Newmarket

STORMWATER UTILITY FEES AND CREDIT PROGRAMS: *A FIRST STEP*

EXECUTIVE SUMMARY

2017

Introduction

The Town of Newmarket, with support from the Ministry of Environment and Climate Change, conducted an in-depth research project on municipal stormwater utility fee and landowner credit programs. Each municipality is seeking a fair program that will generate sustainable funding for stormwater management. The struggle they face is communicating to the public and engaging landowners in stormwater best management practices.

As part of this project, Newmarket conducted a unique community engagement approach in an attempt to discover how to connect with landowners and share these principles with other municipalities.

In addition, several other items for municipalities were created, including:

- An in-depth jurisdictional scan with lessons learned;
- A draft model by-law;
- A “how to manual” for the Town of Newmarket’s stormwater program;
- Interviews with seven municipalities;
- Community Engagement Summary;
- Communication material examples;

The remainder of this document provides the main highlights of the jurisdictional scan and the community engagement summary documents.

Municipal Stormwater Fee and Budget Information

Most stormwater fee programs in Canada have been implemented in the last 3 years (2015-2017). There are now 22 municipalities with stormwater programs in Canada and 14 in Ontario with more on the way. With the variety of existing programs, most municipalities opt for the tiered flat fee structure and the majority do not offer a landowner credit program, particularly when it comes to the residential sector.

The Town of Newmarket created an online tool which provides a summary of these programs in Canada. You can find the tool on the Town of Newmarket website.

When a stormwater fee program is implemented, municipalities tend to phase in sustainable stormwater funding over the course of 10 years, despite their preference to have sustainable funding from day one. This at least doubles their stormwater budget. A comparison of 42 municipalities in Canada suggests that a healthy per capita stormwater budget is approximately $45-$50.

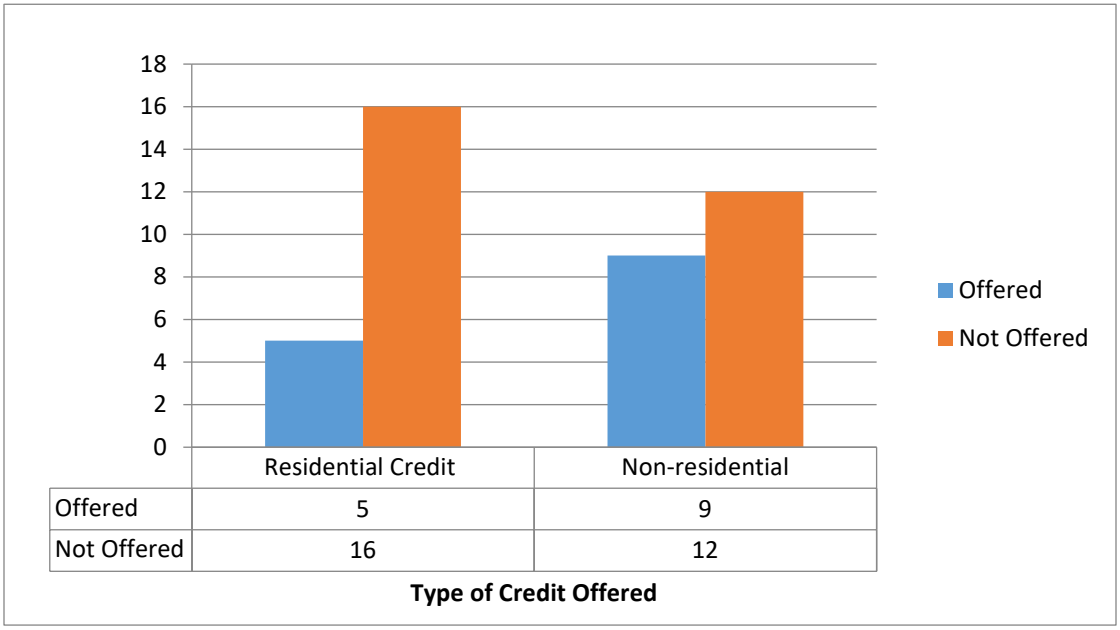
More details on municipal stormwater budgets can be found in **Appendix G** of the Jurisdictional Scan.

Credit Programs

As mentioned previously, most municipalities do not offer a landowner credit program, particularly when it comes to the residential sector.

Those that do offer a program have been plagued with low participation rates. The reason: the messaging and motivations behind these programs do not encourage participation.

Figure 1: Canadian Municipal Credit Offering



Community Engagement Summary

To truly engage residents and landowners in a community is difficult. Soliciting feedback is often not enough to constituent as “engagement”. Traditional engagement techniques have relied upon convincing the public to change their behaviours based on information provided. Most municipalities have used flood prevention as the main message when trying to sell their stormwater utility programs. This in not effective as is evident in the lack of uptake of credit programs and the public push back municipalities receive on fee programs.

Connections between people, nature and the existing systems often do not exist and these need to be re-established. Appropriate quality time needs to be set aside to truly engage with your community and connect to people’s values to inspire them to be involved in the process.

Newmarket changed their process to emulate this approach and conducted two engagements in September 2017; one with residents and one with businesses.

Below is a recap of key findings of the Engagements with respect to: 1) The Needs; 2) The Benefits, and 3) The Top Five Tips. Full details on the engagements and the results are outlined in **Appendix F: Community Engagement and Feedback Summary.**

The Need:

Below are key needs that were identified, each of which represents a trigger for change.

1. Municipalities are being faced with increased complex issues that are interrelated in their dynamics and impact on their communities, with often decreasing resources.
2. Stress is one of the dynamics that is pervasive in these issues– stress on infrastructure and systems, stress on municipalities to fund solutions to complex issues and stress in people's lives.
3. One of the greatest stress relievers is to explore alternatives, rather than being held hostage by the lists of 'best practices and 'to do's, especially when this exploration is done in a creative way that opens up minds and channels while finding new solutions.
4. People are thirsty for community, on their own terms, especially in the world of social media dominance and online activities. They need positive reasons to come out of hibernation and into their physical neighbourhoods to contribute their ideas, knowledge and perspectives.
5. Businesses are hungry for innovation and new ways of understanding their clientele and the communities they are working in.

The Benefits:

The approaches tested through these two engagements provided ways of addressing each of the need above. In addition, the following benefits emerged:

1. When a new context is created for topics such as stormwater, a door opens for new dialogue that in turn generates new possibilities for dealing with chronic issues. It also attracts new players and perspectives to get involved with the municipality in productive positive ways such as community projects. Information gathered at engagements using this methodology can be highly insightful for other departments of the municipality.

2. The role of the municipality has the opportunity to shift from tax collector to a facilitator/broker to bring business and community together to co-create new projects that deal with the stormwater while also offering other benefits to the players. The role of providing soft or human infrastructure in addition to the hard infrastructure is a vital role for municipal governments in the complexity of our communities today.

3. When we view neighbourhoods as integrated systems in which stormwater is a connector, there is significant opportunity to integrate stormwater solutions and systems into community planning models rather than being treated as an afterthought.

4. When communities see the physical outcomes of stormwater being reframed as an asset, rather than a liability, there is the opportunity to take other topics that have been viewed negatively in the past, and explore how these too can be shifted to become drivers of positive change.

5. Initiatives and projects that flow from this type of engagement impact more than one municipal department, thereby providing bridges between what can be siloes compartments for innovative collaboration.

Top Five Tips for Engagement

1. Manage Expectations

People have been trained to expect the typical Town Meetings, so when they arrive and see a very different set up, some can feel threatened. The invite should provide a ‘heads up’ that this isn’t ‘business as usual’.

2. A Sense of Something New

Social innovation speaks to the need to send up a flare that signals new possibilities and then see who comes. This is very different from community based social marketing that targets specific groups.

3. Keep It Simple

The more the complex the issue, the simpler the design of the engagement has to be. It needs a clean structure that poses unusual questions using individual and group activities and techniques.

4. Keep It Subtle

People love to uncover and discover, rather than being hit over the head with information and guilt. The activities need to be designed so that the answers are not obvious, and there is almost a mystery as to how it will come back to the topic at hand in the end.

5. Keep It Going

If residents and businesses are going to share key thoughts, feelings and insights, they need to know it is going to be directly applied to something concrete like

community projects and continuing to building the relationships and something exciting and new.

Alternative Approaches

Having dedicated funding for stormwater may assist municipalities with maintaining stormwater assets, but if we want to see real change in how stormwater is managed, change needs to occur to how the system is designed and implemented. Below are some examples of various approaches.

One Water System

Most water systems are segregated from one another. However, water exists in a cycle which highlights the need for a holistic approach to manage stormwater. We need to position stormwater as a resource and develop programs and systems which integrate water utilities and utilize each other (The Johnson Foundation, 2012).

New Jersey's water infrastructure was suffering an array of deficiencies and a big price tag to fix them; $40 billion over the next 20 years (Jersey Water Works, 2017). Since no organization could solve their problems on their own, they came together to look at how they could address the problems across all sectors (drinking water, wastewater and stormwater). The result was the Jersey Water Works collaborative. They created common goals and objectives and will be releasing their work plan later in 2017.

Watershed Based Approach

Stormwater does not stay within private and political boundaries, it moves within a watershed or sub-watershed. It makes sense then to create programs which manage stormwater on this scale. Ideas such as the selling of credits and allowing multiple properties to drain to a shared stormwater feature become possible. Philadelphia found a 67% reduction in cost per greened acre by allowing private firms to 'bundle' green infrastructure across multiple private properties. (Sustainable Prosperity, 2016).

Washington, D.C. has created a stormwater market. Properties generate Stormwater Retention Credits (SRC) for voluntary green infrastructure that reduces stormwater runoff. Owners can sell their credits in an open market to others who need to use them to meet up to half of their regulatory stormwater retention requirements. Under this program, owners can also sell their Credits directly to the Department of Energy and Environment to ensure their return on investment. This allows the District to leverage private investment in targeted areas to provide a maximum benefit to the environment. With the private sector seeking the most cost effective places to install the infrastructure (public or private land); the cost to implement innovative stormwater solutions is cheaper than if the government undertook the work themselves.

Public Private Partnerships

Charges to landowners and costs for maintenance and replacement will continue to go up as more assets are assumed and price indexing increases (Credit Valley Conservation, 2016). The fees which are collected are used to conduct projects on publicly owned land only, which is limited. This does not engage the private sector to address a community issue which requires everyone to participate in the solution.

Instead, the private sector needs to be viewed as a municipal asset to assist in providing a public service to the community. Public-private partnerships create a win-win scenario for both sectors. Construction costs are reduced, participation increases and issues get resolved.

Stormwater as a Resource

In fall 2016, DC Water and Sewer Authority (DC Water), Calvert Foundation, and Goldman Sachs announced an environmental impact bond (EIB) to fund green infrastructure to manage stormwater runoff in Washington D.C. The bond is a tax-exempt bond where a portion of the repayment to the investors is based on achieving stormwater runoff reduction targets. This project is over a 5 year period with an initial $25 million principal payment by the investors. DC Water will pay interest in over the 5 year term and will pay back the initial investment in full in the 5th year. The catch is if green infrastructure outperforms the expectation the investors receive a $3.3 million dollar bonus payout, however, if it under performs, the same amount will be deducted from the principal and not paid to the investors. The goal is to use private capital to promote innovation and achieve social and environmental benefits.

A Community Stormwater System

An example of this is The Ontario Water Centre's ReWild residential engagement program, NatureScaping. Neighbours self-select to work both together and individually through a guided process to learn about stormwater in their community and on their own property, to redesign their own properties so that both people and nature can thrive, and then to collaborate in implementing these designs. The program aspires to leverage a citizen-led community-based stormwater management effort to assist municipalities in reducing costs of stormwater management, while allowing residents to beautify their yards, redesign their streetscapes and reignite neighbourhood connections.

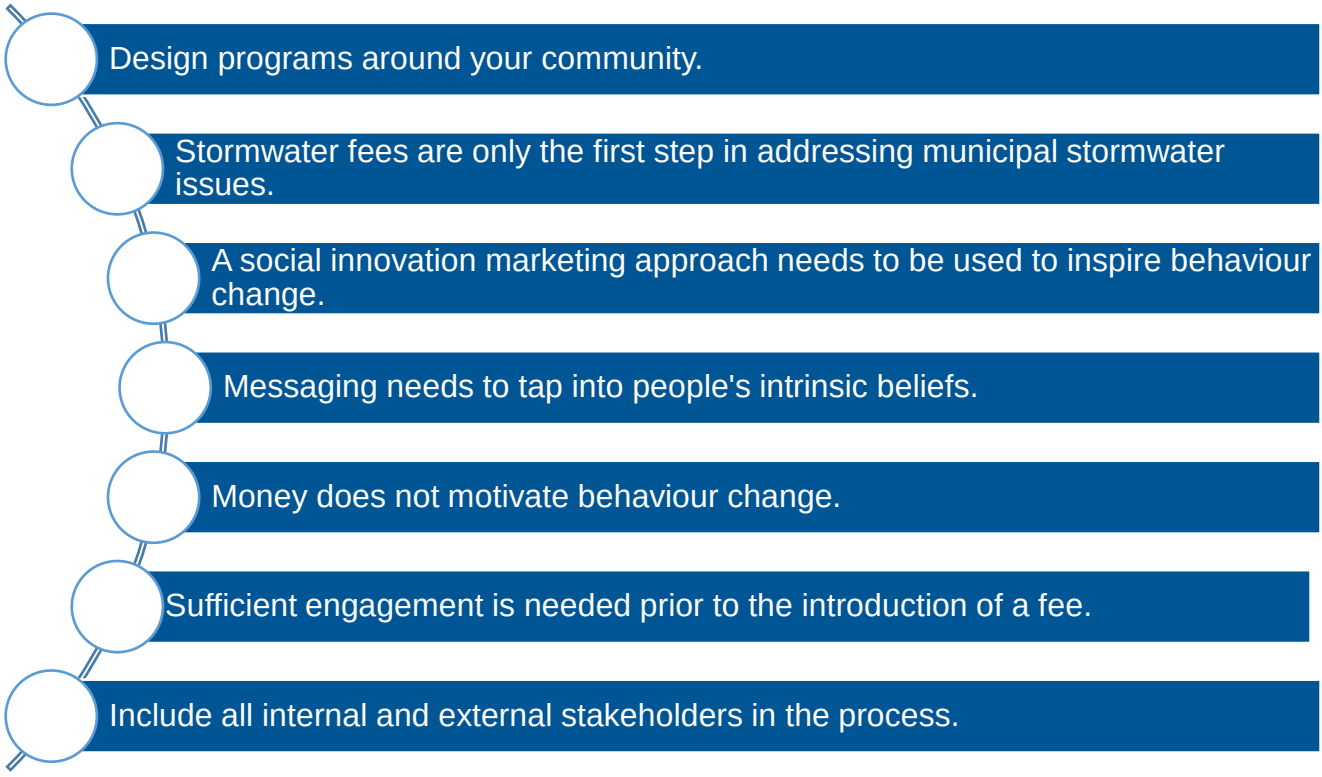
Designing with People and Nature in Mind

The Netherlands has adopted the approach of Building with Nature. They are using nature based defences for flood protection which mimics nature but which also considers the economic and social aspects into the design. Through several pilot projects the country has implemented, they have highlighted that it is crucial for "engineers to design infrastructure that can serve more than just one purpose…" (Vriend, 2014). The Dutch Building with Nature approach created a set of design

guidelines which can be found here. These principles should be applied to stormwater management in Ontario, where problems can be solved with people and nature in mind.

Lessons Learned

After conducting the jurisdictional scan, speaking with other municipalities and conducting the engagements, there are several key components a municipality should keep in mind if they are considering implementing a stormwater utility fee and landowner credit program. A full list of lessons learned can be found in the main jurisdictional scan report.



Please visit the Town of Newmarket website for more information and resources on this study.