

## Developing a tool for flood risk assessment in Yukon communities

Yukon Government's Emergency Measures Organization (EMO), with funding from the Federal National Disaster Mitigation Program, has approached the Northern Climate ExChange (NCE), part of the Yukon Research Centre at Yukon College, as a partner to develop an online tool that helps communities and government officials identify areas of current and future flood risk; and an online database that tracks changes in flood risk from region to region and over time.

### Project Overview

Flooding can occur at any time of the year in the Yukon, often with little or no warning. Flooding is an important environmental process, but it can also result in damage to buildings, critical infrastructure, areas of cultural and traditional importance, environmental contamination or even result in harm and loss of life. Recognizing this, Yukon Government's Emergency Measures Organization (EMO), with funding from the Federal National Disaster Mitigation Program, has approached the Northern Climate ExChange (NCE), part of the Yukon Research Centre at Yukon College, as a partner to develop an online tool that helps communities and government officials identify areas of current and future flood risk; and an online database that tracks changes in flood risk from region to region and over time.

The core piece of the Yukon Flood Risk Assessment Tool is a map viewer, which displays a variety of thematic layers to allow users to analyze flood risk in a certain community. Layers include the area that would be affected in the event of a flood (hazard), important values that could be damaged or affected in this area (exposure), the combination of hazard and exposure (risk) and how this may change in the future due to climate change.

The flood hazard in most Yukon communities can be determined using information already available from the Yukon Government, Water Resource Branch; however, information pertaining to exposure is best identified by those who live in the community that is at flood risk. This project aims to engage with local First Nations and communities to identify and discuss flood related vulnerabilities specific to their community and combine them with existing flood hazard information to determine the overall flood risk.

The project is currently in a pilot stage, finishing in September 2017. Within this timeline, the tool and database will be developed for two communities in the Yukon. Continuation of the project to integrate further Yukon communities in the tool is anticipated.

#### Project Team

##### Project Coordinator:

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#### Funders

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