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## **NIRB Application for Screening #125304**

### **Migratory and breeding ecology of birds facing global environmental change.**

**Application Type:** New  
**Project Type:** Scientific Research  
**Application Date:** 3/28/2018 3:17:34 PM  
**Period of operation:** from 0001-01-01 to 0001-01-01  
**Proposed Authorization:** from 0001-01-01 to 0001-01-01  
**Project Proponent:** Jean-François Lamarre  
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## **DETAILS**

### **Non-technical project proposal description**

English: Document is attached.

French: No document attached as this project takes place in the Kitikmeot region.

Inuktitut: No document attached as this project takes place in the Kitikmeot region.

Inuinnaqtun: Document is attached.

### **Personnel**

Personnel on site: 5

Days on site: 40

Total Person days: 200

Operations Phase: from 2018-05-14 to 2018-08-31

## Activities

### Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
2018_Lamarre_temporary_camp	Scientific/International Polar Year Research	Crown	N/A	N/A	N/A
2018_Avian_predator_surveys	Scientific/International Polar Year Research	Crown	N/A	N/A	N/A
2018_Arthropod_traps	Scientific/International Polar Year Research	Crown	N/A	N/A	N/A
2018_Icebreaker Channel goose colony survey	Scientific/International Polar Year Research	Crown	N/A	N/A	N/A
2018_Anderson bay goose colony survey	Scientific/International Polar Year Research	Inuit Owned Surface Lands	N/A	N/A	N/A

### Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Information is not available			

## Authorizations

### Indicate the areas in which the project is located

#### Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Canadian Wildlife Service	CWS scientific permit	Not Yet Applied		
Nunavut Research Institute	Wildlife research permit	Not Yet Applied		
Nunavut Water Board	NWB authorization; for activities using less than 50 m <sup>3</sup> water per day	Not Yet Applied		

### Project transportation types

Transportation Type	Quantity	Proposed Use	Length of Use
Air	0	Helicopter bell 2016	
Land	0	Snowmobile, ATV and foot	

### Project accommodation types

Temporary Camp

## Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Research - Motion triggered cameras	20	5-1/2"H x 4-1/2"W x 3" D	Monitoring of wildlife (nest predators or dens) and habitat. Most equipment will be installed for a short period of time and few may be installed more permanently to record habitat variation through the year. They will be frequently visited (minimum once a month.
Research - Temperature probes for nests.	60	2"H X 2"W X 2"D	Monitoring of bird nest temperature. Logger is few feet away from nest and a small cable leads to the probes in the nest. Probes are not affecting predation rate. They will help us know how steadily the birds incubate and if the nest hatch.
Research - Trapping equipment	175	see in proposed use	Up to 9 small traps for invertebrate (15"H X 15"W X 3"D) - Duration of use is 3 months. Traps will be revisited each 2-3 days. Up to 20 larger traps for invertebrate (6.5"H X 5"W X 5"D) - deployed for extended periods (two to eight weeks) Up to 2 bird traps (Max 6' diameter, flat) - Traps will be monitored at all times (capture time generally less than one hour) Up to 144 lemming traps. (15"H X 15"W X 3"D) - Duration of use is 2 weeks. Traps will be revisited frequently (Twice a day).

### 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	0	0	0	Liters	Helicopter use will require fuel but as the length of travel planned is small (under 500 km) we do require fuel caches and helicopter will be based solely at Cambridge Bay airport.
Gasoline	fuel	2	20	40	Liters	ATV, Snowmobile and Generator run on unleaded gasoline and a small quantity will be stored at camp in jerry cans on top of a spill containment tray with absorbent. Up to four 20L jerry can will be stored on site

## Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
1	20 L Jugs carried by foot.	Nearby camp.

## Waste

### Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Scientific/International Polar Year Research	Greywater	20 L per day maximum	Grey water (coming from dishwashing) will be filtered to remove all particules bigger than 2mm diameter. Water will be drained in a hole in the ground away from water bodies. Hole will be away from camp and covered to avoid attracting wildlife to it. Biodegradable soap will be used. Particules filtered will be disposed in the trash and stored in bear proof containers.	N/A
Scientific/International Polar Year Research	Sewage (human waste)	Up to 1 kg per day (for 5 persons at camp).	Human waste will be collected at camp and brought back to Cambridge for appropriate disposal.	Containers will be sealed when not in use to avoid attracting wildlife.

### Environmental Impacts:

A small temporary camp setting will be used. This camp will hold 1 cooking tent and up to 5 personal tents. Camp locations will change each 5 days. We will prefer barren ground/sandy area to reduce disturbance to the tundra at a minimum and will avoid wetland areas. Fuel will be stored on a spill containment tray and absorbent will be readily accessible to deal effectively with any fuel spill. Bear detectors and noise deterrent will be deployed during the whole duration of the camp. All food will be stored in tight containers to avoid smell and all trash will be collected in bear proof containers and brought back to Cambridge Bay. Low to no impact on the environment is expected.

**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**

