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August 20, 2015

**JOINT CORPORATE SERVICES/DEVELOPMENT & INFRASTRUCTURE SERVICES REPORT
- FINANCIAL SERVICES – 2015-42**

TO: Mayor Tony Van Bynen and Members of Council
Committee of the Whole

SUBJECT: Stormwater Management Rate

ORIGIN: MFIP Intern

RECOMMENDATIONS

THAT Financial Services Report - 2015-42 dated August 20, 2015 regarding the Stormwater Management Rate be received and the following recommendations be adopted:

- 1. THAT staff be directed to inform and consult with the public regarding the potential of establishing a stormwater management rate;**
- 2. AND THAT staff report back on the feedback received in January, 2016.**

COMMENTS

Purpose

This report builds on past reports, provides further analysis, and provides steps to move forward on exploring the establishment of a stormwater management rate. This rate will provide a sustainable financing source for the maintenance and replacement of our stormwater infrastructure.

Budget Impact

While some of the work required to establish the rate can be absorbed by current staff, additional resources will be required to enable the introduction of the stormwater management rate. This item will be proposed in the 2016 budget.

Summary

A user rate will help fund the three major drivers for cost increases which are aging infrastructure, changing regulatory requirements and design standards, and climate change. The next step in the implementation of a stormwater management rate is community consultation.

BACKGROUND

This report provides an update to the Information Report 2012-14 (the report is available on the Town’s website and hardcopies are available upon request) and relates to Council direction to establish a stormwater management rate to support the service’s operations.

The establishment of a stormwater management rate was set as a priority in the 2009 Service Delivery Review. As the Capital Financing Sustainability Strategy report has been completed and is being implemented and the Comprehensive Stormwater Master Plan is being developed, this report builds on past reports, provides further analysis, and provides steps to move forward on exploring the establishment a stormwater management rate.

Description and Account of Stormwater Management

The Town is responsible for the planning, design, construction, maintenance, inspections, renewal, and rehabilitation of its stormwater management system.

Stormwater runoff is generated when precipitation from rain and snowmelt events flow over land or impervious surfaces and does not percolate into the ground. As the runoff flows over the land or impervious surfaces (paved streets, parking lots, and building rooftops), it accumulates debris, chemicals, sediment or other pollutants that could adversely affect water quality of our rivers and lakes. Greater levels of stormwater runoff also increase the risks of flooding.

To reduce the negative effects of stormwater runoff, municipalities offer a stormwater management service. Stormwater management refers to building and maintaining structural or engineered control devices and systems such as storm sewers and retention ponds. It also includes operational or procedural practices such as street sweeping and catch basin cleaning. For an overview of the assets the Town manages with respect to stormwater management, refer to Table 1 for the historical cost of our assets as of December 31, 2014.

Table 1: Stormwater Management Asset Inventory

Asset Name	Estimated Quantity	Unit of Measure	Historical Cost
Real Assets			
Land	130	Acres	\$ 12,264,376
Pipe Assets			
Storm Sewers	225	Kilometres	\$ 66,922,601
Catch Basins	7,278	Number	
Stormwater Manholes	3,450	Number	
Outlets to receiving waters	355	Number	
Pond Assets			
Stormwater Management Facilities	53	Number	\$ 9,847,092
Watercourse Assets			
Watercourses, streams, rivers, and creeks	55	Kilometres	N/A

The three major drivers for cost increases are aging infrastructure, changing regulatory requirements and design standards, and climate change.

The following subsections will describe the challenges the Town faces with respect to the three major cost drivers for our stormwater management system.

Aging Infrastructure

Contributions to the stormwater asset replacement fund need to increase in order to fund the replacement of aging assets in the short and long term.

The Town's *Capital Financing Sustainability Strategy* outlines our stormwater capital financing needs over the next half century. According to the strategy, the Town requires asset replacement fund contributions of \$1.56 million per year to ensure that our assets are able to provide for the current service level. Refer to Table 2 to see the replacement value of assets and when assets are recommended to be replaced based on their expected useful life. Staff will expand the Town's Asset Management Plan to better understand the financing needs of the stormwater management service.

Table 2: Stormwater Projected Asset Replacement Costs.

Projected Replacement	Replacement Value	Percentage
1-10 Years	\$ 17,017,100	15%
11-20 Years	\$3,992,900	4%
21 - 30 Years	\$ -	0%
31 - 40 Years	\$ 219,300	0%
41 - 50 Years	\$ 1,670,400	1%
51 + Years	\$ 90,939,100	80%
Total	\$ 113,839,000	100%

Regulatory Requirements and Design Standards

The Town is developing a comprehensive stormwater management master plan as per the regulatory requirements outlined in the Lake Simcoe Protection Act (LSPA).

Stormwater runoff containing phosphorus from both urban and rural sources has upset Lake Simcoe's ecosystem. The runoff has fostered excessive aquatic plant growth, raised water temperatures and decreased oxygen levels, thereby rendering limited breeding grounds for wildlife inhospitable.

Consequently, the Town is developing a comprehensive stormwater master plan to explore various ways to reduce phosphorus levels in runoff within its study area in compliance with Lake Simcoe Region Conservation Authority's guidelines. To execute the stormwater master plan, additional funds for capital investment and operations will be required.

Climate Change

Local governments face legal and liability risks relating to stormwater management and climate change.

Municipalities across Ontario are experiencing more intense and frequent extreme weather events due to climate change. According to the Insurance Bureau of Canada, fire was once the leading cause of property insurance claims in Canada. Now, water and wind damage caused by severe weather are the top concern.

As a result of the increased flooding, some Ontario residents face higher insurance premiums, lower property values, and/or flooding damage that is not covered by their insurance companies. In certain cases, residents are looking beyond their insurer to recover flood-related costs; instead, they are launching lawsuits against the governments responsible for stormwater management.

In 2010, the City of Stratford paid \$7.7 million to settle a class action lawsuit brought on by residents who were flooded in a 2002 storm. This sum is in addition to \$1.3 million that Stratford paid to residents in emergency compensation after the flooding took place. Furthermore, the City of Mississauga and City of Thunder Bay are currently defending a class action lawsuit for damages to private homeowners as a result of floods.

The desired service level of stormwater management cannot be met at the current funding level.

Over the past 5 years, the Town spent \$402,000 per year on average on stormwater management related costs. This spending includes both operating costs and capital costs. With the additional resources needed for asset replacement fund contributions, phosphorus runoff mitigation, and flood control upgrades, the desired level of stormwater management cannot be met at the current funding level. With an update of the *Asset Management Plan* to include stormwater management assets and the implementation of multi-year budgeting, the financial needs will be determined in 2016.

Table 3: Stormwater Management Costs over the Past Five Year Period

Year	2010	2011	2012	2013	2014	Average
Expenditure	\$573,143	\$236,698	\$198,547	\$758,600	\$242,045	\$401,807

ANALYSIS

In order to fund the stormwater infrastructure, the Town should establish a stormwater management rate.

A stormwater management rate helps municipalities sufficiently and equitably fund their stormwater management system.

The *Capital Financing Sustainability Strategy* recommends establishing a stormwater management rate. The motivation for their recommendation is that “Many municipalities have

found it a challenge to reach the required funding levels for stormwater infrastructure, since it is often competing for funding with recreation facilities, roads and other services that are more visible to the public. Rate based stormwater management funding can offer a more stable and dedicated funding source.”

The principles for establishing the stormwater management rate should mirror the principles established for the water and wastewater utility rates.

With the Financial Report 2014-36 (report available on the Town’s website and hardcopies are available upon request), Council adopted the principles of determining the water rate. The following guiding principles are adapted from the water rate principles to be appropriate stormwater rate principles.

1. Fairness and Equity - Rates should reflect each customer's fair share of the costs of controlling and treating stormwater runoff.
2. Water Resource Management - Stormwater rates should be structured to encourage customers to maintain the natural quantity and quality of runoff. This will ensure that customers will be better protected from flooding and the natural waterways will be safe and clean.
3. Simplicity - Customers’ bills should be predictable and easy to understand. The rate should also be simple to administer in order to keep Town costs low.
4. Financial Sustainability - Stormwater should receive no funding from property taxes. Rates must fund all necessary investments and operating costs with respect to stormwater management. These investments allow the Town of Newmarket to expand, operate and maintain a reliable stormwater management system.

Legal Considerations

Under the authority of the *Municipal Act, 2001* the Town has authority to pass a “Fees and Charges” By-law for the purpose of funding stormwater management. As such, tax exempt property owners would be required to pay the stormwater management fee, just as tax exempt properties pay for water and wastewater services. Tax exempt properties include education institutions, philanthropic organizations, churches and long-term care homes.

In order for government revenue sources to be considered a user fee, there must be a rational nexus between the amount of the fee and the cost the user imposes on the government. Therefore, there must be sufficient correlation between the level of runoff from a property and the fee the property owner pays.

Based on these principles, this report explores four options for collecting the required revenue to support the Town's stormwater management system.

Option 1: Status Quo

The status quo means of funding the stormwater management system is through property taxes. As experience has shown, taxes provide an insufficient level of funding because stormwater management projects compete for funding against projects that are more visible to the public. This option has low administration costs; however it is not a sustainable option as a greater level of funding is required in the short and long term. This option does not meet the financial sustainability principle.

Option 2: Flat Rate

In a flat rate system, properties are charged the average costs of servicing their property class with stormwater management. With this system, all residential properties pay one rate and non-residential properties pay another rate. This option has an initial startup and ongoing maintenance costs. It would offer stable and predictable funding for the stormwater management system. However, it is not fair and equitable as a small shop would pay the same fee as a large retail complex.

Option 3: Prorated Rate

In a prorated rate system, properties are charged based upon their individual level of expected water runoff. To determine the level of expected runoff, geographic information system (GIS) software is used to determine the impervious areas of each property. Once the impervious area is determined, the runoff factor is determined using calculations established from the Town's engineering standards. This option is the most complex administratively but offers the greatest incentive to reduce runoff.

Option 4: Tiered Rate:

In a tiered rate system, properties are charged based upon total runoff ranges, where higher ranges are charged higher amounts. To determine which tier a property is a part of, the area of the property is multiplied by the runoff factor of its land use to determine the expected runoff level. With the runoff level, the property is sorted into one of the tiers where the range of the runoff is defined and the associated rate is applied.

Recommended Option

This report recommends using the tiered option (Option 4) where the rate system would reflect properties' runoff and best match the Town's current administration capacity.

The recommended option is Option 4. This option would allow for a charge that reflects a property's runoff that best matches the Town's current administration capacity. It also addresses the requirement of a rational nexus between the user rate and the cost the user imposes on the

utility. In the future, it may be advantageous to establish a rebate to encourage best practices of stormwater management to be employed on private properties.

Implementation Strategy

The following is a tentative timeline of milestones for the next steps of stormwater funding:

1. Consultation with the public on the need for a rate and potential rate structures: October-December, 2015.
2. Report back to Council on the feedback received from the public consultation and seek approval for rate structure: January, 2016.
3. Presentation of final rate structure and implementation approval: June, 2016.
4. Public Education on fee roll-out: October-December, 2016.
5. Town-wide stormwater fee billings begin: January, 2017.

COMMUNITY CONSULTATION

Public consultation is recommended to implement a stormwater management rate.

The Town of Newmarket's Financial Services Department will be working closely with the Communications Department to develop a communications plan that will encompass public education and community engagement. Communication tools and tactics will include, but are not limited to:

- Advertisements and Town Page Notices
- Information on the Newmarket website
- Education and awareness through the Town's social media channels
- Public Information Centre/Open Houses
- Newspaper ads in the local newspaper
- Media releases and advisories

BUSINESS PLAN AND STRATEGIC PLAN LINKAGES

This report supports Council's Strategic Priorities by following the theme of "Efficiency / Financial Management" and the specific priority of "Ensuring Effective and Efficient Management" by pursuing a funding source for stormwater management that is reliable, predictable, and fair to ensure the service can continue to be effectively run in the future.

This report supports the Town's Strategic Plan linkages of being "Well-Equipped & Managed" by implementing processes that reflect sound fiscal responsibility; "Well-Planned & Connected" with long-term strategy matched with a short-term action plan; and "Well-Respected" for considering innovative solutions for the future well-being of the Town.

BUDGET IMPACT (Current and Future)

Operating Budget

While some of the work required to establish the rate can be absorbed by current staff, additional resources will be required to enable the introduction of the stormwater management rate. This item will be proposed in the 2016 budget.

Capital Budget

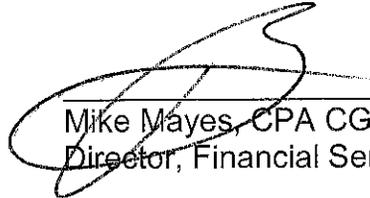
This report has no direct impact on the Town's capital budget, but does propose the development of a sustainable financing source for the maintenance and replacement of our stormwater infrastructure.

CONTACT

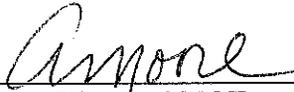
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