

# **The Corporation of the Town of Lakeshore**

## **Report to Council**

### **Engineering & Infrastructure Services**



**To:** Mayor & Members of Council

**From:** Nelson Cavacas, Director, Engineering & Infrastructure Services

**Date:** July 6, 2020

**Subject:** Belle River Flood Control System and WECI Grant

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### **Recommendations**

Direct Administration to complete the Belle River Flood Control projects; and,

Approve the transfer of a maximum of \$75,000 from the contingency reserve to fund the Town's portion of the projects, as presented at the July 14, 2020 Council meeting.

### **Background**

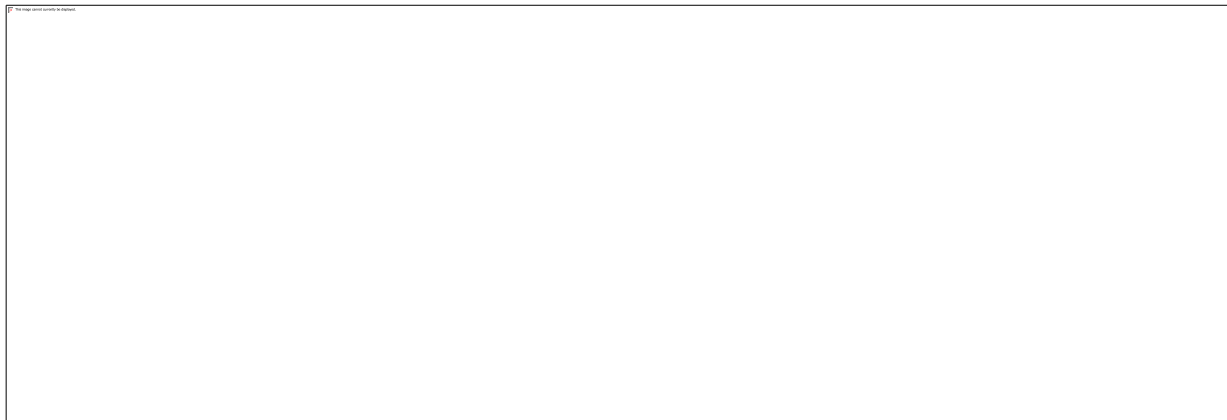
The Belle River Flood Control System was constructed in 1989/1990. The system consisted of the construction of earth berms and retaining walls, shoreline protection and storm water pumping stations to significantly reduce the risk of flooding to the community of Belle River caused by high lake levels and ice jams. In 1989/1990, approximately 1.5 million dollars was expended on this multi-phase project. The Essex Region Conservation Authority (ERCA) and the Town partnered on this project and the original cost was equally shared.

In 2015 and 2017 maintenance repairs were undertaken on a section of the system which involved retaining wall and shoreline protection repairs along the Belle River. Following these repairs and considering the current forecasted high lake levels, the Town partnered with ERCA to proactively identify deficiency areas requiring maintenance, repairs and upgrades of dyke, channel and shoreline protection works along the designated sections of the Belle River Flood Control System in the Town of Lakeshore by undertaking an assessment of the flood control works that was finalized in 2019. It had been 12 years since the last overall engineering assessment was undertaken of the flood control works. All previous repairs and assessment work has been funded 50% by the Town and 50% by ERCA through the Water Erosion Control Infrastructure (WECI) provincial funding program.

The Town in collaboration with ERCA had submitted two applications earlier this year for potential WECI funding utilizing the 2019 assessment study information which is attached.

## Comments

On June 22, 2020 ERCA informed the Town that both applications for the WECI program associated with the Belle River Flood Control (BRFC) Project were approved for 50% funding by the Ministry of Natural Resources and Forestry (MNR) up to the maximum provincial shares identified in the table below. The Town would fund the Local Share of the remaining 50%. Although ERCA does not provide a direct financial contribution, they provide project management oversight with ERCA staff for these projects.



The Belle River Flood Control – Detailed Assessment Study identified as project ID S.20.033 is a result of the previous work done by Landmark Engineers (2019 Assessment Study) which recommended a detailed evaluation of alternatives and the selection of a preferred option for eliminating gaps in the dyking, address long term instability of select locations of shore wall, assess remaining thickness of original sheet steel pile walls by means of ultrasound testing (existing condition shows signs of severe corrosion with visible perforations). Again, this was one of the recommendations from the 2019 report that was funded 50% by the WECI grant from the MNR.

The Belle River Flood Control – Repairs identified as project R.20.045 was also highlighted as the next repair work to be prioritized in Landmark's 2019 assessment report which identified a series of repairs that included top dressing existing berms at select locations, reinstating some sections of flood control berms, repairs to double-retained earth berms, repairing exposed and corroded tie-rods with cover restored. It also includes some thorough drain cleaning of some of the drainage ditches associated with the BRFC project.

## Others Consulted

ERCA

## Financial Impacts

The total cost to complete the two flood control projects is \$141,000 of which the Town's 50% share would be \$70,500. This work supports the Town's strategic priorities regarding Shoreline Protection and Community Resiliency by investing into the planning and repairs of this flood control system while leveraging the benefit of 50% grant funding. Although this work was not included in the 2020 budget, it is recommended this work be funded from the contingency reserves up to a maximum of \$75,000. The reserve currently has a balance of \$955,000.

**Attachment:** 2019 Belle River Flood Control – Inspection Report

## Report Approval Details

Document Title:	Belle River Flood Protection Infrastructure and WECl Grant.docx
Attachments:	- 2019 Belle River Flood Control - Inspection Report.pdf
Final Approval Date:	Jul 9, 2020

This report and all of its attachments were approved and signed as outlined below:

Rosanna Pellerito

Kristen Newman

Tammie Ryall