

TOWN OF LAKESHORE
ENGINEERING AND INFRASTRUCTURE SERVICES

TO: Mayor and Members of Council

FROM: Nelson Cavacas
Director, Engineering and Infrastructure Services

DATE: June 10, 2018

SUBJECT: Run-off Based Stormwater Fee Assessment

RECOMMENDATION:

It is recommended that:

1. Council receive the attached report for information purposes.

BACKGROUND:

Council requested at the November 21, 2017 meeting a report on the establishment of a run-off based storm water fee assessment.

COMMENTS:

While the concept seems simple, the steps and process of making a change in the recovery of urban storm and municipal drainage costs is complex. Typically properties are serviced by stormwater management systems consisting of the following:

- 1) Urban Storm Sewers
- 2) Municipal Drain (open or enclosed) under Drainage Act
- 3) Storm Water Management Ponds
- 4) Natural Water Courses (i.e. rivers, creeks or lakes)
- 5) Various combinations of the above systems.

Urban Storm Sewers

Primarily, urban storm drainage systems can be installed, improved or maintained under the following methods:

- Installed by developers and assumed by municipality
- Installed, improved and maintained under Drainage Act
- Installed as a local improvement
- Installed under general tax levy

The majority of urban storm sewers have been installed by developers and assumed by the municipality. Urban storm sewers generally provide drainage of surface run off in built up areas. Urban properties enjoy similar benefit from the installation, maintenance and improvement of a storm sewer system and associated costs are therefore funded through the general levy.

Urban storm sewers typically possess the following characteristics:

- Erected in municipal right of way/easement registered on title
- Municipal asset
- Provides equal benefit to all residents served by system
- Closed piping system
- Associated costs funded by general tax levy
- Commonly in sanitary sewage area

Municipal Drains

In agricultural areas the benefits to agricultural properties from a drain improvement will vary from property to property. Municipal drains and their related sub surface components are designed to reduce soil erosion, sediment transfer and standing water thereby increasing crop productivity. The Drainage Act allows the engineer to determine benefit and apportion project costs on a cost per benefit basis to the landowners in the watershed. The Act further provides that “lands used for agricultural purposes” are eligible for Drainage Act grants.

Municipal drains commonly possess the following characteristics:

- Primarily serve agricultural areas
- Installed on private property without an easement on title
- Not a municipal asset
- Commonly open ditch design
- Commonly not in sanitary sewage area
- Associated cost paid by benefitting landowners
- Benefits to landowners vary

Storm Water Management Ponds

The majority of storm water management ponds have been installed by developers and assumed by the municipality. Storm water management (SWM) ponds generally deal with surface run off only and are designed primarily to prevent flooding in built up areas. Urban properties similarly to urban storm sewers enjoy the benefit from the installation, maintenance and improvement of a SWM ponds and associated costs are therefore funded through the general levy.

SWM Ponds typically possess the following characteristics:

- Erected in municipal property registered on title
- Municipal asset
- Provides equal benefit to all residents served by the SWM pond
- Can be either a dry or wet pond

- Associated costs funded by general tax levy
- Commonly in sanitary sewage area

Natural Water Courses

Properties that abut and topography slopes towards natural water courses such as Belle River, Pike Creek or St. Clair Lake do not rely on the above drainage systems and run off their storm water directly into the abutting natural water course. In some instances a small portion of the front yards may drain towards the municipal road that could be serviced by either an urban storm sewer or municipal drain but the drainage benefit would be minor.

As noted above for the different types of the Town's drainage systems, storm water management systems are currently funded by a combination of general tax levy and user fee cost recovery of associated costs to benefitting landowners.

Run-off Based Storm Water Fee

Currently in Ontario there are only eight municipalities that have implemented a separate storm water fee to fund storm water management infrastructure. Storm water fees are specifically imposed on property owners to cover the costs of storm water management (i.e.: the operation, monitoring, and maintenance of grey and green storm water infrastructure).

The Municipal Act, 2001 allows municipalities to implement storm water fees. While the Act is silent on how stormwater fees could be implemented, options for calculating such fees include:

- Flat fee or tiered flat fee; and,
- Equivalent residential unit and single-family unit; and,
- Impervious area: based on the total amount of impervious area on a property.

Flat Fee

The flat fee or tier flat fee is a set charge that does not vary based on use or size of the land, or a series of set charges for different categories of land (e.g., residential and commercial).

Equivalent Residential Unit

The equivalent residential unit and single-family unit are calculated through statistical sampling of measured impervious areas for individual residential dwellings to determine the average equivalent residential unit (ERU) or single-family unit (SFU) (square meters of impervious area) that are used as the base billing unit against which all other charges are calculated (ERU) or to come up with the average impervious area (SFU).

Impervious Area

The impervious area method is based on the total amount of impervious area on each individual property. Hence, the fee will vary dependent on size and impervious coverage of the individual property. Larger properties with greater areas of impervious surfaces would have larger fees than smaller properties on basis that greater surface water run-off is generated by areas with greater impervious surfaces.

Of the 8 Ontario municipalities that charge storm water fees and the fees differ because of varying program needs, fee calculation method, and community input. The average storm water fee for a single detached residential property in Ontario for municipalities that charge a fee ranges from \$3.95 to \$14.92 per month. Attached is a summary table of the fees and methods employed by the 8 municipalities.

Fee Implementation Benefits

There are many benefits to funding storm water management through a separate fee. First, it can provide municipalities with a dedicated and stable funding source that allows long-range planning, preventative maintenance, and large-scale capital improvements.

At least equally important, a well-designed storm water fee can give developers and property owners an economic incentive to reduce the runoff from their property. This incentive is created if the storm water fee is based on the amount of impermeable surface on a property, whether directly or through a credit program. Landowners can reduce runoff, and therefore their storm water fee, through green infrastructure and other best management practices such as rain barrels, cisterns, rain gardens or permeable pavement or pavers. The combined effect of such practices can dramatically reduce the speed, quantity and pollution of runoff that the municipality must then manage.

Storm water fees based on runoff also have other advantages. For example, they are a more equitable way to finance storm water management, because they implement the polluter pay principle. It requires those who create the most runoff to pay for their proportional share. Storm water fees can also increase awareness of and transparency in how much runoff management costs and why the service is needed. Public understanding can help build public support for this essential, but often invisible public service.

Implementation Challenges

Implementing storm water fees is a challenging exercise that will require to be managed and will involve significant time and resources to establish and implement.

First, the public may fear a new tax or fee along with the public potentially not understand the need for it, or may distrust that the money will be spent as intended. The Town would need to minimize this challenge through effective public communications on the rationale and implementation of the fee, such as a storm water advisory committee and other outreach and education programs.

Secondly, there may be strong opposition from those for whom storm water fees impose a significant financial burden. The Town would need to consider the potential of whether to offer assistance for property owners that are legitimately unable to pay by any of the following:

- phasing in the fee over a period of time,
- by reducing or eliminating the fee for certain property owners or classes of property,
- by helping such owners to alter their properties to reduce runoff.

Thirdly, what is a common characteristic with the 8 municipalities in Ontario that have implemented storm water fees is that they all are more urban built up areas with less or minimal rural agricultural lands. Implementation of a run-off based fees are designed to best suite municipalities with higher density populations with urban built up landscapes. Rural based municipalities typically employ and administer the Drainage Act process for drainage maintenance and improvements which are recovered from the benefitting landowners. In addition, agricultural farmland properties are also eligible for grant subsidies for drainage works completed under the Drainage Act. To establish a run-off based storm fee for rural properties would be challenging considering implications of farm properties loss of current grants from OMAFRA (Ontario Ministry of Agricultural, Food and Rural Affairs). As such, a potential for a grant for farm properties would need to be subsidized by the Town. Towns similar to Lakeshore with significant large rural areas have not been successful in implementing a run-off based fee program in the past. Consideration was given in Chatham-Kent but ultimately did not proceed.

Fourthly, there are administrative costs, such as the rate study, database management, billing and customer services that require ongoing resources (both staffing and software) to support fee implementation. These costs would need to be considered in the context of the Town establishing a fee design that is compatible with resources and capacity, or if groups of municipalities could share in the fee program costs.

SUMMARY

In conclusion, considering the foregoing information on the approaches and methods of implementing a charge for storm water fees which details the complexity of these programs and as well the characteristics of the Town of Lakeshore having a large rural agricultural area component, it is recommended that implementation of a storm water fee program is premature at this time and could potentially be revisited in the future.

As communities grow, the agricultural history and characteristics of the municipal drain will evolve to the point where they may no longer be applicable. The evolving changes to areas serviced by municipal drains end up serving built up urban areas and eventually it is appropriate in some cases to abandon the municipal drain under the Drainage Act.

In addition, to implement a run-off based storm water fees there is a number of studies and information required to complete financial analyses and cost recovery approaches. Some of these are ongoing such as the Town's Asset Management Plan and others that

have commenced this year with the completion of a Storm Water Master Plan. Also program costs on maintaining and administering a new storm water fees needs to be reviewed that would consider resource capacity of staffing and technology required to implement. Integration of new software for establishing a new fee program is premature at this time as well considering the Town has identified the need to upgrade current systems.

OTHERS CONSULTED:

The Director of Finance was consulted along with the research completed into what the current Ontario municipalities have implemented with a run-off based storm fees program.

FINANCIAL IMPACTS:

The information presented in this report provides Council with a general overview of the various approaches and methods of a run-off based storm fees program. The recommendation noted within the report does not have any financial impacts at this time but the report does highlight the future aspects that the Town will need to consider in the future if implementation of a run-off based storm fee program is pursued.

Prepared by:

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Attachment: Description of Municipal Storm Water Fee Programs in Ontario