



## NIRB Application for Screening #126011

### Visiting the Spicer Islands of Foxe Basin

**Application Type:** New  
**Project Type:** Tourism  
**Application Date:** 11/22/2024 9:59:07 PM  
**Period of operation:** from 2025-08-15 to 2025-12-15  
**Project Proponent:** Zachary Michael Frohman  
3232 Eastern Avenue, Apt 401  
Baltimore Maryland 21224  
United States of America  
Phone Number:: 1-908-809-2427, Fax Number::

## DETAILS

### Non-technical project proposal description

English: This project is for an individual to visit the Spicer Islands of the Foxe Basin for the purpose of studying and documenting their geography, geology, and wildlife. The project is primarily touristic in nature, although I hope to also add to the limited scientific research of these islands. I am not part of a commercial enterprise but there would be a possibility of the video footage or photographs being used in media in the future. I am a United States citizen, and I would be arriving at these islands by boat as part of a longer journey. Due to weather and other uncontrollable circumstances that could delay my arrival to these islands, an exact start date cannot be provided. However, once at the islands, 7 consecutive days (total) would be spent at them. The Operations Phase includes the entire expected time in Nunavut. A sailboat will be used to reach the 3 islands mentioned in this project. A dinghy will then be used to go on shore, and it will be left on the islands until I leave. No permanent facilities will be built on the islands. There will also be no vehicles or heavy machinery used on the islands. Only temporary campsites will be constructed, and then taken down before leaving. "Leave no trace" policies will be followed. Sanirajak is the closest community to the islands. None of the islands are currently protected areas, but North Spicer Island is an important migratory bird habitat. It has been proposed as a potential protected area in Land Use Draft Plans. I will take precautions to not disturb the sensitive habitats. This includes maintaining the recommended distance of at least 300 meters from sites of large groups of migratory birds. I am requesting a Scientific Research License from the Nunavut Research Institute for the purpose of collecting rock and sediment samples from North Spicer Island, South Spicer Island, and Era Island. These samples would be analyzed for potential contaminants (including mercury and PFAS) and then compared to other regions of the Arctic. The general geochemical properties of these samples would also be examined, as limited research is available on the geology of these islands. I am requesting permission to collect approximately 25 lb (11.3 kg) of rock samples and approximately 1 cubic foot of sediments from these islands. Most of the collected rocks are expected to be carbonate rocks from the Paleozoic Era. In an effort to limit environmental impact, hand tools would be used to collect these samples. As a result, all samples would be taken from the surface or just below the surface of the earth. I am also requesting a Class 1 Archaeology and Paleontology Research Permit from the Government of Nunavut - Department of Culture and Heritage. If I find anything of archaeological or paleontological importance, I want permission to take photographs and record the locations for the benefit of future archaeologists/paleontologists. I would not be collecting or otherwise disturbing these items. As part of the journey, I intend to stop in the communities of Sanirajak, Kinngait, and Kimmirut for approximately 1 day each.

French: Ce projet vise à permettre à une personne de visiter les îles Spicer du bassin Foxe dans le but d'étudier et de documenter leur géographie, leur géologie et leur faune. Le projet est avant tout de nature touristique, même si j'espère aussi contribuer à la recherche scientifique limitée sur ces îles. Je ne fais pas partie d'une entreprise commerciale, mais il serait possible que les séquences vidéo ou les photographies soient utilisées dans les médias à l'avenir. Je suis citoyen américain et j'arriverais sur ces îles en bateau dans le cadre d'un voyage plus long. En raison de la météo et d'autres circonstances incontrôlables qui pourraient retarder mon arrivée sur ces îles, une date de début exacte ne peut être fournie. Cependant, une fois sur les îles, 7 jours consécutifs (au total) y seraient passés. La phase d'exploitation comprend toute la durée prévue au Nunavut. Un voilier sera utilisé pour rejoindre les 3 îles mentionnées dans ce projet. Un canot sera ensuite utilisé pour accoster à terre, et il sera laissé sur les îles jusqu'à mon départ. Aucune installation permanente ne sera construite sur les îles. Aucun véhicule ni machinerie lourde ne sera également utilisé sur les îles. Seuls des terrains de camping temporaires seront construits, puis démontés avant le départ. Les politiques « Ne laisser aucune trace » seront suivies. Sanirajak est la communauté la plus proche des îles. Aucune des îles n'est actuellement une zone protégée, mais l'île North Spicer constitue un habitat important pour les oiseaux migrateurs. Elle a été proposée comme zone protégée potentielle dans les projets de plans d'aménagement du territoire. Je vais prendre des précautions pour ne pas déranger les habitats sensibles. Cela inclut le maintien de la distance recommandée d'au moins 300 mètres des sites abritant de grands groupes d'oiseaux migrateurs. Je demande un permis de recherche scientifique à l'Institut de recherche du Nunavut dans le but de recueillir des échantillons de roches et de sédiments de l'île North Spicer, de l'île South Spicer et de l'île Era. Ces échantillons seraient analysés pour détecter d'éventuels contaminants (y compris le mercure et les PFAS), puis comparés à d'autres régions de l'Arctique. Les propriétés géochimiques générales de ces échantillons seraient également examinées, car peu de recherches sont disponibles sur la

géologie de ces îles. Je demande la permission de ramasser environ 25 lb (11,3 kg) d'échantillons de roche et environ 1 pied cube de sédiments de ces îles. La plupart des roches collectées devraient être des roches carbonatées du Paléozoïque. Afin de limiter l'impact environnemental, des outils manuels seraient utilisés pour recueillir ces échantillons. En conséquence, tous les échantillons seraient prélevés à la surface ou juste sous la surface de la terre. Je demande également un permis de recherche en archéologie et paléontologie de classe 1 auprès du gouvernement du Nunavut – ministère de la Culture et du Patrimoine. Si je trouve quelque chose d'importance archéologique ou paléontologique, je demande la permission de prendre des photos et d'enregistrer les emplacements pour le bénéfice des futurs archéologues/paléontologues. Je ne ramasserais ni ne dérangerais ces objets. Dans le cadre du voyage, j'ai l'intention de m'arrêter dans les communautés de Sanirajak, Kinngait et Kimmirut pendant environ une journée chacune.

## **Personnel**

Personnel on site: 1

Days on site: 7

Total Person days: 7

Operations Phase: from 2025-08-15 to 2025-12-15

## Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
South Spicer Island - Activities include camping, observing wildlife, and collecting rock/sediment samples.	Tourism Activities	Crown	N/A	Unknown, since limited research has been completed. I am not aware of any archaeological or paleontological sites that have been found on this island.	The community of Sanirajak is approximately 95 kilometers to the northwest.
Era Island - Activities include collecting rock/sediment samples.	Tourism Activities	Crown	N/A	Unknown, since limited research has been completed. I am not aware of any archaeological or paleontological sites that have been found on this island.	N/A
North Spicer Island - Activities include camping, observing wildlife, and collecting rock/sediment samples.	Tourism Activities	Crown	N/A	Unknown, since limited research has been completed. I am not aware of any archaeological or paleontological sites that have been found on this island.	North Spicer Island is not currently a protected area, but it has been proposed in draft plans since it is a key migratory bird habitat. Precautions will be taken to not disturb the birds and their habitat.

## 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
Nunavut Water Board	Approval to Use Water/Deposit Water Without a Licence	Not Yet Applied		
Government of Nunavut, Department of Environment	Wildlife Observation Licence	Not Yet Applied		
Nunavut Research Institute	Scientific Research Licence	Not Yet Applied		
Government of Nunavut, Department of Culture, Language, Elders, and Youth	Archaeology and Paleontology Research Permit, Class I	Not Yet Applied		

## Project transportation types

Transportation Type	Proposed Use	Length of Use
Water	A sailboat will be used to navigate the waters of Nunavut. A dinghy will be used to reached land at the sites shown on the Project Map.	

## Project accomodation types

Temporary Camp

## Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Camp-stove	1	Approximately 20 cm x 20 cm x 20 cm	A standard camp-stove to be used to heat up meals or to supply heat in case of an emergency.
Geology Hammer	1	13L x 7W x 1.25Th	A standard geology hammer to be used for breaking off chunks of rocks for collection and later analysis.
General Geological Hand Tools	1	N/A	Chisels, spades, and other small hand tools to be used to collect rock and sediment samples for later analysis.

### Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Propane	fuel	5	1	5	Lbs	The propane would be used as fuel for a standard camp-stove.
Propane	hazardous	5	1	5	Lbs	The propane would be used as fuel for a standard camp-stove. The canisters would be brought back off the islands.

### Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0	No drilling or digging. Only surface water would be bottled and then boiled. This would only be done if necessary due to running out of water carried onto the island.	Within the boundaries of the areas drawn on the Project Map.

# **Waste**

## **Waste Management**

<b>Project Activity</b>	<b>Type of Waste</b>	<b>Projected Amount Generated</b>	<b>Method of Disposal</b>	<b>Additional treatment procedures</b>
Tourism Activities	Sewage (human waste)	Human waste from 1 individual over 7 days.	Waste Alleviation and Gelling bags that would be brought with me back off the islands. None of the bags would be disposed of on the islands.	N/A

## **Environmental Impacts:**

The ground may be slightly disturbed by setting up temporary campsites, but no significant environmental impacts are predicted. Leave no trace procedures will be followed. In addition, collecting rock and sediment samples will disturb the earth, but care will be taken to only damage what is needed for the purpose of extracting samples.

# **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**

There is not much research available on the physical environment of these islands.

### **Description of Existing Environment: Biological Environment**

Researchers have identified significant polar bear populations on these islands in the past. North Spicer Island is also considered an important habitat for migratory birds, although it has not yet officially been made a protected area.

### **Description of Existing Environment: Socio-economic Environment**

There are no communities present on the Spicer Islands in the Foxe Basin. The nearest community is Sanirajak. I am not aware of any archaeological or paleontological sites that have been discovered on the islands.

## **Miscellaneous Project Information**

### **Identification of Impacts and Proposed Mitigation Measures**

There may be minor negative impacts to ground stability, surface and bedrock geology, and sediment and soil quality due to activities undertaken to collect samples of rocks and sediment for analysis. However, due to the small volume of samples being taken and the use of hand tools instead of heavy machinery, the potential impact is expected to be mitigated. The wildlife may be slightly disturbed by my presence, but care will be taken to keep as much distance as possible. I also will not get close to the nesting sites of migratory birds that use North Spicer Island as a key nesting grounds.

## **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																		

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

## Project Location



## List of Project Geometries

- 1 polygon North Spicer Island - Activities include camping, observing wildlife, and collecting rock/sediment samples.
- 2 polygon South Spicer Island - Activities include camping, observing wildlife, and collecting rock/sediment samples.
- 3 polygon Era Island - Activities include collecting rock/sediment samples.
- 4 polyline Approximate route
- 5 polyline Approximate route
- 6 polyline Approximate route
- 7 polyline Approximate route
- 8 polyline Approximate route

- |    |          |                                       |
|----|----------|---------------------------------------|
| 9  | polyline | Approximate route                     |
| 10 | point    | Kinngait - A visit to the community.  |
| 11 | point    | Sanirajak - A visit to the community. |
| 12 | point    | Kimmirut - A visit to the community.  |