan must apply must be the later of 2010 and the year in which the first licence for the system was issued.
- The financial plan must be available, upon request, to members of the public at no charge and posted on the internet (if the municipality maintains a website).
- The municipality must provide notice as deemed appropriate to advise the public of the availability of the financial plan.





Once a system is licensed, the municipality's Financial Plan is required to be updated every 5 years, in conjunction with every application for license renewal. A full documentation of the financial plan regulation, O.Reg. 453/07 can be found in Attachment 1.

## **1.2 Recent Accounting and Policy Changes**

In June 2006, the Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered accountants approved new municipal financial accounting and reporting standards requiring that tangible capital assets (TCA), including the assets of drinking water systems, be included in municipal financial statements. Stat 3150 came into effect on January 1, 2009.

The Clean Water Act, 2006 targets the protection of drinking water supplies through the development of collaborative, locally driven, science and watershed based source protection plans. According to the MOE financial planning guidelines, Financial Plans should include source water protection costs related to the provision of water services. Utilities are encouraged to have, at minimum, estimates of any current source protection costs as a separate cost item by the time that their Financial Plans are required in order to effectively align with the anticipated approval timelines for source protection plans (2010-2012).

In June 2007, the government of Ontario proposed a lead action plan. The Financial Plans regulation requires municipalities' Financial Plans to include the costs associated with replacing lead service pipes that are part of their drinking water system.

## **1.3 Township of McGarry – Virginiatown-Kearns Water System**

The Virginiatown-Kearns Drinking Water System (DWS), located in the Township of McGarry is owned by the Corporation of the Township of McGarry and is operated by the Ontario Clean Water Agency. McGarry is located in northeastern Ontario, several hundred km north of North Bay. The DWS draws its water from one production well, drilled 26.2 m deep and is located in a pumphouse building approximately 6 km northeast of the Virginiatown Community Centre. The well has a permitted capacity of 1420 m<sup>3</sup>/day.

The DWS has a rated capacity of 2045 m<sup>3</sup>/day and contains a sodium hypochlorite disinfection system, one (1) storage reservoir (volume of 483m<sup>3</sup>), one (1) elevated storage tank (1300m<sup>3</sup>) and one (1) 56kW diesel generator for emergency power. The distribution system is primarily comprised of 6, 8 and 10 inch ductile iron pipes with 41 fire hydrants throughout the municipality.

The treatment plant's disinfection system consists of two (2) chemical solution tanks with secondary spill containment, two chemical metering pumps (one duty, one standby) and a feed line discharging the disinfectant to the well pump discharge line, upstream of the pumphouse.



## **2. Financial Operating Plan**

The financial operating plan includes the full costs of operating the Virginiatown-Kearns DWS on an ongoing basis and includes capital investments, operating costs, maintenance costs and administration costs.

A financial operating plan for the Virginiatown-Kearns DWS was developed using historical financial information and projecting the information forward to forecast the annual expenditure requirements, while taking into account inflation and any growth forecast.

### **2.1 Operating Expenses**

Recurring operating expenses for the Virginiatown-Kearns DWS consists of contracted operating services provided by OCWA, hydro cost and other operating expenses such as materials, supplies, major maintenance and repair. All operating costs are projected to increase on an annual basis at a rate of 2.5% per year, except for hydro costs, which are projected to increase at a rate of 5% per year. The total operating expenses for the Virginiatown-Kearns DWS was approximately \$118,718 in 2011 and is forecasted to be approximately \$124,625 in 2013. Thereafter, modest increases are projected in each year, except for 2015 in which will see a significant increase to \$203,581 due to major maintenance items forecasted for that year.

### **2.2 Capital Costs**

Although ongoing yearly maintenance and repair of the Virginiatown-Kearns DWS is forecasted, these costs will be considered an expense, based on the Township's policy for tangible capital asset accounting. Capital items forecasted includes, construction of a new well and installation of back-up power generator at the water tower. These works are planned to occur in 2014. In addition, upgrades to the distribution system have been included in the plan in 2016 and 2017.

### **2.3 Debt Management**

The Virginiatown-Kearns DWS has no debt and no debt is forecasted over the study period. However, if the new well is to be constructed in 2014 without senior government funding support, a loan may be required.

### **2.4 Lead Pipe Replacement Costs**

There are no costs forecasted during the study period for lead pipe replacement.

## 2.5 Source Water Protection Costs

There are no costs associated with source water protection forecasted for the Virginiatown-Kearns DWS during the study period.

## 3. Funding Plan

A funding plan was developed to ensure that the annual expenditures forecasted in the financial operating plan can be sustained over the study period. The funding plan relies on operating revenues from the direct users of the drinking water system through water rates in combination with government grants to cover certain capital and operating costs. General revenues are used in 2015 in the amount of \$12,732 to cover operating and maintenance funding shortfalls. There is also a senior government grant through the Ontario Small Water Works Assistance Program (OSWAP) that contributes to funding the water system in 2011 and 2012. The Small Northern and Rural Municipal Infrastructure Fund (SNRMIF) will be used to fund the installation of back-up power to the water tower. In addition, a capital project application has been made to the SNRMIF for additional funding to construct a new well in 2014.

### 3.1 Water Rates

The Virginiatown-Kearns DWS served approximately 313 residents in 2011 throughout Virginiatown, North Virginiatown and Kearns. Customers are charged a monthly flat rate for water used with a 10% discount allowed if payment is made on or before the due date. The historical and proposed water gross (before discount) rates charged to residential consumers can be found in figure 1.1. The rates are projected to increase by 15.0% in 2014, 15.0% in 2015 and remain constant thereafter through to 2017.

Figure 3.1 – Water Rate Charge per Month

Residential Water Rates							
Year	Historical Rates			Proposed Rates			
	2011	2012	2013	2014	2015	2016	2017
Rate per month	\$34.45	\$34.45	\$34.45	\$39.62	\$45.56	\$45.56	\$45.56
Rate per year	\$412.20	\$412.20	\$412.20	\$475.41	\$546.72	\$546.72	\$546.72
% Increase		0%	0%	15.00%	15.00%	0%	0%
# Residential	313	314	315	316	317	318	319



The forecasted rates were developed with the assumption that there will be a slight increase in the number of residential customers, at one additional customer being added to the system each year.

### **3.2 Debt and Cash Reserves**

Based on the current revenue and expenditure forecasts for the study period, there will be no requirement to raise any addition funds through borrowing. The cash reserve balance of \$44,138 that existed in 2012 will be used to address any year end operating deficits. The cash reserve is forecasted to dip to a low of \$0 in 2015 and build to an amount of approximately \$11,664 by year end 2017.

### **3.3 Government Grant**

The Township received OSWAP funding in 2011 and 2012. Funds of approximately \$20,648 from the SNRMIF will be used to offset the cost of the installation of back-up power to the water tower in 2014. An application was also made to the SNRMIF for 90% funding to add a new well to the system in 2014 at an estimated cost of \$380,000. The project to add a new well will only proceed if funding is secured.

## **4. Financial Plan Summary – McGarry**

This section provides a summary of principal features concerning the current and projected future state of the Viriginiatown-Kearns Drinking Water System. The financial information is contained in financial statements covering the years 2011 to 2017. The detailed financial statements are set out in tabular form in Section 5. The notes regarding the financial statements are presented at the end of the financial statement section of this report.

### **4.1 Statement of Financial Position (Table 1.1)**

An important feature of a water system is its net financial assets. A positive net financial asset indicates that the system has some 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. The Viriginiatown-Kearns water system's net financial assets are shown in Figure 4.1.

Figure 4.1 – McGarry Net Financial Assets

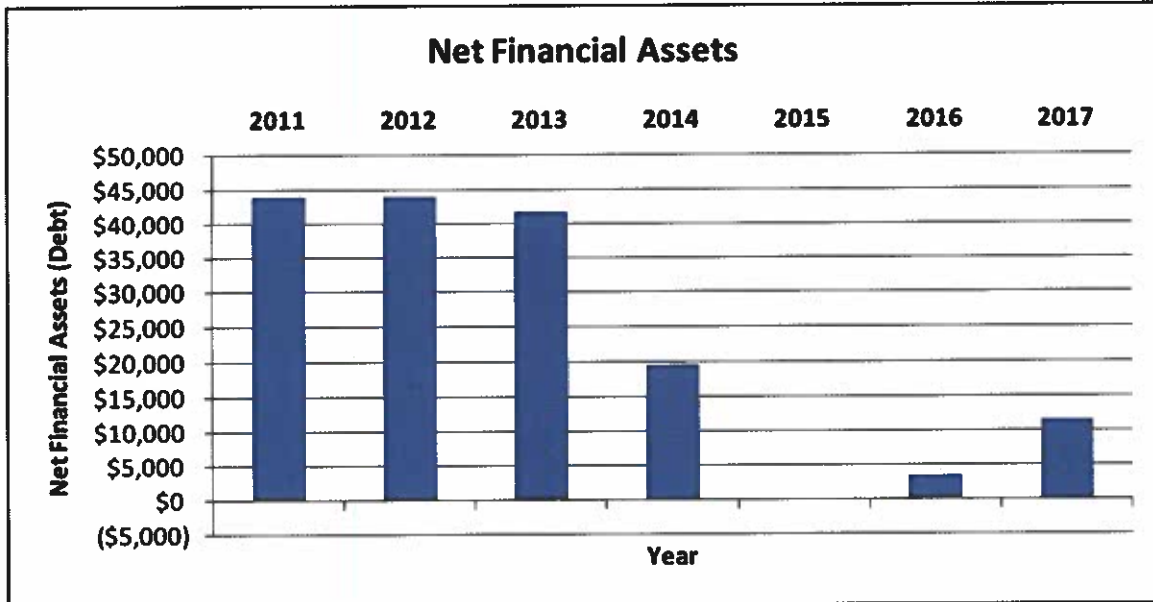


Figure 4.1 shows a positive net financial asset position is maintained over the study period.

A second feature is the total value of the water system tangible capital assets (plant equipment, watermains). Consideration of the value of tangible capital assets is part of PSAB compliance. The current value of the capital assets is termed net book value (NBV). It is the difference between the original cost of an asset less the accumulated amortization.

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. Tangible capital assets, once installed, are being used, and are decreasing in value. 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 of the assets is set out in Figure 4.2. The net book value for the Tangible Capital Assets of the DWS is forecasted to show an overall increase over the study period with the forecasted capital works in 2014, 2016 and 2017.

Figure 4.2 – McGarry Tangible Capital Assets

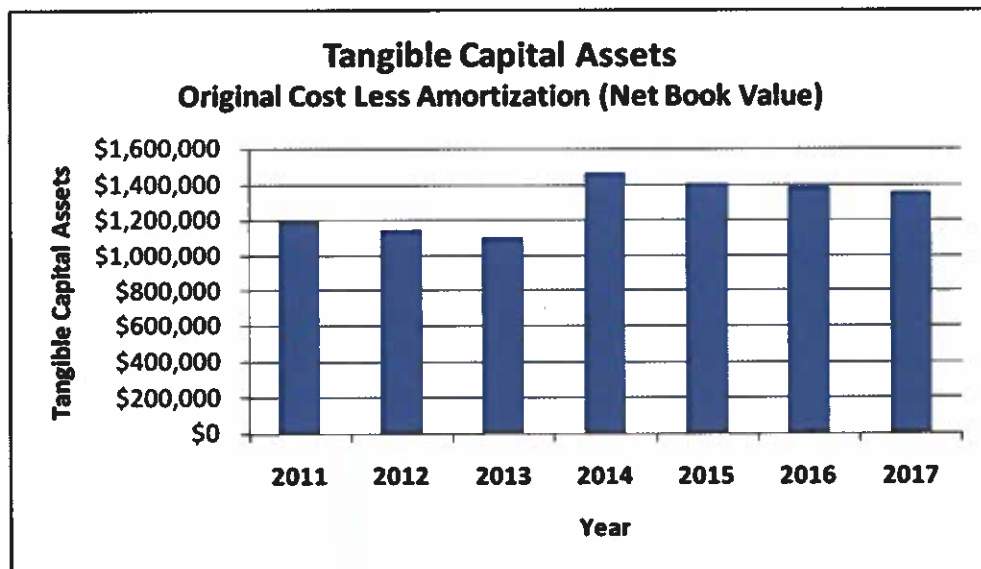
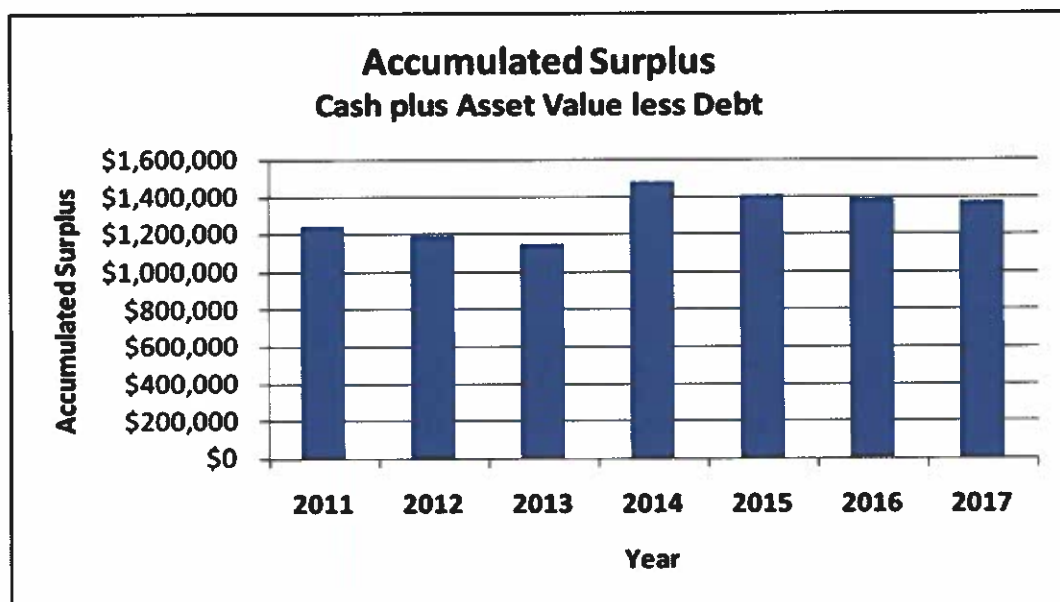


Figure 4.3 sets out the accumulated surplus. It represents cash on hand plus the net book value of tangible capital assets less debt. The water system is projected to have an overall increase in accumulated surplus over the study period.

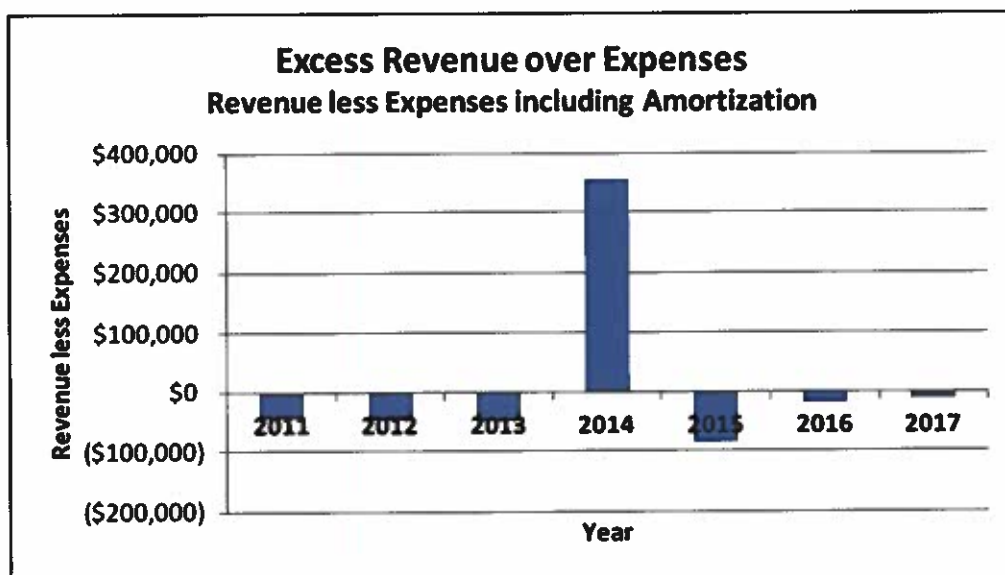
Figure 4.3 – McGarry Accumulated Surplus



#### 4.2 Statement of Operations (Table 1.2)

This statement summarizes revenues and expenditures. The revenue includes revenues from connected users, contribution from general revenue, interest earned and government grants. The expenditures include ongoing operating costs and asset amortization. Figure 4.4 projects that the system’s excess of revenues over expenses, including amortization, is mostly negative throughout the study period except for 2014 in which significant capital works are forecasted. This indicates that although the annual revenues for the most part are adequately funding ongoing operating costs over the study period, the revenues are not fully covering the yearly amortization expense of the system.

Figure 4.4 – McGarry Excess Revenue over Expenses



#### 4.3 Continuous Improvement

The SDWA requires renewal of Municipal Drinking Water Licences every five years. The Financial Plan regulation requires the preparation and approval of a financial plan before making an application for renewal of a Drinking Water Licence. Thus each Financial Plan will require updating at a maximum frequency of every five years. This on-going update will assist in revisiting the assumptions made, in the original financial plan, to develop the operating and funding plans as well as re-assessing the need for capital renewal and major maintenance expenditures.

#### 4.4 Conclusion

The Viriginiatown-Kearns DWS has a cash reserve that will be used to offset future operating deficits. However the reserve fund is not sufficient to cover future capital and major maintenance costs forecasted in 2014 and 2015. Senior government funding will be relied upon to offset some of these costs, but even with senior government support a significant increase in rates will be required in 2014.

In addition, if insufficient or no funding is received to assist with the construction of a new well in 2014, a loan may be required or the project may have to be deferred.

Nevertheless, if senior government funding is secured and rates increased as currently planned, the financial statements reveal that the Viriniatown-Kearns DWS is projected be in adequate financial shape over the study period with no need for borrowing and a small cash reserve of approximately \$11,664 at year end 2017.

In reviewing these statements, it is important to keep in mind that a number of assumptions have been made concerning inflation, interest rates, and growth projections. Actual numbers may significantly deviate from these over time. In addition, capital and major maintenance cost estimates and schedule may vary from current projections. There is a need to monitor the progress of this plan and make adjustments as needed.

The detailed financial statements are set out in tabular form in the following Section and were the basis for the above summary.

## **5. Financial Statements**

The detailed financial statements are set out in the following tables followed by the notes that correspond to the numbers on the right side of the tables.



Statement of Financial Position	2011	2012	2013	2014	2015	2016	2017	Notes
<b>Financial Assets</b>								
Cash/Cash Equivalents								
System Reserve	\$44,138	\$44,138	\$41,934	\$19,636	(\$0)	\$3,432	\$11,664	1
other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Total Cash/Cash Equivalents</b>	<b>\$44,138</b>	<b>\$44,138</b>	<b>\$41,934</b>	<b>\$19,636</b>	<b>(\$0)</b>	<b>\$3,432</b>	<b>\$11,664</b>	
Investments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Accounts Receivable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Total Financial Assets</b>	<b>\$44,138</b>	<b>\$44,138</b>	<b>\$41,934</b>	<b>\$19,636</b>	<b>(\$0)</b>	<b>\$3,432</b>	<b>\$11,664</b>	
<b>Liabilities</b>								
Accounts Payable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Debt Principle	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Working Deficit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Other liabilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Total Liabilities</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
<b>Net Financial Assets (Debt)</b>	<b>\$44,138</b>	<b>\$44,138</b>	<b>\$41,934</b>	<b>\$19,636</b>	<b>(\$0)</b>	<b>\$3,432</b>	<b>\$11,664</b>	
<b>Non Financial Assets</b>								
Tangible Capital Asset (TCA) Cost (Closing)	\$2,204,554	\$2,204,554	\$2,204,554	\$2,608,554	\$2,609,554	\$2,640,515	\$2,672,249	2
Changes in TCA - Additions/Betterments	\$0	\$0	\$0	\$405,000	\$0	\$30,961	\$31,735	3,4
TCA - Disposal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	3
Accumulated Amortization (closing)	\$1,011,803	\$1,057,956	\$1,104,109	\$1,150,262	\$1,205,015	\$1,259,768	\$1,314,908	2
<b>Total Non Financial Assets</b>	<b>\$1,192,751</b>	<b>\$1,146,598</b>	<b>\$1,100,445</b>	<b>\$1,459,292</b>	<b>\$1,404,539</b>	<b>\$1,380,747</b>	<b>\$1,357,341</b>	
<b>Accumulated Surplus(deficit)</b>	<b>\$1,236,889</b>	<b>\$1,190,736</b>	<b>\$1,142,379</b>	<b>\$1,478,928</b>	<b>\$1,404,539</b>	<b>\$1,384,179</b>	<b>\$1,369,005</b>	

Note: Unaudited for Planning Purposes Only - Actual results will differ from the above and these difference would be material.

Table 1.2 – Statement of Financial Operation

Statement of Financial Operations	2011	2012	2013	2014	2015	2016	2017
<b>Revenues</b>							
<b>User Revenues</b>							
User Fees (Residential)	\$120,298	\$129,733	\$120,000	\$150,230	\$173,311	\$173,857	\$174,404
User Fees (Commercial)	\$5,078	\$5,386	\$6,000	\$6,900	\$7,935	\$7,935	\$7,935
Forfeited Discount	(\$10,821)	(\$11,601)	(\$11,000)	(\$15,023)	(\$17,331)	(\$17,386)	(\$17,440)
Other (Hydrant Fees disconnect charge)	\$7,476	\$7,008	\$7,200	\$7,200	\$7,200	\$7,200	\$7,200
<b>Total Revenue from Users</b>	<b>\$122,630</b>	<b>\$130,526</b>	<b>\$122,200</b>	<b>\$149,307</b>	<b>\$171,115</b>	<b>\$171,607</b>	<b>\$172,099</b>
Other							
OSWAP 2 Grant	\$29,603	\$29,617	\$0	\$0	\$0	\$0	\$0
SNRMIF	\$0	\$0	\$0	\$342,000	\$0	\$0	\$0
SNRMIF	\$0	\$0	\$0	\$20,648	\$0	\$0	\$0
Contribution from General Revenue	\$0	\$0	\$0	\$0	\$12,732	\$0	\$0
Interest	\$114	\$0	\$221	\$210	\$98	(\$0)	\$17
<b>Total Revenues</b>	<b>\$152,347</b>	<b>\$160,143</b>	<b>\$122,421</b>	<b>\$512,164</b>	<b>\$183,945</b>	<b>\$171,607</b>	<b>\$172,116</b>
<b>Expenses</b>							
Administration	\$3,758	\$10,671	\$13,625	\$13,966	\$14,766	\$15,136	\$15,514
Pumphouse	\$18,523	\$8,512	\$14,500	\$13,038	\$13,600	\$14,188	\$14,803
Water Tower	\$22,839	\$7,345	\$19,000	\$18,563	\$19,145	\$19,747	\$20,371
Water System Maintenance	\$73,488	\$67,594	\$77,500	\$73,288	\$75,120	\$76,988	\$78,923
Major Maintenance				\$10,609	\$80,951	\$11,146	\$2,539
<b>Expenses before interest, amortization &amp; other</b>	<b>\$118,718</b>	<b>\$94,122</b>	<b>\$124,625</b>	<b>\$129,462</b>	<b>\$203,581</b>	<b>\$137,214</b>	<b>\$132,150</b>
Other - Contribution to General Revenue	\$33,515	\$66,020	\$0	\$0	\$0	\$0	\$0
Debt Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Amortization	\$46,153	\$46,153	\$46,153	\$46,153	\$54,753	\$54,753	\$55,140
<b>Total Expenses</b>	<b>\$198,386</b>	<b>\$206,298</b>	<b>\$170,778</b>	<b>\$175,615</b>	<b>\$258,334</b>	<b>\$191,967</b>	<b>\$187,290</b>
Excess of Revenues over Expenses before Other	(\$46,039)	(\$46,153)	(\$48,357)	\$336,549	(\$74,389)	(\$20,360)	(\$15,174)
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Excess of Revenues over Expenses</b>	<b>(\$46,039)</b>	<b>(\$46,153)</b>	<b>(\$48,357)</b>	<b>\$336,549</b>	<b>(\$74,389)</b>	<b>(\$20,360)</b>	<b>(\$15,174)</b>
<b>Annual Surplus (Deficit) Beginning of year</b>	<b>\$1,282,928</b>	<b>\$1,236,889</b>	<b>\$1,190,736</b>	<b>\$1,142,379</b>	<b>\$1,478,928</b>	<b>\$1,404,539</b>	<b>\$1,384,179</b>
<b>Accumulated Surplus (Deficit) End of Year</b>	<b>\$1,236,889</b>	<b>\$1,190,736</b>	<b>\$1,142,379</b>	<b>\$1,478,928</b>	<b>\$1,404,539</b>	<b>\$1,384,179</b>	<b>\$1,369,005</b>

Note: Unaudited for Planning Purposes Only – Actual results will differ from the above and these difference would be material

Table 1.3 – Statement of Change in Cash Flow

Statement of Cash Flow	2011	2012	2013	2014	2015	2016	2017
<b>Operating Transactions</b>							
Cash received from Revenues	\$152,347	\$160,143	\$122,421	\$512,164	\$183,945	\$171,607	\$172,116
Cash paid for Operating Expenses	\$116,718	\$94,122	\$124,625	\$129,462	\$203,581	\$137,214	\$132,150
Cash paid for Financing Charges (Debt Interest)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other - Contribution to General Revenue	\$33,515	\$66,020	\$0	\$0	\$0	\$0	\$0
<b>Excess of Operating Revenues Over Operating Expenses</b>	<b>\$114</b>	<b>\$0</b>	<b>(\$2,204)</b>	<b>\$382,702</b>	<b>(\$19,636)</b>	<b>\$34,393</b>	<b>\$39,966</b>
<b>Working Capital Items</b>							
Accounts Receivable	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Work in Progress	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Cash provided by Operating Transactions</b>	<b>\$114</b>	<b>\$0</b>	<b>(\$2,204)</b>	<b>\$382,702</b>	<b>(\$19,636)</b>	<b>\$34,393</b>	<b>\$39,966</b>
<b>Capital</b>							
Acquisition of TCAs	\$0	\$0	\$0	(\$405,000)	\$0	(\$30,961)	(\$31,735)
Proceeds on Disposal of TCA	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Cash used in Capital Transactions</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$405,000)</b>	<b>\$0</b>	<b>(\$30,961)</b>	<b>(\$31,735)</b>
<b>Investing</b>							
Cash (used in)/Provided by Investing Activities	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Increase (decrease) Cash Provided by Investing Activities</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Financing</b>							
Repayment of short term loan	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Repayment of Long Term Debt	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interim Financing	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Cash Provided by (used) in Financing Activities</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Increase (decrease) in Cash Equivalents</b>	<b>\$114</b>	<b>\$0</b>	<b>(\$2,204)</b>	<b>(\$22,298)</b>	<b>(\$19,636)</b>	<b>\$3,432</b>	<b>\$8,232</b>
<b>Cash and Cash Equivalents at the beginning of the Year</b>	<b>\$44,024</b>	<b>\$44,138</b>	<b>\$44,138</b>	<b>\$41,934</b>	<b>\$19,636</b>	<b>(\$0)</b>	<b>\$3,432</b>
<b>Cash and Cash Equivalents at the End of the Year</b>	<b>\$44,138</b>	<b>\$44,138</b>	<b>\$41,934</b>	<b>\$19,636</b>	<b>(\$0)</b>	<b>\$3,432</b>	<b>\$11,664</b>

Note: Unaudited for Planning Purposes Only – Actual results will differ from the above and these difference would be material

## **6. Notes on the Viriginiatown-Kearns Water System Financial Plan**

The Viriginiatown-Kearns Drinking Water System Financial Plan represents a forecast of the financial performance of the drinking water system over a study period starting in the year 2011 through to the year 2017. The following notes are intended to document and/or clarify some of the assumptions made in generating the financial information contained in the tables. The reader is cautioned that the financial plan contains un-audited financial information and is subject to change.

1. The reserve fund balance of \$44,138 that existed at the start of year 2011 is used to cover deficits forecasted for 2014 and 2015. Thereafter, any year end surplus is assumed to go into the Reserve Fund. Interest on any reserve balance is calculated at 0.50% per year starting in 2013.
2. Tangible Capital Assets Cost (Closing) includes changes (additions, disposals, write-downs) in tangible capital assets during the year.
3. TCA Additions – A capital projects include construction of a new well and installation of back-up power at the water tower in 2014. As well, upgrade to older sections of the distribution system is planned for in 2016 and 2017. Note - construction of the new well will only proceed in 2014 if funding can be secured through the SNRMIF.
4. Tangible Capital Assets (TCA) are assumed to have no residual value when they have reached the end of their projected useful life. The projected future costs of capital items include a 15% contingency. Amortization was determined using the straight line method. The calculation of Amortization begins the year after an asset is put into service.
5. Ontario Small Water Works Assistance Program (OSWAP) will end in 2012.
6. Small Northern and Rural Municipal Infrastructure Funding (SNRMIF) of \$20,648 will be used to offset the cost of the installation of back-up power supply at the water tower. A funding application has been submitted for up to 90% assistance to construct a second well. This project is estimated to cost approximately \$380,000 and will only go ahead in 2014 if funding is secured.
7. A small contribution from general revenue is expected in the year 2015 to recover any operating and maintenance funding shortfalls.
8. Interest is calculated at a rate of 0.50% per year starting 2013 on any reserve fund balance.
9. OCWA contacted services and other operational expenses (except for hydro) are projected to increase at 2.5% per annum. Hydro costs are projected to increase at 5% per annum.
10. Major maintenance items, which are major non-routine costs that are not capital items per the Township's TCA policy includes a 15% contingency. Major maintenance costs for 2011 through to 2013 have been included with the expenditures for pumphouse, water tower and water system.



11. Operating deficits in 2011 and 2012 is assumed to be covered by general revenue contributions.



**Attachment 1**

**Ontario Regulation 453/07**

**Safe Drinking Water Act, 2002**  
**ONTARIO REGULATION 453/07**  
**FINANCIAL PLANS**

**Consolidation Period:** From April 1, 2008 to the e-Laws currency date.

Last amendment: O. Reg. 69/08.

*This is the English version of a bilingual regulation.*

**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. O. Reg. 453/07, s. 1 (1).

**(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. O. Reg. 453/07, s. 1 (2).

**(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. O. Reg. 453/07, s. 1 (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. O. Reg. 453/07, s. 1 (4).

**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. O. Reg. 453/07, s. 2.

**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. O. Reg. 453/07, s. 3 (1).
- (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). O. Reg. 453/07, s. 3 (2).

**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. O. Reg. 453/07, s. 4.

**Amendment of financial plans**

**5.** Sections 2 and 3 do not prevent financial plans from being amended. O. Reg. 453/07, s. 5.

**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. O. Reg. 453/07, s. 6.

APPENDIX "B"  
TO BY-LAW 2014-09.

The Township of McGarry  
McGarry Wastewater System  
Revenue & Rate Setting Plan

January 31, 2014



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**



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## **1. Introduction**

The Corporation of the Township of McGarry (the Township) has retained the Ontario Clean Water Agency (OCWA) to develop a financial plan for the Virginiatown-Kearns Drinking Water System (DWS) in order to comply with the financial plan regulation (O. Reg. 453/07). In addition to the DWS financial plan, a Revenue and Rate Setting Plan (the Plan) would also be developed for the municipal wastewater system.

This report covers the wastewater system revenue and rate setting plan. The DWS financial plan has been completed under separate cover.

This report was prepared based on information supplied by the Municipality, including, future capital and major maintenance projects and wastewater system financial information.

The information supplied by the Municipality was used to generate a financial operating plan which forecasted future annual expenditure requirements from the year 2012 through to 2020. A revenue plan, relying mostly on user fees was generated that supported the expenditure requirements.

### **1.1 McGarry Wastewater System**

The McGarry Wastewater System consists of wastewater collection systems in the communities of Kearns and Virginiatown as well as a sewage treatment plant. The Wastewater System is operated by the Ontario Clean Water Agency.

The wastewater system consists of two (2) sewage pumping stations and three (3) lagoons.

The McGarry Sewage Treatment Lagoons have a capacity of approximately 1135 m<sup>3</sup>/day. The treatment system is comprised of an inlet structure with bar screens, two (2) partially aerated lagoons, one (1) non-aerated polishing lagoon, outlet structures, two (2) blowers, and one (1) emergency diesel generator.

There are two (2) pumping stations: Kearns Lift Station and Virginiatown Lift Station. Each pumping system contains wet wells, submersible pumps, a standby emergency diesel generator and various other appurtenances and equipment for the pumping stations.

The collection system is primarily comprised of clay piping built in the 1930s. In addition to this clay piping, there is some concrete piping, some of which was rehabilitated in 2006 along with approximately 2 km of clay piping constructed in the 1950s.

## **2. Financial Operating Plan**

The financial operating plan includes the full costs of operating the McGarry Wastewater System on an ongoing basis and includes capital investments, operating costs, maintenance costs, administration costs, debt repayment and interest charges (if any).

A financial operating plan for the McGarry Wastewater System was developed using historical financial information and projecting the information forward to forecast the annual expenditure requirements, while taking into account inflation and any growth forecast.

## 2.1 Operating Expenditures

Recurring operating expenses for the McGarry Wastewater System consists of contracted services that includes operator charges; labour and material expenses for ongoing minor maintenance; utility costs such as hydro, fuel and oil costs; major maintenance costs; and other operating expenses such as training expenses, property taxes and debt charges. All operating costs with the exception of major maintenance costs and utility costs are projected to increase on an annual basis at a rate of 2.5% per year. Utility and heating costs are projected to increase at a rate of 5% per year. For the purposes of this rate study, the focus has been on cash flows regarding the wastewater system, and the amortization of assets has not been included.

The total operating expenditures (not including capital costs) for the McGarry Wastewater System is forecasted to be approximately \$272,486 in 2013. The total operating expenditures are expected to increase steadily each year reaching a value of \$308,250 by the year 2020.

## 2.2 Capital Costs

Although ongoing yearly maintenance and repair of the McGarry Wastewater System is forecasted, many of these costs are considered an expense, based on the Township's policy for tangible capital asset accounting. There is one notable, ongoing capital project to highlight within the study period. This project involves a restoration of clay piping that was laid in the 1930's. This project will take place over the years 2014 to 2029 with \$50,000 being allocated to the project each year.

A detailed Capital and Major Maintenance Plan can be found in section 4.

## 2.3 Debt Management

The McGarry Wastewater System has two (2) long term debt charges active during the study period.

There were two long term debts that were taken out in 2006 and 2009 at values of \$620,000 and \$778,750, respectively. According to the FIR statement, the principal amount remaining for both debts combined, in 2012, is \$1,181,531. This value decreases yearly until the end of the study period eventually reaching a value of \$643,142 by the end of year 2020. No additional debt is forecasted during the study period as it is assumed that any future deficits (if applicable) will be covered by general revenue.

A sewer capital fee is collected from all lots in the Township of McGarry, whether they are connected to the system or not. This fee is used to assist in repaying the two long term debt charges.

### 3. Funding Plan

A funding plan was developed with the intention that the annual expenditures forecasted in the financial operating plan can be sustained over the study period. The funding plan primarily relies on a flat rate system applied to all users of the system as well as a sewer capital fee applied to all lots located in McGarry, whether or not they are currently connected to the system. These revenues are billed directly to the users of the systems through the sewage rates applied and the sewer capital fee. If additional revenues are required, they will be generated from general revenues which are utilized in every year from 2014 onward. A full revenue and expenditure chart can be found in Section 4 in Table 1.2

#### 3.1 Rates

The McGarry Wastewater System currently (in 2013) services approximately 313 residential and 10 commercial connections. Customers of the Wastewater System are charged on a monthly basis based on a flat rate. This flat rate has been unchanged for many years.

The financial position of the McGarry Wastewater System is presented below.

The rate setting scenario indicates an increase in the water rates of 15% in 2014, followed by 3% increases in any subsequent years. This scenario will be discussed below

##### 3.1.1 Rate Increase of 15% in 2014 and 2015 and 3% in Subsequent Years

In this rate structure, a 15% increase was chosen to cover some operating, major maintenance, capital as well as any other expenditures part of the wastewater system. The total expenditures related to the Wastewater System, revenues generated from the sewer billings, the surplus or deficit in each year as well as the yearly flat rate can be found in the table below.

	2013	2014	2015	2016	2017	2018	2019	2020
Expenditures	\$272,486	\$329,428	\$336,597	\$344,027	\$351,732	\$359,721	\$368,006	\$390,269
Billings	\$248,000	\$277,757	\$304,964	\$311,740	\$318,739	\$325,968	\$333,434	\$341,145
Contribution from General Revenue	\$24,486	\$51,670	\$31,633	\$32,287	\$32,993	\$33,753	\$34,572	\$49,124
Annual Rate	\$472.68	\$543.58	\$625.12	\$643.87	\$663.19	\$683.08	\$703.58	\$724.68
Annual Rate Increase	0.0%	15.0%	15.0%	3.0%	3.0%	3.0%	3.0%	3.0%

The key information to take from the values presented above, is the row that is highlighted in red. These figures indicate that by increasing the sewer rate by 15% in 2014 and 2015, followed by subsequent increases of 3.0% per year thereafter, a contribution from general revenue will be required ranging from \$24,486 up to \$51,670. The larger rate increases in 2014 and 2015 allows some cost recovery for the rehabilitation of the collection system's old clay piping system beginning in 2014 at \$50,000 per year being allocated to this project.

### **3.2 Debt and Cash Reserves**

Current revenue and expenditure forecasts for the study period will not require raising any additional funds through borrowing. There is no cash reserve balance at the end of 2013. It is anticipated that no reserve will build throughout the study period as any funding available will be used in the clay piping rehabilitation project.

### **3.3 Conclusion**

After adjusting the rates to result in a system that is financially sustainable, it is evident that the McGarry Wastewater System requires large rate increases to be a financially self sustaining system. It was determined that a 49% rate increase in 2014 would be required to have a financially self sustaining system. However, a rate increase of this magnitude was identified as being too drastic for the users of the system, resulting in a 15% increase in 2014 and 15% increase in 2015. If rates continue to increase at 3% every year thereafter, the system will continue to require contributions from general revenue to fund all operating, maintenance and capital expenditures.

In reviewing these statements, it is important to keep in mind that a number of assumptions have been made concerning inflation, interest rates, and growth projections. Actual numbers may significantly deviate from these over time. In addition, capital and major maintenance cost estimates and schedule may vary from current projections. There is a need to monitor the progress of this plan and make adjustments as needed.

## **4. Capital and Major Maintenance Plan**

The Capital and Major Maintenance Plan is set out in the following table.

