

Flood reduction in focus as Council addresses challenges

In heavy rainstorms, the sight of cars either grounded or lifted by rising waters as they travel Wellington Street West have become more and more frequent, but new measures eyed by the Town could soon bring relief for commuters and residents near problem areas.

Council this week is poised to endorse in principle a new Stream Management Plan and Flood Relief Study that outlines challenges facing the community over the next 40 years when it comes to flooding and climate change.

If approved by Council this week, the total estimated cost for all the projects contained within the plan amounts to \$41 million spread over a 30-year period.

This, according to municipal staff, breaks down to an estimated budget in the range of \$530,000 to \$2.87 million per year over the next three decades.

The Stream Management Master Plan and Flood Relief Study were presented to local lawmakers at the January 14 General Committee meeting. Introduced by geomorphologist Robert Amos, the studies examined areas linked to the Tannery Creek and East Holland River watersheds and outlined a number of projects Aurora should tackle over the next four decades to better manage streams and reduce flood risk.

The original report, as presented, earmarked improvements to the Wellington Street West and Machell Park areas on the 10- to 20-year and 20- to 30-year planning horizons respectively, but given frequent flood concerns expressed by residents, Council voted to move flood-reduction projects related to these two areas up to the 2- to 10-year window.

"I really hope we can speed things up as much as possible," said Councillor Rachel Gilliland, before making a motion to move the Wellington Street West project up to the 2- to 10-year horizon.

This project was tentatively approved at the Committee level, as was a further motion from Councillor Sandra Humfries to bring projects related to Machell Park up to the same timeframe.

"Machell Park has some severe flooding, including going right up to the neighbours' backyards," said Councillor Humfries. "Soccer is cancelled and their basements have been ruined time and time again for years for 20 or 30 years. I just think we should be able to add that one as well. I understand Wellington Street has [been happening] forever and cars have problems going through, but this is damaging the homes."

A new Stream Management Plan and Flood Relief Study was

commissioned by Council in 2018 to look at the conditions of existing dam and flood control measures located in Aurora's older neighbourhoods, examine challenges that new developments have presented to old infrastructure, pinpoint areas where remedial work is necessary and develop a budget to address the issues.

Among the areas of study were stream erosion risks and areas for restoration.

The Stream Management Master Plan identified problem areas, but also many opportunities to reduce flooding risks and improve the overall health of the Town's streams and creeks, said Anca Mihail, Manager of Engineering for the Town of Aurora in her report to Council.

Such areas of concern, she said, were risks due to erosion and deteriorating infrastructure, debris jams in watercourses increasing flooding hazards, increased flooding risks due to undersized culverts that constrain high flows, and landscaping on private properties.

Flooding issues include 259 buildings ? 230 of which are residential homes ? identified as susceptible, 28 undersized road crossing structures, and more than 30 road crossings deemed too narrow to meet Ministry of Natural Resources guidelines.

In total, the Town of Aurora maintains over 80 km of rivers, creeks, tributaries and drainage features, all of which provide a very valuable natural heritage element to the Town, supporting aquatic and terrestrial habitats, providing significant vegetation and recreational opportunities that are integrated into the corridors, but also, these 80 km of stream segments also provide direct drainage for all of the local neighbourhoods, said Mr. Amos in his presentation.

Ten specific flood projects were identified based upon the flood hazard assessment, he adds, noting that within the study project, maps based on erosion and flooding areas had an uncanny consistency. What this enabled us to do is come up with an integrated implementation plan, at which point we looked at the priority of the erosion and flooding projects and, from a logistics standpoint, we made recommendations to address erosion and flooding projects coupled together. What this will do is ensure that when a flood project is undertaken ? for example, the replacement of an undersized road crossing ? that the upstream and downstream channel will be addressed should there be erosion hazards as well. This will inevitably save the Town money from a contractual standpoint.

Following the concerns outlined by Councillors Gilliland and Humfries, Mr. Amos said amending the project timetables to bring forward projects sooner is always a welcome move.

A lot can go on over the next 20 to 30 years, as well as a lot can change within the water courses, he said. They are certainly quite

dynamic. Any opportunity the Town may have in terms of advancing some of the longer-term horizons into a shorter term would certainly help to reduce the existing risks.?

Ms. Mihail, however, cautioned that improvements to the Machell Park area are ?very complex? and quite expensive, estimated within the plan at \$7.8 million due to the need for an underground flood storage facility in addition to an upgraded soccer field on site.

Although Council gave the tentative green light to the plan, as well as the two amendments made at the table, a note of caution was interjected by Councillor John Gallo, who was wary of these decisions being made on an ?ad-hoc? basis.

?In order for me to make that decision, I need to know whether staff took into account only the financial aspects or the severity to be addressed,? he said.

By Brock Weir