Inuvialuit **Research** Newsletter



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Inuvialuit Regional Corporation, 2019

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Message from the Chair & CEO

Aaqana readers,

It is my pleasure to welcome you back to the annual Inuvialuit Research Newsletter. In these pages you will find updates on all research projects underway in the Inuvialuit Settlement Region (ISR).

For many years, most of the research in the ISR was conducted by other organizations, post-secondary institutions, and government departments. In recent years, the Inuvialuit Regional Corporation (IRC) has built up its research capacity and begun to undertake Inuvialuit-owned, led and partnered research initiatives. Autonomy and control over research in our region is an important step towards reconcilliations and greater Inuvialuit selfdetermination.

In 2016, IRC created the Inuvialuit Research unit under the Government Affairs Division with the goal of enhancing our evidence-based decisionmaking approach to policy development and advocacy. Since then, the unit has grown to include eight permanent positions, a mentorship branch and more than fifteen major projects. IRC is tremendously proud of the dedication to advancing our research goals that the Inuvialuit Research team has demonstrated over the last three years.

2019 marked a pivotal year for the Inuvialuit Research unit as it merged with the Inuvialuit Community Economic Development Organization (ICEDO) and transformed it into its own, stand-alone Division: the Innovation, Science, and Climate Change (ISCC) Division. The division will be led by its new Director, Jenn Parrott, and will be based in the Mack Travel



Building, Suite 104 (the old Bank of Montreal). Whether you are a new or returning reader, I want to thank you for taking the time to learn about the impactful and interesting work being done in the ISR by IRC and other organizations in the region. I would also like to acknowledge and thank our partner organizations for their important contributions to this newsletter. I am proud of the valuable research being conducted in the ISR and we are eager to share it with you.

Quyanainni! Koana! Quyanaqpak!

Sunchit

Duane Ningaqsiq Smith Atanruîuq Katimaîuanun Chair and CEO, Inuvialuit Regional Corporation

Inuvialuit Final Agreement

The Inuvialuit Final Agreement (IFA)

After ten years of negotiations, the Western Arctic Claim - better known as the Inuvialuit Final Agreement (IFA) - was signed by the Committee for Original People's Entitlement and the Government of Canada on June 5, 1984. It was the first comprehensive land claim agreement signed north of the 60th parallel and only the second in Canada at that time.

In the IFA, Inuvialuit agreed to give up their exclusive use of their ancestral lands in exchange for certain other guaranteed rights from the Government of Canada. The rights came in three forms: land, wildlife management, and money. The IFA will not prejudice the rights of Inuvialuit as Canadian citizens nor as Aboriginal people within the Constitution. The signing of the IFA is without prejudice to the Aboriginal rights of other native peoples within the Inuvialuit Settlement Region (ISR) and the negotiation of their own land claims in respect of their own rights.

Goals of the IFA

The main goals expressed by the Inuvialuit and recognized by Canada in the IFA are:

(a) to preserve Inuvialuit cultural identity and values within a changing northern society;

(b) to enable Inuvialuit to be equal and meaningful participants in the northern and national economy and society; and

(c) to protect and preserve the Arctic wildlife, environment and biological productivity.

The Inuvialuit Inuit

Inuvialuit are the Inuit of the Western Canadian Arctic who trace their origins to the Thule culture, which developed in Alaska more than 1,000 years ago and soon after spread into what is now known as the Canadian Arctic.

In the 19th century, Inuvialuit were living in named groups with well-defined territories along the lower reaches of the Mackenzie River and along the shorelines of the Beaufort Sea. The rich resources of this territory allowed them to live in large communities of up to several hundred people.

Beneficiary Eligibility

A beneficiary of the IFA must be a Canadian citizen and is: (1) on the official voters list used for approving the IFA; or (2) of Inuvialuit ancestry. A person may also be eligible if he or she: (1) has Inuvialuit ancestry and is accepted by an Inuvialuit Community Corporation (CC) as a member; or (2) is an adopted child of a beneficiary. Descendants of beneficiaries are also eligible to participate in the Settlement.

The Inuvialuit Trust

Under the IFA, each Inuvialuit enrolled as a beneficiary shall share equally in the benefits received by various Inuvialuit CCs and distributed through the Inuvialuit Trust.

Each eligible Inuvialuk 18 years or older is entitled to enrol as a beneficiary and upon acceptance will receive a non-transferable Trust Certificate in the Inuvialuit Trust.

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Located in Canada's western Arctic, the ISR refers to the area covered under the IFA. (Map courtesy of the Inuvialuit Regional Corporation)

The Inuvialuit Settlement Region

Located in Canada's western Arctic, the ISR refers to the area covered under the IFA.

The ISR was designated in the IFA for the Inuvialuit people by the Government of Canada.

Covering the entire northern portion of the Northwest Territories, the ISR spans 1,172,749 square kilometres.

Of this area, Inuvialuit own approximately 15,000 square kilometres of subsurface lands (referred to as 7(1)(a) lands), and approximately 90,000 square kilometres of surface lands (referred to as 7(1)(b) lands).

The ISR is made up of both Inuvialuit private lands and Territorial lands spanning several subregions, such as the Beaufort Sea, the Mackenzie River Delta, the Yukon North Slope, and the Western Canadian Arctic Islands.

In 2015, the estimated population of the ISR was 5,700 people, of which 3,300 are Inuvialuit.

Of the six communities in the ISR all are within the Northwest Territories.

There are no Inuvialuit communities in the Yukon North Slope.

About IRC

About IRC and its Corporate Structure

Established in 1984 to manage the settlement outlined in the IFA, the Inuvialuit Regional Corporation (IRC) represents the collective Inuvialuit interests in dealings with governments and the world at large. Inuvialuit beneficiaries directly control IRC and its subsidiaries through a democratic process of seven elected Directors from each of the six Community Corporations (CCs).

Each Inuvialuit community - Aklavik, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, and Ulukhaktok - has a CC with elected Directors. The Directors of the six CC's elect the IRC Chair and CEO. The forty-two Directors of the CCs, along with the Chair and CEO of IRC, form IRC's Board of Directors.

IRC's Mandate

IRC's mandate is to continually improve the economic, social, and cultural well-being of the Inuvialuit through implementing the IFA and by all other available means.

IRC's Operating Philosophy

The mandate and corporate goals of the IRC can only be met through a strong commitment by all directors, officers, and employees of IRC to an operating philosophy of teamwork, dedication, and coordination of both planning and action.

The focus of all effort must be the improved well-being of Inuvialuit. This will be the core criterion by which all corporate activities are measured.

IRC's Corporate Goals

- To preserve and grow the financial compensation flowing from the IFA;
- To distribute accumulated wealth to beneficiaries;

• To represent and advance Inuvialuit interests in external relations, including federal, territorial, and municipal governments; in circumpolar and other Indigenous organizations; and in the private sector and with special interest groups;

- To ensure responsible stewardship of Inuvialuit lands;
- To identify and implement economic, social, cultural, educational, training, and employment programs that benefit Inuvialuit;
- To provide technical and administrative support to Community Corporations and beneficiaries; and
- To promote the rights and benefits accorded to Inuvialuit under the IFA.

IRC 2019 Research Priorities

1. 2019 Beaufort Strategic Environmental Assessment Research Priorities

Determined through information gathered from beneficiaries during 2016-2018 community tours

- Meaningful inclusion of traditional knowledge and consultation of knowledge holders
- Effect of marine traffic on water quality, key fish species, and marine mammals
- Relationship between environmental change and preservation of tradition and culture
- Cumulative effects research in the following areas: employment rate; social wellness; education; harvesting; food security; oil and gas disaster response infrastructure; climate change; and water quality.

2. 2019 Strategic Research Priorities

Determined through information gathered at the January 2019 IRC 42 Directors Meeting

- Environmental change (ice, landslides, safety, permafrost, erosion)
- Interactions between humans and the environment (tourism and economics, cumulative effects, grey and ballast water, place names)

3. 2019 Community Identified Research Priorities

Determined through information gathered at 2018 and 2019 community tours

- Climate change, invasive species, and geohazards
- Marine safety and coastal eroision
- Wellness and place names
- Energy



IRC's Board of Directors at the January 2019 IRC 42 Directors Meeting. (Photo courtesy of the Inuvialuit Regional Corporation)

About IRC's ISCC Division

Behind the Scenes at IRC's ISCC Division

The ISR is one of the most studied locations within Canada due to its rapidly changing environment, the creation of the Inuvik-Tuktoyaktuk Highway (ITH), and a recent surge in funding related to climate change research.

Research programs are always evolving to meet beneficiary needs, community organizations, and partners at the regional, territorial, and national levels. As such, the inclusion of Inuvialuit worldviews has also improved.

In 2016, IRC created a specialized research division, which was renamed in 2019 to the Innovation, Science, and Climate Change (ISCC) division. This division is led by a Director and is organized into the following pods:

- Cyber Infrastructure/Data
- Environmental Policy
- Health/Engagement
- Inuvialuit Community Economic Development Organization (ICEDO)

Work administered and produced by ISCC during the 2019-2020 fiscal year focused on the development and implementation of several regionally coordinated initiatives, which included:

- A research agenda
- A climate change action plan
- A clean energy strategy
- A regional opportunity readiness plan

ISCC is located in the Mack Travel Building at 151 Mackenzie Road, Suite 104 (the old Bank of Montreal).

ISCC Division Staff

Director Jenn Parrott, Director

Cyber Infrastructure/Data Matthew Maciek Chudek, Statistician

Michael O'Rourke, Inuvialuit Place Names Project Coordinator

Environmental Policy

Brian Park, Climate Change Program Coordinator

Darby Desrosiers, Clean Energy Coordinator

Tess Forbes, Marine Programs Coordinator

Tyra Cockney-Goose, Climate Change and Environmental Program Assistant

Health/Engagement Kendra Tingmiak, Inuit Research Advisor

Inuvialuit Community Economic Development Organization Patrice Stuart, ICEDO Projects Coordinator

ISCC 2019 Research Priorities

1. Ensure that Traditional Knowledge and western science are equally considered in policy decisions made in the ISR

- Foster a culture of innovation and self-determination
- Develop a robust internal research program which addresses local priorities

2. Communicate about research happening in the ISR effectively

- Facilitate local participation through opportunities and knowledge mobilization
- Increased local participation (Environmental and Wildlife Mentors)
- Increased local engagement (Newsletters, flyers, community tours)
- Make products of research and data available

3. Ensure Inuvialuit are meaningfully involved in all ISR research policy processes

- Re-evaluate internal research licensing process
- Develop Inuvialuit focused research policy and associated materials
- Standards for engagement and involvement in research conducted by external groups

4. Develop an ISR research agenda

• Identify research gaps

• Develop a coordinated approach between the various Inuvialuit organizations as to how tangible research is conducted in the ISR

5. Mentor the next generation of Inuvialuit researchers

- Provide youth with employment and opportunities to be directly involved in research
- Provide youth with training and mentorship activities to build skills while transferring knowledge



One ISCC priority is to ensure traditional knowledge is considered when making policy decisions. (Photo courtesy of the Inuvialuit Regional Corporation)



IRC 2019-2020 Research Projects

ASSESSING THE POTENTIAL IMPACTS OF PRICING CARBON POLLUTION ON COMMUNITIES IN THE ISR

Project at a Glance

Project Lead

IRC in partnership with the Government of Canada

Project Objective

To investigate the potential impacts of the federal Carbon Tax on ISR communities that rely on traditional harvesting methods (which require fuel which has an increasing cost due to the Carbon Tax) for food.

Communities Involved

Aklavik, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, Ulukhaktok

Project Status Phase two complete

To reduce the impacts of climate change, the government of Canada created a Carbon Tax. The price of fuel all over Canada will go up gradually over the coming years, with the aim of encouraging companies and people to use less fuel and find greener alternatives. To reduce the impact of this change on community members, the government will send some of the money gathered from this tax back to people in the form of an offset cheque.

This could have unexpected negative impacts in Inuvialuit communities.

In the ISR, many people harvest food on the land, which is less expensive and more sustainable than shipping it up from Southern Canada and buying it in the store. But higher fuel prices brought on by the Carbon Tax may make harvesting food on the land more expensive and less accessible for many people. Due to the high cost of food in stores, an offset cheque in the mail may do very little to help while creating barriers to traditional hunting and increasing dependence on stores.

To investigate this, and potentially inform the Government of Canada of these unforeseen consequences, we are collecting data on:

- Cost & yield of hunting in the ISR
- How fuel price change affects hunting
- The costs of shipping food to the ISR from Southern Canada; and
- The carbon footprint of these activities.

We hope to have a report on this important topic in 2020.

SOCIO-CULTURAL ECONOMIC INDICATORS

Project at a Glance

Project Lead Jenn Parrott and Bob Simpson

Project Objective

To track social, cultural, and economic indicators related to the ISR. Data is used for program management, IFA implemention, and assessing overall wellness within the western Arctic region.

Communities Involved

Inuvik, Aklavik, Tuktoyaktuk, Paulatuk, Ulukhaktok, Sachs Harbour

Project Status Multi-year (ongoing)

Inuvialuit Indicators was launched in 2007 to track the socio-economic well being of Inuvialuit in the western Arctic.

The timing of its launch coincided with discussions and planning for the proposed Mackenzie Gas Project. IRC determined that this major infrastructure could substantially exacerbate existing social problems in the region.

As a result, Inuvialuit Indicators helps monitor the impacts of oil and gas development on the soci-economic conditions in the region, and to create a database to show historical trends in the years to come. There are currently over 150 indicators available on the website which can be downloaded or visualized using the platform.

Data has been contributed from the Northwest Territories Bureau of Statistics, Beaufort Delta Education Council, other Government of the Northwest Territories (GNWT) departments, boards and agencies, Government of Canada, and IRC.

To make good decisions, community members and local organizations need good information. To represent Inuvialuit people, especially when negotiating with the Government of Canada, IRC needs good quality, reliable data on what people's lives are like in our communities.

There are demographic questions, like: how many people are there? How old are they? How many people are being born,? How many are graduating high school? There are economic questions, like: how much money do people earn? How much does housing and groceries cost? Is life getting easier or harder? And there are social questions, like: what are the major challenges people are facing? What are the causes of depression and suicide? Which support services are working and which are not?

Working with Statistics Canada and the GNWT Statistics Department, we are compiling social, cultural, and economic indicators about life in the ISR. We are working to ensure these statistics are always available in a consistent format, are available within IRC for staff and directors to use, and published online for ISR residents to reference.

The Inuvialuit Indicators website is online and updated periodically and can be found here: https://indicators.inuvialuit.com/

INUVIALUIT PLACE NAMES

Project at a Glance

Project Lead

Jenn Parrott and Michael O'Rourke

Project Objective

To develop a consolidated and quality-controlled map of place names within the ISR.

Communities Involved

Inuvik, Aklavik, Tuktoyaktuk, Paulatuk, Ulukhaktok, Sachs Harbour

Project Status

Multi-year (ongoing)

Over the centuries, Inuvialuit have lived and travelled through the ISR and given names to camping places, settlements, and important landmarks.

These names may reflect the kinds of activities that were carried out at those places, the kinds of resources the area is known for, or events that occurred there.

Place names help to shape and define the cultural landscape and are an enduring record of Inuvialuit history and heritage. Knowing place names and their meanings, the resources or landmarks at those locations, and the sequence of those place names as people journeyed along travel routes was one way that Inuvialuit learned to read the land without a writing system or printed maps. These locations are of central importance when identifying key areas of significance within the ISR. This initiative aims to identify, collect, overlap and control the quality of data previously collected from Place Names research.

Place name information will be complied from existing research and will include names documented on maps and in interviews in both English and Inuvialuktun.



Place names are an enduring record of Inuvialuit history and heritage. (Photo courtesy of 'The Inuvialuit Place Names Project: Applying toponym Research in the Management of Cultural Landscapes' M. O'Rourke, Prince of Wales Northern Heritage Centre)

INUVIALUIT SELF-DETERMINATION WORKSHOP

Project at a Glance

Project Lead IRC's ISCC Division

Project Objective

To advance coordinated research in the ISR by facilitating dialogue on research policies, priorities, and frameworks that integrate aspects of territorial and national Inuit research strategies.

Communities/Organizations Involved IRC, Joint Secretariat, Shared Services Unit

Project Status

Complete - draft Inuvialuit Research Agenda in development

The Inuvialuit Self-Determination Workshop was held September 11 and 12, 2019 at Ingamo Hall Friendship Centre in Inuvik, NT.

Twelve representatives from the Inuvialuit Joint Secretariat (JS) co-management boards, the JS Shared Services Unit (SSU), and various divisions of IRC took part in roundtable discussions at the workshop.

Eight questions were identified around the subject of research, specifically regarding communications, policies, and ethics.

Also discussed was the co-development and advancement of an Inuvialuit regional research agenda.

Twenty-five emergent themes and recommendations were drafted and distributed for review and feedback from the IRC Board of Directors in October 2019.

The purpose of the workshop was to promote organization advancement in coordinated research through the ISR by facilitating introductory dialogue on research policies, priorities, and frameworks that integrate aspects of territorial and national Inuit research strategies, such as Inuit Tapiriit Kanatami (ITK)'s National Inuit Strategy on Research (NISR), and contribute to IRC's 2019-2021 Strategic Plan.

Another aspect of the workshop focused on developing an Inuvialuit Research Agenda and Policy, and discussions regarding advancing the development of an Inuvialuit Research Agenda and to create a short report outlining discussions and emerging themes associated with the roundtable discussions.

The two-day workshop saw approximately 25 participants representing regional Inuvialuit organizations (IRC, ILA, CEDO, ICRC, JS, IGC) and Inuvialuit co-management organizations (FJMC, WMAC-NWT, WMAC-NS).

The focus of discussions included research conducted within the Inuvialuit Settlement Region by or with Inuvialuit organizations.

IMPROVING COMMUNICATION ON CLIMATE CHANGE AND LONG-RANGE CONTAMINATES FOR COMMUNITIES AND RESEARCHERS IN THE ISR

Project at a Glance

Project Lead IRC's ISCC Division

Project Objective

To bridge knowlegde gaps in Inuvialuit communiies and the disconnect with climate change researchers in the ISR.

Communities Involved

Aklavik, Inuvik, Tuktoyaktuk, Ulukhaktok

Project Status

Complete - aim to host a second workshop in 2020-2021

This initiative centered around a workshop held in Inuvik, Northwest Territories, on September 18 - 20, 2019.

The workshop was facilitated by IRC's ISCC Division, in partnership with the Inuvialuit Cultural Resource Centre.

Six translators, fluent in each of the three Inuvialuktun dialects (Sallirmiutun, Uummarmiutun, and Kangiryuarmiutun/ Innuinnaqtun) translated and assigned literal meanings to 21 terms related to climate science and long-range contaminants. The translations are intended to bridge knowledge gaps in Inuvialuit communities and mitigate the disconnect with climate change researchers who conduct their studies in the ISR.

The translated and verified terms are outlined in a project summary report, which is accessible on the IRC website.

Depending on future funding, a second workshop may be organized to translate additional climate change terms.



At the September 2019 workshop, translators worked to translate 21 terms related to climate science and long-range contaminants from English to the three Inuvialuktun dialects.

(Graphic courtesy of Inuvialuit Regional Corporation)



IRC-Partnered 2019-2020 Research Activities

BEAUFORT REGIONAL STRATEGIC ENVIRONMENTAL ASSESSMENT

Project at a Glance

Project Lead

Jenn Parrott and Government of Canada

Project Objective

A comprehensive examination of the interrelationships between the environment, social, cultural, and economic conditions, the traditional use, and wildlife harvesting of natural resources and decision-making by Inuvialuit, regulatory and planning authorities.

Communities Involved Inuvik, Aklavik, Tuktoyaktuk, Paulatuk, Ulukhaktok, Sachs Harbour

Project Status Multi-year (2016-2021)

This project facilitates a better understanding of the Beaufort Sea Large Ocean Management Area and contribute to the review included in the December 20, 2016 United States-Canada Joint Arctic Leaders' Statement by:

• Promoting engagement, education, monitoring, and research projects in the western Arctic to support informed decision-making around future resource development, environmental conservation programs, community sustainable and subsistence activities;

• Review under which conditions do Inuvialuit endorse oil and gas activities in the Beaufort; and

• Assess how other variables will affect the future of the Beaufort (i.e. invasive species, climate change, transportation).



BRSEA Fall 2019 Community Tour. (Photo courtesy of the BRSEA Assessment and Report Presentation)

ADVANCING ARCTIC RESEARCH THROUGH CONNECTED DATA INFRASTRUCTURE

Project at a Glance

Project Lead

IRC in partnership with Canada's foremost Arctic scholars and data managers

Project Objective

To support Inuit self-determination; enable informed actions for managing decision-making around multiple issues; support operational activities by making information from space-based technologies more accessible and usable for those charged with search and rescue; and to ensure safe transportation and protection of life, environment, and infrastructure in Canada's Arctic.

Communities Involved

Aklavik, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, Ulukhaktok

Project Status Ongoing

The Canadian Consortium for Arctic Data Interoperability (CCADI) is a collaboration between several major scientific organizations that work and collect data in the Arctic. Currently, these organizations - including IRC's ISCC division - are using their own data internally, or making it available inconsistently to others piece by piece.

We will be able to do so much more with this data if we can have our computer systems automatically connect it all together.

Together, as the CCADI project, we are writing computer software that both connects the data and makes it easy for scientists, researchers and community members to find it, look up what they're interested in, and begin using it.

We have already made our Inuvialuit Indicators data interoperable and are working with the CCADI technical team to fully integrate it into the emerging CCADI platform.

We are also developing systems and policies within IRC that will make it easy for staff to connect future data to the system if they choose to.



Data on the Inuvialuit Indicators website is interoperable and will eventually be integrated with the emerging CCADI platform. (Screenshot courtesy of IRC's Inuvialuit Indicators website)

ISR DRILLING SUMPS FAILURE AND CLIMATE CHANGE

Project at a Glance

Project Lead Bob Simpson

Project Objective

Develop an updated drilling waste and sump inventory for the ISR which sets the foundation for conducting a regional sump assessment.

Communities Involved

Aklavik, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, Ulukhaktok

Project Status Complete

This project involves a desktop study which set the foundation for analyzing predicted air and ground temperature change and its impact on known or expected drilling waste and muds on the surrounding environment. The updated inventory attempted to identify any wells for which the owner could not be identified (orphan well sites), documents the status of the sumps and identifies the characteristics of any new sumps since the last inventory done in 2004 (AMEC, 2005).

The study also provides insights into the pace and extent of climate change affecting sump failure with associated environmental impacts. The inventory provides a basis for future recommended priorities for methods that could mitigate the environmental impacts from failed sumps, or sumps that could fail in the future.

The IFA sets out government and Inuvialuit responsibilities in relation to wildlife and environment ("to protect and preserve the Arctic wildlife, environment and biological productivity." IFA 1(c)). In particular, the IFA compels the Parties to use standards set out in laws of general application for the environment and safety. Inuvialuit land management rules should be equal or exceed government standards.

With a changing arctic environment, there is a growing need to determine the status, pace, and stability of drilling waste and sumps and develop and implement mitigation and remediation efforts prior to their failure as a result of global warming and resource development activities in the ISR.



Map of well sites located in the ISR. (Photo courtesy of Drilling Sumps Failure and Climate Change Report: Jamie Van Gulck, PhD., P.Eng., Principal, ARKTIS Solutions Inc., March 11, 2020)

MUNAQSIYIT - INUVIALUIT GUARDIANS

Project at a Glance

Project Lead

Chloe Brogan, Inuvialuit Joint Secretariat Shared Services Unit

Project Objective

To enable Inuvialuit monitors to include year-round monitoring and data collection of safety hazards, such as debris and environmental disturbances influenced by a changing climate and legacy of industrial development and tourism practices.

Communities Involved

Aklavik, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, Ulukhaktok

Project Status Multi-year (ongoing)

Emerging land hazards such as permafrost change, erosion, and flooding can impact biodiversity of plants and animals, as they can cause changes in physical habitat and structure, alter wildlife movement and create conditions for environmental pollution.

Identifying and recording these hazards will enable IRC and the Joint Secretariat (JS) to identify remediation activities to lessen the impacts and resulting changes to biodiversity within the ISR.

The program will use local community monitors and community members in gathering information about traditional land in the ISR and connecting to lands.

Monitors (also known as Guardians) will collect data from their own observations as well as the observations on the land and water and ice.

The collections of information and data will be downloaded on the ISR Data Platform. Validation of data will be done at regular Hunters and Trappers Committee meetings.

To ensure safe travel and stewardship of the land, results will be shared with local community organizations via posters, radio advertisements, maps, and an interactive mapping application.



The ISR Community Based Monitoring Program aims to appropriately survey the region. (Graphic courtesy of the Joint Secretariat)

ISR PLATFORM

Project at a Glance

Project Lead

Jenn Parrott and the Department of Fisheries and Oceans Canada

Project Objective

To minimize knowledge mobilization barriers by creating a central storage house for geospatial information pertaining to the Beaufort Sea Large Ocean Management Area.

Communities/Organizations Involved

Aklavik, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, Ulukhaktok, Hunters and Trappers Committees, Government, Co-Management Organizations

Project Status

Multi-year (2011 to Present)

This project aims to minimize knowledge mobilization barriers by creating a central storage house for geospatial information pertaining to the Beaufort Sea. The fully interactive platform facilitates data sharing and supports the implementation of the integrated Oceans Management Plan. Available to all members of the Beaufort Sea Partnership, this user-friendly, intuitive, and integrated online knowledge mobilization platform facilitates information sharing, improves decision making, organizes existing data, and promotes collaboration among various partners.

The Beaufort Sea Large Ocean Management Area (LOMA) is one of five priority areas identified for integrated ocean management planning by the Government of Canada in 2011, the Inuvialuit Settlement Region Platform allows members of the Beaufort Sea Partnership to easily communicate and conduct multi-layer spatially based operations to meet management objectives for the Beaufort Sea LOMA. It is a web-based Platform for central storage and enhanced visualization of geospatial information.

The principal activitie of this project are: increasing geospatial capabilities through application development, data collection, data storage, map generation, multi-layer analysis, enhanced information sharing, and increased collaboration.

Frequency of login May Aug Nov Feb Legend: Approximate daily trend: Best fitting straight line: 95% confidence interval:

(Graph courtesy of ISRP_1PageStats_withTukCC.pdf)

INUVIALUIT HARVEST STUDY

Project at a Glance

Project Lead

Chloe Brogan, Inuvialuit Joint Secretariat, Shared Services Unit

Project Objective

To support Inuvialuit-focused wildlife and natural resource development decisions in the ISR by providing local environmental and harvest information

Communities Involved

Aklavik, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, Ulukhaktok

Project Status Multi-year

Inuvialuit harvesters, 16 years of age and older, whom are registered with their local Hunters and Trappers Committee (HTC), provided information to the Inuvialuit Harvest Study (IHS).

The IHS is a community based effort that recognizes the importance of traditional knowledge and meaningfully engages beneficiaries of the IFA in harvest data collection. In addition to harvest information, participants are asked to share their comments, observations, and concerns regarding environmental trends or changes they have experienced while out on the land. This not only ensures that the Inuvialuit Harvest Study is able to provide a more complete analysis of harvesting in the ISR, but facilitates meaningful community participation and self-advocacy. Data collected from the IHS is used to better inform Inuvialuit decision and policy makers on wildlife and environmental matters including environmental assessments.

The IHS fulfills core requirements of the IFA by collecting the required information to continue to protect and preserve Inuvialuit harvesters and traditional harvesting lands.

Through identifying key areas of harvest and associated ecosystems, results from this work will support the review of under which conditions do Inuvialuit endorse oil and gas activities in the Beaufort.

Additionally, this work provides a representative dataset which can be compared to the previous harvest study conducted from 1987-1996.

Questions about the study or want to participate?

Contact: Community Based Monitoring Program Coordinator Joint Secretariat Tel: (867) 777-2828 Fax: (867) 777-2610 cbmp@jointsec.nt.ca

QANUIPPITAA? - NATIONAL INUIT HEALTH SURVEY

Project at a Glance

Project Lead

IRC's Health and Wellness Division

Project Objective

To improve the health and well-being of Inuit in Canada by providing Inuitled, Inuit-owned research to inform policy makers, law makers, and government.

Communities Involved

Aklavik, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, Ulukhaktok

Project Status

Multi-year

The Qanuippitaa? National Inuit Health Survey (QNIHS) is a pan-regional, collaborative research program that is ultimately led by the QNIHS Working Group, a sub-group of National Inuit Committee on Health (NICoH).

Within IRC, the Health and Wellness Division serves as the lead for the ISR, working in close collaboration with ISCC. The QNIHS program encompasses a permanent, recurring core questionnaire, with a potential for clinical testing (every 5-years).

The QNIHS is a massive project, that includes partners in all four Inuit Land Claims Organizations (or their designate), both Provincial and Territorial representation, Inuit Taparit Kanatami, various Technical Advisors across Canada, Pauktutiit Inuit Women of Canada, and Statistics Canada. To summarize the QNIHS program, please see the below diagram as created by the QNIHS Working Group.



Qanuippitaa? is a collaborative Inuit health research program. (Graphic courtesy of the National Inuit Health Survey)

MULTI-STRESSOR RESPONSES OF KEY ARCTIC FISH SPECIES WITHIN A CLIMATE CHANGE IMPACT FRAMEWORK

Project at a Glance

Project Lead

Nadja Steiner, Department of Fisheries and Oceans Canada

Project Objective

To assess the impact of climate change indicators on species health through acidification studies/ modelling in the Beaufort Sea.

Communities Involved

Paulatuk, Sachs Harbour, Ulukhaktok

Project Status Complete

The physical, chemical, and biological properties of aquatic ecosystems in the Western Canadian Arctic and Subarctic are rapidly changing. The anthropogenic build-up of greenhouse gasses in the atmosphere and the consequent increase of ocean absorption of carbon dioxide (CO2) are causing ocean warming and acidification, respectively. We need to provide high resolution model projections for these aquatic ecosystems to help inform resource managers and subsistence harvesters about the potential impacts of climate change and ocean acidification.

Arctic fish species are exposed to multiple

human induced stressors: climate change related increases in temperature, decreases in pH (ocean acidification), and habitat loss (for sea ice associated species such as Arctic cod), as well as potential increases in noise level and contaminants due to enhanced human activity in the north. The combined cardio-respiratory method examines changes in heart rate and oxygen uptake under stress and is a powerful tool to quantify the impact of multi-stressors upon animal health. This method will be adopted to perform multiple stressor laboratory experiments on key Arctic species. Species will be chosen based on interviews with local communities in the ISR.

Measured physiological responses and thresholds will then be incorporated into risk assessments by DFO's Ecosystem Stressors Program to provide science advice on potential ecosystem impacts of cumulative stressors. Results will be implemented in higher trophic level species distribution and Ecopath models and combined with regional climate model projections to understand already observed changes and assess potential future changes in species abundance, distributions and species shifts. This will allow for the assessment of impacts on species distribution and abundance within local communities.

This work will include the identification of acidification thresholds for key species and assessments of associated health characteristics. This project's principal activities are: development of a database, regional climate modelling, lab work, community visits, and monitoring forage fish habitat.



Aklavik Hunters and Trappers Committee (AHTC) Community-Based Monitoring Activities

ARCTIC SALMON

An estimated 800 salmon were traded in to the Arcic Salmon project during the 2019-2020 fiscal year.

This project aims to track the migration and abundance of Arctic salmon (such as the Chum, Pink, Sockeye, and Chinook species), and unusual fish spotted and/or harvested in the Northwest Territories and Nunavut to better understand and monitor trends through genetics using both fish head and whole fish samples. Data for this project is collected by the Department of Fisheries and Oceans Canada (DFO), in partnership with the Aklavik Hunters and Trappers Committee (AHTC), Fisheries Joint Management Committee (FJMC), the Gwich'in Renewable Resources Board (GRRB), along with the assistance of the Hunters and Trappers Committees (HTCs) and the Renewable Resources Councils (RRCs) of Inuvik, Aklavik, Sachs Harbour, Paulatuk, Tsiigehtchic, and Fort McPherson.



The Arctic Salmon project aims to track the migration and abundance of Arctic salmon and other fish in the Northwest Territories and Nunavut.

(Image courtesy of the Aklavik Hunters and Trappers Committee)

ATHC COMMUNITY-BASED MONITORINGACTIVITIES CONTINUED: NORTH SLOPE DOLLY VARDEN POPULATION ASSESSMENT



Dolly Varden harvest data is used to evaluate trends in harvest and biological indicators over time. (Image courtesy of the Aklavik Hunters and Trappers Committee)

DFO, in partnership with AHTC, West Side Working Group, FJMC, and Parks Canada reported a total of approximately 315 and 359 Dolly Varden harvested from Shingle Point (Babbage, Big Fish, and Rat rivers), and Herschel Island (Joe Creek, Firth River, and Fish Creek, 'Komakuk' systems), Yukon Territory in 2019.

A total of 12 tagged Dolly Varden were recaptured at Shingle Point and 2 tagged char were reported for Herschel Island. A small number of Dolly Varden were harvested in Ivvavik National Park in 2019, of which 14 were sampled for biological data and tissue samples. Two sampling programs are in place to collect data to assess populations of the Dolly Varden: (1) coastal harvest monitoring; and, (2) fall seining and tagging. Data from the coastal sampling tells us how many are harvested and from which stock (using genetics), while those from tagging generate estimates of abundance. The biological information obtained from both programs are very useful to better understand char. All data collected are put together to evaluate trends in harvest and biological indicators over time. This forms the basis to determine the health of each stock.

The population assessment objectives for 2019 were to: (1) collect data from fisheries: catch and biological data at Shingle Point, Herschel Island, and in the Firth River; (2) conduct tagging studies to estimate population abundance: Fish Creek, Joe Creek, Firth RIver, Babbage River, and Big Fish River; (3) collect biological data from a small sample of resident and sea-run fish to better understand life history of Dolly Varden: Fish Creek, Joe Creek, Firth River, Firth delta spring, Babbage River, resident only in Big Fish River; and (4) collect habitat information during winter from rivers in Ivvavik National Park that support char.



Traditional Knowledge Projects Conducted in the ISR

Using Inuvialuit and Gwich'in Observations to Monitor Environmental Change in the Beaufort Delta Region

Dr. Trevor C Lantz; University of Victoria; Year 4 of 5; January 29 - December 31, 2019; Aklavik, Inuvik, Sachs Harbour, Tuktoyaktuk, Paulatuk, Ulukhaktok, Tsiigehtchic, and Fort McPherson.

The objective of this project is to work with Inuvialuit and Gwich'in experts to document and share local observations of environmental conditions.

Over time, this will build a record of observations against which future changes can be compared.

This research will employ methods including participatory photo-mapping, participatoryvideo, web-based mapping, photo-elicitation interviews, and field based video-interviews.

Communication of results will occur on an ongoing basis by:

• Providing plain language summaries to the HTCs/RRCs, interested community members, and schools in each community impacted; • Periodic oral presentations at the regular meetings of regional co-management organizations (i.e., IGC, GRRB, FJMC, HTCs/RRCs); and

• Public presentations at the Western Arctic Research Centre in Inuvik.

Project Jewel: Using Inuvialuit ways of Knowing to Understand How On-the-Land Programming Can Foster Wellness

Dr. Audrey R. Giles; University of Ottawa; Year 1 of 1; March 01 - December 31, 2019; Aklavik, Ulukhaktok, Inuvik, Sachs Harbour, Tuktoyaktuk, and Paulatuk.

The objective of this project is to better understand how on-the-land programming offers culturally-safe, trauma and violence-informed programs that meet the self-identified needs of residents of the Inuvialuit Settlement Region.

Photo books and a short film from the visual and audio data collected will serve as a knowledge translation tool to share information with research participants, funders, potential future participants, local schools, stakeholders.

Results will be shared at conferences and in publications aimed at both practitioners and researchers.

We will liaise with the Government of the Northwest Territories Department of Health and Social Services to identify ways in which findings can inform funding policies and practices.



Shining Lights: Energy Literacy and Language in the Northwest Territories

Centre for Indigenous Environmental Resources (CIER); August 13-15, 2019; Inuvik.

This project focuses on increasing foundational knowledge of energy and energy use and creates Indigenous language translations of key energy terminology.

This project will use a train-the-trainer model where six Indigenous trainers co-develop the proposed workshop curriculum, then work in pairs to deliver three regional workshops to a total of 75 Indigenous women and youth.

The workshops will focus on: (1) energy literacy concepts - a basic introduction to energy literacy; and, (2) energy terms translation into Indigenous languages - women and youth participants will work with Elders/translators to identify and translate key energy terms into Indigenous languages of the region.

These terms will be made into a poster and a final report for distribution to the participating communities

Improving Communication on Climate Change and Long-Range Contaminants for Communities and Researchers in the ISR

Inuvialuit Regional Corporation's Innovation, Science, and Climate Change Division; September 18-20, 2019; Aklavik, Inuvik, Tuktoyaktuk, Ulukhaktok.

The development and consistent use of accurate, standardized climate change terminology in all three dialects spoken in the ISR. In partnership with the Inuvialuit Cultural Resource Centre and IRC's ISCC department, a three-day workshop was hosted in Inuvik.

Six translators, fluent in each of the three Inuvialuktun dialects attended the workshop, and were presented with twenty-one climate change and long-range contaminants related terms to translate and provide literal meaning associated with each translation. Once translated, the words and meanings were sent to each translator for verification within their respective communities. The terms will be compiled into a Terminology Glossary that will be accessible across the ISR.



Frequency of Traditional Knowledge projects in the ISR as documented by the Aurora Research Institute's NWT Research Database from 1974 to 2019.



Northern Contaminants Program

What is the Northern Contaminants Program?

Crown-Indigenous Relations and Northern Affairs Canada started the Northern Contaminants Program (NCP) in 1991 due to concerns that Aboriginal people and Northerners in general were being exposed to high levels of contaminants through the consumption of wild meat common to traditional Aboriginal diets.

NCP found that many of the substances and pollutants discovered were not originating in the North, or even in Canada.

As a result, the program's key objective is to work towards reducing and, where possible, eliminating contaminants in traditional/ country foods, while providing information that assists individuals and communities in making informed decisions about their traditional food consumption. NCP provides funding for research and related activities through four main areas of focus that contribute to addressing health and safety issues arising from contaminants in traditionally harvested foods:

- Human Health Research;
- Environmental Monitoring and Research;
- Education and Communications; and
- National/Regional Coordination and Aboriginal Partnerships.

For more information about NCP's 2019-2020 ISR research activities, see page 46.

Who is involved in NCP?

Federal Departments:

- Health Canada
- Environment Canada
- Fisheries and Oceans Canada
- Indian and Northern Affairs Canada

Territorial Governments:

- Yukon
- Northwest Territories
- Nunavut
- Nunavik
- Nunatsiavut

Northern Aboriginal Organizations:

- Council of Yukon First Nations
- Dene Nation
- Inuit Tapiriit Kanatami
- Inuit Circumpolar Conference



A drilling machine for post holes in permafrost. (Image courtesy of Hunt, David E., 1925-, "Drilling Machine for the Post Holes in the Permafrost," Inuvialuit Cultural Centre Digital Library.)



Network of Centres of Excellence of Canada: ArcticNet

What is ArcticNet?

ArcticNet is a Network of Centres of Excellence of Canada that brings together scientists, engineers, and managers in the natural, human health and social sciences with their partners from Inuit organizations, northern communities, federal and provincial agencies and the private sector to study the impacts of climate change in the Canadian North.

Over 175 ArcticNet researchers from 33 Canadian universities, 8 federal and 11 provincial agencies and departments collaborate with research teams in Denmark, Finland, France, Greenland, Japan, Norway, Poland, Russia, Spain, Sweden, the United Kingdom and the USA. Earth's climate is warming and the increase in average global temperature predicted by climate models will be amplified at Arctic latitudes. In Canada, climate warming will have tremendous environmental, socio-economic and strategic consequences that will be felt first and most severely in Arctic regions.

The reduction of coastal sea-ice already hinders traditional hunting by Inuit, reduces the habitat of the unique Arctic fauna, increases exposure of coastal communities to storms and could soon open the way to intercontinental shipping, raising new challenges to Canadian sovereignty and security. In the terrestrial coastal environment, warmer temperatures and permafrost thawing are already disrupting transportation, buildings and other infrastructures. The central objective of ArcticNet is to contribute to the development

ArcticNet >PpsbcsbJTb JProdsbNrc

and dissemination of the knowledge needed to formulate adaptation strategies and national policies to help Canadians face the impacts and opportunities of climate change and modernization in the Arctic. A major goal of ArcticNet is to engage Inuit organizations, northern communities, universities, research institutes, industry as well as government and international agencies as partners in the scientific process and the steering of the Network.

ArcticNet is conducting Integrated Regional Impact Studies on societies and on marine and terrestrial coastal ecosystems in the Canadian High Arctic, in the Eastern Canadian Arctic, and in Hudson Bay. In addition to work conducted in northern communities, ArcticNet researchers from various fields use the Canadian research icebreaker CCGS Amundsen and field stations distributed across the North to access the vast expanses of the Canadian Arctic. This integrated research offers a unique multi-disciplinary and cross-sectorial environment to train the next generation of specialists, from north and south, needed to manage the Canadian Arctic of tomorrow.

The ArcticNet Administrative Centre is hosted at Université Laval, Quebec City, Canada. For more information about ArcticNet's 2019-2020 ISR research activities, see pages 47-48.



Knowledge Sharing and Advancement of Research



RSEA Community Outreach Tour 2019 participants gathered outside their charter. (Image courtesy of Michael Fabijan)

Beaufort Regional Strategic Environmental Assessment (RSEA) Community Outreach Tour 2019

The fourth tour with the IRC, IGC, and CIRNAC partners and community members of the ISR.

This tour presented communities the opportunity to engage and provide feedback on the potential oil and gas development in the Beaufort region and the desired economic and environmental outcomes that this development may bring about. The tour visited all six ISR communities in November 2019.

Tuktoyaktuk Science Day

Held on August 1, 2019 in Tuktoyaktuk, this rendezvous brought together scientists and community members to discuss coastal research activities happening in and around the ISR. Two elders and two youth alongside two IRC ISCC Staff travelled from Inuvik to Tuktoyaktuk to engage in the two-way transfer of science and coastal research knowledge.

Climate Change and Clean Energy Community Outreach Tour 2020

The highlight for this tour was 69 high school students from the abovementioned communities, excluding Inuvik, engaged in rabbit fur pompom making with materials and guidance supplied by the IRC's ISCC staff.

This tour introduced the ISR Climate Change Strategy and Clean Energy Action Plan, while also providing an opportunity for input from community members of the ISR.

The tour visited five ISR communities:

- Aklavik, Hamlet Chambers, Feb. 21
- Paulatuk, Visitor's Centre, Feb. 25-26
- Tuktoyaktuk, Kitty Hall, Mar. 4

- Inuvik, Community Corporation, Mar. 5
- Ulukhaktok, Community Hall, Mar. 9-10

GeoWeek Amazing Race

GeoWeek: Amazing Race was held on August 13, 2019, in Inuvik, NT. This Aurora Research Institute (ARI) initiative brought together community members and local organizations to engage in hands-on, innovative activities to complete a race against fellow community members.

IRC's ISCC division's activity included a laminated map which contained Inuvialuktun place names. Participants had to pinpoint coordinates for three exact locations then translate the Inuvialuktun name to English using a Sallirmiutun dictionary.



Kendra Tingmiak, IRC Inuit Research Advisor, represents the ISCC Division at GeoWeek. (Photo courtesy of Leigh-Ann Williams-Jones/Inuvialuit Regional Corporation)



Federal and Territorial Government Research Activities in the ISR

PARKS CANADA

Raptor Survey in Tuktut Nogait National Park (TNNP)

Led by Paden Lennie, the June 2019 Raptor Survey project in Tuktut Nogait National Park (TNNP) studied raptor abundance in the park. Raptor species include birds such as the peregrine falcon, gyrfalcon, rough-legged hawk and golden eagles. Raptors are an essential part of the healthy tundra ecosystem and can be used as an indicator for climate change over time. There are concerns that the raptor population in TNNP may be impacted by warming temperatures in the Arctic, which has led to variation in food supply, direct and indirect contact with toxic chemicals, erratic weather fluctuations, increasing rates of erosion and slumping, and changes in the timing of other ecological processes.

During the survey, Parks Canada observed 42 individual raptors, 6 raptor species, and 10 active nests along the Hornaday River and its canyons.



The raptor population in TNNP may be impacted by warming temperatures. (Photo courtesy of Parks Canada)



ILHP held a week-long cultural camp for youth and elders in Ivvavik National Park. (Photo courtesy of Parks Canada)

Inuvialuit Living History Project (Inuvialuit Pitqusiit Inuuniarutait)

The Inuvialuit Living History Project (ILHP) is an ongoing collaborative initiative between Parks Canada, the University of Western Ontario, Ursus Heritage Consulting, the Prince of Wales Northwen Heritage Centre, Simon Fraser University, the Smithsonian Institution, and the Inuvialuit Cultural Resource Centre.

In the summer of 2019, ILHP held a week-long cultural camp for Inuvialuit youth and elders at Imniarvik Base Camp in Ivvavik National Park with the aim of celebrating Inuvialuit culture. Participants shared in storytelling, fishing, berry picking, hiking, swimming, practicing Inuvialuktun, and visiting cultural sites in the park. Project outcomes included:

• A youth-led magazine, Nipaturuq, was developed by Inuvialuit youth participants Cassidy Lennie-Ipana and Mataya Gillis

• A presentation titled "Celebrating the Imniarvik Cultural Experience: An Inuvialuit Youth and Elders Camp" was delivered by Inuvialuit youth participants Cassidy Lennie-Ipana and Mataya Gillis and Parks Canada representative Mervin Joe at the 2019 Inuit Studies Conference in Montreal

• A chapter co-authored by all of the camp participants and edited by Pamela Stern will be published in "Inuit Worlds" and titled "Enduring Social Communities of the Inuvialuit: From the Yukon North Slope to the Circumpolar Stage"

CANADIAN COAST GUARD

Search and Rescue

Coast Guard Arctic Region's Arctic Community Engagement and Exercising Teams (ACEET) visited 22 northern communities in 2019 and completed approximately 60 hours of training with Coast Guard Auxiliary units and 20 hours of exercising, including visits to Inuvik and Aklavik. ACEET has previously delivered SAR training and CCGA engagement in Tuktoyaktuk, Sachs Harbour, Aklavik, Inuvik, Ulukhaktok and Paulatuk.

Environmental Response

Coast Guard is investing in the modernization of Environmental Response (ER) equipment and working with Inuit, First Nations and Métis organizations and governments to include Indigenous knowledge in ER and ship-source pollution response.

Canadian Hydrographic Services

Coast Guard is working with DFO – Canadian Hydrographic Service (CHS) to improve Canada's surveying and charting of Arctic waters. A working group has been established to determine best practices and the plan is to eventually work with Inuit, First Nations and Métis partners to establish a community hydrographer program where Inuit could be hired to collect bathymetry from their vessels.

In 2019, four Coast Guard icebreakers, four survey launches, and three vessels under contract sounded a total of 52,210 kilometers surveyed. As of April 1, 2019, 30.6 % of the Canadian Arctic's primary and secondary low impact shipping corridors were surveyed to either adequate or modern standards.



The Coast Guard Auxilliary conducted a Search and Rescue exercise in Inuvik in 2018. (Photo courtesy of the Canadian Coast Guard)

Northern Low-Impact Shipping Corridors

In collaboration with Transport Canada and DFO Canadian Hydrographic Services, Coast Guard has been engaging with Inuit, First Nations, Métis and Northern partners on Northern Low-Impact Shipping Corridors. This initiative seeks to minimize potential effects on wildlife, respect culturally and ecologically sensitive areas, enhance marine navigation safety, and promote investments in the North. Phase 1 was completed in summer 2019.

Inuit Marine Monitoring Program

Coast Guard is supporting the expansion of the Inuit Marine Monitoring Program (IMMP) in the North to increase Inuit capacity in maritime domain awareness for Arctic waters. The pilot project explores an alternative service delivery model that increases the capacity of Inuit and Northerners in vessel monitoring and tests the viability of maintaining the IMMP network in partnership Inuit organizations.

In February 2020, Coast Guard co-hosted a twoday training session in Ottawa for Inuit marine monitors, as well as a workshop to showcase Arctic Marine Domain Awareness initiatives. Several ISR representatives attended these events.

Polar Bikes Project

Since 2015, the Canadian Coast Guard has supported the Polar Bike Project created by Alison and Tom Harper. Bikes and helmets are loaded onto our vessel in B.C. and transported to isolated communities in the North for kids who might otherwise not be able to get one. Each year, the bikes are distributed to a different community. In the ISR, Ulukhaktok received 63 bikes in 2018 through the Polar Bikes Project.

Canadian Coast Guard Employment Opportunities

Community Engagement Coordinators

DFO and Coast Guard Arctic Regions are working with Northern partners on the Community Engagement Coordinators (CEC) pilot project that will see hiring Indigenous CECs in a number of communities across the Arctic beginning in 2020.

CECs will act as a liaison between the Department and regions in the North and support capacity building and collaboration.

Arctic Region Youth Council & Forum Coast Guard and DFO will promote Indigenous Youth Employment in the Department by engaging Northern youth (young adults 18-25) and developing a Youth Council, as this was identified as a priority by Northern partners.

The Youth Council will be developed as a joint initiative between Coast Guard and DFO to enhance youth engagement and interest in Departmental initiatives. Led by youth in the North, the Council will host a Youth Forum, support Northern recruitment and retention, and create a video featuring Coast Guard and DFO operations in the Arctic Region to support youth recruitment and employment.

AURORA RESEARCH INSTITUTE

Aurora Research Institute: Beaufort Sea Coastal Restoration Project – 2020 Update

The purpose of the Beaufort Sea Coastal Restoration Project (BSCRP) is to examine the impacts of permafrost thaw slumping on Kugmallit Bay and to investigate the feasibility of using local plant species to mitigate these effects.

Historical aerial photographs compared to current drone imagery of Kugmallit Bay have shown that most, if not all, coastal areas of the region are eroding at a rate of about 4-8 metres per year.

The project, which will span over 5 years from 2018-2022, received \$423,212 from Fisheries and Oceans Canada's Coastal Restoration Fund. In 2018, BSCRP chose three key study sites wherein sample water runoff was collected and analyzed and seeds of local plant species collected at each site.

In 2019, the progression of coastal erosion and thaw slumping between 1967 and 2004 was mapped, more sample water runoff from the study sites was analyzed, vegetation plots at each study site were established and their ground temperatures were monitored.

In 2020, drone imagery from each study site will be obtained, sample landscape runoff and water samples will be collected from the sites, and an experimental site will be selected to test the project approach.



An eBee SenseFly Drone was used to collect detailed imagery from the study sites. (Photo courtesy of the Aurora Research Institute)



Erika Hille (Aurora Research Institute, Project Lead, Beaufort Sea Coastal Restoration Project) holding water runoff samples collected at study sites in Kugmallit Bay region. (Photo courtesy of the Aurora Research Institute)



Block failure off the coast of Pullen Island. (Photo courtesy of the Aurora Research Institute)

AURORA RESEARCH INSTITUTE CONTINUED

Education

• Building Instructional Capacity for Digital Literacy Teaching in the NWT (Digital NWT) This project aims to increase "digital literacy" (the ability to use technology to create and share information) in the Northwest Territories by running three courses on a variety of digital literacy skills that have been designed to respond to the needs of communities in the territory.

The project has selected and trained instructors who then deliver each course in their home community.

The goal of the project is to reach as many communities as possible over four years.

Energy

• Creating Heat from Waste: Landfill Destined Cardboard as a Raw Material for Heating Pellets

This project is investigating the use of locally diverted waste carboard to produce fuel pellets in Inuvik, NT.

The pellets, created from waste carboard and paper products, can be burned in a standard pellet boiler.

• Wind Energy Potential

For nearly a decade, the Department of Environment of Natural Resources and ARI have been conducting wind energy studies in the NWT to assess the potential of wind energy to meet the power demands of NWT communities.

Environment – Air Quality

• Inuvik Air Quality Monitoring: National Air

Pollution Surveillance Network (NAPS)

The Inuvik Air Quality Station is monitoring pollutants in the air such as carbon monoxide, particulate matter of various sizes, ozone, sulfate, and nitrogen-containing gases.

It is important to monitor the air quality in the territory as it is an important factor in environmental protection and the protection of human health.

Environment – Permafrost

• Permafrost Information Hub

In order to assess the effects of climate change and plan resilient infrastructure in Northern communities, this project aims to improve collaboration and information sharing between permafrost researchers and northern stakeholders, conduct northern-relevant research projects, and increase capacity for permafrost research.

• **Permafrost Monitoring in the Inuvik Region** This project aims to improve our understanding of how climate change is affecting permafrost in the western Arctic.

The ice content of permafrost terrain affects its stability, and as ice melts this can result in damage to infrastructure and changes to the landscape.

Permafrost monitoring is a crucial step in preparing for these changes.

• Beaufort Sea Coastal Restoration: Exploring the Potential for Using Indigenous Plant Species to Revegetate Coastline Affected by Permafrost Thaw Slumping

The goal of this project is to examine the effects

of thaw slumping on the nearshore waters of Kugmallit Bay and to create a plan to mitigate these effects using indigenous plant species.

Environment – Water Quality

• Investigating the Quality of Water Runoff from Different Terrain Types Found Alone the Dempster-ITH Corridor

Retrogressive thaw slumping is an extreme form of permafrost thaw due to climate change and has significant implications for freshwater systems.

This project aims to improve our understanding of how factors such as latitude, seasonal variability, and surficial geology have on the quality of water runoff. This will help us better predict how shoreline retrogressive thaw slumping and construction and development are affecting freshwater systems.

• Carbon Monitoring: Time-Series Water Quality Parameters in the East Branch of the Mackenzie River Delta

In partnership with Dr. Aleck Wang of the Woods Hole Oceanographic Institution, ARI is monitoring water quality parameters in the East Channel of the Mackenzie River in order to begin long-term measurements and studies of the impacts of global warming on the carbon systems in the Mackenzie River, its estuary, and adjacent coastal waters.

• Impacts of Natural and Anthropogenic Disturbances on the Aquatic Health of Tundra Lakes in the Upland Region Northeast of Inuvik, NT

The objectives of this project are to examine the water quality of landscape runoff to and from 9 small tundra lakes in the upland region east of Inuvik, NT and to examine the long-term impacts of retrogressive thaw slumping on a small tundra lake in the same region using water quality data collected over a 16-year period.

• Environmental Change at the Trail Valley Creek Research Watershed

The Trail Valley Creek Research Station, located 50km north of Inuvik, NT, is one of the most rapidly warming regions on Earth. Research started at this site in 1991 and continues today in order to understand how the changing climate is affecting water resources and ecosystems of the region now and in the future, and to transfer this knowledge to all Canadians.

Food and Agriculture

• State of the Northwest Territories Country Food Systems: Planning for Long Term Sustainability

The proposed project aims to bring together researchers, policymakers, and communities to undertake a baseline assessment of the state of wild food systems in the NWT to support the development of evidence-based policies and programs that will help keep the wild foods of the territory available for future generations.

• Western Arctic Research Centre Ethnobotany Garden: Highlighting the traditional names and uses of Plants in the Mackenzie Delta

The goal of this educational garden is to showcase some of the most common and important plants of the Mackenzie Delta Region and their traditional Inuvialuit and Gwich'in names and uses.

• Virtual Ethnobotany Garden

This project, set to launch Fall 2020, is a webbased resource that will provide year-round access to the Western Arctic Research Centre's ethnobotany garden through 360 imagery, educational resources, Inuvialuit and Gwich'in names, uses, and knowledge of plant species.

Geographic Information Systems (GIS)

• A GIS to Support Community Monitoring of the Effects of Climate Change in Tuktoyaktuk This project aims to assist the Hamlet of

Tuktoyaktuk in developing their capacity in using geospatial tools and services to support the collection, management and dissemination of climate change related data.

• Indigenous Knowledge and GEM Data Integration Workshop

This 4-day Indigenous Mapping Workshop hosted in Inuvik, NT, welcomed more than 100 Western Arctic community members to provide innovative training and opportunities to utilize geoscience/spatial data, methods, and tools for community-based activities.

• Online Digital Hazard Maps of Landslides Along the Caribou Hills, The East Channel of the Mackenzie River, Inuvik

Through developing and making available online hazard maps of the Caribou Hills, this project aims to protect infrastructure, people, and wildlife in the Northwest Territories from the effects of climate-driven changes on the landscape (such as along coastlines, inland to the valleys, water channels, and along the slopes).

• A Geographic Information System to Support the Development and Implementation of Mineral Strategies in the Western Arctic

This project will develop a GIS to support the management of mineral strategies in the Western Arctic to provide stakeholders with geospatial tools, geoscience and geospatial information to better inform their decision making regarding mineral strategy management and land use planning.

Human Health – Family Violence

• Community Partnership to Create a Comprehensive Approach to Family Violence in the NWT

Canadian Domestic Homicide Prevention Initiative for Vulnerable Populations This project aims to engage community partners in co-creation of best practices to prevent family violence, to share findings of a scoping review on best practices to prevent/end family violence, and to hear priorities from these implications from youth and elders in the communities.

• Canadian Domestic Homicide Prevention Initiative for Vulnerable Populations

This project is dedicated to bringing researchers and practitioners together to share knowledge that can inform promising practices in the prevention of domestic homicide in rural, remote, and northern communities

Human Health – Maternal Health

• Learning from Mothers, Grandmothers and Great-Grandmothers about Breastfeeding in the Northwest Territories

This project will examine the nature of breastfeeding in the Northwest Territories in order to generate knowledge that would guide health promotion efforts targeting territorial mothers and be inclusive of grandmothers and the traditional knowledge that they hold about infant feeding and mothering.

Manufacturing

• Arts, Crafts and Technology Micro-Manufacturing Center

The Arts, Crafts, and Technology Micro-Manufacturing Centre (ACTMC) in Inuvik, NT provides a fully-equipped and resources space where the region's artists can merge traditional methods and materials with modern technologies and production techniques to grow their small businesses and pursue existing and emerging economic opportunities.

ACTMC services communities in the Inuvialuit Settlement Region and Gwich'in Settlement Area.

Outreach

• Aurora Research Institute STEM Outreach Program

The goal of this project is to connect northerners with the research and researchers of the region through plain-language speaker series and family-friendly science promotion events.

It also aims to bring local students and educators' year-round access to curriculumbased, hands-on STEM activities and resources, and northern STEM professionals in the classroom and on the land.

• Growing Climate Change Awareness Among Students

This project aims to guide Western Arctic youth on integrating traditional knowledge with Earth and Space science to identify, map and monitor the effects of climate-driven changes on their communities in fun, entertaining, interactive, and informative ways.

Inuvik Robotics and Engineering Club

This project provides a weekly 2-hour afterschool program focused on computer science, engineering, and trades.

In the spring of 2020, the club concluded its 8th year of operations with its largest project to date: a territory-wide STEM challenge that provided youth with opportunities to explore design, 3D printing, and programming while allowing students to achieve high school credits towards their diploma requirements in the Beaufort Delta.

Space

Canadian CubeSat project: AuroraSat

This outreach project aims to build a satellite payload in the Northwest Territories that will launch in 2022.

The primary outreach mission will see a digital screen deployed which will feature art by Northwest Territories residents, which will then be imaged by an on-board camera with the earth in the background.

The satellite will also measure the impact of the sun on the atmosphere in low earth orbit.



Arctic Science and Technology Information System



The Arctic Science and Technology Information System (ASTIS) is a project of the Arctic Institute of North America (AINA), at the University of Calgary. The purpose of the ASTIS is to make information about northern Canada more accessible. The ASTIS database contains 84,000 records which covers all subjects and contains two types of information: citations to publications and descriptions of research projects in northern Canada. The ASTIS subset databases provide selected ASTIS records and background information for specific regions, subjects, or projects.

Project Summaries

1. The use of hair as a proxy for total and methylmercury burdens in polar bear muscle tissue / Bechshoft, T. Dyck, M. St. Pierre, K.A. Derocher, A.E. St. Louis, V. 2019

2. Holocene changes in deep water circulation inferred from authigenic Nd and Hf isotopes in sediment records from the Chukchi-Alaskan and Canadian beaufort margins / Deschamps, C.-E. Montero-Serrano, J.-C. St-Onge, G. Poirier, A. 2019

3. Data fusion and data assimilation of ice thickness observations using a regularisation framework / Asadi, N. Scott, K.A. Clausi,

D.A. 2019

4. The evolution of wind-driven surface waves in partial sea ice cover in the southern Beaufort Sea / Campbell, Y. Barber, D. [Supervisor] Ehn, J. [Supervisor] 2019

5. Les processus sédimentaires durant le Petit âge glaciaire et l'actuel dans l'Archipel arctique canadien / Letaïef, S. St-Onge, G. [Supervisor] Montero-Serrano, J.-C. [Supervisor] 2019

6. Impact de fonte tardive ou hâtive de neige et de glace sur l'export de microalgues dans la mer de Beaufort / Nadaï, G. Fortier, L. [Supervisor] Tremblay, J.-É. [Supervisor] 2019

7. Use of subsistence-harvested whale carcasses by polar bears in the southern Beaufort Sea / Lillie, K.M. Gese, E.M. Atwood, T.C. Conner, M.M. 2019

8. Abundance and species diversity hotspots of tracked marine predators across the North American Arctic / Yurkowski, D.J. Auger-Méthé, M. Mallory, M.L. Wong, S.N.P. Gilchrist, G. Derocher, A.E. Richardson, E. Lunn, N.J. Hussey, N.E. Marcoux, M. Togunov, R.R. Fisk, A.T. Harwood, L.A. Dietz, R. Rosing-Asvid, A. Born, E.W. Mosbech, A. Fort, J. Grémillet, D. Loseto, L. Richard, P.R. Iacozza, J. Jean-Gagnon, F. Brown, T.M. Westdal, K.H. Orr, J. LeBlanc, B. Hedges, K.J. Treble, M.A. Kessel, S.T. Blanchfield, P.J. Davis, S. Maftei, M. Spencer, N. MacFarlane-Tranquilla, L. Montevecchi, W.A. Bartzen, B. Dickson, L. Anderson, C. Ferguson, S.H. 2019

9. Nitrate consumers in Arctic marine eukaryotic communities : comparative diversities of 18S rRNA, 18S rRNA genes, and nitrate reductase genes / Comeau, A.M. Lagunas, M.G. Scarcella, K. Varela, D.E. Lovejoy, C. 2019

10. Canadian Arctic maritime sovereignty during the Trudeau years / Lalonde, S. 2019

11. Pelagic production and the recruitment of juvenile polar cod Boreogadus saida in Canadian Arctic seas / LeBlanc, M. Geoffroy, M. Bouchard, C. Gauthier, S. Majewski, A. Reist, J.D. Fortier, L. 2019

Microplastics in beluga whales
 (Delphinapterus leucas) from the eastern
 Beaufort Sea / Moore, R.C. Loseto, L. Noel,
 M. Etemadifar, A. Brewster, J.D. MacPhee, S.
 Bendell, L. Ross, P.S. 2019

 Pan-arctic winter drift speeds and changing patterns of sea ice motion : 1979–2015 / Kaur,
 Ehn, J.K. Barber, D.G. 2019

 State of knowledge on current exposure, fate and potential health effects of contaminants in polar bears from the circumpolar Arctic / Routti, H. Atwood, T.C. Bechshoft, T. Boltunov, A. Ciesielski, T.M. Desforges, J.-P. Dietz, R. Gabrielsen, G.W. Jenssen, B.M. Letcher, R.J. McKinney, M.A. Morris, A.D. Rigét, F.F. Sonne, C. Styrishave, B. Tartu, S. 2019 Levels and trends of poly- and perfluoroalkyl substances in the Arctic environment – an update / Muir, D. Bossi, R. Carlsson, P. Evans, M. De Silva, A. Halsall, C. Rauert, C. Herzke, D. Hung, H. Letcher, R. Rigét, F. Roos, A. 2019

16. Patterns of suspended particulate matter across the continental margin in the Canadian Beaufort Sea during summer / Ehn, J.K. Reynolds, R.A. Stramski, D. Doxaran, D. Lansard, B. Babin, M. 2019

17. Mismatch between microalgae and herbivorous copepods due to the record sea ice minimum extent of 2012 and the late sea ice break-up of 2013 in the Beaufort Sea / Dezutter, T. Lalande, C. Dufresne, C. Darnis, G. Fortier, L. 2019

 Could offspring predation offset the successful reproduction of the arctic copepod Calanus hyperboreus under reduced sea-ice cover conditions? / Darnis, G. Wold, A. Falk-Petersen, S. Graeve, M. Fortier, L. 2019

 Behaviour and characteristics of mating polar bears (Ursus maritimus) in the Beaufort Sea, Canada / Biddlecombe, B.A. Derocher, A.E. Richardson, E.S. Stirling, I. 2019

20. RP Canada-United States-Korea Beaufort Sea geoscience research program, Yukon / Jin, Y. K. [Investigator] Korea Polar Research Institute [Affiliation] 2019

21. Trends of persistent organic pollutants in ringed seals (Phoca hispida) from the Canadian Arctic / Houde, M. Wang, X. Colson, T.-L.L. Gagnon, P. Ferguson, S.H. Ikonomou, M. Dubetz, C. Addison, R.F. Muir, D.C.G. 2019

For more information, visit http://www.aina. ucalgary.ca/astis/.

Northern Contaminants Program: 2019–2020 ISR Research Projects

Communications, Capacity, and Outreach

1. "Northwest Territory Regional Contaminants Committee (NWTRCC)" - Emma Pike, CIRNAC; Tim Heron, NWT Metis Nation; Shannon O'Hara / Kendra Tingmiak, IRC

2. "Inuit Research Advisor for the ISR" - Shannon O'Hara/Kendra Tingmiak, IRC

3. "Nuna Tariuq Silalu Film Project: Food Security, Global Environmental Changes, and Resilience in the Canadian Arctic, using Participatory Video Method" - Maeva Gauthier, University of Victoria

Environmental Monitoring and Research

1. "Passive Air Sampling Network for Organic Pollutants and Mercury" - Hayley Hung and Alexandra Steffen, ECCC

2. "Temporal Trends of Persistent Organic Pollutants and Metals in Ringed Seals from the Canadian Arctic" - Magali Houde and Derek Muir, ECCC, and Steve Ferguson, DFO

3. "Temporal trends of mercury and halogenated organic compounds (legacy, new and emerging) in three beluga populations landed at Hendrickson Island NT, Sanikiluaq NU, and Pangnirtung NU" - Lisa Loseto, Steve Ferguson, and Courtney Watt, DFO

4. "Caribou Contaminant Monitoring Program" -Mary Gamberg, Gamberg Consulting
5. "Community based seawater monitoring for organic contaminants and mercury in the Canadian Arctic" - Jane Kirk, Amilia DeSilva, Derek Muir, ECCC, & Rainer Lohnmann, University of Rhode Island

6. "Assessing Legacy and Emerging Contaminants in Canadian Arctic Air and Water Bodies as an Entry Point into the Arctic Food Chain" - Liisa Jantunen, ECCC

7. "Insight into mRNA and metabolites to understand the health of the Beaufort Sea beluga whales as it relates to contaminants and climate change" - Marie Noel, Ocean Wise Conservation Association, and Lisa Loseto, DFO

8. "Microplastics Contamination in Sediment, Water, Snow/Ice and Fish of the Canadian Arctic" - Liisa Jantunen, ECCC, and Patricia Corcoran, University of Western Ontario

9. "Non-invasive determination of polar bear contaminant loads from their faeces" - Valérie Langlois, Institut national de la recherche scientifique, and Allison Rutter, Queen's University

10. "Monitoring Priority Pollutants in the Western Arctic" - Marie Noel and Kelsey Delisle, Ocean Wise Conservation Association

 "The influences of environmental changes on levels and trends of methylmercury in Beaufort beluga food web" - Amanda Giang and Miling Li, University of B.C.

Human Health

 "Country Food for Good Health: Developing a country food database for the ISR" - Brian Laird and Sonja Ostertag, University of Waterloo

ArcticNet: 2019-2020 ISR Research Projects

Marine Systems

1. A Co-operative Observation Network to Address Community Research Priorities While Studying Marine Biogeochemistry Else, Brent (University of Calgary)

2. Arctic Seafloor Mapping Data Processing and Dissemination Montero-Serrano, Jean-Carlos

3. Community-based research on winter water modifications in the coastal domain of Hudson Bay: Implications for freshwater-marine coupling, biological productivity and the carbon cycle Kuzyk, Zou Zou (University of Manitoba)

4. Downscaling future oceanography projections in the Canadian Arctic and Subarctic Oliver, Eric (Dalhousie University)

5. Fate of kelp forests in a rapidly changing Arctic Archambault, Philippe (Université Laval)

6. GO-Ice: Glacier-Ocean-Iceberg Dynamics in a Changing Canadian Arctic Copland, Luke (University of Ottawa)

7. Improved Canadian Arctic Sea Ice Thickness Estimates Stroeve, Julienne (University of Manitoba)

8. Nutrient fluxes and living marine resources in the Inuit Nunangat Tremblay, Jean-Éric (Université Laval) 9. The shifting pelagic ecosystem: monitoring and synthesis Fortier, Louis (Biology Department)

10. Understanding climate change impacts on fish species in Ungava Bay (Kuujjuaq, Quebec) Power, Michael (University of Waterloo)

Terrestrial Systems

1. Changing nutrients and food web health in northern lakes and rivers Rautio, Milla (Université du Québec à Chicoutimi)

2. Developing seasonal multi-layer network models to evaluate cumulative impacts on Arctic ecosystems

Legagneux, Pierre (Université Laval)

3. Ensuring water security in the High Arctic: understanding the impacts of changing permafrost and hydrology on water quality and aquatic ecosystems.

Lafreniere, Melissa (Queen's University)

4. Long-term hydrological dynamics of Canada's largest watershed: climate controls on water quantity and quality of the Mackenzie River Basin Galloway, Jennifer (University of Calgary)

5. Nunataryuk - Permafrost thaw and the changing Arctic coast: the MacKenzie delta and coastal waters sampling Babin, Marcel

ARCTICNET: 2019-2020 ISR RESEARCH PROJECTS CONTINUED

6. Understanding and predicting future coastal climate-vegetation-cryosphere interactions in coastal Labrador Way, Robert

• Inuit Health, Education and Adaptation

1. Community-led housing in the Canadian North: mobilizing the development of supportive housing plans through knowledge sharing and engagement in the NWT and Nunavut Christensen, Julia (Memorial University); Riva, Mylene (McGill University)

2. Effective teachers for successful students: An investigation of the preparation and resiliency of Northern educators Kane, Ruth (University of Ottawa); Snow, Kathy (University of Prince Edward Island)

3. Moving from understanding to action on food security in the Canadian Arctic Furgal, Chris (Trent University)

4. Qanuikkat Siqinirmiut? Towards an understanding of southern Quebec Inuit health and wellbeing Fletcher, Christopher (Université Laval)

5. Qanuilirpitaa 2017 - Understanding the determinants of health and well-being to support the implementation of population health promotion programmes, interventions, and services in Nunavik. Riva, Mylene (McGill University)

6. Supporting humans in a thawing landscape Calmels, Fabrice (Yukon College)

7. The Canadian Arctic One Health Network

Jenkins, Emily (University of Saskatchewan); Leighton, Patrick (Université de Montréal)

Northern Policy and Development

1. Arctic Shipping and Transportation in a Rapidly Changing Arctic Dawson, Jackie (University of Ottawa)

2. ArcticFish: Fisheries resources in the changing Canadian Arctic Ocean Geoffroy, Maxime (Memorial University)

3. Mitigating Arctic Shipping Risks Through Improved Prediction of Conditions Leading to Besetments in Pressured Ice in the Hudson Strait Scott, Andrea

4. Modernizing Ecosystem Monitoring to Support Sustainable Development in Eastern Canadian Arctic Smith, Paul (Environment and Climate Change

Canada)

5. Supporting sustainable development of community Greenland halibut fisheries in the Eastern Canadian Arctic Hussey, Nigel

6. Towards a marine management plan for Nunatsiavut: Coastal ecosystem research in support of priority concerns of Inuit Brown, Tanya (University of Windsor)

7. Understanding the effects of climate change and industrial development on contaminant processes and exposure in the Canadian Arctic marine ecosystem (ACCCPE) Stern, Gary (University of Manitoba)



Index of Organizational Acronyms

| Amaujaq Centre | AC |
|--|--------|
| Aurora College | AC |
| ArcticNet | AN |
| ArcticNet Inuit Advisory Council | AN-IAC |
| ArcticNet Student Association | AN-ASA |
| Aurora Research Institute | ARI |
| Beaufort Delta Education Council | BDEC |
| Beaufort Delta Health and Social Services Authority | BDHSSA |
| Canadian Consortium for Arctic Data Interoperability | CCADI |
| Canadian Institutes of Health Research | CIHR |
| Community Corporations | CC's |
| Department of Fisheries and Oceans Canada | DFO |
| Education, Culture, and Employment | ECE |
| Environment Canada | EC |
| Environment and Climate Change Canada | ECCC |
| Government of the Northwest Territories | GNWT |
| Government of Nunavut | GN |
| Health Canada | НС |
| Hunters and Trappers Committees | HTC's |
| Indigenous and Northern Affairs Canada | INAC |
| Inuit Circumpolar Council - Canada | ICC-C |
| Inuit Knowledge Center | ІКС |

| Inuit Tapiriit Kanatami | ITK |
|---|----------|
| Inuvialuit Final Agreement | IFA |
| Inuvialuit Regional Corporation | IRC |
| Innovation, Science, and Climate Change Division (IRC) | ISCC |
| Inuvialuit Regional Corporation's Regional Youth Advisory Committee | IRC-RYAG |
| Inuvialuit Settlement Region | ISR |
| Inuvialuit Settlement Regional Contaminants Committee | ISRCC |
| Inuvialuit Joint Secretariat | JS |
| Kativik Regional Government | KRG |
| Makivik Corporation | МС |
| Municipal and Community Affairs | MACA |
| National Inuit Committee on Health | NICoH |
| National Inuit Youth Council | NIYC |
| Natural Sciences and Engineering Research Council | NSERC |
| Northern Contaminants Program | NCP |
| Northwest Territories Cumulative Impact Monitoring Program | NWT-CIMP |
| Northwest Territories Environment and Natural Resources | NWT-ENR |
| Northwest Territories Health and Social Services Authority | NWT-HSSA |
| Northwest Territories Regional Contaminants Committee | NWT-RCC |
| Nunatsiavut Government | NG |
| Nunavut Tunngavik Incorporated | NTI |
| Pauktuutit Inuit Women of Canada | PIWC |
| Inuvialuit Joint Secretariat's Shared Services Unit | SSU |
| Statistics Canada | SC |
| Social Sciences Health Research Council | SSHRC |
| United Nations | UN |

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"In undertaking more and more Inuvialuit-owned, led, and partnered research initiatives in the Inuvialuit Settlement Region, IRC is proud to be taking steps towards a reconcilliatory future with greater Inuvialuit autonomy and self-determination at its forefront."

> *—Duane Smith IRC Chair & CEO*

