

NEWSLETTER
#4

WHITEWATER REGION FLOOD RISK ASSESSMENT



Scope of the project

Jp2g has completed a flood risk assessment for an area south-west of the Westmeath Provincial Park along the Ottawa River. The study encompassed many non-conforming (grandfathered) properties situated in the floodway or flood fringe, as well as the Westmeath Provincial Park. This area seasonally floods with the spring freshet and represents a significant and recurring flood risk. The Township of Whitewater Region has identified flooding in its Hazard Identification and Risk Assessment.

It is understood that the area was severely impacted by 2019 flooding with several property owners relying on the Disaster Recovery Assistance for Ontarians (DRAO) Program to address flood damage. The goal of the flood risk assessment study was to prepare an action plan with flood mitigation solutions.

This project commenced summer 2021, and newsletters were sent out to homeowners in the study area throughout the project duration.



Study

Jp2g collected background information from residents through phone calls, emails, and 1-on-1 interviews on site. It was determined that in the 2019 flood there were extensive damages to most properties along Greatview Trail, Edgewater Trail and Sunset Trail. In response to these flood events, some residents and cottage owners have installed retaining walls or rock walls or raised their structures onto cinderblocks or other foundations.

Considerations and constraints for the at-risk infrastructure were determined, including site conditions, usability, flood depth, and barrier protection. Proposed mitigation solutions were developed based on capital costs, permeance, consideration for aesthetics, effectiveness of mitigation, and ease of implementation. Seasonal barrier methods and long-term barrier methods were identified to mitigate the flood risk in the study area.

Results

Recommended mitigation options include floodproofing structures within the study area or raising structures above the floodplain elevation. Immediate flood mitigation options include monitoring river levels and installing sandbag barriers when necessary. It is recommended that floodplain mapping for the study area along the Ottawa River take place as a next step, to accurately determine the floodplain elevation, and to install a water gauge in the Westmeath basin to provide data for future flood forecasting and predictions.

Jp2g has prepared a Final Report identifying the risks to the infrastructure based on flooding levels and climate change parameters. The report has identified solutions for flood protection measures in the study area and includes an action plan to address and mitigate the risk of flooding.

The report will be available on the Township's project website (www.whitewaterregion.ca/projects), and the presentation to Council can be viewed on the Township's YouTube channel (link can be found on the project website).



Contact information

Jp2g Consultants

Andrea Bishop, Civil Engineer

✉ andreab@jp2g.com

☎ 613-282-6464

Township of Whitewater Region

Lane Cleroux, Manager of Public Works

✉ lcleroux@whitewaterregion.ca

☎ 613-646-2282