



## **NIRB Application for Screening #126193**

### **Coastal invertebrates sampling around Belcher Islands, Qikiqtaaluk**

**Application Type:** New

**Project Type:** Scientific Research

**Application Date:** Wednesday, June 4, 2025

**Period of operation:** from 2025-05-18 to 2028-11-16

**Project Proponent:** Paloma Calabria Carvalho  
Fisheries and Oceans Canada  
501 University Crescent  
Winnipeg MB R3T 2N6  
Canada  
Phone Number:: 4312948937, Fax Number::

## DETAILS

## Non-technical project proposal description

English: This research supports current community-based and DFO research and conservation initiatives within the Belcher Islands (Qikiqtait Area). Coastal sampling in collaboration with the Sanikiluaq community and partnership with the Arctic Eider Society and Hunters' and Trappers Association will continue around the Belcher Islands through zooplankton tows and community benthic dredge to collect invertebrate. The main species of interest includes Icelandic scallop (*Chlamys islandica*), green sea urchin (*Strongylocentrotus droebachiensis*) and Atlantic sea cucumbers (*Cucumaria frondosa*) that will continue to be collected from spring to fall (see map) providing the opportunity to examine temporal and spatial differences in genetic diversity, carbon source use and trophic position of each species between northern versus southern areas of Qikiqtait. Objectives: 1) Identify sea-ice algae reliance of benthic species, including sea scallops, urchins and sea cucumbers by analyzing highly-branched isoprenoid (HBI). 2) Establish food web baseline using stable isotopes. 3) Compare nearshore-offshore in their foraging ecology using biotracers.

French: NA

[illegible]

Inuinnaqtun: NA

## Personnel

Personnel on site: 3

Days on site: 56

Total Person days: 168

Operations Phase: from 2025-05-18 to 2028-11-16

# Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Sampling stations for benthic invertebrates around Belcher Islands	Sampling sites	Marine	NA	NA	Sanikiluaq

## Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Sanikiluaq	Lucassie Arragutainaq	HTA	2025-02-20

# Authorizations

Indicate the areas in which the project is located:

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Fisheries and Oceans Canada	LICENCE TO FISH FOR SCIENTIFIC PURPOSES	Applied, Decision Pending		
Hunters and Trappers Associations/Organizations	Letter of support from the Sanikiluaq HTA	Active	2025-05-21	

## Project transportation types

Transportation Type	Proposed Use	Length of Use
Water	HTA Boat	

## Project accomodation types

Community

## Material Use

Equipment to be used (including drills, pumps, aircraft, vehicles, etc)

Equipment Type	Quantity	Size - Dimensions	Proposed Use
HTA Boat	1	28ft	HTA community boat (Silver dolphin 28) is used to sample invertebrates from the stations marked in the map.

### Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Gasoline	fuel	50	25	1250	Gallons	Boat fuel

### Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0		

# Waste

## Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Information is not available				

## Environmental Impacts:

NA

# **Additional Information**

**SECTION A1: Project Info**

**SECTION A2: Allweather Road**

**SECTION A3: Winter Road**

**SECTION B1: Project Info**

**SECTION B2: Exploration Activity**

**SECTION B3: Geosciences**

**SECTION B4: Drilling**

**SECTION B5: Stripping**

**SECTION B6: Underground Activity**

**SECTION B7: Waste Rock**

**SECTION B8: Stockpiles**

**SECTION B9: Mine Development**

**SECTION B10: Geology**

**SECTION B11: Mine**

**SECTION B12: Mill**

**SECTION C1: Pits**

**SECTION D1: Facility**

**SECTION D2: Facility Construction**

**SECTION D3: Facility Operation**

**SECTION D4: Vessel Use**

**SECTION E1: Offshore Survey**

**SECTION E2: Nearshore Survey**

**SECTION E3: Vessel Use**

**SECTION F1: Site Cleanup**

**SECTION G1: Well Authorization**

**SECTION G2: Onland Exploration**

**SECTION G3: Offshore Exploration**

**SECTION G4: Rig**

**SECTION H1: Vessel Use**

**SECTION H2: Disposal At Sea**

**SECTION I1: Municipal Development**

**Description of Existing Environment: Physical Environment**

**Description of Existing Environment: Biological Environment**

**Description of Existing Environment: Socio-economic Environment**

**Miscellaneous Project Information**

**Identification of Impacts and Proposed Mitigation Measures**

**Cumulative Effects**



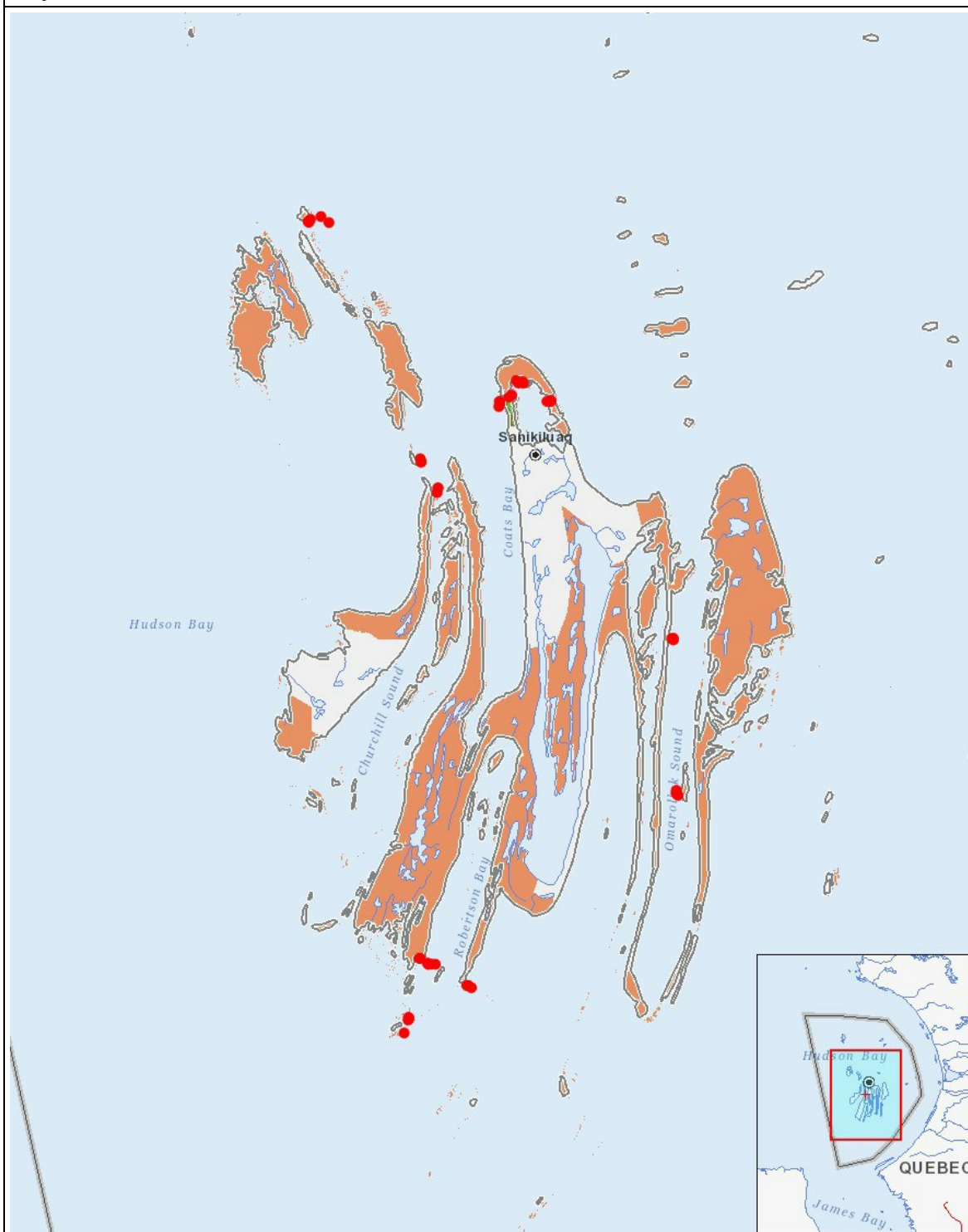
Impacts

Identification of Environmental Impacts

	PHYSICAL	Designated environmental areas	Ground stability	Permafrost	Hydrology / Limnology	Water quality	Climate conditions	Eskers and other unique or fragile landscapes	Surface and bedrock geology	Sediment and soil quality	Tidal processes and bathymetry	Air quality	Noise levels	BIOLOGICAL	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	SOCIO-ECONOMIC	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health
Construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Decommissioning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

## Project Location



## List of Project Geometries

- |   |       |  |
|---|-------|--|
| 1 | point | Sampling stations for benthic invertebrates around Belcher Islands |
|---|-------|--|