

Polar Knowledge Canada



Advancing Polar Knowledge for a Better Tomorrow

April 4th, 2017
Nunavut Mining Symposium
Iqaluit, NU



Polar Knowledge
Canada

Savoir polaire
Canada

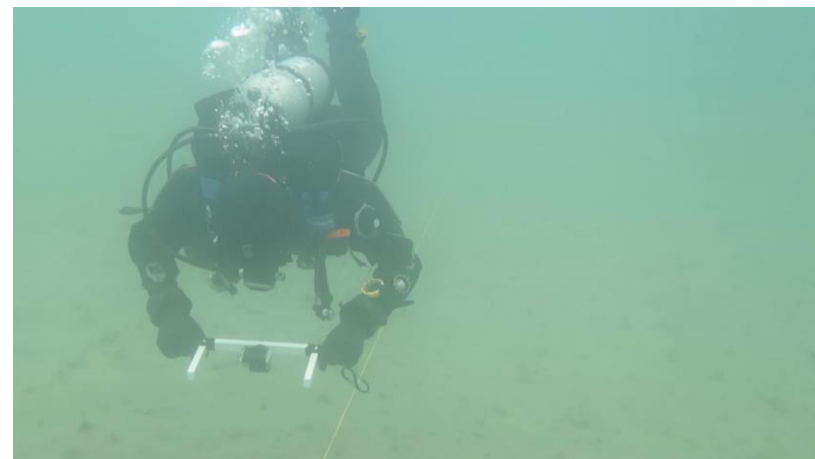
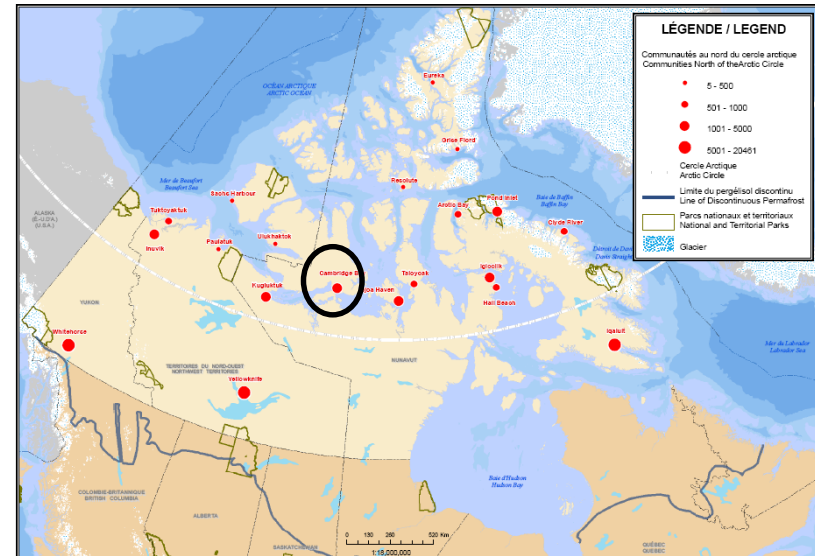
Introduction

- POLAR Organization Update
- Canadian High Arctic Research Station Campus (CHARS)
- POLAR Programming Overview

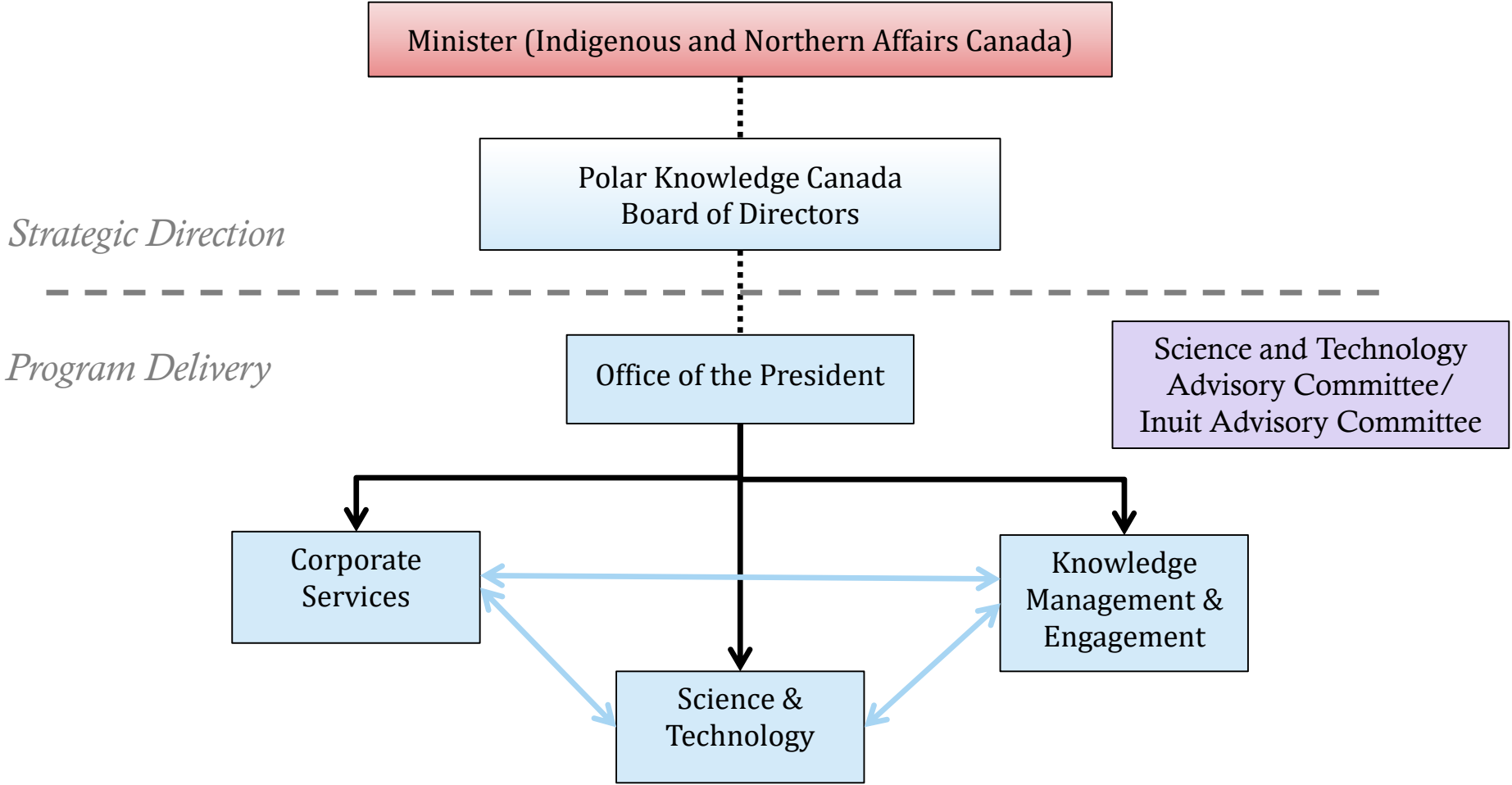


POLAR's Mandate

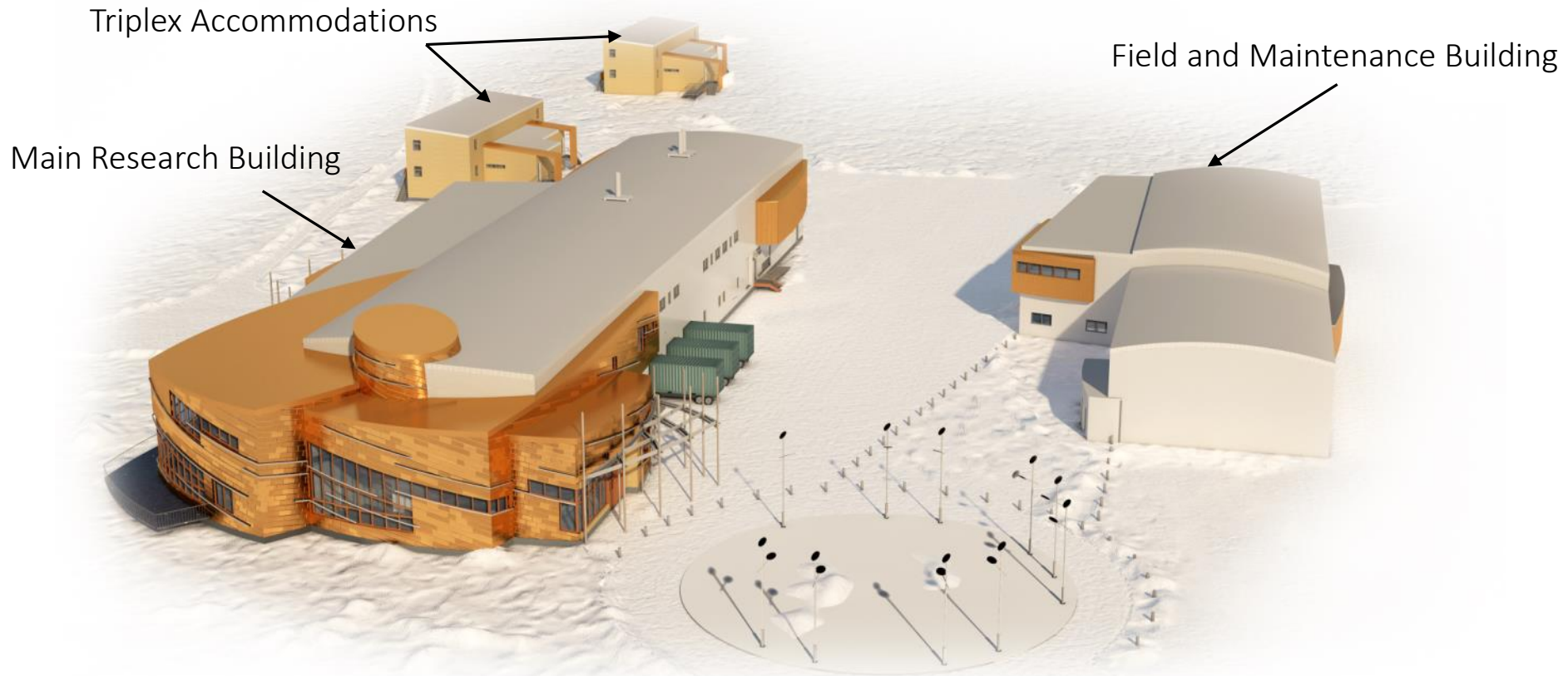
- Advance knowledge of the Canadian Arctic, Improve economic opportunities, environmental stewardship and quality of life
- Promote the development and dissemination of knowledge of the other circumpolar regions, including the Antarctic
- Strengthen Canada's leadership on Arctic issues
- Establish a hub for scientific research in the Canadian Arctic



Governance Structure



CHARS Campus



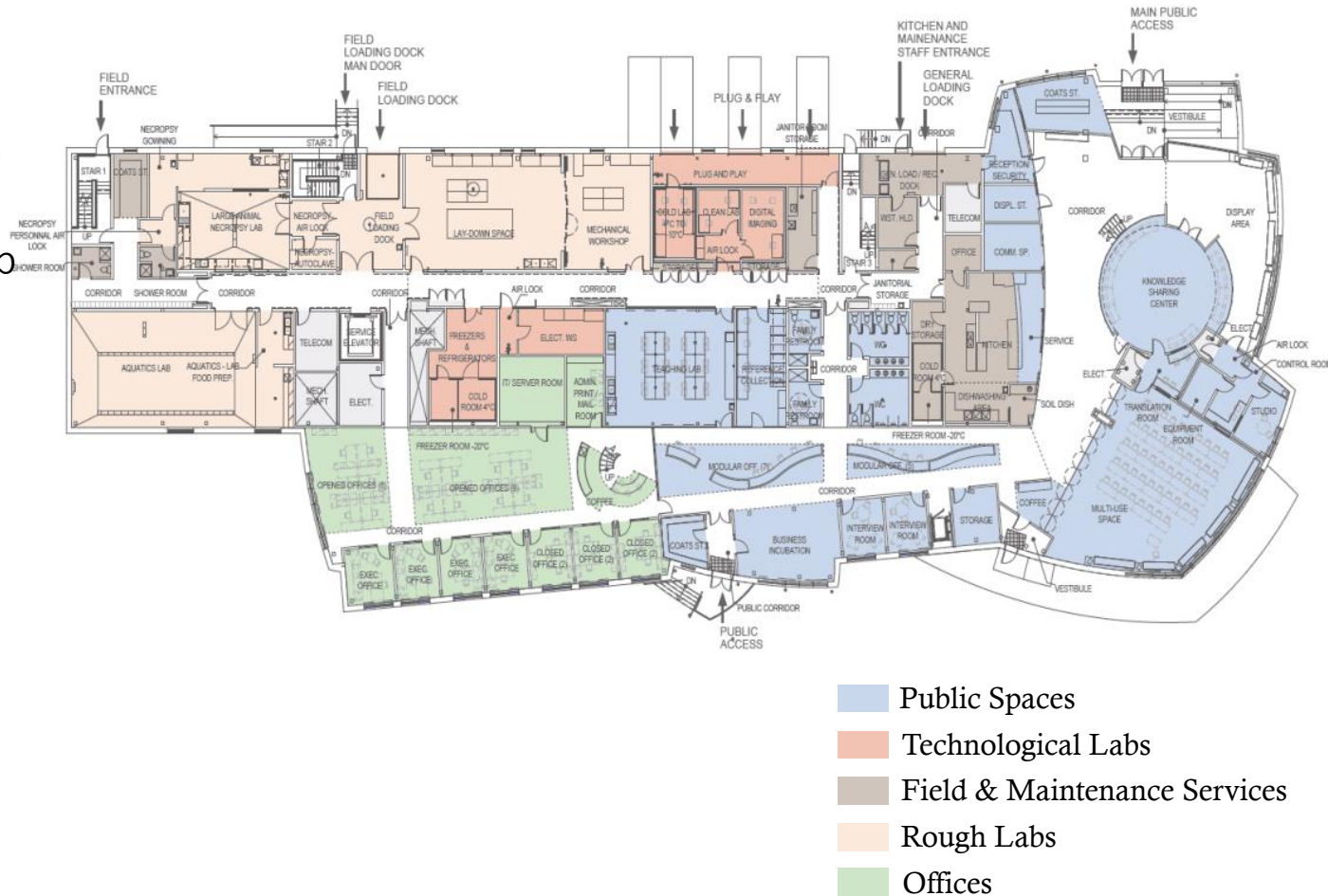
The Main Research Building



A World-Class Research Facility

The Main Research Building includes:

- Genomics Lab
- Animal necropsy labs
- Aquatics lab
- Mechanical workshop
- Lay down space
- Cold lab
- Clean lab
- Digital imaging
- Translation room
- Cold room
- Specimen Bank
- Teaching laboratory
- Reference collection



The Field and Maintenance Building



Exterior of the Field and Maintenance Building



Interior of the Field and Maintenance Building

On-Site Accommodations



Triplex accommodation units



Common dining area and kitchen in Triplex

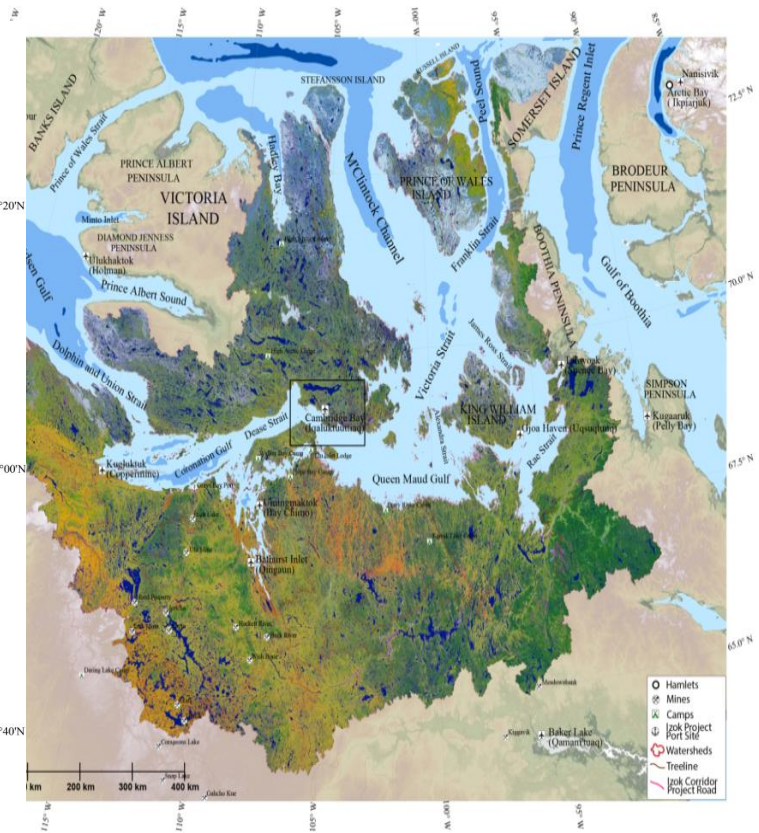
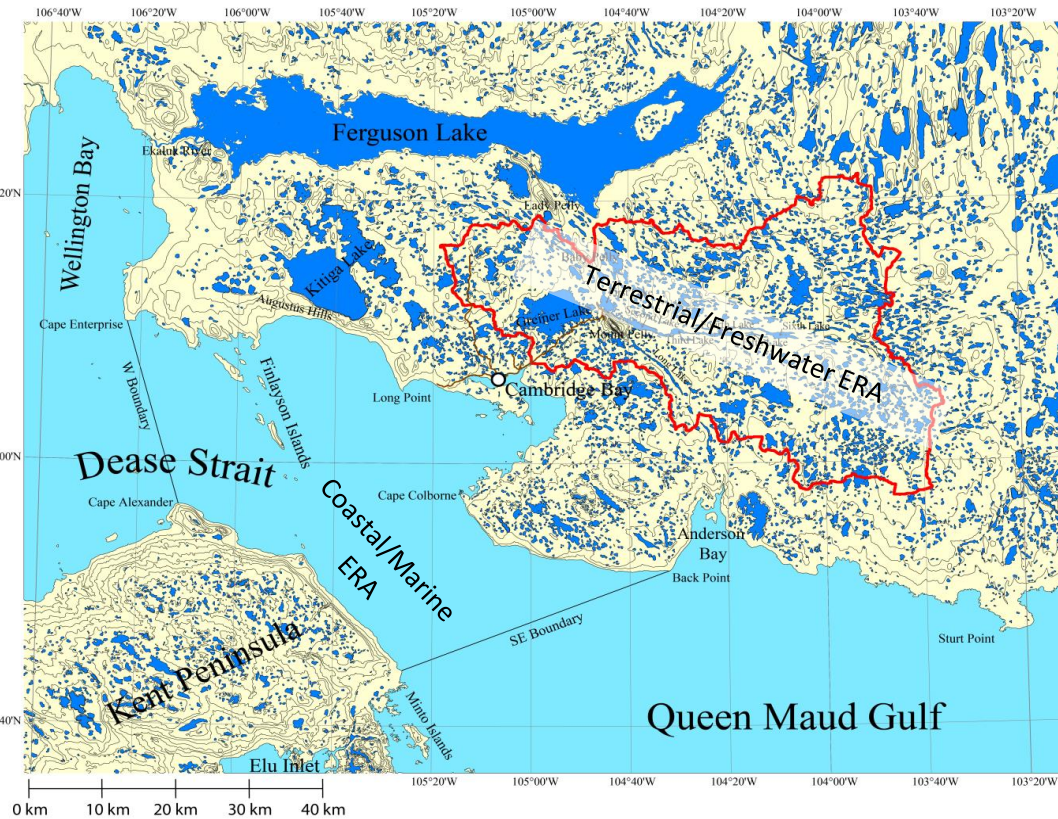
Alternative and Renewable Energy

- **Reduce Dependence on Diesel for Energy Generation**
- **Create Economic Opportunities**
- **Build Capacity**



Baseline Monitoring

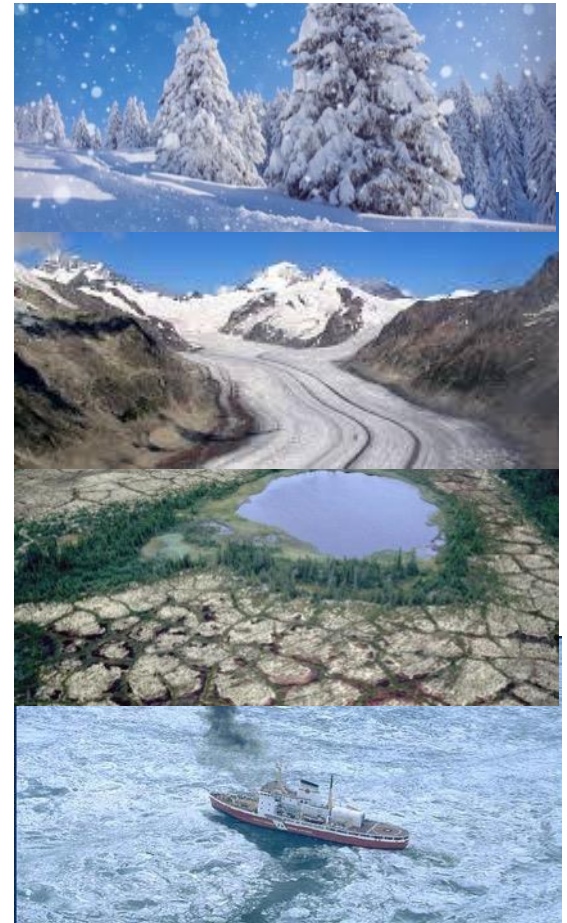
Baseline Information to prepare for Northern Sustainability



Cryosphere

Predicting the impacts of changing ice, permafrost and snow on shipping infrastructure and communities

- **Understanding changing terrestrial cryosphere**
- **Understanding changing marine cryosphere**
- **Improved predictive capacity**



Improving Northern Infrastructure

- *Canada's North is facing a significant infrastructure deficit*

- POLAR
 - Seeking Collaborative Partnerships
 - Identifying Research Gaps

- Northern Housing

- Waste/Waste Treatment/Waste Water Treatment



Grants & Contributions

Direct and Leveraged CFP:

- **2015-2018 (ongoing projects)**
 - \$3.5M distributed to 21 projects



- **Upcoming 2017-2019**
 - Call closed on January 23, 2017
 - Up to 2 years of funding, beginning in April 2017
 - ~\$6M in total



- **Joint Call for Proposals MEOPAR-POLAR-ARF**
 - Call closed on March 6, 2017
 - Funding Period: 2017–2020
 - Year of Polar Prediction (YOPP)
 - **\$2.3M available**

 **MEOPAR**
MARINE ENVIRONMENTAL OBSERVATION
PREDICTION & RESPONSE NETWORK



Science Excellence through Collaboration

➤ **Ekaluktok Char Study-Elder & Youth Camp**

- Arctic Char Knowledge Sharing Camp: bringing elders, youth and scientists together to bridge the gap between knowledge systems
- Report and film to support knowledge dissemination



➤ **Wildlife health research and disease ecology**

- Studying the changes in muskox health due to parasites and climate change (S. Kutz)



➤ **SmartICE Pond Inlet: A sea ice information service to support local decision-making**

- Using both stationary and mobile sea-ice thickness sensors, as well as Inuit knowledge
- Improve sea-ice information and forecasting services for northern communities



Training, Outreach & Exchange

- **Capacity Building and Training**



- **Outreach and Engagement**



- **Facilitating cooperation with partners**



International Partnerships



Thank you, Merci, Quana! Qujannamiik!



Stay connected with us:



Email:
Info@polar.gc.ca



Twitter:
[@POLARCanada](https://twitter.com/POLARCanada) (EN)
[@POLAIRECanada](https://twitter.com/POLAIRECanada) (FR)



Instagram:
[polar.knowledge](https://www.instagram.com/polar.knowledge) (EN)
[savoir.polaire](https://www.instagram.com/savoir.polaire) (FR)



Facebook:
[Polar Knowledge Canada](https://www.facebook.com/PolarKnowledgeCanada) (EN)
[Savoir polaire Canada](https://www.facebook.com/SavoirpolaireCanada) (FR)

Website:

<http://www.canada.ca/en/polar-knowledge> (English)

<http://www.canada.ca/fr/savoir-polaire> (French)