



NIRB Application for Screening #126478

ICENAV

Application Type: New

Project Type: Scientific Research

Application Date: Monday, July 20, 2026

Period of operation: from 2026-08-20 to 2028-08-30

Project Proponent: José Lagunas
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DETAILS

Non-technical project proposal description

English: Please refer to attached description of the ICENAV project in the project documents

French: Please refer to attached description of the ICENAV project in the project documents

Inuktitut: Please refer to attached description of the ICENAV project in the project documents

Personnel

Personnel on site: 13

Days on site: 10

Total Person days: 130

Operations Phase: from 2026-08-20 to 2028-08-30

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Sampling region I	Scientific/International Polar Year Research	Marine	Please refer to the technical description of the scientific program in the attached documents.	Please refer to the technical description of the scientific program in the attached documents.	Please refer to the technical description of the scientific program in the attached documents.
Sampling region II	Scientific/International Polar Year Research	Marine	Please refer to the technical description of the scientific program in the attached documents.	Please refer to the technical description of the scientific program in the attached documents.	Please refer to the technical description of the scientific program in the attached documents.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Resolute Bay	Sandi Gillis	Qillaq Innovations	2025-05-20

Authorizations

Indicate the areas in which the project is located:

Kitikmeot
North Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Nunavut Planning Commission	The NPC has completed its review of the above noted project proposal. It conforms to the North Baffin Regional Land Use Plan (NBRLUP). The proponent has undertaken to comply with the applicable conformity requirements of Appendic C, H and I. See NPC letter attached in project documents	Active	2026-06-11	

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	CCGS Helicopter for reconnaissance	
Water	CCGS Henry Larsen	

Project accommodation types

Other,

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
CCGS Henry Larsen	1	100x20x7 [m]	The ship will support Icenav's request for dedicated primary ship time in the Northwest Passage intersection, Parry Channel, Melville Sound and M'Clintock Channel
CCG Helicopter	1	12x10x3 [m]	Launched from CCGS Henry Larsen for ice-survey operations
FLIR Skyranger drone	1	.45x.8.1.35 [m]	Drone to be used in sea-ice survey
DJI Matrice 350	1	.8x.7x.4 [m]	Drone to be used in sea-ice survey

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Information is not available						

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
Scientific/International Polar Year Research	Other, CCG waste disposal policy	N/A	Canadian Coast Guard vessels operating in the Arctic comply with the Arctic Waters Pollution Prevention Act, the Arctic Shipping Safety and Pollution Prevention Regulations, the Canada Shipping Act, 2001, and associated federal environmental management procedures. Under these authorities, ship-generated garbage, oily waste, hazardous waste, and most wastewater are retained, treated, or landed at approved facilities rather than discharged into Arctic waters.	The CCG has invested in advanced wastewater-treatment systems to reduce environmental impacts from ship operations. According to a 2023 Coast Guard announcement, residual waste from the new wastewater treatment systems is retained in onboard tanks and disposed of in environmentally responsible ways.

Environmental Impacts:

Risks: 1) Losing deployed drifters 2) Underwater noise from scientific acoustic sources 3) noise from drones on birds 4) Drone crashes Mitigation 1) Deploy drifters in large floes to ensure they can be tracked 2) The acoustic source to be used is low power and will have lower propagation distances than the CCGS Henry Larsen itself. Icebreaker noise is in the 210-220 dB range and contains low frequency noise which propagates very far in comparison to the scientific acoustic source. 3) Noise from drones on birds is well studied, very minor impacts in the worst case. Birds tend to avoid them. 4) The flights of the drones will be conducted under good atmospheric conditions and clear visibility. The RHIB (rescue boats) of the CCGS Henry Larsen will stand ready in case recovery is needed

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

please refer to technical scientific description of the project in the attached documents

SECTION H2: Disposal At Sea

Canadian Coast Guard vessels operating in the Arctic comply with the Arctic Waters Pollution Prevention Act, the Arctic Shipping Safety and Pollution Prevention Regulations, the Canada Shipping Act, 2001, and associated federal environmental management procedures. Under these authorities, ship-generated garbage, oily waste, hazardous waste, and most wastewater are retained, treated, or landed at approved facilities rather than discharged into Arctic waters.

SECTION I1: Municipal Development

Description of Existing Environment: Physical Environment

please refer to technical scientific description of the project in the attached documents

Description of Existing Environment: Biological Environment

Description of Existing Environment: Socio-economic Environment

Miscellaneous Project Information

Identification of Impacts and Proposed Mitigation Measures

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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	-	-	-	M	-	-	-	P	-	P	-
Decommissioning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Project Location



List of Project Geometries

1	polyline	Sampling region I
2	polyline	Sampling region II