

Subject:	Pefferlaw Dam Update
То:	Mayor and Council
From:	Nancy Fleming, Manager, Asset Management & Technical Services
CC:	Shawn Nastke, Director, Strategic Initiatives Michael Vos, Director (A), Operations and Infrastructure Dan Buttineau, Director, Community Services
Date:	April 27, 2022

Briefing:

Background

Council conducted a closed session meeting on November 17, 2021, to discuss the potential of assuming ownership of the Pefferlaw Dam (Dam) structure/lands as well as its future maintenance and operation. Council reported out of closed session directing staff to complete the following:

- 1. In collaboration with the Lake Simcoe Region Conservation Authority (LSRCA), commission an additional technical analysis to assess the full scope of repairs and costs of the Town assuming ownership of the Dam structure and adjacent parcels;
- 2. Enter into an Operations Agreement with the LSRCA until such time as a final determination is made on the transfer of ownership of the Dam structure, wherein the Town agrees to assume responsibility of the installation/removal of the stop logs and flashboards, subject to a satisfactory inspection of the Dam by a third-party expert, and perform regular inspections of the Dam; and
- 3. Provide an update to Council no later than spring 2022.

Analysis:

D.M. Wills Associates Ltd. (D.M. Wills), an engineering consultant, was retained by the Town to undertake a technical assessment of the Dam to determine the full scope of repairs required and associated costs. As a first step of this assessment, D.M. Wills completed a visual inspection of the Dam in early April to confirm the stop logs and flashboards could be safely installed this spring without any additional risk compared to previous years.

Further, as a result of the satisfactory completion of the D.M Wills inspection, the Town and LSRCA have entered into an interim Operations Agreement whereby Town Staff will operate the Dam. The installation of the stop logs and flashboards was commenced by Town staff on April 20, working together with the LSRCA operational team who provided equipment and operational training support. The remaining stop log and flashboard installation process will take approximately one month to complete depending on river flow.

In the upcoming weeks, D.M Wills will complete the second phase of the technical assessment on the Dam. This will include the completion of a Dam Safety Review, comprising of hydrology and hydraulics/dam breach studies, a hydraulic capacity assessment and structural stability assessment. D.M. Wills will also prepare an updated rehabilitation plan, inclusive of proposed schedule and associated costs for the required works. This assessment will be brought forth to Council for consideration on June 22, 2022.

Public communication regarding the above and future work includes a mailed information notice to those impacted by or within the community of the Dam, a dedicated project website on both Town of Georgina and LSRCA websites, and posted signage at the Dam site indicating what work is being completed.