



## **NIRB Application for Screening #125892**

### **Marine Habitat Use of Thick-billed Murres**

**Application Type:** New

**Project Type:** Scientific Research

**Application Date:** 3/7/2024 10:02:47 AM

**Period of operation:** from 2024-07-20 to 2024-08-31

**Project Proponent:** Grant Gilchrist  
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## Non-technical project proposal description

French: L'intensification récente des activités de développement des ressources devrait accroître le trafic maritime dans les régions marines de l'est de l'Arctique canadien. Cependant, il n'existe pas suffisamment d'informations pour évaluer correctement les impacts écologiques potentiels des voies de navigation ouvertes toute l'année sur la faune marine. Notre objectif est de déterminer les modèles de répartition et d'abondance du Guillemot de Brünnich, dans le but d'identifier les habitats marins clés. Nous étudions les variations saisonnières et annuelles de l'utilisation de l'habitat marin dans plusieurs colonies du Nunavut (cap Graham Moore, île Bylot). En association avec cette recherche, nous examinons comment la variation du comportement de recherche de nourriture pourrait influencer la physiologie et le succès reproducteur des individus. Ce travail établira une base de référence sur l'utilisation de l'habitat marin à partir de laquelle les impacts potentiels futurs du développement des ressources sur les oiseaux marins pourront être évalués.

## Personnel

Operations Phase: from 2024-07-20 to 2024-08-31

## Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Field Camp Location	Camp	Inuit Owned Surface Lands	The Cape Graham Moore thick-billed murre colony is important to the community of Pond Inlet for egg collections. Our activities do not overlap with their harvest.	We do not know of nearby archaeological sites, however if one were to be discovered we would notify the community and QIA.	The closest community is Pond Inlet, across the channel. The camp site and colony we work with are near, but lie outside of Sirmilik National Park.
Cape Hay Colony to survey	Sampling sites	Crown	This colony has not been surveyed in many years.	We are unaware of any archeological sites of value at this colony.	This is located within Sirmilik National Park, and the closest community is Pond Inlet.

## Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Pond Inlet	Judah Innualuk	Mittimatalik HTO	2024-02-13
Pond Inlet	Julia Prokopick	Asungasungaat Area Co-management Committee	2022-06-01

# Authorizations

Indicate the areas in which the project is located:

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Nunavut Water Board	Approval without a license. Obtained the last 3 years, waiting on decision for 2024.	Applied, Decision Pending		
Environment and Climate Change Canada	Animal Use Protocol. Obtained the last 3 years, renewal pending.	Applied, Decision Pending		
Qikiqtani Inuit Association	Permit QX-2202	Active	2022-03-22	2024-08-30
Government of Nunavut, Department of Environment	Permit WL-2022-024, amendment applied for to include Cape Hay colony surveys (pending)	Active	2022-03-22	2024-08-30
Canadian Wildlife Service	Banding permit (10892)	Active	2022-05-09	2024-12-31
Parks Canada	Application to work at Sirmilik National Park to conduct Cape Hay survey of thick-billed murre colony. Submitted on Feb 28, 2024.	Applied, Decision Pending		

## Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	We will be travelling to and from our camp by helicopter	
Land	We will only be travelling by foot while on the land. There are no motorized vehicles.	

## Project accomodation types

Temporary Camp

## Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Helicopter	1	Bell 206 L	6 flights - 2 take crew and gear in, 2 resupply and crew change over mid-season, 2 take crew and gear out
Drone	1	Mavik Pro 3	Survey thick-billed murre colony to determine colony size

### Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Aviation fuel	fuel	1	45	45	Gallons	Fuel for helicopter flight time to survey Cape Hay and Cape Graham Moore thick-billed murre colonies

### Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
1	Snow in shaded areas, places into blue barrels and melted for drinking, washing dishes, etc.	Snow is collected in shaded areas within 1 Km of our camp.

# Waste

## Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Camp	Combustible wastes	6 garbage bags	Incineration at high temperatures	Ash removed and brought to Pond Inlet for disposal.
Camp	Greywater	5L/day	Placed in sump at least 100m from water bodies	Backfilled to match landscape.
Camp	Non-Combustible wastes	3 garbage bags	Flown back to Pond Inlet for disposal at dump.	Stored in garbage bags in camp. Removed when we leave.
Camp	Sewage (human waste)	10L/day	In a sump at least 100m from water bodies (river, lake, etc).	Backfilled to match contours of the land

### Environmental Impacts:

Given that we aim to study birds in their natural environment, we aim to minimize the impact of our presence and activities on the landscape/environment. We ensure we keep a clean camp and remove all our equipment/materials when we complete the work and leave for the season. Our largest impacts are likely our grey water and human sewage outputs. We ensure that we do not deposit these things anywhere near possible water sources to ensure there is no contamination, and we back fill these sumps to match the landscape. We only run our generator when it is necessary to charge our GPS units for bird tracking and to charge our radios for safety communication, thus reducing noise generated from our camp. Our tents will only be up for about 12 days so they should have minimal impact on surrounding vegetation, especially since we aim to put our tent up on gravel-heavy areas. When we leave, we aim to ensure the site looks as it did when we arrived.

# **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																										
Camp		M	-	-	-	-	-	-	-	M	-	-	M		M	M	M	-	M		-	-	-	-	-	-
Decommissioning																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

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

Project Location



List of Project Geometries

- |   |         |                           |
|---|---------|---------------------------|
| 1 | polygon | Cape Hay Colony to survey |
| 2 | point   | Field Camp Location       |