



NIRB Application for Screening #126346

Iqaluit Nukkiksautiit Project (INP)

Application Type: New

Project Type: Infrastructure

Application Date: Tuesday, August 4, 2026

Period of operation: from 2031-10-02 to 2099-12-31

Project Proponent: Heather Shilton
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Canada
Phone Number:: 8679798400, Fax Number::

DETAILS

Non-technical project proposal description

English: The Iqaluit Nukkiqsautiit Project (INP) is an Inuit-led renewable energy project. It proposes to build a hydroelectric power facility in the Kuugaluk River system on the Hall Peninsula. The Project is led by the Nunavut Nukkiqsautiit Corporation (NNC), a 100% Inuit-owned clean energy company. The goal of the Project is to provide a reliable source of renewable electricity for Iqaluit and to reduce the use of diesel fuel brought in from outside Nunavut. The Project would include a hydroelectric facility with a planned power capacity of up to 30 megawatts (MW). Electricity would be produced by storing water from an existing lake and river system and releasing it through turbines. The main parts of the Project would include a dam, a reservoir, and a powerhouse with turbines and generators. Other water control structures, such as spillways and intake structures, would help manage water levels and flows. The reservoir is expected to cover about 7,300 hectares, and water levels would be managed to support power generation while allowing water to continue flowing downstream. Other Project infrastructure would include ~66 kilometres of new all-season access roads, smaller roads within the Project area, and ~66-kilometre transmission line to carry electricity to Iqaluit. A new substation near Iqaluit would connect the power to the existing electrical system. Temporary facilities, such as seasonal camps, work areas, and material borrow sites, would be needed during study and construction work. These temporary areas would be removed or restored once they are no longer needed. At this time, the Project is still in the planning stage. The exact size, location, and design of Project components are being finalized. Details such as road routes, construction methods, water management plans, and operating rules will be updated as more engineering work, environmental studies, and Inuit engagement are completed. The Project is currently completing environmental, socio-economic and technical studies. These studies look at water flow, water quality, fish and wildlife, permafrost, and ground stability. The information collected will help prepare future environmental reports, including an Environmental Impact Statement (EIS), and will help improve Project design and safety measures. The Project is being reviewed under the Nunavut Planning and Project Assessment Act (NuPPAA). It requires review by the Nunavut Planning Commission and screening by the Nunavut Impact Review Board (NIRB). Based on current information, the Project does not require a federal impact assessment. Federal permits will still be needed for specific activities, such as work in water or near navigable waters. If the Project is approved and built, it could greatly reduce diesel use in Iqaluit, lower greenhouse gas emissions, and improve long-term energy security. The Project would also support Inuit jobs, training, and business opportunities. NNC will continue to work with Inuit communities, regulators, and partners to make sure the Project reflects Inuit values, protects the environment, and meets territorial priorities.

French: Le projet Iqaluit Nukkiqsautiit (INP) est un projet d'énergie renouvelable mené par les Inuit[RD1.1]. Il propose la construction d'une centrale hydroélectrique dans le réseau hydrographique de la rivière Kuugaluk, sur la péninsule Hall. Le projet est dirigé par la Nunavut Nukkiqsautiit Corporation (NNC), une entreprise d'énergie propre détenue à 100 % par les Inuit. L'objectif du projet est de fournir une source fiable d'électricité renouvelable à Iqaluit et de réduire l'utilisation de carburant diesel importé de l'extérieur du Nunavut. Le projet comprendrait une centrale hydroélectrique d'une puissance prévue d'environ 30 mégawatts (MW). L'électricité serait produite en stockant l'eau provenant d'un lac et d'un réseau fluvial existants et en la libérant à travers des turbines. Les principaux éléments du projet comprendraient un barrage, un réservoir et une centrale électrique équipée de turbines et de générateurs. D'autres ouvrages de contrôle des eaux, tels que des déversoirs et des prises d'eau, aideraient à gérer les niveaux et les débits d'eau. Le réservoir devrait couvrir environ 7 300 hectares, et les niveaux d'eau seraient gérés de manière à permettre la production d'électricité tout en laissant l'eau continuer à s'écouler en aval. Les autres infrastructures du projet comprendraient environ 66 kilomètres de nouvelles routes d'accès toutes saisons, des routes plus petites dans la zone du projet et une ligne de transport d'électricité de 66 kilomètres pour acheminer l'électricité vers Iqaluit. Une nouvelle sous-station près d'Iqaluit permettrait de raccorder l'électricité au réseau électrique existant. Des installations temporaires, telles que des camps saisonniers, des zones de travail et des sites d'emprunt, seraient nécessaires pendant les travaux d'étude et de construction. Ces zones temporaires seraient supprimées ou restaurées dès qu'elles ne seraient plus nécessaires. À l'heure actuelle, le projet en est encore au stade de la planification. La taille, l'emplacement et la conception exacts des composantes du projet sont en cours de finalisation. Les détails tels que le tracé des routes, les méthodes de construction, les plans de gestion de l'eau et les règles d'exploitation seront mis à jour à mesure que les travaux d'ingénierie, les études

[illegible]

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
Reservoir	Other	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit
Dam	Equipment installation	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit.
Dam	Drilling	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit.
Dam	Airstrip use or construction	Crown	Remote, largely undeveloped	Archaeological and cultural sensitivities	Approximately 66 km to the City of

			Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Iqaluit
Penstock Powerhouse	Equipment installation	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit
Penstock Powerhouse	Airstrip use or construction	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit
Aviation Areas	Airstrip use or construction	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's	Approximately 66 km to the City of Iqaluit

			camp, with no known prior industrial or contaminated use.	investigative studies. No paleontological values have been identified.	
Emergency Landing Strip	Airstrip use or construction	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit
Fuel and Waste	Fuel and chemical storage	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit
Labs, Shacks, Equipment Storage (Generators, Solar Panels)	Equipment installation	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit
Staging and Laydown	Camp	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River	Archaeological and cultural sensitivities are present, including Inuit	Approximately 66 km to the City of Iqaluit

			system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	
Labs, Shacks, Equipment Storage (Generators, Solar Panels)	Camp	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit
Temporary Camp and Multi-Use Area	Camp	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit
Temporary Camp and Multi-Use Area	Airstrip use or construction	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No	Approximately 66 km to the City of Iqaluit

			industrial or contaminated use.	paleontological values have been identified.	
Penstock Pump Lines	Equipment installation	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit
Spillway	Access Road	Crown	Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Approximately 66 km to the City of Iqaluit
Access Road - Option 1 (Preferred)	Other	Crown	Activity is related to the Transmission Line which will follow the Access Route Right of Way (ROW). Remote, largely undeveloped Crown land in the Kuugaaluk River system, traditionally used for Inuit travel and harvesting. Recent use has been limited to project studies and a temporary camp, with no known prior industrial or contaminated use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Start of ROW is within the City of Iqaluit, and the end of the access route is approximately 66 km Northeast City of Iqaluit to the Project Area.

Access Road - Option 1 (Preferred)	Access Road	Crown	The proposed access route crosses remote, largely undeveloped Crown land traditionally used for Inuit travel, harvesting and other land-based activities. Recent use has been limited to Project investigations, with no known prior industrial development or contaminated land use.	Archaeological and cultural sensitivities are present, including Inuit land-use sites, travel routes and heritage features. Ongoing archaeological studies are being completed as part of the Project's investigative studies. No paleontological values have been identified.	Start of access route is within the City of Iqaluit, and the end of the access route is approximately 66 km Northeast City of Iqaluit to the Project Area.
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Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Iqaluit	Open house	Iqaluit Rightsholders	2023-06-01
Iqaluit	Open house	Iqaluit Public	2023-06-01
Iqaluit	Open house	Iqaluit Rightsholders	2023-11-01
Iqaluit	Open house	Iqaluit Public	2023-11-01
Iqaluit	Open house	Inuksuk High School	2023-11-01
Iqaluit	Open house	Nunavut Arctic College	2023-11-01
Iqaluit	Open house	Iqaluit Public	2023-12-01
Iqaluit	Private	QIA Board	2024-03-01
Iqaluit	Open house	Iqaluit Rightsholders	2024-07-01
Iqaluit	Private	Amaruq HTA	2025-01-01
Iqaluit	Open house	Iqaluit Rightsholders	2025-01-01
Iqaluit	Open house	Iqaluit Public	2025-01-01
Iqaluit	Open house	Rightsholders	2025-03-01
Pangnirtung	Open house	Panniqtuuq Community Lands and Resources Committee	2025-03-01
Pangnirtung	Open house	Panniqtuuq Public	2025-03-01
Iqaluit	Private	Amaruq HTA	2025-03-01
Iqaluit	Private	GN Premier	2025-03-01
Pangnirtung	Private	Panniqtuuq HTA	2025-05-01

Authorizations

Indicate the areas in which the project is located:

South Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Nunavut Planning Commission	Conformity Determination (#151033)	Active	2026-02-02	
Fisheries and Oceans Canada	Fisheries Authorization	Not Yet Applied		
Transport Canada	Navigable Waters Act Approval	Not Yet Applied		
Nunavut Water Board	Water Licence(s)	Not Yet Applied		
Environment and Climate Change Canada	Canadian Environmental Protection Act Approval	Not Yet Applied		
Hamlets and Municipalities	Letter of Support	Applied, Decision Pending		
Hunters and Trappers Associations/Organizations	Letter of Support	Applied, Decision Pending		
Crown Indigenous Relations and Northern Affairs Canada	Class A Land Use Permit	Not Yet Applied		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Helicopter, Fixed wing (for emergencies)	
Water	Boat (aluminum outboard motor boats)	
Land	ATV, Heavy duty pick-up trucks, heavy equipment (Dozer, Excavators, dump truck)	

Project accomodation types

Temporary Camp

Other,

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Hydraulic excavators	14	Various sizes; L × W × H TBD	xcavation, drainage, foundations, road construction, quarry development, dam construction and reclamation
Track dozers	8	TBD	Grading, embankment construction, quarry work, stockpile management and site preparation
Articulated dump trucks	26	TBD	Hauling rock, aggregate, fill and excavated material
Rigid quarry haul trucks	4	TBD	Quarry production and bulk rock haulage
Wheel loaders	10	TBD	Handling aggregate, managing stockpiles, feeding crushers and screens, and supporting the batch plant
Motor graders and compaction rollers	8	TBD	Road shaping, grading, compaction and maintenance
Grout drill rigs	2	TBD	Foundation drilling, grout-hole installation and foundation treatment
Mobile crane	4	TBD	Structural erection, material handling and mechanical and electrical installation
Large mobile or crawler cranes	2	TBD	Heavy lifts associated with the dam, powerhouse, spillway, intake, penstock, substation and generating equipment
Mobile crushers	3	TBD	Processing blasted rock into road aggregate, concrete aggregate and engineered fill
Screening plants	2	TBD	Sorting and grading crushed rock and aggregate
Concrete batch plant	1	TBD	Producing concrete for the dam, powerhouse, spillway, intake and other civil structures
Concrete mixer trucks	4	TBD	Transporting concrete from the batch plant to placement areas

Concrete pumps	2	TBD	Pumping and placing concrete at civil structures
Pipelayers or sidebooms	4	TBD	Handling, positioning and installing penstock sections
Fuel, mobile-service and mechanic-support vehicles	8	TBD	Mobile refuelling, equipment servicing, maintenance and repair
Vacuum or sewage-haul trucks	4	TBD	Transporting sewage and greywater to an authorized receiving facility
Solid-waste haul vehicles	4	TBD	Collecting and transporting construction and camp waste
Lowboy, step-deck and flatbed trailers	4	TBD	Moving heavy and oversized equipment from Iqaluit to the Project site
Buses or personnel carriers	6	TBD	Transporting workers between Iqaluit, the camp and active work areas
Pickup trucks and light-duty vehicles	10	TBD	Personnel movement, supervision, inspections and environmental monitoring
Snow-removal equipment	2	TBD	Maintaining roads, camp areas, laydown areas and emergency access
Helicopter	2	407	Personnel transport, environmental inspections, emergency response, remote access and delivery of urgent parts or small equipment
Twin Otter or similar fixed-wing aircraft	1	TBD	Emergency or specialized personnel and material transport; float-equipped aircraft may use McKeand Lake
Small tools and minor support equipment	TBD	TBD	General construction, maintenance, surveying, monitoring and camp support
Outboard Motor Boat	2	16ft	Emergency or specialized personnel and material transport around unnamed lake.
ATV/Side by Side	6	TBD	Access route field work

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
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Propane	fuel	243	205	49815	Liters	Heating, cooking, temporary support facilities
Diesel	fuel	45220	205	9270100	Liters	Construction equipment, haul trucks, generators, camp heating and power, vehicles, mobile equipment and general site servicing
Gasoline	fuel	1391	205	285155	Liters	Light-duty vehicles, small engines, portable equipment and general site support
Aviation fuel	fuel	500	205	102500	Liters	Helicopter operations and limited or emergency fixed-wing aircraft support
Lubricants and hydraulic fluids	hazardous	100	205	20500	Liters	Equipment lubrication, hydraulic systems, generators, vehicles and camp-support equipment
Blasting agents	hazardous	10	1	10	Metric Tons	Quarry blasting, access-road rock cuts, dam foundations, powerhouse excavation, spillway, intake and portions of the penstock alignment
hazardous solids, including oily rags, filters, absorbents, batteries and contaminated containers	hazardous	75	205	15375	Liters	Concrete production for the dam, powerhouse, intake, spillway and other structures

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
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500	Temporary withdrawal from the Project reservoir area or another approved onsite surface-water source for construction and camp. Water will use screened intakes and will be treated as required.	The Headworks are located downstream of a small set of falls at the outlet of a natural lake on the South Branch of the Kuugaluk.
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Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Camp	Greywater	6–14 m ³ /day	Base case: collect in holding tanks and transport by vacuum truck to an authorized receiving facility in Iqaluit	Approximately two to three vacuum-truck trips per week during active construction. Modular onsite treatment remains under evaluation. Untreated sewage or greywater will not be discharged directly to the environment
Other	Hazardous	5,000–20,000 L/year	Transport by licensed carrier to an approved recycling, treatment or disposal facility	Store in labelled, compatible containers within secondary containment. Maintain inventories, inspections, spill kits and controlled transfer procedures
Camp	Hazardous waste	Approximately 1–5 t/year during construction	Shipment to an approved hazardous-waste receiving facility, generally south where local acceptance is unavailable	Segregate by compatibility, label containers and store in secure, covered hazardous-waste areas
Access Road	Non-Combustible wastes	50 t/year	Reuse or recycle where practicable; remaining material transported to an approved disposal facility	Segregation, volume reduction and secure temporary storage. Materials not accepted locally would be packaged and shipped south
Camp	Non-Combustible wastes	75–125 kg/day typical	Transport to an authorized facility in Iqaluit where accepted; shipment south where local disposal is unavailable	Segregate at source and store in secure, wildlife-resistant containers. Maintain regular collection and housekeeping to control wildlife attractants, odour and litter.
Airstrip use or construction	Non-Combustible wastes	50–250 t/year during construction	Reuse or recycle where practicable; remaining material transported to an	Segregation, volume reduction and secure temporary storage.

			approved disposal facility	Materials not accepted locally would be packaged and shipped south
Access Road	Non-Combustible wastes	Approximately 50–250 t/year	Reuse or recycle where practicable; remaining material transported to an approved disposal facility	Segregation, volume reduction and secure temporary storage. Materials not accepted locally would be packaged and shipped south
Airstrip use or construction	Other, Recyclable and reusable materials	1 t/year	Reuse onsite where suitable, local recycling where available or shipment south	Segregate and store in covered designated areas to prevent mixing, windblown debris and contamination

Environmental Impacts:

See attached Project Proposal Section 6.0

Additional Information

SECTION A1: Project Info

See attached Project Proposal and Information Request

SECTION A2: Allweather Road

See attached Project Proposal and Information Request

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

5.1.1 Climate and Permafrost 5.1.2 Atmospheric 5.1.3 Archaeological and Heritage Resources 5.1.4 Hydrology and Water Quality

Description of Existing Environment: Biological Environment

5.2.1 Aquatic Ecosystems and Fish Habitat 5.2.2 Vegetation and Terrain 5.2.3 Wildlife

Description of Existing Environment: Socio-economic Environment

Section 5.3 – Socio-economic Environment

Miscellaneous Project Information

Detailed Responses to NIRB Screening Comments and Information Requests

Identification of Impacts and Proposed Mitigation Measures

Section 6.2 – Potential Effects and Mitigation

Cumulative Effects

Section 6.4 – Cumulative Effects

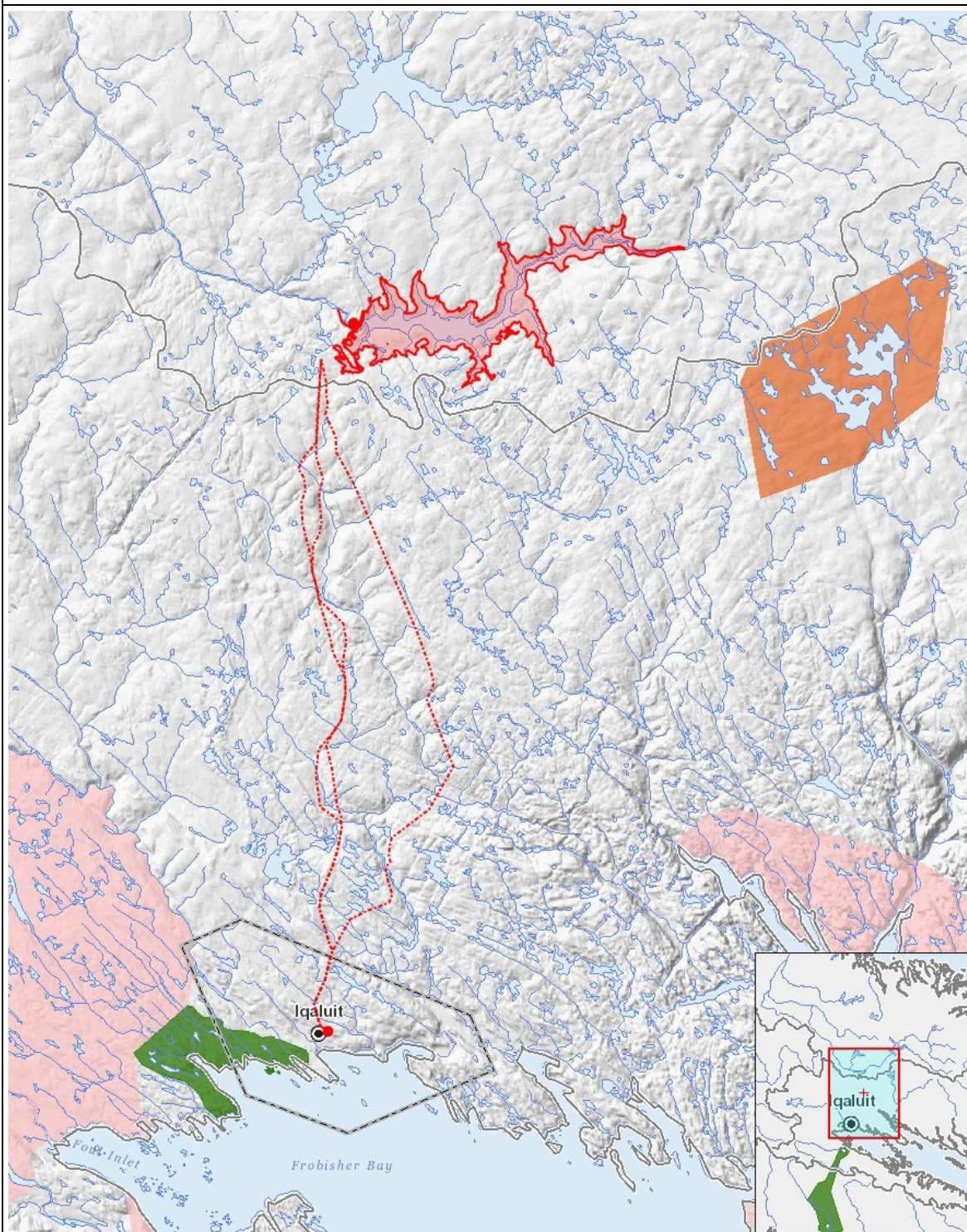
Impacts

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																									
Camp		-	-	-	-	-	-	M	-	M	-	M	M		M	U	U	-	-		-	P	P	-	-
Equipment installation		-	M	M	-	M	M	-	M	M	M	M	M		-	M	M	M	-		U	P	P	P	P
Fuel and chemical storage		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	P	-	-	-
Access Road		-	N	U	-	M	-	M	M	M	-	M	M		M	M	M	M	U		U	P	P	P	U
Staging areas		-	M	-	-	-	-	M	M	M	-	-	M		M	M	M	-	M		U	P	P	P	U
Waste disposal		-	-	-	-	-	-	-	-	-	-	-	-		M	-	-	-	-		-	P	P	-	-
Municipal and Industrial Development		-	M	M	-	M	M	M	M	M	-	M	M		M	M	M	M	-		P	P	P	P	U
Operation																									
Camp		-	-	-	-	-	-	M	-	M	-	M	M		M	U	U	-	-		-	P	P	-	-
Access Road		-	M	M	-	M	P	M	M	-	-	M	M		M	M	M	M	-		-	P	P	P	U
Staging areas		-	M	-	-	-	-	M	M	M	-	-	M		M	M	M	-	M		U	P	P	P	U
Municipal and Industrial Development		-	M	M	-	M	P	M	M	M	M	M	M		M	M	M	M	-		P	P	P	P	U
Decommissioning																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

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

Project Location



List of Project Geometries

- | | | |
|----|----------|--|
| 1 | polygon | Reservoir |
| 2 | polygon | Dam |
| 3 | polygon | Penstock Powerhouse |
| 4 | polygon | Aviation Areas |
| 5 | polygon | Emergency Landing Strip |
| 6 | polygon | Fuel and Waste |
| 7 | polygon | Labs, Shacks, Equipment Storage (Generators, Solar Panels) |
| 8 | polygon | Staging and Laydown |
| 9 | polygon | Temporary Camp and Multi-Use Area |
| 10 | polyline | Access Road - Option 1 (Preferred) |

11	polyline	Access Road - Option 2
12	polyline	Access Road - Option 3
13	polyline	Penstock Pump Lines
14	polyline	Spillway
15	point	Approximate Camp Location
16	point	Iqaluit Substation