



NIRB Application for Screening #125793

High Arctic Cetacean Survey 2023

Application Type: New

Project Type: Scientific Research

Application Date: 4/6/2023 3:43:35 PM

Period of operation: from 0001-01-01 to 0001-01-01

Proposed Authorization: from 0001-01-01 to 0001-01-01

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DETAILS

Non-technical project proposal description

English: A survey of narwhal, beluga and bowhead whales will be conducted in the Canadian high Arctic in August 2023. The last survey of all the narwhal stocks simultaneously occurred in 2013 and since then, there is further research which supports potential movement of narwhals among previously defined summering regions. As a result, surveys of all the stocks within a short period of time is needed. The survey will cover areas previously surveyed for these stocks in 2013, while incorporating information and knowledge from the communities Hunters and Trappers Organizations that was sought during a scoping meeting in January 2020, and satellite telemetry of narwhals from 2012-2018 to determine high-use areas. Surveys will be flown in a DeHavilland Twin Otter (DH-6) equipped with bubble windows and a camera hatch at the rear. Overlapping photographs will be taken along transect lines from an altitude of 610 m (2000 ft). Two camera systems will be installed in the twin otter camera hatch. Each system will consist of a Nikon D850 camera, a Garmin GPS unit and a laptop computer. Geo-referenced images will be saved on the laptop in real time and analyzed for all marine mammal sightings after the survey. This survey will provide updated abundance estimates for all the Canadian Baffin Bay narwhal stocks, Cumberland Sound beluga whales, and Eastern Canada- West Greenland bowhead whales. Updated abundance estimates are needed to ensure sustainable harvests in Nunavut.

French: Une enquête sur le narval, le béluga et la baleine boréale sera menée dans le Haut-Arctique canadien en août 2023. La dernière étude de tous les stocks de narvals simultanément a eu lieu en 2013 et depuis lors, d'autres recherches soutiennent le mouvement potentiel des narvals entre les régions d'estivage précédemment définies. Par conséquent, il est nécessaire d'effectuer des enquêtes sur tous les stocks dans un court laps de temps. L'étude couvrira les zones déjà étudiées pour ces stocks en 2013, tout en incorporant les informations et les connaissances des organisations de chasseurs et de trappeurs des communautés qui ont été demandées lors d'une réunion de cadrage en janvier 2020, et la télémétrie par satellite des narvals de 2012 à 2018 pour déterminer les zones à forte utilisation. Les relevés seront effectués à bord d'un DeHavilland Twin Otter (DH-6) équipé de fenêtres à bulles et d'une trappe à caméra à l'arrière. Des photographies se chevauchant seront prises le long des lignes de transect à une altitude de 610 m (2000 ft). Deux systèmes d'appareil photo seront installés dans la trappe de l'appareil photo du Twin Otter. Chaque système sera composé d'un appareil photo Nikon D850, d'une unité GPS Garmin et d'un ordinateur portable. Les images géoréférencées seront sauvegardées sur l'ordinateur portable en temps réel et analysées pour toutes les observations de mammifères marins après l'étude. Cette étude fournira des estimations d'abondance actualisées pour tous les stocks canadiens de narvals de la baie de Baffin, les bélugas de la baie de Cumberland et les baleines boréales de l'est du Canada et de l'ouest du Groenland. Des estimations actualisées de l'abondance sont nécessaires pour garantir des récoltes durables au Nunavut.

[illegible]

Inuinnaqtun: Naunaiyautit tuugait, arvit arvillu havaktauniaqtut uvani Kanatami anginiqhakkut Ukiuqtaqtumi uvani Niqiliqivik 2023. Kinguliit naunaiyautit tamaita tuugadjat tamayait attautimiitut uvani 2013mi talvangalu, piqaqtuq hivumut ihivgiugutininik kitut ikayuutauyut ingutaaqniqmik kiklinik kinguani naunaiyaqhimayut auyami aviktungniini. Talvuuna, naunaiyainiq tamainnik piqarninnga naittumik ikaarnimik ihariagiyauyuq. Naunaiyautit

pidjutiginiaqtait kitut kinguani naunaiyaqtauyut hapkununga pihimayainun uvani 2013mi, ilaublugit kangiqhidjutit uvalu ilihimayatit hapkununga nunallaani Anguniaqtit Katimayit tapkua qiniqtauyut katimatilugit uvani Ubluqtuhivia 2020, uvalu satellite telemetry natqait hamanga 2012-2018 ihumaliugutikhat angiyumik-atungnikkut nayugait. Ihivriudjutikhangit tingminiaqtun talvani DeHavilland Twin Ottermi (DH-6) piqaqtun puptalaanik igalaarnik piksaliurutmiklu piksaliurutmik. Qaliriiknigit piksat piyauniaqt nalruyunik 610-miitamik (2000 ft). Malruk piksaliutit auladjutait iliuraqtauniaqtut uvani twin otter piksaliut. Tamangnik hanaqidjutikharnik piqarniaqtun Nikon D850nik piksaliurutmik, Garmin GPSnik iglukharnik qaritauyangniklu qaritauyangnik. Nunamiutanik ilidjuhikgivakgainik piksaliukhimayunik tutkikhaktaulutik mikharut laptop nik havakhikhimayunik uvunulu kinikhianikmun ihiviuktauyukhanik tamainik taryumiutanik nirgitinik takungnakpaktukhanik talvanga ihiviukhinikmun naunaiyainikmun naunaitkutakhanik. Una naunaiyaut tunihiniaqtuq nutaanguqtiqhimayunik amigainiit itqungniarutit tamainun Kanatami Qikiqtaalungmi narwhalnik, Cumberland Soundmi qilalukkat, kivataanilu Kanatami-Kalaaliit arvit. Nuutaanguqtiqhimayut amigaitilaangit nallautiqhimayut piqaqtukhat naunaiyaiyaangat atuqtauhiimaagiaqaqtunik anguniaqtakharnik Nunavunmi.

Personnel

Personnel on site: 16

Days on site: 22

Total Person days: 352

Operations Phase: from 2023-08-04 to 2023-08-25

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Jones Sound	Scientific/International Polar Year Research	Inuit Owned Surface Lands	N/A	N/A	Grise Fiord, Nunavut
Norwegian Bay	Scientific/International Polar Year Research	Inuit Owned Surface Lands	N/A/	N/A	Grise Fiord, Nunavut
Foxe Basin	Scientific/International Polar Year Research	Inuit Owned Surface Lands	N/A	N/A	Sanirajak, Nunavut
East Baffin Island/Somerset	Scientific/International Polar Year Research	Inuit Owned Surface Lands	N/A	N/A	Resolute Bay, Arctic Bay, Pond Inlet, Clyde River, Qikiqtarjuaq, Pangnirtung, Taloyoak

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Clyde River	James Arreak	Nangmoutaq Hunters and Trappers Organization	2022-12-21
Arctic Bay	Amy Barnabas	Ikajutit Hunters & Trappers Association	2022-12-21
Hall Beach	Lizzie	Sanirajak Hunters and Trappers Association	2022-12-21
Pond Inlet	Jennifer	Mittimatalik Hunters & Trappers Organization	2022-12-21
Qikiqtarjuaq	Martha Nuqingaq	Nattivak Hunters & Trappers Organization	2022-12-21
Resolute Bay	Nancy Amarualik	Resolute Bay Hunters & Trappers Organization	2022-12-21
Pangnirtung	Mark Kilabuk	Pangnirtung Hunters & Trappers Organization	2022-12-21
Grise Fiord	Louisa	Iviq Hunters & Trappers Association	2022-12-21
Taloyoak	Jimmy Oleekatalik	Spence Bay Hunters and Trappers Organization	2022-12-21

Authorizations

Indicate the areas in which the project is located:

Transboundary
Kitikmeot
Kivalliq
North Baffin
South Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Hunters and Trappers Associations/Organizations	Letters of support have been received from five of the nine Hunters and Trappers Organizations to date.	Active	2023-04-01	2024-04-01
Hunters and Trappers Associations/Organizations	We are waiting for letters of support from four of the nine Hunters and Trappers Organizations. One has provided verbal support but not a letter yet. Three have no yet reviewed or responded.	Applied, Decision Pending		
Canadian Wildlife Service	NWA and MBS applications have been submitted.	Applied, Decision Pending	2023-01-27	
Qikiqtani Inuit Association	NWA and MBS applications have been submitted.	Applied, Decision Pending	2023-01-25	

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Twin otters will be used to fly systematic survey lines.	

Project accomodation types

Community

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Twin otter airplane: DeHavilland Twin Otter (DH-6)	4	wingspan 65ft	We will use 4 twin otters to fly transect lines over survey strata across the Canadian Arctic.

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	45	205	9225	Liters	Fuel will be cached by PCSP at airstrips prior to the survey.

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
Aerial surveys	Sewage (human waste)	5L	Left on the land	People may need to go to the washroom while landing to refuel.

Environmental Impacts:

There will be no environmental impacts on the land as we will use already demarcated landing strips where fuel is regularly cached. There will be minimal noise disturbance to wildlife as we fly at an altitude of 1000-2000ft.

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																									
Scientific/International Polar Year Research		-	-	-	-	-	-	-	-	-	-	-	N	N		-	-	-	-	-	-	P	-	-	-
Decommissioning																									
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-

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

Project Location



List of Project Geometries

1	polyline	Jones Sound
2	polyline	Norwegian Bay
3	polyline	East Baffin Island/Somerset
4	polyline	Foxe Basin