



NEWSLETTER
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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, including 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.

Background Information

Jp2g collected background information from residents through phone calls, emails, and 1-on-1 interviews on site. Seasonal flood information, as well as 2017 and 2019 flood levels were noted at the respective properties. It was determined that seasonally, the water level does rise, and in some areas the access roads are impassable, but typically there is no damage to the infrastructure. In 2017, sandbags were used as a flood mitigation strategy, which proved unsuccessful leaving some lower lying structures and accessory buildings flooded and requiring repair. Based on the information collected from homeowners, no mitigation measures were successful in the 2019 flood. There were extensive damages to most properties along Greatview Trail, Edgewater Trail and Sunset Trail, some of which were unrecoverable. In response to these flood events, some residents and cottage owners have installed retaining walls/rock walls or raised their structures onto cinderblocks or other foundations. Based on the flood risk mapping, all properties and all roads are within the floodplain.

Study Results

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 prepared to mitigate the flood risk in the study area. 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.



Schedule

Jp2g has prepared a Draft 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. Jp2g has prepared a presentation that will be presented to Council on March 16th. The draft report will be on the Township's project website (www.whitewaterregion.ca/projects), and the presentation can be viewed on the Township's YouTube page (link can be found on the project website).



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