NIRB Application for Screening #126473

Cumberland Sound Fishery-Independent Arctic Char Research 2026-27

Application Type:	New
Project Type:	Scientific Research
Application Date:	Tuesday, June 30, 2026
Period of operation:	from 2026-08-08 to 2026-08-31
Project Proponent:	Hailey Chymy Department of Fisheries and Oceans (DFO) 631 Mivvik St Iqaluit, NU, Canada Nunavut X0A3H0 Canada Phone Number:: 8672229686, Fax Number::

DETAILS

Non-technical project proposal description

English: The main purpose of this study is to continue to develop the Arctic Char research program and progress stock assessments in the Cumberland Sound region of Nunavut. Through the application of a multi-mesh gill-net survey, this research aims to add to the collection of Cumberland Sound Arctic Char data and perform site specific fishery-independent surveys required to complete stock assessments. To accomplish this, we will work with the community of Pangnirtung to obtain local knowledge on stocks and fishing practices, as well as to collect baseline biological data through collaborations with the Pangnirtung Hunters and Trapper's Organization (PHTO). For this project year (2026-27) we are looking at collecting the third year of baseline data from the unassessed commercially fished, Opingivik Lake (PG002), to ultimately contribute to a 5-year index of abundance and trends in biological characteristics used to assess stock status.

French: NA

Inuktitut: File attached.

Inuinnaqtun: NA

Personnel

Personnel on site: 6

Days on site: 12

Total Person days: 72

Operations Phase: from 2026-08-08 to 2026-08-31

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
PG002 Camp Location	Camp	Inuit Owned Surface Lands	This area was used for a research camp for the first two years of this project in 2024 and 2025. No other site history is known.	NA	The closest community is Pangnirtung, ~110kms away via water/boat. The closest protected area is Kekerten (Qikiqtan) Territorial Park, ~70kms away, followed by the Auyuittuq National Park Of Canada, ~140 kms away.
PG002 Survey zone	Baseline data	Marine	This area is part of a commercially fished region along with some subsistence and recreational fishing activities.	NA	The closest community is Pangnirtung, ~110kms away via water/boat. The closest protected area is Kekerten (Qikiqtan) Territorial Park, ~70kms away, followed by the Auyuittuq National Park Of Canada, ~140 kms away

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Pangnirtung	Mark Kilabuk	Pangnirtung Hunters and Trappers Organization	2026-03-19

Authorizations

Indicate the areas in which the project is located:

South Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Fisheries and Oceans Canada	License to Fish for Scientific Purposes Permit	Applied, Decision Pending		
Hunters and Trappers Associations/Organizations	Cumberland Sound Arctic Char Research Support from Hunters and Trappers Organization	Active	2026-04-16	
Qikiqtani Inuit Association	Land Use Permit	Applied, Decision Pending		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Water	2 x boats (~ 25ft with associated motors) are used to transport crew and equipment from Pangnirtung to the research site	

Project accomodation types

Temporary Camp

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Multi-mesh gillnets	3	50m	Following the Exploratory Fisheries, and DFO Scientific Stock Assessment Data Collection protocols, sampling will take place from the proposed site. A goal of two hundred (200) Arctic Char will be sampled during their migration upstream (Late July – Mid September) using 5-panel, multi-mesh gillnets. The use of multi-mesh gillnets, typical of stock assessment surveys, will permit sampling of Arctic Char of all sizes and ages as well as provide a more accurate presentation of catch rates.
Boats	2	25+ft	Boats and associated motors required to travel to and from field site with gear and personnel.
Small boat/skiff	1	10ft	Skiff used for checking nets while performing survey.
Personal tent	2	6 x 4 ft	Small (1-person) tents used by the DFO crew members for sleeping accommodations while on the land.
Canvas kitchen tent	1	12 x 12 ft	Large canvas tent used as a kitchen tent for whole crew.
Sampling tent	1	10 x 10 ft	A medium sized, pop-up screen tent used for biological sampling.
Coleman stoves	2	2 x 1 ft	Coleman stoves used for cooking while in the field.

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Gasoline	fuel	5	200	1000	Liters	Fuel required for two boats to travel across Cumberland Sound to sampling site multiple times as required to

						complete survey.
Other	fuel	8	2	16	Liters	Naphtha required to run stoves and heaters at field site.

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0	The water used for this camp set-up will be obtained by hand via water jugs and will be used for basic camp-activities including cooking and cleaning (e.g., washing dishes).	The water used for this camp set-up will be obtained from the nearby freshwater stream/river.

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Camp	Greywater	0.01 per day on site	Returned to surrounding environment.	Environmentally friendly soaps will be used for all washing activities to enable a safe return of greywater to the environment.
Camp	Other, General garbage produced through camp site	2-4 large garbage bags	All waste will be removed from site and disposed of properly in Pangnirtung	NA

Environmental Impacts:

There are very limited environmental impacts associated with this project. There is a small footprint on land for the proposed camp site. To ensure minimal impact to environment, all garbage and equipment will be removed from field site at the completion of work. To help mitigate the use and return of water to the environment environmentally friendly soaps will be used for all washing activities to enable a safe return of greywater to the environment. The main impact to wildlife is to Arctic Char through the collection of 200 samples; however, the long-term benefits of assessing stock status and fishery sustainability are expected to outweigh the short-term impacts of sample collection. Useable fish samples obtained through this work will be delivered to the town of Pangnirtung for community distribution. Additional positive environmental impacts include data collection on water characteristics and daily climate that adds to the collection of data available to monitor and assess the region presently, and in the future.

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

There is no existing human-made infrastructure in the area. The terrain consists largely of exposed bedrock, steep-sided valleys, and lower coastal regions and fluvial deposits with moderate to high local relief. Surface materials include bedrock, gravels, and alluvial and marine deposits. The field site sits along the relatively flat, well-drained area along the inter-tidal zone above the active waterline and below the surrounding uplands.

Description of Existing Environment: Biological Environment

Ground cover is discontinuous and minimal consisting of low-growing mosses, lichens, grasses, sedges, and dwarf shrubs. Terrestrial wildlife in the area includes polar bears, barren-ground caribou, Arctic foxes, lemming spps., and ermine. Known aquatic species residing in the freshwater, brackish, and marine habitats of the area consist of Arctic Char, Arctic Cod, caplin, and sculpin, among others. The research area (shallow, nearshore, estuarine region) is not expected to overlap with the deeper offshore habitats more commonly used by other Cumberland Sound species including Greenland sharks, Greenland Halibut, wolffish, as well as larger marine mammals (bowheads, belugas, etc.). The water region surveyed coincides with the Arctic char return migration for Opinigvik lake which is intentional to enable assessment of the population.

Description of Existing Environment: Socio-economic Environment

The overarching goal of this work is to support the sustainable management of Arctic Char stocks in the Cumberland Sound region of Nunavut, in addition to maintaining positive collaborations and relationships with community members and local resource management groups, and to ultimately help indigenous communities (Pangnirtung) grow their economy through exploratory and commercial fisheries. The PHTO, Cumberland Sound Fisheries Ltd., along with the community have been working to further develop Arctic Char fisheries in the Cumberland Sound region and filling knowledge gaps on stocks is vital for sustainable management of Arctic char and economic growth of communities.

Miscellaneous Project Information

Note: Alternative project title on NPC application - Arctic char stock assessment research in Cumberland Sound, Nunavut

Identification of Impacts and Proposed Mitigation Measures

The camp is located on an open, previously undisturbed area free of permanent infrastructure, minimizing the need for vegetation clearing or ground disturbance.

Cumulative Effects

There are negligible expected negative cumulative impacts to the environment associated with this project. However, ultimately the results of this work, analysis, interpretation and collation of available data will help support sustainable resource management. Additionally, the collection of baseline data from previously unassessed areas, the primary component of this research, is vital to assess possible future impacts of climate change and anthropogenic influences. This long-term results of this research additionally help address requests from the Canadian Science Advisory Secretariat for science advice on Cumberland Sound commercial Arctic Char stocks.

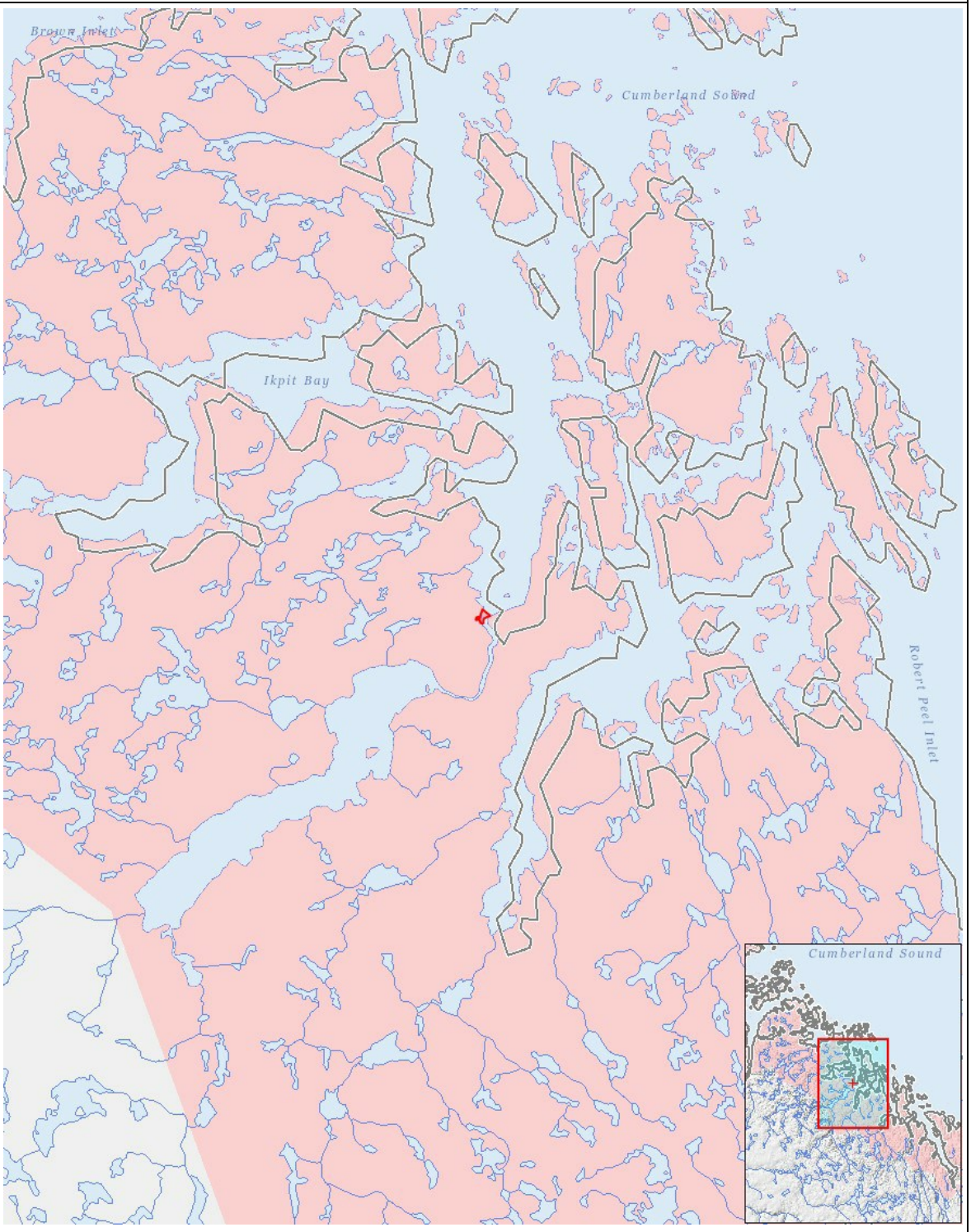
Impacts

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																									
Baseline data		-	-	-	-	M	P	-	-	-	-	-	-		-	-	-	U	-		-	P	-	-	-
Camp		-	U	-	-	U	-	-	-	-	-	-	U		-	-	-	-	-		-	-	-	-	-
Decommissioning																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

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

Project Location



List of Project Geometries

1	polygon	PG002 Camp Location
2	polygon	PG002 Survey zone