

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

Project Summary

Research Team:

Gita Ljubicic, School of Geography and Earth Sciences, McMaster University, Hamilton (Lead)

Shirley Tagalik, Aqqiumavvik Society, Arviat (Nunavut Co-Lead)

Jackie Dawson, Department of Geography, Environment and Geomatics, University of Ottawa, Ottawa (Nunavut Co-Lead)

Natalie Carter, Department of Geography, Environment and Geomatics, University of Ottawa, Ottawa (Postdoc and Nunavut Research Coordinator)

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

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

Lucassie Arragutainaq, Sanikiluaq Hunters and Trappers Association and Arctic Eider Society, Sanikiluaq (Collaborator)

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

Shari Fox, Ittaq Heritage and Research Centre, Clyde River (Collaborator)

Joel Heath, Arctic Eider Society, St. John's and Sanikiluaq (Collaborator)

Theo Ikummaq, Independent Researcher, Igloolik (Collaborator)

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

Carolyn Marshall, Environment and Climate Change Canada and Department of Geography, Environment and Geomatics, University of Ottawa, Ottawa (Collaborator and PhD Student)

Simon Okpakok, Independent Researcher, Gjoa Haven (Collaborator)

Natasha Simonee, Independent Researcher, Pond Inlet (Collaborator)

Katherine Wilson, Environment and Climate Change Canada and Department of Geography, Memorial University of Newfoundland, Burlington (Collaborator and PhD Student)

Project Location:

Qikiqtaaluk Region: Clyde River, Igloolik, Iqaluit, Pond Inlet, Sanikiluaq

Kivalliq Region: Arviat, Coral Harbour

Kitikmeot Region: Cambridge Bay, Gjoa Haven

Timeframe: September 1, 2019 to December 31, 2022

Project Description:

Overview and Goals

Our project team includes Inuit, northern, and academic researchers who have worked together over many years in different communities across Nunavut. Over the years, we have learned that weather, water, ice, and climate services are being used more often to plan travel on the land (including water and ice), to support search and rescue efforts, and to support community adaptation to climate change. However, we have also heard many concerns that these services are not easy to access, understand, or use in remote northern communities, and often do not provide information that is relevant to travel on the land.

The goal of our project is to learn from Nunavummiut about what kinds of environmental information or services they rely on to decide when and where to travel on the land. We want to learn what kinds of weather, water, and ice information is used in different communities to assess travel safety.

We also want to know what Nunavummiut think is missing, and what could be improved. To do this, we have developed a survey to get feedback from community members. Input from across Nunavut will provide valuable guidance for service providers and decision-makers who are trying to make services more relevant to arctic travel. Ultimately, we hope that results of this project can lead to improved products and services to help Nunavummiut have safer and more successful travel.

Methodology:

We have developed a survey that will take 30-60 minutes to complete. A Local Research Coordinator (LRC) will be hired in each community to facilitate the surveys. Surveys can be completed in hard copy or online, independently or with help from the LRC. A list of potential participants will be developed by Nunavut Collaborators and community partners. We aim to speak with a broad range of Nunavummiut, include men and women of all ages and levels of experience with travelling on the land. Our goal is to complete 50-150 surveys per community, depending on population size. We will be inviting people to be involved if they have been actively travelling outside their home community within the last three years. This will help to learn about current uses of environmental information and services, based on services available in recent years, and will reflect seasonal contexts for each community. This project also involves LRC training in survey facilitation and analysis. Preliminary results will be reviewed with Nunavut Collaborators and community partners before sharing with service providers, decision-makers, or other researchers.

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.

Data Use and Storage:

Community and regional reports and summaries will be developed and translated. All data will be shared and stored at participating regional or community partner organizations. While long term ownership, control, access and possession continues to be discussed (i.e. beyond the life of this project), the research team fully recognizes that the data collected through this study is the property of the communities and their representative organizations. Potential exists for long term storage and ownership at regional or national Inuit organizations and research centres. These possibilities will be explored and discussed. All compiled project results and outputs will be publicly available. Metadata will be provided to the Polar Data Catalogue.

Reporting:

Preliminary results will first be shared and verified with community collaborators, then more broadly. Electronic and hard copies of non-technical reports (English and Inuktitut) will be shared with: individual participants (upon request), community partners and key organizations, regional partners and key organizations, community/regional/national service providers and decision-makers working to tailor their weather, water, ice, and climate products and services. Academic publications and conference presentations will also be prepared to share results with the academic and service provider/government communities.