



## **NIRB Application for Screening #126035**

### **IceBird Winter 2025**

**Application Type:** New

**Project Type:** Scientific Research

**Application Date:** 1/20/2025 1:54:04 PM

**Period of operation:** from 2025-03-25 to 2025-04-13

**Project Proponent:** Christian Haas  
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Operations Phase: from 2025-03-25 to 2025-04-13

## Activities

| Location      | Activity Type  | Land Status | Site history | Site archaeological or paleontological value | Proximity to the nearest communities and any protected areas |
|---------------|----------------|-------------|--------------|--|--|
| Cambridge Bay | Aerial surveys | Marine      | n/a          | n/a  | >35 km   |

## Community Involvement & Regional Benefits

| Community     | Name                        | Organization | Date Contacted |
|---------------|-----------------------------|--------------|----------------|
| Cambridge Bay | Daniel Kramer, U Sherbrooke | HTC          | 2025-02-13     |
| Cambridge Bay | Trevor Bell                 | SmartIce     | 2025-02-03     |

# Authorizations

Indicate the areas in which the project is located:

Authorizations

| Regulatory Authority       | Authorization Description                      | Current Status            | Date Issued / Applied | Expiry Date |
|----------------------------|--|---------------------------|-----------------------|-------------|
| Nunavut Research Institute | Research license from NRIPreviously 0201924R-M | Applied, Decision Pending |                       |             |

## Project transportation types

| Transportation Type | Proposed Use                                 | Length of Use |
|---------------------|--|---------------|
| Air                 | Airborne sea ice surveys with own DC3/Basler |               |

## Project accomodation types

Community

## Material Use

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

| Equipment Type              | Quantity | Size - Dimensions | Proposed Use   |
|-----------------------------|----------|-------------------|--|
| Basler BT-67 (DC3) airplane | 1        | N/A               | Research flights and ferrying equipment & passengers |

### 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      | 1                    | 16000              | 16000        | Liters | For survey flights. Fuelling will take place at local community airports YCB, YRB |

### 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 |
|------------------------------|---------------|----------------------------|--------------------|---------------------------------|
| Information is not available |               |                            |                    |                                 |

## Environmental Impacts:

Our surveys take place at 200, 1100, and 1500 ft flying altitude, with a speed of 120 knots. The only impact is short-term noise from the aircraft, particularly during the overflight at 200 ft. However, noise is limited due to the fact that only one overflight takes place at any location as the low altitude surveys take place along extended single lines. For the larger altitudes, aircraft presence is limited to a maximum of several overflights during one hour, and only on one day. The impact of these flights is minimal and we have permission to carry them out even in Antarctica where the strictest environmental requirements worldwide exist.

# **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 |
|------------------------|--|----------|--------------------------------|------------------|------------|-----------------------|---------------|--------------------|---|-----------------------------|---------------------------|--------------------------------|-------------|--------------|------------|------------|--|---|---|--------------------------|----------------|--|------------|--------------------|--------------------------|--------------|
| <b>Construction</b>    |  |          |                                |                  |            |                       |               |                    |   |                             |                           |                                |             |              |            |            |  |   |   |                          |                |  |            |                    |                          |              |
| -                      |  | -        | -                              | -                | -          | -                     | -             | -                  | -   | -                           | -                         | -                              | -           | -            |            | -          | -  | -   | -   | -                        |                | -  | -          | -                  | -                        | -            |
| <b>Operation</b>       |  |          |                                |                  |            |                       |               |                    |   |                             |                           |                                |             |              |            |            |  |   |   |                          |                |  |            |                    |                          |              |
| Aerial surveys         |  | M        | U                              | U                | -          | U                     | U             | U                  | U   | U                           | U                         | U                              | M           | M            |            | U          | M  | M   | U   | M                        |                | U  | P          | P                  | U                        | U            |
| <b>Decommissioning</b> |  |          |                                |                  |            |                       |               |                    |   |                             |                           |                                |             |              |            |            |  |   |   |                          |                |  |            |                    |                          |              |
| -                      |  | -        | -                              | -                | -          | -                     | -             | -                  | -   | -                           | -                         | -                              | -           | -            |            | -          | -  | -   | -   | -                        |                | -  | -          | -                  | -                        | -            |

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

## Project Location



## List of Project Geometries

|   |         |                 |
|---|---------|-----------------|
| 1 | polygon | Last Ice Area   |
| 2 | polygon | Victoria Strait |
| 3 | polygon | Penny Strait    |
| 4 | polygon | Pond Inlet      |
| 5 | polygon | Qikiqtarjuaq    |
| 6 | point   | Eureka          |
| 7 | point   | Resolute Bay    |
| 8 | point   | Cambridge Bay   |