

City of Mississauga
Corporate Report



<p>Date: October 20, 2020</p> <p>To: Chair and Members of General Committee</p>	<p>Originator's files:</p>
<p>From: Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works</p>	<p>Meeting date: November 4, 2020</p>

Subject

Stormwater Charge Credit Program - 5 Year Review

Recommendations

1. That the report dated October 20, 2020 from the Commissioner of Transportation and Works titled Stormwater Charge Credit Program – 5 Year Review be received for information; and
2. That staff report back to General Committee with a detailed implementation plan addressing the proposed options to improve the Non- and Multi-residential Credit Program as outlined in the report dated October 20, 2020 from the Commissioner of Transportation and Works titled Stormwater Charge Credit Program – 5 Year Review.

Report Highlights

- As part of a 5-year review of its Stormwater Charge Program, the City retained consulting services to undertake a review of its Non- and Multi-residential Credit Program, including consideration of a grant program as requested by the Mississauga Board of Trade (MBOT), and residential credit programs being offered by others.
- The City's Non- and Multi-residential Credit Program was found to be robust and generally consistent with other large benchmarked communities in North America.
- Five recommendations to improve the Non- and Multi-residential Credit Program were shortlisted for further consideration.
- MBOT has been consulted and is generally supportive of the five recommendations to improve the Non- and Multi-residential Credit Program but requests that the maximum 50 percent credit currently offered receive further consideration for an increase.
- Through the benchmarking exercise of residential credit programs offered by communities in North America, it remains staff's opinion that the current Residential Stormwater Outreach and Education Program is the best approach and most cost-effective way to

engage and educate Mississauga's residential community on stormwater best management practices.

Background

Beginning in January 2016, the City of Mississauga launched its Stormwater Charge Program that included a Non- and Multi-residential Credit Program for industrial, commercial, institutional and multi-residential property owners. The purpose of this credit program is to encourage non-residential and multi-residential property owners, making up 70 percent of the City's land area, to implement stormwater management best practices on-site and be eligible for a stormwater charge fee reduction of up to a maximum of 50 percent. As of October 2020, the participation rate for eligible properties is below two percent.

With respect to a residential incentive program, the question of how best to recognize residential homeowners who take action to manage stormwater has been a topic thoroughly considered during the development and after the implementation of the Stormwater Charge Program. The following table, Table 1, briefly summarizes the residential program options previously taken to General Committee and Council.

Table 1: Summary of Residential Program Options

Subject	Highlights of Residential Incentive Discussions
<p>Corporate report titled '<i>Stormwater Financing Study (Phase 1) – Funding Recommendations</i>'</p> <p>General Committee December 5, 2012 (Adopted by Council on December 12, 2012)</p>	<ul style="list-style-type: none"> ▪ While the City recognizes the importance of on-site stormwater management measures on residential properties, the anticipated high administration cost of such a program would outweigh the net savings in the City's stormwater program ▪ Staff recommended that an incentive program be explored which offers a one-time discount on the capital cost of implementing stormwater controls such as rain barrels
<p>Corporate report titled '<i>Stormwater Financing Study (Phase 2) – Implementation Plan</i>'</p> <p>General Committee December 4, 2013 (Council adopted referral back to staff on December 11, 2013)</p>	<ul style="list-style-type: none"> ▪ The report recommended that a residential incentive program be developed with an offer of one-time incentives to homeowners for pre-approved stormwater measures such as rain barrels, rain gardens, soak-away pits or permeable pavements ▪ Members of Committee expressed concerns with the administrative costs and bureaucratic scale of implementing this program and referred the matter back to staff for more information

Subject (cont.)	Highlights of Residential Incentive Discussions (cont.)
<p>Corporate report titled <i>'Stormwater Charge Implementation Update'</i></p> <p>General Committee May 20, 2015 (Adopted by Council on May 27, 2015)</p>	<ul style="list-style-type: none"> ▪ Staff recommended that an Outreach and Education Program be introduced for the single-family residential sector ▪ Staff research found that residential financial incentive programs for stormwater best management practices on residential properties commonly has very low uptake ▪ Members of Committee expressed concerns the report did not recommend incentives and requested more information on the residential stormwater credit program being offered by the City of Kitchener
<p>Corporate report titled <i>'Stormwater Charge Implementation Update – Additional Information on Residential Programs'</i></p> <p>Council May 27, 2015</p>	<ul style="list-style-type: none"> ▪ Additional information related to Kitchener's residential stormwater credit program was presented ▪ Staff concluded that the Outreach and Education Program for the residential sector still represents the best value to realize an uptake of stormwater best management practices on residential properties. ▪ Council received this report for information
<p>Council Meeting October 28, 2015</p>	<ul style="list-style-type: none"> ▪ Council supported an amended motion by Councillor Ras to establish a Working Committee of Councillors and staff to consider a separate credit program for residential properties. ▪ In January 2016, a Residential Program Working Committee was initiated comprised of Councillors Ras, Fonseca, Starr, Mahoney and Carlson and City staff. In addition to Working Group meetings, two well attended and well-received facilitated workshops were held on April 13, 2016.
<p>Corporate Report titled <i>'Stormwater Programs for Residential Properties'</i></p> <p>General Committee June 29, 2016 (Adopted by Council on July 6, 2016)</p>	<ul style="list-style-type: none"> ▪ Based on findings from the Residential Program Working Committee, an enhanced Residential Stormwater Outreach and Education Program was determined to be the best value option to address public outreach and education desires and to develop a Residential Home Visit Service to engage homeowners to apply general stormwater best practices on their property ▪ The report also concluded that financial recognition programs, such as credits and rebates, are not recommended as these programs do not incentivize good stormwater management practices or provide benefits to municipal stormwater programs, typically have very low participation rates, and are costly to provide. ▪ Council adopted staff's recommendations (as amended)

Subject (cont.)	Highlights of Residential Incentive Discussions (cont.)
<p>Corporate report titled <i>'Enhanced Stormwater Outreach and Education Program'</i></p> <p>General Committee October 4, 2017</p>	<ul style="list-style-type: none"> ▪ An update was provided on the enhanced Residential Stormwater Outreach and Education Program and the Residential Stormwater Home Visit Service pilot program ▪ General Committee did not make a decision on this report which recommended the following: <ul style="list-style-type: none"> ▪ The pilot Enhanced Residential Stormwater Outreach and Education Program to be made permanent; ▪ Budget increase for promotional material; ▪ Increased funding to expand the Residential Stormwater Home Visit Service; ▪ Conversion of the two full-time contracts to permanent positions ▪ General Committee was concerned over the effectiveness of in-person outreach and the potential for duplication with initiatives offered by the Region and local conservation authorities and did not support the recommendations ▪ The Commissioner of Transportation and Works indicated that staff would continue with the current pilot program and will report back in a year
<p>Corporate report titled <i>'Enhanced Stormwater Outreach and Education Program Update'</i></p> <p>General Committee June 26, 2019 (Adopted by Council on July 3, 2019)</p>	<ul style="list-style-type: none"> ▪ Upon completion of the Enhanced Residential Stormwater Outreach and Education Pilot Program, staff reassessed the program and proposed a strategic shift to digital outreach, supplemented by in-person interactions, as well as a greater presence with the commercial sectors; resulting in a cost effective way to engage the public ▪ General Committee was in favour of this approach

While the Non- and Multi-residential Credit Program has remained unchanged since the launch of the Stormwater Charge, significant efforts have been spent on developing and refining the approach to the residential sector. Most recently in 2019, Council supported an updated Stormwater Outreach and Education Program with a primary focus on digital engagement and a web-based presence. This program includes online videos and tutorials to assist residents in stormwater management, digital comic books to increase stormwater literacy in schools, and other educational offerings.

In December 2019, as the City headed into the fifth year of its Stormwater Charge Program, staff commenced a study to review the program's Non- and Multi-residential Credit Program including, in response to a request by MBOT, consideration for a grant program (particularly the

one being offered by the City of Philadelphia) to support the business sector with implementing on-site stormwater management measures. This study also included a review of existing residential incentive programs currently being offered by other communities.

To assist with this review, the City retained consulting services led by Resilient Consulting Corporation with sub-consultant CHI ('Consulting Team'). As part of its review, the Consulting Team conducted thorough jurisdictional scans of 14 benchmark communities (five Canadian and nine American communities) with established stormwater credit programs. The purpose of this review was multi-fold and included the following:

- Gather information through online research, questionnaires and phone interviews to thoroughly review each community's current stormwater credit program in relation to the City of Mississauga's;
- Compare successes and challenges of stormwater programs across communities in relation to the City of Mississauga's;
- Recommend enhancements and improvements to the City's Non- and Multi-Residential Credit Program, and;
- Provide options to consider for a residential incentive program.

This information report provides a summary of the Consulting Team's study findings and recommended improvements.

Comments

The following is a summary of the benchmarking exercise undertaken by the Consulting Team related to the Non- and Multi-residential Credit Program and residential incentive options for the City to consider moving forward.

Non- and Multi-Residential Credit Program

Non- and Multi-Residential credit programs are a part of a comprehensive stormwater rate structure. The principle behind a credit program is based on fairness and equity between the credit amounts offered and the cost savings to the City's Stormwater Program resulting from the implementation of stormwater measures on private properties.

All 14 benchmarked communities have some form of stormwater credit program available to non-residential and, in some cases, multi-residential property owners. While it was found that there are overall commonalities with credit categories among the communities such as for flood protection or water quality treatment, each community's credit program is individualized and tailored to meet broader stormwater objectives of or specific regulations imposed on that municipality.

The City's Non- and Multi-residential Credit Program was developed in consultation with the Stormwater Credit Stakeholder Group comprised of representatives from the institutional,

development and commercial sectors. The resulting program was developed based on aligning with the objectives of the City's Stormwater Program such as flood control and water quality.

Unlike Mississauga, some benchmarked communities have developed their programs with a focus towards meeting regulations or legal obligations. As an example, a number of communities benchmarked have a combined stormwater and wastewater system, mainly in the older areas, where combined sewer overflow is a serious concern. This occurs when heavy rain overwhelms the capacity of the wastewater treatment plants to handle the flow from both storm and sanitary sewers, the effluent is forced to divert untreated into the system's creeks, rivers and other water bodies. The City of Philadelphia, Pennsylvania and Northeast Ohio Regional Sewer District in Cleveland, Ohio, for instance, are under enforcement orders of the U.S. Environmental Protection Agency (EPA) to reduce combined sewer overflow with the large-scale implementation of green infrastructure. Encouraging the non-residential sector to implement green infrastructure on-site is seen as a critical step by these communities towards compliance with the EPA consent orders and decrees. In another example, the Cities of Alexandria and Richmond, Virginia are required to meet state and federal pollution reduction mandates associated with areas that drain into the Chesapeake Bay watershed; deemed to be a sensitive water body of ecological and economic significance. Their credit programs have been developed through that lens.

Overall, the Consulting Team concluded that the City's Non- and Multi-residential Credit Program is robust and consistent with what other large communities are offering in North America. Further, it found that the maximum 50 percent credit given by the City is in line with the median value of maximum credit given by the benchmarked communities. While these findings are encouraging, the Consulting Team pursued opportunities to further enhance Mississauga's existing credit program in line with the City's objectives.

Consequently, a list of 12 preliminary options were proposed and considered based on applicability and level of effort. Through multiple meetings between the Consulting Team and City staff, the 12 preliminary options were shortlisted to five recommended options, which this report will focus on. There is, however, one preliminary option related to offering grants which was ruled out that warrants a more detailed explanation given MBOT's request for this option to be considered.

Currently, the City's credit program does not offer grants that are specifically intended to encourage credit uptake. Of all the benchmarked communities and agencies across North America, only the City of Philadelphia and the Northeast Ohio Regional Sewer District in Cleveland offer grants. In these cases, their grant programs are intended to specifically offer help to achieve the terms of their respective combined sewer overflow U.S. EPA consent orders and decrees.

In the case of the City of Philadelphia, it is in its ninth year of a 25-year implementation schedule to fulfill a consent order with the EPA to reduce Philadelphia's combined sewer overflow by 85

percent (referred to as the *Green City, Clean Waters* program). One way that Philadelphia needs to achieve this is by integrating green stormwater features such as bio-retention, swales, wetlands, forest buffers, and vegetated strips.

The City of Philadelphia's Stormwater Credit Program offers a maximum credit of nearly 100 percent; however, in most cases the credit alone is not significant enough to incentivize private investment in green infrastructure.

In 2012, the City of Philadelphia partnered with the Philadelphia Industrial Development Corporation (PIDC), a public-private economic development corporation, to offer stormwater grants to fund the design and construction of stormwater retrofit projects on commercial, industrial, multi-family and institutional properties. It is staff's understanding that the grants given out in 2019 were in excess of \$20 million. Of note is that projects undertaken using the stormwater grants are allowed to qualify for credits to stimulate investments in green infrastructure which is seen as a critical step by the City towards reducing the volume of combined sewer overflow and meeting the terms of the EPA consent order.

In short, stimulus grants to increase credit uptake are being used in communities that have been ordered to reduce combined sewer overflows. The grant program was implemented to assist in meeting legal obligations with respect to their wet weather infrastructure and operations. The City of Mississauga does not have combined sewers or orders to reduce overflow as in the case of City of Philadelphia and Northeast Ohio Regional Sewer District in Cleveland. As such, offering significant grant funding to property owners for capital investment of on-site stormwater management measures in order to obtain additional incentives via credits is not seen as a suitable approach for Mississauga. This would also translate into a higher stormwater charge rate to offset the cost of the grant program funded by stormwater charge revenue.

The five recommended options shortlisted for further consideration are shown in the following table, Table 2.

Table 2: Non- and Multi-Residential Credit Program Options Recommended for Further Review

Recommended Options	Description
Formalize process for communal facilities to share credits	The City currently allows for credits to be allocated to multiple property owners for communal facilities based on contributing impervious area or some other acceptable cost-share formula between property owners. Business rules and processes need to be developed to formalize this option.
Define variable credit criteria by geography	The current credit criteria are applied uniformly across the City. The City may consider variable credit criteria defined by geography, such as at a watershed or sub-watershed level, based on City development requirements. This notion allows the City to encourage uptake of onsite stormwater management measures in areas where these would be most effective and, likewise, discourage uptake in areas where they would be less effective (as over-controlling beyond requirements to achieve greater credit amount may not provide reciprocal benefits to the City's stormwater system).
Apply sliding scale criteria	This option is to be considered concurrently with the option ' Define variable credit criteria by geography '. This option is intended for property owners who wish to obtain credits through site retrofits, outside of the development process, but cannot meet full control requirements due to site constraints or cost. A "sliding scale" approach which provides partial credits can be applied to the City development requirements at a watershed or sub-watershed level.
Change maximum credit in any category	The current maximum credits under each of the four credit categories are: Peak Flow Reduction – 40%, Runoff Volume Reduction – 15%, Water Quality Treatment – 10%, Pollution Prevention – 5%. These figures were generally based on the need of the City during the development of the stormwater charge credit program. Given fluctuations in the needs and focus of the City's annual stormwater program, it may be appropriate to re-evaluate the optimal maximum credits in each category. This approach would allow the credit applicants the flexibility to maximize credits in categories that would provide the most benefit and/or align with current stormwater goals and objectives of the City.
Add new practices or measures to be eligible	Review and possibly expand the list of eligible stormwater management measures (new technologies and practices) in the credit program.

On October 1, 2020, City staff held a consultation meeting with MBOT to present the credit program review, discuss preliminary results and solicit feedback. Formal comments from MBOT were received on October 13, 2020 (Appendix 1). MBOT is generally supportive of the five options shortlisted for further consideration but strongly recommends that the maximum 50 percent overall credit offered be given greater consideration. This feedback from MBOT will be considered in combination with the recommended options as a next step.

Given the complexity of the City's Stormwater Charge Program, prior to any option being incorporated into the credit program, additional evaluation must be taken at a detailed level. This would include an impact assessment to existing credit holders, changes to existing business processes and IT systems as well as revisions required to stormwater policies and the by-law.

Residential Incentive Options

The intent of a residential incentive program is to encourage desirable behaviour on a smaller/single property scale and that on-site stormwater management may contribute a benefit to the City's overall stormwater programs and infrastructure.

As part of the City's 5-year review of its Stormwater Charge Credit Program, the Consulting Team was tasked with undertaking a benchmarking exercise on residential incentives that are being offered by other communities in North America. The purpose of this benchmarking exercise is not intended to revisit the approach that was approved by Council last year but to highlight programs currently being offered and identify any new approaches which may warrant consideration in the future.

The Consultant Team's study identified various forms of residential incentives found throughout North America that have been classified into four types:

- Credits – on-going reduction of stormwater charge;
- Rebates – one time reward;
- Subsidies – cost reduction on materials or supplies from an external body/vendor, and;
- Other – incentives provided by an organization (e.g. guidance/education programs or in-kind services).

Of the 14 benchmark communities or agencies, 10 offer some form of stormwater credits to residential property owners of which only two examples are found in Canada (Kitchener, ON and Victoria, BC). Maximum credits on average are approximately 50 percent. Some of the benchmark communities have extensive combined sewer systems and as a result their stormwater pressures and program objectives are not comparable to Mississauga. Five benchmarked communities offered rebates to residential property owners while none provided a formal subsidy. However, many offer 'other' incentives in the form of guidance/education similar to Mississauga's existing Stormwater Outreach and Education Program.

The Consulting Team compared Mississauga to other benchmarked communities and provided a range of residential incentive program options being offered. These options, including a subsidy program, rebate program and credit program, have largely been explored at length in the past by the City and subsequently not pursued.

In practice, there are several drawbacks to any residential incentive program including start-up and on-going administrative costs, enforcement, impact to stormwater charge rates and, most importantly, poor uptake. These drawbacks were highlighted in previous Corporate Reports when residential incentive programs were considered in the past which led to the Stormwater Outreach and Education Program currently in place; an approach that staff believes remains the best option and most cost-effective way to engage and educate Mississauga's residential community.

Strategic Plan

The Stormwater Charge Credit Program aligns with the *Connect: Completing our Neighbourhoods*, *Prosper: Cultivating Creative and Innovative Businesses* and *Green: Living Green* pillars.

Financial Impact

There are no immediate financial impacts as a result of the adoption of the recommendations in this report.

Conclusion

Based on the Consultant Team's experience with other stormwater user fees across North America as well as discussions with the benchmarked communities that were reviewed as part of its study, the City's efforts with respect to the stormwater charge and credit program meet or exceed an acceptable standard of practice.

As a next step, staff is recommending that a detailed review of the Consulting Team's recommended options and MBOT's suggestion on the Non- and Multi-residential Credit Program to identify implications and merit for implementation be undertaken.

Attachments

Appendix 1: Letter from Mississauga Board of Trade



Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works

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