

Project Overview of ArcticNet Project (funded April 2019)

Title: Understanding Inuit community uses and needs for weather, water, ice and climate information and services

Project Summary:

The combined effects of climate change and industrial development have resulted in decreased predictability of weather, water, and ice conditions across Inuit Nunangat (Inuit homelands). Socio-economic and political pressures associated with increases in shipping, tourism, fisheries, and resource development have compounding effects on access and use of lands and waters, as well as ice conditions in Inuit Nunangat. Colonization and modernization processes have also impacted the intergenerational transfer of Inuit knowledge and subsistence harvesting practices – further challenging the ability of Inuit to travel safely on land, water and ice. Collectively, these pressures have led to community members seeking out and using diverse weather, water, ice and climate (WWIC) information and services, in support of safe travel. However, little is known about the extent to which WWIC information such as weather and marine forecasts, ice charts, satellite imagery, wind and tide information, and community-based monitoring outputs are used. It is critical to understand the relevance of available WWIC information and services in a community (i.e. local) context, how products are currently used, and what specific needs Inuit wish to articulate to guide future product and service delivery.

Our proposed project builds upon long-term community-research partnerships in 20 communities across Inuit Nunangat. We have been hearing for years from Inuit hunters and community members that WWIC services are not meeting local needs considering the scale, accessibility, usability, language, and technological barriers that arise for remote Inuit communities. The significant challenges associated with federal mandates to provide WWIC services that meet the needs of diverse end users have also been identified nationally and internationally. To date, there has been no systematic effort to document and assess the uses or needs of WWIC information and services across Inuit Nunangat.

Through regional leadership across all four Inuit regions, we will link several ongoing community-research partnerships to develop a more cooperative and networked approach to understanding Inuit community WWIC uses and needs. Together we will develop a short survey to better understand what kinds of WWIC information are currently being used, and community-identified needs for improved services, to support travel safety decisions across Inuit Nunangat. This networked approach, and collaborative survey development, is important to ensure that survey results can be useable to community members and decision-makers, as well as service providers and policy-makers from local to international scales. Developing a baseline is critical to inform future applied research with the goal of enhancing the accessibility and relevance of WWIC information in support of safe travel on land, water, and ice for Inuit and other northerners living in Inuit Nunangat.

Key Research Phases:

Year 1 (2019/2020): Collaborative survey development; training and survey facilitation; intensive survey period.

Year 2 (2020/2021): Survey response compilation and analysis; collaborative results interpretation and analysis.

Year 3 (2021/2022): Circulation of results for broad feedback; refinement of communication plan; writing reports and publications.

15 Partner Communities:



Project Roles:



Project Leader:

Gita Ljubicic (Associate Professor, School of Geography and Earth Sciences, McMaster University, Hamilton, Ontario and: Adjunct Research Professor, Carleton University)

Network Investigators:

Jackie Dawson (Associate Professor and Canada Research Chair in Environment, Society and Policy, Department of Geography, University of Ottawa, Ottawa, Ontario)

Trevor Bell (Professor, Department of Geography, Memorial University of Newfoundland, St. John's, Newfoundland and Labrador)

David Atkinson (Associate Professor, Department of Geography, University of Victoria, Victoria, British Columbia)

Collaborators (alphabetical by last name):

Lucassie Arragutainaq (Manager, Sanikiluaq Hunters and Trappers Association, and Board Member and Co-Founder, Arctic Eider Society, Sanikiluaq, Nunavut)

Andrew Arreak (SmartICE Nunavut Operations Lead, Qikiqtaaluk North, Pond Inlet, Nunavut)

Natalie Carter (Postdoctoral Fellow, Department of Geography, University of Ottawa, Ottawa, Ontario)

Peter Paul Cookie (Community Liaison, Arctic Eider Society, Kuujjuaraapik, Québec)

Laura Eerkes-Medrano (PhD Candidate, Department of Geography, University of Victoria, Victoria, British Columbia)

Shari Fox (Co-Founder and Volunteer Coordinator, Ittaq Heritage and Research Centre, Clyde River, Nunavut)

Joel Heath (Executive Director and Co-Founder, Arctic Eider Society, Sanikiluaq, Nunavut and St. John's, Newfoundland and Labrador)

Theo Ikummaq (Independent Researcher, Igloodik, Nunavut)

Ancilla Irkok (Researcher, Aqqiumavvik Society and Young Hunters Program, Arviat, Nunavut)

Frankie Jean-Gagnon (Research and Stewardship Coordinator, Arctic Eider Society, Inukjuak, Québec)

Robert Karetak (SmartICE Nunavut Operations Lead, Kivalliq, Arviat, Nunavut)

Annie Kasudluak (Community Liaison, Arctic Eider Society, Umiujaq, Québec)

Pauloosie Kasudluak (Community Liaison, Arctic Eider Society, Inukjuak, Québec)

Charles Klengenber (Director of Lands, Inuvialuit Regional Corporation, Inuvik, Northwest Territories)

Carolyn Marshall (Senior Program Meteorologist, Meteorological Service of Canada, Environment and Climate Change Canada and; PhD Candidate, Department of Geography, University of Ottawa, Ottawa, Ontario)

Simon Okpakok (Independent Researcher, Gjoa Haven, Nunavut)

Alison Perrin (Climate Change Education and Project Coordinator, Yukon Research Centre, Whitehorse, Yukon)

Natasha Simonee (Independent Researcher, Pond Inlet, Nunavut)

Shirley Tagalik (Director, Aqqiumavvik Society, Arviat, Nunavut)

Katherine Wilson (Chief of Strategic Policy and Planning, Canadian Ice Service, Environment and Climate Change Canada and; PhD Candidate, Department of Geography, Memorial University of Newfoundland, Burlington, Ontario)