

## Project Profile

<b>Project Name:</b>	Geohazard Mapping for Risk Management
<b>Project Number:</b>	ES-Pipe-2021-01
<b>Proponent:</b>	BGC Engineering
<b>Funding Envelope:</b>	Engineering and Safety Research—Pipelines
<b>Timeframe:</b>	June 1, 2020, to December 31, 2020

### Project objectives

Develop a publicly available landslide susceptibility map showing where landslides are likely to be present or occur in the future (in BC portion of the Western Canadian Sedimentary Basin)—aiding:

- Regulator—in reviewing permits and authorizations for projects and in supporting compliance planning in landslide susceptible areas; and
- Industry—in development of geohazard risk management programs to support pro-active management of landslide hazard risk and infrastructure development.

### Project description

The landslide susceptibility map will highlight specific areas in northeastern BC where new and existing pipelines, wells, facilities, roads and other oil and gas infrastructure may be susceptible to the impacts of landslides. This information will aid the Regulator in reviewing permits and authorizations for projects and to guide regulatory compliance assurance activities. It will also help industry operators identify landslide-prone areas and initiate landslide risk assessment and risk management for their infrastructure, which will improve safety, reduce operating costs, and help protect the environment.

### Project approach

The project will involve identification of existing landslide features within a random subset of the study area, followed by mathematical analysis using a variety of statistical and data science approaches to find an optimum model with the best predictive power.

### Project deliverables

The deliverables from this project include the following:

1. Landslide susceptibility map, particularly focused on the Western Canadian Sedimentary Basin region of B.C.
2. Final report.