

Demande de la CNER faisant l'objet d'un examen préalable #125782
Permafrost Pathways Monitoring Network

[illegible]

Inuinnaqtun: Nunap qiqumaninganik Apqutit amihunuk-havagviuyut havaaq hanayauhimayuq naunaiyaiyiniq, hilaqyuami pitquhiqmi ayugitunik, nunagiyauyumilu ilauyut, hivuliqhuqtauyut Dr. Susan Natali-mit Woodwell Hilap Iltuqhaivikmi Havakviuyumi. Tikinahuarutivut naunaiyagianganani qiqumanirit mamitirnirmun avatiini Ukiuqtaqtumi nunaini, uvalu atuqlugit hapkua qanuginiit maligahat itquumayut nunaqyuami hilap maliruagahait. Tadjá, itqungniarutit puyuit anianiit hapkunanga nunap qiqumaninganin aviktungniinin akhut aalakiigutiqaqtut uvalu, maliguagahat pidjutiqaqgitut hapkunanga puyuit humi hiamitiqnikkut ikikliyuumiqlugit turaarutit. Naunaiyarniaqtugut alqunngup puyuanut himmautingit talvani nampangit ihariagiyaayut tamainni Ukiuqtaqtumi boreal aviktuqhimaninnga aturhuni havaqatigiikniqmik munarinimut, unalu Nunavunmi. Talimani ukiuni, hapkua havagviit aktiarniaqtait puyuit dioxidemik uvalu puyuit puyuit nunap qiqumaninganin avatingit. Munarinikkut havagviit aulahimaniaqtun Nunavunmi ukiuq tamaat piluqtaulutiklu aturlutik tunngavimik imaatun havigalikmik pinghunuk, inuk ingutaarnirnik ilaliutihimajun qulaani ataanilu nunami. Hapkuat mihingnautit katitiquhivaktut naunaitkutikhanik hilatigut imaalu avatimut qanurinniinnik imaalu pidjutiqaqtunik puyuum anariaqtuqtilaangit himmautingit. Tutquumaviit naunaipkutit munariyauniaqut timiuyumit, kihiani tamaita naunaipkutit akmaumaniaqtut ilitariyaufaarianganani ihuliniganani atuni tatqiqhiunmi ukiumi. Piinariaqaqinnga una nampanik atuliqtitauniaqtuq havaqatigiikniq aadlanut ihivriuqtiuyunut. Titiraffaarniaqtavut qanuriliniyut tikuaqhiyut inuuqatiriigutiniq ukua hilap aalaguqniganik ahiuniganiklu nunap qiqumaninganik. Havaavut mikiyumik hulaqutiqaqniaqtut inuuhiinun Nunavunmi inuit. Ihivriuqtiyut iliurarniaqtait munarivikhangit ihuangittumik nayuganganani angiqtauniaqtuq uumannga nunannga nanminiaqtuq unalu nunamikni timiqutigiyayut, utiffaarniaqtugutlu ukiuq tamaat ihuarhigiami pihimagiamilu mihiknarninngit. Upalungaiyaqtugutlu katulaakkut nunamingni inungnun ihuaqhaiyaangini mihingnautinun uvalu ikayuqlutik ayuqhautinik atuqtilugu ukiuq. Ilaupkarumajugut ilaujumaqlutalu nunamingni katimapkaidjutikhanik ukiuq tamaat uqautigilugit qaujihaidjutikhat imaalu kiulugit apiqqutikhat nunamingni nunaqaqtut nunamingni qaujihainikkut najugainnik imaalu angitqijaniq tikinnahuaqtakhainnik. Una ilauyuq katimadjutit Qausuittungmi, Mittimatalikmi, Iqalungni, uvalu/uvaluuniin aalat nayugait tapkua havangniaqtugut hivuniptingni.

Post-Closure Phase: from to

Activités

Emplacement	Type d'activité	Statut des terres	Historique du site	Site à valeur archéologique ou paléontologique	Proximité des collectivités les plus proches et de toute zone protégée
Resolute Monitoring Station (primary)	Equipment installation	Commissioners	Currently designated as GN airport parcel, otherwise appears untouched. Melissa Lafrenière at Queens University has visited the site and reported that it looked natural and suitable for our needs. History otherwise unknown.	Unknown	2.5km to YRB runway, 0.5km to Crystal City structures.
Resolute Monitoring Station (alternative)	Equipment installation	Municipal	Unknown	Unknown	1km south of nearest Resolute residential area
Pond Inlet Monitoring Station (primary)	Equipment installation	Municipal	Un-surveyed municipal land, otherwise unknown.	Unknown	1.2km to shooting range, 1.8km to YIO runway
Pond Inlet Monitoring Station (alternative)	Equipment installation	Municipal	Un-surveyed municipal land, otherwise unknown.	Unknown	0.7km from nearest municipal road
Resolute Monitoring Station (primary)	Scientific/International Polar Year Research	Commissioners	Currently designated as GN airport parcel, otherwise appears untouched. Melissa Lafrenière at Queens University has visited the site and reported that it looked natural and suitable for our needs. History	Unknown	2.5km to YRB runway, 0.5km to Crystal City structures.

			otherwise unknown.		
Resolute Monitoring Station (alternative)	Scientific/International Polar Year Research	Municipal	Unknown	Unknown	1km south of nearest Resolute residential area
Pond Inlet Monitoring Station (primary)	Scientific/International Polar Year Research	Municipal	Un-surveyed municipal land, otherwise unknown.	Unknown	1.2km to shooting range, 1.8km to YIO runway
Pond Inlet Monitoring Station (alternative)	Scientific/International Polar Year Research	Municipal	Un-surveyed municipal land, otherwise unknown.	Unknown	0.7km from nearest municipal road

Engagement de la collectivité et avantages pour la région

Collectivité	Nom	Organisme	Date de la prise de contact
Resolute Bay	Ian Dudla	Hamlet Office	2022-06-16
Resolute Bay	Nancy Amarualik	Hunter Trapper Organization	2023-02-28
Resolute Bay	Debbie Iqaluk	Canadian Rangers	2023-03-07
Pond Inlet	Dave Stockley	Hamlet Office	2023-02-24
Pond Inlet	Tim Sourcie	QIA	2023-03-09
Pond Inlet	Justin Milton	Ikaarvik	2023-04-05

Autorisations

Indiquez les zones dans lesquelles le projet est situé:

North Baffin

Autorisations

Organisme de régulation	Description des autorisations	État actuel	Date de l'émission/de la demande	Date d'échéance
Gouvernement du Nunavut, Institut de recherche du Nunavut	We have submitted our application for a physical research license from the NRI, decision pending.	Applied, Decision Pending		
Hunters and Trappers Associations/Organizations	We have attempted to propose our research to the HTO boards in Pond Inlet and Resolute Bay, but have been unsuccessful in reaching them by phone or email. We are travelling to both communities in May to discuss our research in person.	Not Yet Applied		
Qikiqtani Inuit Association	After discussions with representatives from QIA, we determined that authorization from QIA is not necessary, as the proposed research will not be done on Inuit-owned lands	Not Yet Applied		
Government of Nunavut, Community Government & Services	We have submitted our application for a special land use permit to the Hamlet Office in Resolute Bay. The application was supplied by GN-CGS, as the unsurveyed municipal land is managed by GN	Applied, Decision Pending		
Government of Nunavut, Community Government & Services	We have submitted our application for a special land use permit to the Hamlet Office in Pond Inlet. The application was supplied by GN-CGS, as the unsurveyed municipal land is managed by GN. The application was approved by the Pond	Active		

	Inlet Hamlet Office			
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Project transportation types

Transportation Type	Utilisation proposée	Length of Use
Air	Commercial flights from YFB-YIO for all personnel	
Land	Truck or ATV access on public roads. We will take ATVs directly to the site (across tundra) only if allowed	

Project accomodation types

Collectivité

Utilisation de matériel

Équipement à utiliser (y compris les perceuses, les pompes, les aéronefs, les véhicules, etc.)

Type d'équipement	Quantité	Taille – Dimensions	Utilisation proposée
ATV	3	2m x 1.5m	We will use ATVs to tow our equipment to the monitoring site, as long as land owners approve.
Tripod towers	4	2m x 2m x 3m	These semi-permanent aluminum or galvanized steel tripods will be erected at the monitoring site (2 tripods at each site for a total of 4). We will use these to mount monitoring equipment for the duration of the project. We will remove them entirely at the end of the project
Scaffolding structure	2	1.5m x 3.2 m x 4.3m	These semi-permanent scaffolding structures will be erected at the monitoring site (1 at each site for a total of 2). We will install them above the tundra and anchor them to protect against wind. The structures will hold wind turbines and solar panels to power our equipment for the duration of the project. We will remove them entirely at the end of the project.

Décrivez l'utilisation du carburant et des marchandises dangereuses

Décrivez l'utilisation de carburant :	Type de carburant	Nombre de conteneurs	Capacité du conteneur	Quantité totale	Unités	Utilisation proposée
Gasoline	fuel	2	60	120	Liters	For ATV and Truck - fuel obtained from local gas stations

Consommation d'eau

Quantité quotidienne (m3)	Méthodes de récupération de l'eau proposées	Emplacement de récupération de l'eau proposé
0		

Déchets

Gestion des déchets

Activités du projet	Type des déchets	Quantité prévue	Méthode d'élimination	Procédures de traitement supplémentaires
Equipment installation	Déchets combustibles	1 standard trash bag	All waste during the installation of the sites will be collected and disposed of in municipal waste receptacles. Waste includes cardboard boxes, plastic wrap, excess lengths of wire and tubing. No waste will remain at the site.	N/A

Répercussions environnementales :

We anticipate that our project will not have any detrimental environmental impacts. During the installation phase, we will access the site to install research equipment, and this will involve carrying heavy batteries across the tundra from the road. We will do everything possible to keep the path short and use existing paths when present. Additionally, we will dig small holes to install sensors, but we will refill those holes and leave them otherwise undisturbed. During operation, the tower will be surrounded by wooden boardwalks to keep our feet above the delicate tundra. We will only visit the site as needed for maintenance, repairs, and cleaning. One pump will produce a small amount of noise during operation, but this noise will not be audible from more than 100m away.

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 de l'environnement existant : Environnement physique

The existing environment where the study will be taking place is a natural tundra landscape in both Pond Inlet and Resolute Bay. These areas are represented by continuous permafrost with an active layer of < 1m. The soil is a granular till. Some trails already exist for community use.

Description de l'environnement existant : Environnement biologique

The existing biological environments in both Pond Inlet and Resolute Bay are a natural high Arctic tundra ecosystem with some minor human disturbance. The local watersheds consist of three primary vegetation communities; wet sedge, mesic tundra, and dry tundra. Minor disturbances within the watersheds include ATV and walking trails that have been formed through community access usage.

Description de l'environnement existant : Environnement socio-économique

This research will be conducted within the municipal boundaries of both Pond Inlet and Resolute Bay. Local community members and youth will be hired and trained in research techniques, instrument maintenance, and data analysis.

Miscellaneous Project Information

We are attempting to involve the local community as closely as possible, by asking for their input in site locations as well as providing employment opportunities. We would also like to use our existing infrastructure to support other research that is important to the community.

Identification des répercussions et mesures d'atténuation proposées

Our project will have minimal negative impacts on the physical, biological or socioeconomic environment. These consist only of physical access across natural tundra, and minimal noise from equipment. It will have however a positive impact on the employment opportunities in Pond Inlet and Resolute Bay. The project will also have a positive impact on the general advancement of knowledge of the area, which is beneficial for all of Nunavut.

Répercussions cumulatives

Continuous access to the sites over the timeframe of the project may have cumulative effects on the tundra, this will be mitigated by constructing a boardwalk to protect the vegetation and permafrost.

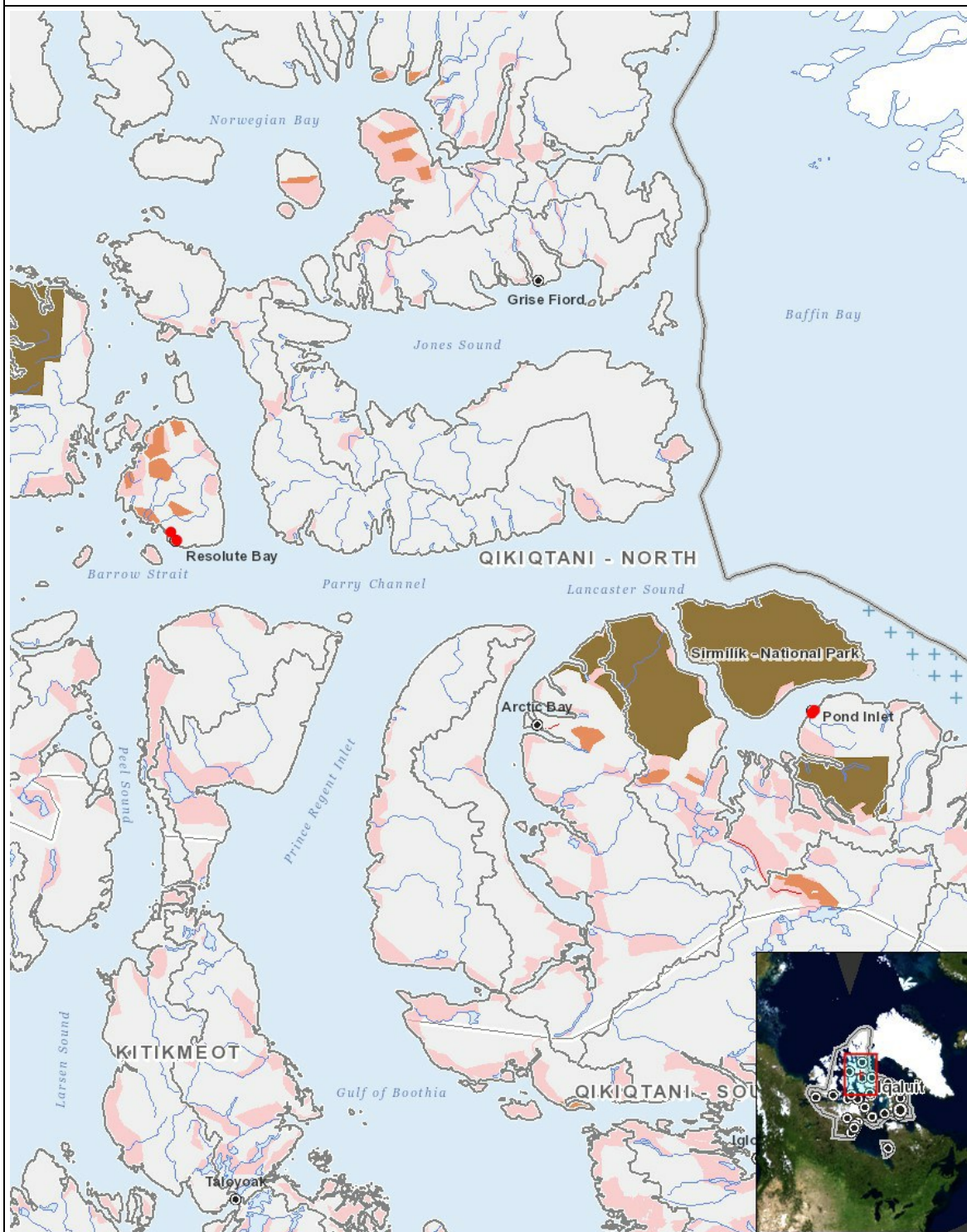
Impacts

Identification des répercussions environnementales

	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	-	-	-	-		-	P	-	-	-	
Exploitation																									
Equipment installation	-	-	-	-	-	-	-	-	-	-	-	N		M	-	-	-	-		-	P	-	-	-	
Désaffectation																									
Equipment installation	-	-	-	-	-	-	-	-	-	-	-	-		M	-	-	-	-		-	P	-	-	-	

(P = Positive, N = Négative et non gérable, M = Négative et gérable, U = Inconnue)

Site du projet



Liste des géométries de projet

- | | | |
|---|-------|---|
| 1 | point | Resolute Monitoring Station (primary) |
| 2 | point | Pond Inlet Monitoring Station (primary) |
| 3 | point | Resolute Monitoring Station (alternative) |
| 4 | point | Pond Inlet Monitoring Station (alternative) |