NIRB Application for Screening #125597

Northern Fulmar and Thick-billed Murre surveys and collections

Application Type:	New
Project Type:	Scientific Research
Application Date:	4/6/2021 2:40:15 PM
Period of operation:	from 0001-01-01 to 0001-01-01
Proposed Authorization:	from 0001-01-01 to 0001-01-01
Project Proponent:	Charlie Nakashuk Environment and Climate Change Canada - Canadian Wildlife Service P.O. Box 1870, 933 Mivvik Street Iqaluit Nunavut X0A 0H0 Canada Phone Number:: 867-975-4983, Fax Number:: 867-975-4645

DETAILS

Non-technical project proposal description

English: see attached

French: see attached

Inuktitut: see attached

Personnel

Personnel on site: 7
Days on site: 5
Total Person days: 35
Operations Phase: from 2021-07-05 to 2021-07-09
Operations Phase: from 2021-07-05 to 2021-09-15
Closure Phase: from 2021-09-12 to 2021-09-15
Post-Closure Phase: from to

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Prince Leopold Island Migratory Bird Sanctuary - Northern Fulmar Colony aerial survey and AIS station installation	Aerial surveys	Crown	Migratory Bird Sanctuary. Prince Leopold Island is the single most important seabird monitoring site in the Canadian Arctic and it has been surveyed since the 1970s.	No known archeological sites.	Prince Leopold Island is a Migratory Bird Sanctuary.
Prince Leopold Island Migratory Bird Sanctuary - Northern Fulmar Colony aerial survey and AIS station installation	Equipment installation	Crown	N/A	N/A	N/A
Cape Liddon - Northern Fulmar Colony aerial survey only	Aerial surveys	Crown	The cliffs of Cape Liddon support a Northern Fulmar colony for which the numbers of nesting birds have variously been estimated at 1000 - 10,000 pairs. The most recent and systematic survey in 2002 estimated 7000 pairs, 4% of the Canadian population.	No known archeological sites.	close to Resolute Bay and Prince Leopold Island Migratory Bird Sanctuary
Hobhouse Inlet - Northern Fulmar Colony aerial survey only	Aerial surveys	Crown	Hobhouse Inlet supports a large northern fulmar colony, estimated at 75,000 pairs in 1972, but reassessed systematically in 2001 and estimated at 15,000 pairs or 9% of the Canadian population.	No known archeological sites.	close to Resolute Bay, Prince Leopold Island Migratory Bird Sanctuary, Arctic Bay and Simmilik National Park
Baillarge Bay - Northern Fulmar Colony aerial survey only	Aerial surveys	Crown	A major northern fulmar colony breeds along 16 km of rugged, incised cliffs between Ballarge Bay and Elwin Inlet on the eastern shore of Admiralty Inlet. This colony has	No known archeological sites.	40 kn north of Actic Bay, within Simmilik National Park

			been estimated 10,00 and 100.000 pairs, although systematic surveys undertaken in 2002 suggested 20,000 pairs of fulmars, representing 11% of the Canadian populations.		
Princess Charlotte Monument - Northern Fulmar Colony aerial survey only	Aerial surveys	Crown	Is in Nirjutiqarvik National Wildlife Area, the Thick-billed Murre and northern fulmar colony has not been surveyed recently and new population estimates are required for the NWA management plan	Princess Charlotte Monument has no known Archeological sites	nearest community is Grise Fjord, Princess Charlotte Monument is located within Nirjutiqarvik NWA.
Cape Vera - Northern Fulmar Colony aerial survey only	Aerial surveys	Crown	An estimated 11,00 pairs of northern fulmars nest at Cape Vera, representing 6% of the Canadian population. this site has been surveyed for decades as is has an important breeding colony	No known archeological sites.	Halfway between Grise Fiord and Resolute Bay.
Fuel Cache	Fuel and chemical storage	Crown	Previously used to cache fuel for aerial surveys	No known archeological sites.	Halfway between Grise Fiord and Resolute Bay
Fuel Cache	Fuel and chemical storage	Crown	Previously used to cache fuel for aerial surveys	o known archeological sites.	Halfway between Resolute Bay and Arctic Bay, close to PLI MBs

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Resolute Bay	Steve Piercey	Hamlet of Resolute Bay	2021-02-24

Authorizations

Indicate the areas in which the project is located:

North Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Environment and Climate Change Canada	Canadian Wildlife Service Migratory Bird Sanctuary and National Wildlife Area access permit.	Applied, Decision Pending		
Government of Nunavut, Department of Environment	Nunavut wildlife research permit.	Applied, Decision Pending		
Hamlets and Municipalities	Authorization for researchers to travel to the community.	Active	2021-02-24	

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Surveys will be conducted by helicopter flying at 20 km/h in order to take photograghs of the colonies. To install the AIS station at PLI MBS a twin otter will transport personel and matireals to the site.	

Project accomodation types

Other,

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Twin Otter	1	20M	Drop off fuel cache
Helicopter (Bell 206L or similar)	1	32.4ft	aerial surveys, we will maintain distances that have been demonstrated to minimize disturbance while still allowing accurate counts to be obtained. The flight path will be planned to minimize the amount of time spent in the protected areas while enabling a complete survey of the relevant colonies.

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	6	45	270	Gallons	Fuel caches will be located at Cape Vera (2 drums) and Whaler Point (4 drums), and should be in position for only 2-3 weeks

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
Equipment installation	Non-Combustible wastes	10 lbs	will remove by twin otter	will remove by twin otter

Environmental Impacts:

During colony surveys, we will maintain distances that have been demonstrated to minimize disturbance while still allowing accurate counts to be obtained. The flight path will be planned to minimize the amount of time spent in the protected areas while enabling a complete survey of the relevant colonies. All surveys will be completed by helicopter, and we do not plan to land at the colonies. If landing is required, the area will be observed first to ensure that no bears, caribou, etc are in the immediate vicinity and the helicopter will land away from nesting areas, to the extent that is feasible. The AIS station installation will occur at the cabin site which is set back from the nesting cliffs. therefore we expect there to be no adverse effects on the colony.

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

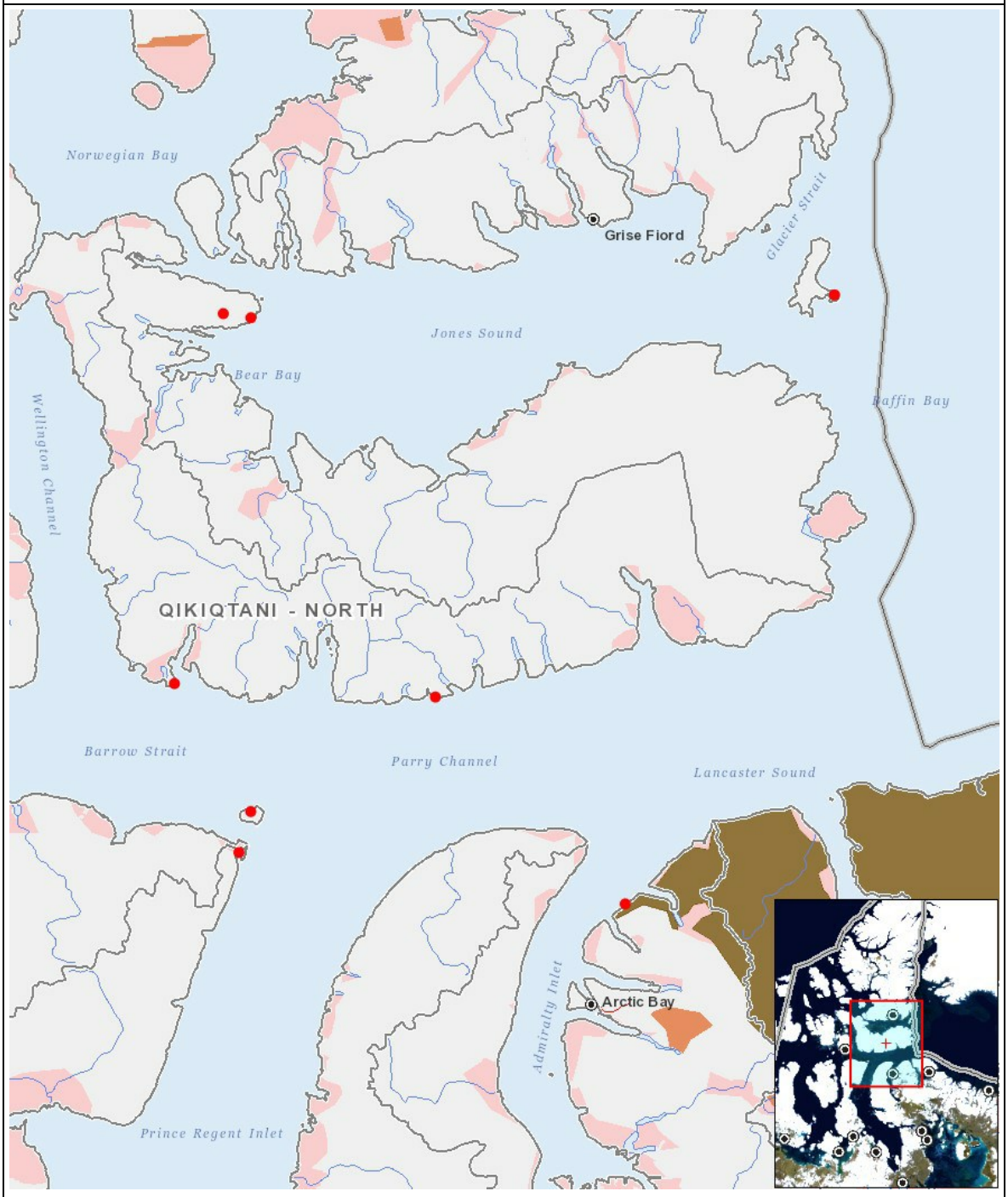
Impacts

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																									
Equipment installation		-	-	-	-	-	-	-	-	-	-	-	-		M	M	M	-	M		-	P	-	-	-
Fuel and chemical storage		-	-	-	-	-	-	-	-	-	-	M	M		M	M	M	-	-		-	-	-	-	-
Operation																									
Aerial surveys		-	-	-	-	-	-	-	-	-	-	N	N		-	M	M	-	N		-	-	-	-	-
Equipment installation		-	-	-	-	-	-	-	-	-	-	-	-		-	P	P	-	P		-	-	-	-	-
Fuel and chemical storage		-	-	-	-	-	-	-	-	-	-	-	-		M	-	-	-	-		-	-	-	-	-
Decommissioning																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

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

Project Location



List of Project Geometries

1	point	Prince Leopold Island Migratory Bird Sanctuary - Northern Fulmar Colony aerial survey and AIS station installation
2	point	Cape Liddon - Northern Fulmar Colony aerial survey only
3	point	Hobhouse Inlet - Northern Fulmar Colony aerial survey only
4	point	Baillarge Bay - Northern Fulmar Colony aerial survey only
5	point	Cape Vera - Northern Fulmar Colony aerial survey only
6	point	Fuel Cache
7	point	Fuel Cache
8	point	Princess Charlotte Monument - Northern Fulmar Colony aerial survey only