Committee of the Whole Report

Report Number WWW2020-007

Meeting Date: November 3, 2020

Title: Sanitary Infrastructure Subsidy and Loan Program

Description: **A review on implementing a flood prevention subsidy and/or loan program for residents that have experienced property damage due to flooding and sanitary lateral back-ups**

Author and Title: Robert MacPherson, Water and Wastewater Technician

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Recommendation(s):

That Report WWW2020-007, **Sanitary Infrastructure Subsidy and Loan Program**, be received; and

That this recommendation be brought forward to Council for consideration at the next Regular Council Meeting.

Department Head: _____

Financial/Legal/HR/Other: _____

Chief Administrative Officer: _____

Background:

With climate change on the rise, frequent and severe weather events are becoming increasingly common. An example of this was seen on January 11, 2020 when the City of Kawartha Lakes (CKL) experienced an inordinate amount of rainfall. Approximately 60 mm fell in a short amount of time. In addition to significant amounts of rainfall, warmer than seasonal temperatures also caused significant snow melt to occur. There were reports of flooding and property damage in multiple locations due to the excessive rain and snow melt.

Due to this event, and as a proactive measure, Council directed staff to review the feasibility of implementing a Sanitary Infrastructure Subsidy Program, as well as a loan option. The intent of this program would be to aid residents in the costs associated with installing a backwater valve (BWV) on their sanitary lateral.

A backwater valve is meant to prevent sewer back-ups from occurring, including those that may be caused by extreme weather events surcharging the City's sanitary sewer systems. They can also provide insurance to a homeowner for back-ups caused by other sources, such as roots and flushing of non-flushable items such as wipes.

At the Council Meeting of July 28, 2020 Council adopted the following resolution

CR2020-187
Moved By Councillor Dunn
Seconded By Councillor Elmslie

That Staff present a program for sewer backup subsidy that meets the needs of residents, including financial constraints, to Council for consideration by the end of Q4, 2020; and

That the report back includes a Flood Prevention Loan option for consideration.

Carried

This report addresses that direction.

Rationale:

The City of Kawartha Lakes proactively works to ensure that the sanitary sewer systems under its control are properly constructed, maintained, and functioning. Although the City designs systems in accordance with provincial standards and performs regular maintenance and flushing of the sanitary mains, extreme events can cause sewer back-ups. One strategy to reduce the risk of sewer back-ups from occurring would be to have property owners install BWV on their sanitary lines. This valve can prevent basements from flooding caused by surcharged

sewers during severe weather events. The average cost to install a BWV device is $1500 but could cost substantially more depending on access and location of the sewer pipe. Council has requested Staff present a subsidy program for consideration to aid residents in paying for the modification of their sanitary infrastructure to include flood reduction initiatives. The program would be considered voluntary as previous enforceable programs such as the Mandatory Connect Program have been met with public discontent.

A Sanitary Infrastructure Subsidy Program for CKL residents could be carried out through the process identified below. Costing for the process is presented within the financial section of the report:

- Initial contact – Resident to contact City if they become aware of non-conforming sanitary connections on their property or if they have had a sewer back up in their basement.
- Application submission – Property owner to complete and submit an application form, with at least two quotations to perform the installation work as well as any additional documentation required. The City to contact the owner informing them of application status, if the device is approved, and if the contractor(s) are eligible to perform work on City infrastructure (if required).
- Installation – Once quotations and application have been approved, the necessary Building Permits from the Building Division would need to be obtained. Once approved the work must be completed within one (1) year from time of approval.
- End of work inspection – Follow up inspection with the City to verify completion of work.
- Rebate process – property owner will submit all required documents such as proof of payment and building permits for City review. Once approved the owner will be notified that a rebate has been processed.

In order for a property to be enrolled in the program certain conditions would also need to be met:

- The property must be located within the City of Kawartha Lakes.
- The subsidy would only be available to existing properties, not homes in the planning or construction stages.
- The downspouts from the property's eavestrough must be disconnected from the City's sewer system (if applicable) in order to reduce potential inflow and infiltration into the sanitary system.
- Application must be submitted prior to the installation of the BWV.
- Any contractor/sub-contractor(s) who performed the installation of the flood prevention device must possess a valid plumber's license and be approved by the City to complete the installation.

- The property in question must not have any outstanding taxes or debts owed to the City of Kawartha Lakes at the time the application is processed.
- No work can commence prior to application approval.
- Residents who experience basement flooding through direct entry of storm water or overland flows would not be eligible.

One important thing to note is that once the device is installed; it must be inspected by a qualified individual once every 6-12 months, or as per manufacturer's recommendations to ensure they are in working order. This additional maintenance scheduling and cost would be the sole responsibility of the property owner. If the maintenance is not performed, there is no guarantee the device will perform as intended in preventing a sewer back-up.

Other Alternatives Considered:

Staff have been asked to present a program for Council's consideration. This is provided in the Rationale section of this report. Staff are recommending Council receive this report as information at this time and remain status quo based on the comments provided in Option 3 below.

Should Council opt to implement a BWV subsidy program as described in the Rationale Section of the report, the following resolution should be added:

"That Staff be directed to budget for and implement a backwater valve installation subsidy program per the process and criteria identified in Rationale Section of Report WWW2020-007."

Option 2:

An alternative option considered would be to implement a Sanitary Infrastructure Loan Program but instead of creating a subsidy, operating the program through a municipal loan. The application process would remain similar although in this option the Revenue and Taxation Division would also need to approve of the application before work could commence. Similar to the City's Septic Rehabilitation Loan Program, upon receipt of the approved funds, the property owner will be responsible for making the loan repayments on a schedule approved by the Revenue and Taxation Division. The annual payment will be collected in the same manner as taxes and deemed as taxes. The annual payment will be levied on the final tax bill of the year and collected as taxes for the maximum term of the agreement being 5 years. The loan could be repaid in full at any time without it being subject to additional fees.

As with the Septic Loan Rehabilitation Loan Program, the property will incur a cost to borrow. The Revenue & Taxation Division will use Infrastructure Ontario loan rate for guidance plus an administrative fee. This option would allow property owners to make the necessary modifications to their sanitary piping without adding an additional expense to the City's user rate budget.

Should Council wish to implement Option 2, the following resolution should be added:
" That Staff be directed to implement a Sanitary Infrastructure Loan Program specific to installation of backwater valves for existing properties as identified in Option 2 in Report WWW2020-007."

Option 3:

This option reviews remaining status quo with the responsibility for installation, maintenance, and costs to that of the property owner. This is recommended given these events seldom occur due to extreme weather. The vast majority of sewer back-ups are due to unmaintained foundations cracking and leaking, failures in the properties weeping system and issues in the private sanitary lines such as blockages caused by roots, grease, non-flushable items, age of infrastructure and buildup of calcite around cracks and leaks in a pipe.

Over a 3-year period (2016-2019) there were 53 sewer back-up occurrences in CKL (47 in Lindsay, 4 in Fenelon Falls, 2 in Bobcaygeon, and none in the smaller systems); 52 were caused by reasons other than weather causing excessive flooding. Based on these occurrences, a BWV may not have prevented these events. Before the event in January 2020, the last confirmed case of sanitary sewage back-up caused by high flows was in Fenelon Falls in 2015. There is also currently no subsidies or loans offered for new properties (post 2016) that are required by by-law 2016-006 "By-law to Establish the Management and Use of Sanitary Sewers" to install these devices at time of construction.

Given the estimated costs of implementing a subsidy program and the low frequency of back-ups that occur Staff are recommending this option at this time. Accordingly, the report is provided to be received by Council with no further direction.

Alignment to Strategic Priorities

The recommendation to Council is consistent with the Council Adopted Strategic Plan in the following ways:

"Vibrant and Growing Economy" – will be met through the proper servicing and collection of appropriate user fees to fund the maintenance, capacity and growth of the municipal water and wastewater systems.

"Healthy Environment" - will be met through community preparedness by ensuring that the necessary funds are secured in order to sustain water and wastewater infrastructure necessary to protect the health of the environment.

"Good Government" – will be met through increasing the efficiency and effectiveness of service delivery by streamlining rate adjustments within the by-law and ensuring that the municipal assets are well maintained and managed.

Financial/Operation Impacts:

Option 1 (presented in Rationale):

There are approximately 11,600 users in Kawartha Lakes connected to the sanitary systems, with 893 new connections since 2016 (presumably to already have a BWV installed). For the sake of estimating, this would leave approximately 10,000 properties where a BWV device could be requested by residents. At an approximate cost of $1,500 per BWV installed, this equates to a rough estimate of $15,000,000 to install BWVs at all remaining properties. A more reasonable estimate to budget annually would be approximately $150,000 or 100 properties. In order to control costs to the User Rate, the Division would need to put a cap on the number of properties that can enroll every year. The program would be on a first come, first serve basis for application submissions. This cost represents 0.8% of the current Water/Wastewater operating budget. In order to maintain current projections in the budget, an additional expense of $1.08 would need to be added to the City's monthly Sewer Fixed Rate price of $29.86, bringing the new monthly cost to $30.94 for residential users connected with a sanitary system.

Although the average cost to install a backflow prevention device is $1500 in a residential property, this does not take into account the additional expenses the property owner may incur such as the $381.00 building permit fee (2020 fee) required to have the work inspected by the Building Division, or any additional restoration work within the house such as concrete work, drywall, etc. is required as part of the installation. Depending on the complexity of the users piping and ease of access, it can potentially cost thousands of more dollars to install a device. This option would generate $38,100 in revenue per year in inspection fees for the Building Division based on 100 properties per year. Additional costs would include the administration of the program by the Water & Wastewater Division staff, as well as Finance. Additional Staffing resources may be required pending program uptake. If Council chooses to implement the option presented in the rationale resource needs would be reviewed based on uptake of the program.

Option 2:

While this option does provide relief to the user budget rate, there would be a potential loss in revenue generated by having the funds remain in the City's reserves growing interest, by providing loans slightly above the Infrastructure Ontario borrowing rate. As mentioned under Other Alternatives Considered the loan would be treated and collected from the property owner as taxes levied on their final tax bill of the year. It is anticipated there would be a fee by the Revenue and Taxation Department for the time required to process the loan application. There is currently a $165 application fee for the Septic Rehabilitation Loan Program. If applied to this program, that represents an additional annual revenue of $16,500 generated by Revenue and Taxation in loan application fees.

This option would also generate $38,100 in revenue per year in inspection fees for the Building Division.

Option 3:

Maintaining the status quo would not present any additional financial/operational impacts to consider.

Consultations:

Supervisor, Water and Wastewater Operations
Manager, Revenue and Taxation
Director, Corporate Services

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