



Shoreline erosion in the Yukon

Technical guidance report summary

Background

The Government of Yukon commissioned SLR Consulting to develop the Lakeshore and Riverbank Erosion in the Yukon report, which provides technical guidance for assessment and risk mitigation.

Shoreline erosion is a natural process that can pose a hazard to infrastructure and private property. Where erosion becomes a hazard, responsibility for assessing the risk and implementing mitigation measures often falls to the property owner, business or government entity affected.

This guidance was developed in response to concerns from stakeholders facing shoreline erosion risks to private property and community infrastructure, often with limited resources and without access to Yukon-specific information.

Study scope

This project involved documenting past and emerging shoreline erosion issues in the Yukon and developing guidance for assessing and mitigating shoreline erosion hazards across the territory.

Next steps

If you are experiencing or are concerned about shoreline erosion, the following steps can help guide your response:

- Start by reviewing the technical guidance for assessment and risk mitigation of lakeshore and riverbank erosion in the Yukon.
- Evaluate your site conditions and any permitting requirements.
- Seek qualified professionals, where needed.

The Yukon's distinct context

Shoreline erosion management in the Yukon must address specific northern challenges that differ from those in southern jurisdictions. These include permafrost, dynamic ice processes and logistical and environmental constraints that can affect construction and maintenance.

Designing for long-term solutions

Shoreline erosion is influenced by many factors including river flow or lake wave conditions, shoreline materials, permafrost, ice processes, etc. Without proper assessment and design that accounts for these factors, mitigation measures are unlikely to perform as intended over time.

Shorelines are shared systems

Shoreline erosion is part of a broader system of sediment movement, where material is continually eroded and deposited within water bodies. Mitigation measures should consider how proposed actions may affect this system, including the potential for unintended impacts beyond the project site.

Careful planning and Yukon-specific design approaches are essential for effective and lasting shoreline erosion management.