

Northern Climate ExChange Project Snapshots

Arquluk Symposium

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Brian Horton, Manager
Northern Climate ExChange



YUKON RESEARCH CENTRE
Yukon College



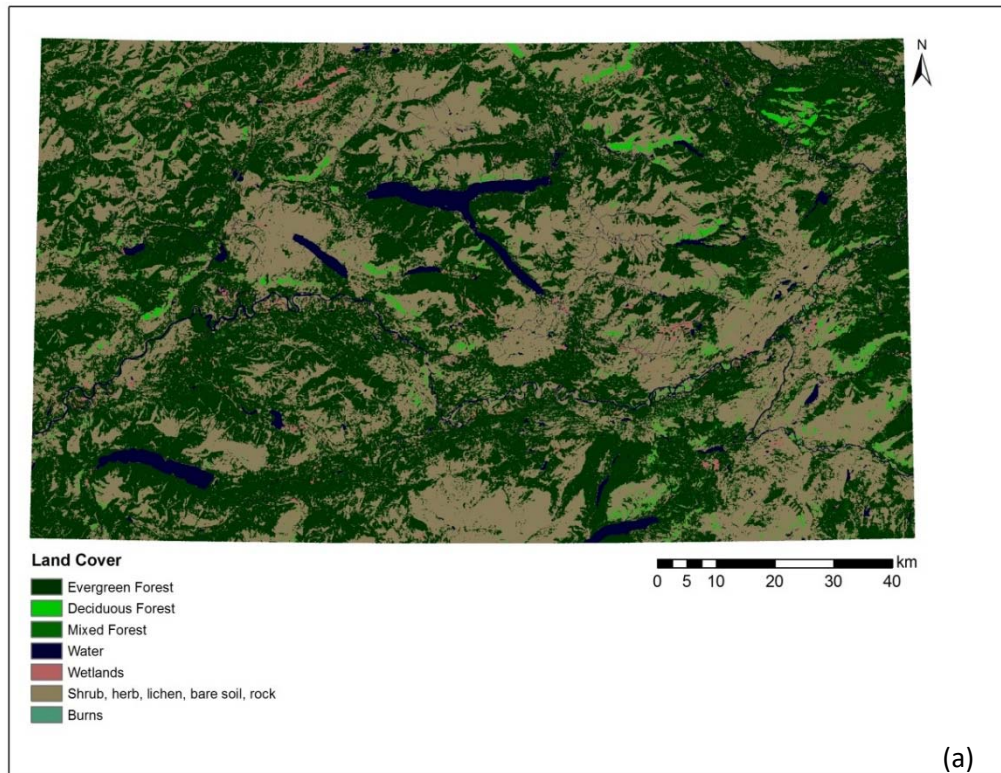
Northern Climate ExChange

- Developing and Sharing Knowledge
 - We actively work to share our research results with organizations across the North – recognizing their value to the circumpolar world
- Partnerships
 - We partner with many different organizations in order to maximize the value of our research results.
- Promoting Awareness of Climate Change
 - Our researchers work with governments to normalize the notion of our changing climate.

Northern Climate ExChange

- Climate change adaptation expertise concentrated in three main areas:
 - Hydrologic modelling
 - Community adaptation
 - Permafrost geophysics and geomorphology
- Additional programming to help governments incorporate climate change into decision-making
- Third-party funding from a variety of government, tri-council, and private-sector sources

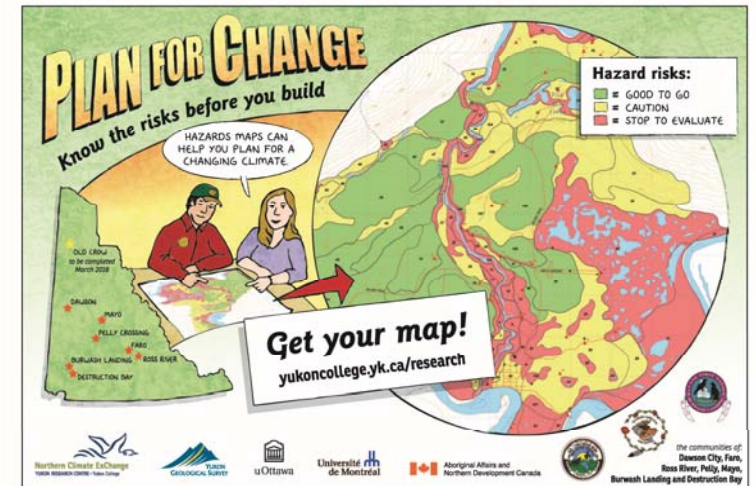
Hydrologic Modelling



- Forecasting tools
- Improved monitoring
- Understanding climate change impacts

Community Adaptation

- Enhancing the inclusion of traditional knowledge and values into governance and co-management structures
- Hazard mapping tools to support decision making
- Participation in workshops and knowledge exchange



Chu äyï ätl'et (The Water In Me) Project



Klukshu Village
Project Brainstorm



Permafrost Thaw Vulnerability Research

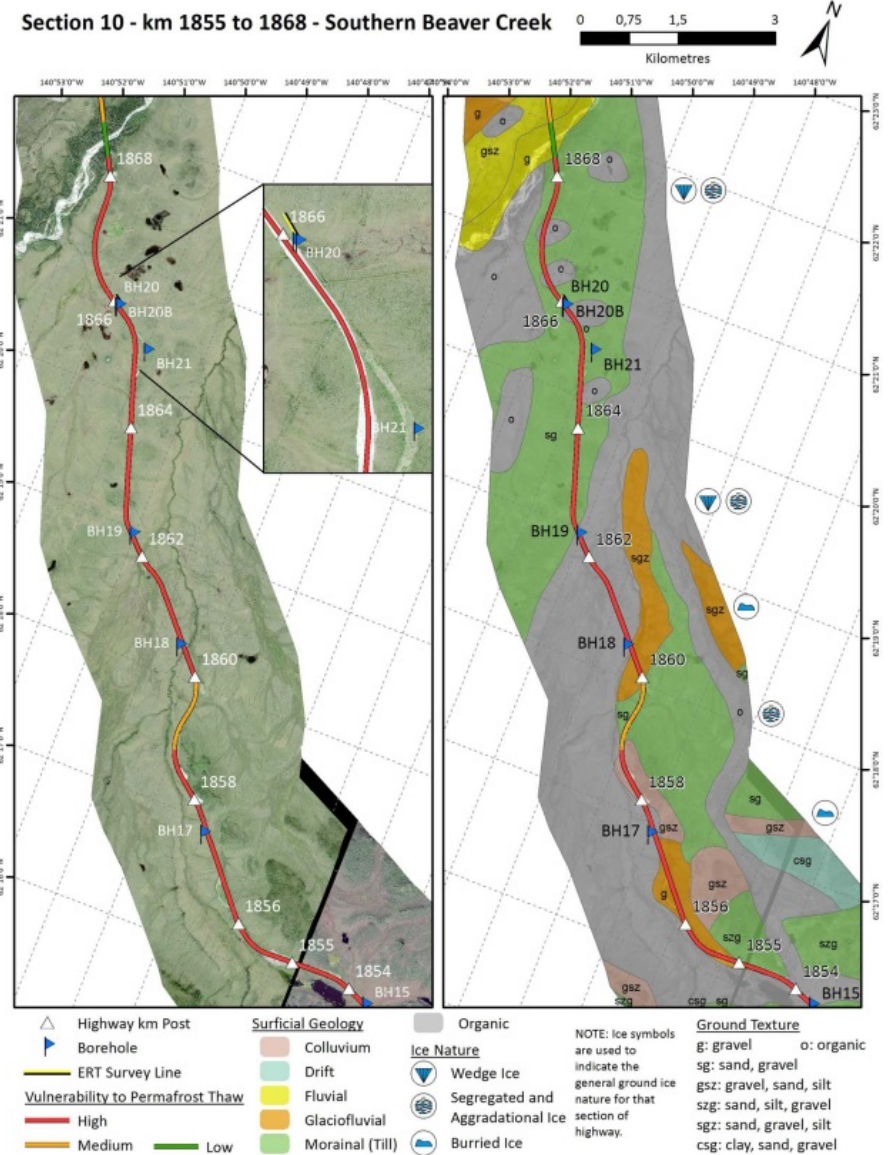
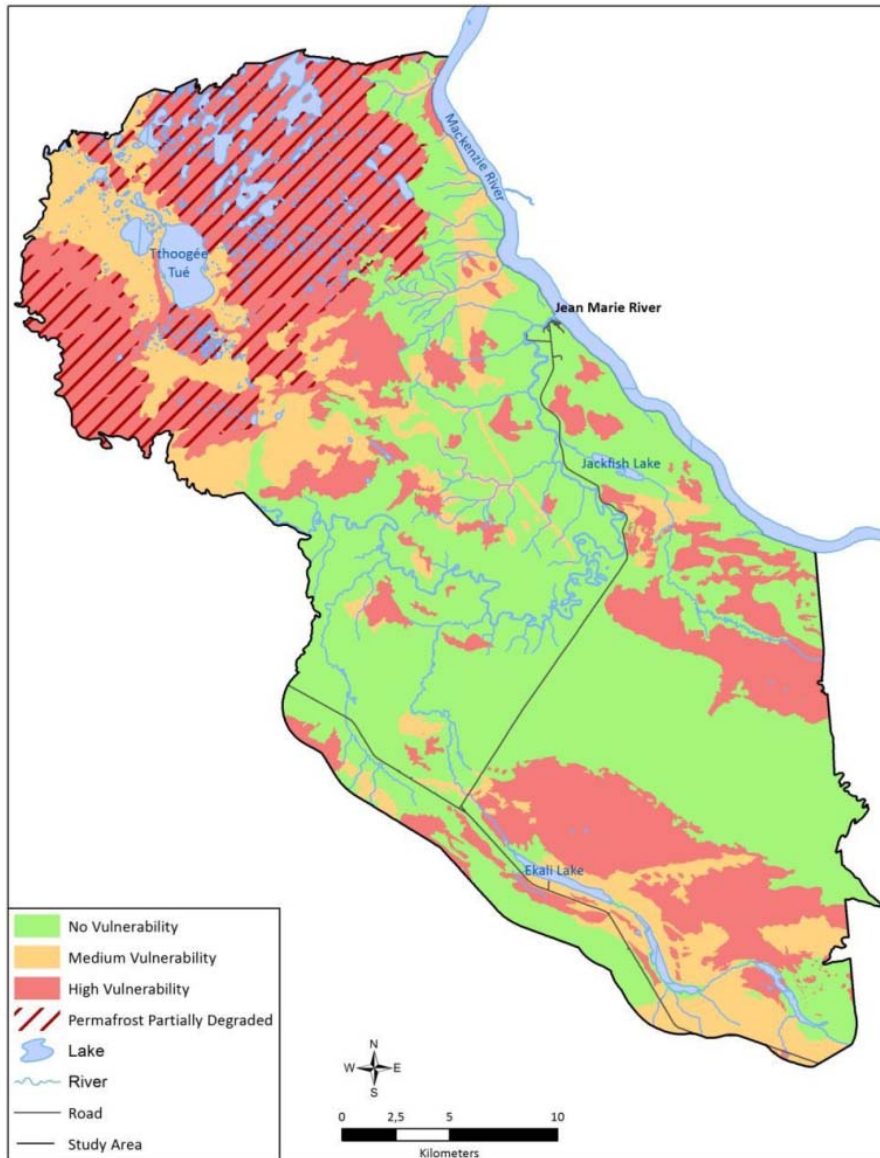
- Permafrost present in most Yukon communities; negatively impacting infrastructure
- It costs \$22,000-\$36,000 / km / year more to maintain highways on permafrost than non-permafrost sections
- Permafrost thaw is impacting traditional food harvest and culture, travel on the land and cultural resilience and well-being

Permafrost Thaw Vulnerability Research

- Geomorphologic survey
- Permafrost coring
- Ground temperature monitoring
- Geophysics



Scale and permafrost thaw vulnerability



Research Supporters and Partners



Aboriginal Affairs and
Northern Development Canada

Affaires autochtones et
Développement du Nord Canada



Northwest
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Transition to Yukon University



Thank You!

Brian Horton

bhorton@yukoncollege.yk.ca



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