

Public Registry - Project Proposals

NPC 150780: ECWG Bowhead Whale Photo Identification and Biopsy Sampling

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Proposal Status: Conformity Determination Issued

[Overview Documents](#)

[Project Overview](#)

Type of application: New

Proponent name:

Brent Young

Proponent company:

Fisheries And Oceans Canada

Project Description:

The project will take place in two locations. Work in Foxe Basin, based out of the community of Igloolik, will take place over approximately two weeks between mid June and mid July, 2025. Work off the east Coast of Baffin Island will be based out of the community of Clyde River and will take place over approximately three weeks in August 2025. The work in Foxe Basin will be carried out entirely by four Nunavut Beneficiaries, hired through the Igloolik Hunters and Trappers Association (HTA). Work based out of Clyde River will be carried out by Fisheries and Oceans (DFO) staff working alongside up to 4 Beneficiaries hired through Nangmoutaq HTA. The main objectives of this study are to collect biopsy samples for use in updating abundance estimates of the Eastern Canada-West Greenland bowhead population and to use drones to collect photographs for use in photo-identification studies. ECWG bowhead whales are known to segregate based on age, with juvenile and subadult whales thought to use different summer habitat than older adults. By expanding our research to the east coast of Baffin Island we hope to learn more about the bowheads that use this area and to collect biopsy samples and photo-id data that would be more representative of the entire population. This data is essential for improving population abundance estimation and this research would represent an important step towards gaining a more complete understanding of ECWG bowhead population dynamics.

[Project Schedule](#)

Start Date:

2025-06-16

End Date:

2025-08-31

[Project Map](#)

List of project geometries:

Id

Geometry

Location Name

[17026](#)

polygon

Study area near Clyde River, NU. Boat-based marine work only.

[17027](#)

polygon

Study area in Foxe Basin, NU. Boat-based and ice based marine work only.

NPC Planning regions:

No Approved Plan

North Baffin

[Project Land Use and Authorizations](#)

Project Land Use:

Marine-Based Activities

Marine-Based Activities

Scientific Research

Licensing Agencies:

Government of Canada - Fisheries and Oceans Canada

Government of Canada - Fisheries and Oceans Canada

[Material Use](#)

Equipment:

Type

Quantity

Type

Use

Small Boat

4

8 m

Small boats (up to approx 8 m in length) would be used to search for and approach bowhead whales for sample collection. Two boats for use in Foxe Basin, based out of Igloolik and two boats based out of Clyde River.

Drone

2

283.0 x 107.7 x 347.5 mm

Small drones will be used to take photos and videos of bowhead whales.

crossbows

4

90 cm length

Crossbows, with special biopsy arrows and tips, will be used to collect small skin/blubber tissue samples from bowhead whales.

Fuel Use:

Type

Container

Capacity

Use

Gasoline

10

160

Gasoline will be used to power small boats, used to search for bowhead whales.

Hazardous Material and Chemical Use:

Type

Container

Capacity

Use

Povidon Iodine (Betadine)

2

1

Betadine will be used to clean stainless steel biopsy tips prior to sample collection.

Water Consumption:

Daily Amount (m²)

Retrieval Method

Retrieval Location

0

Waste and Impacts

Environmental Impacts:

We anticipate very little environmental impact resulting from our project. We will be staying in communities, rather than establishing a camp. Therefore all human waste and regular garbage will be disposed of through the community waste handling systems. We will be conducting day trips using small motor boats, producing exhaust from the consumption of gasoline, but given the small scale of our project, the emissions created from this work will be small. Approaching bowhead whales in boats will result in some disturbance to their regular behavior, but the sample collection methods are considered minimally invasive, and whales typically return to regular activities soon after the sampling event.

Waste Management:

Waste Type

Quantity Generated

Treatment Method

Disposal Method

Hazardous

1 litre

While not classified as hazardous waste, Betadine is an antiseptic and disinfectant agent, and its active ingredient, povidone-iodine, is a known irritant and will be handled with care.

Used Betadine (Not considered hazardous waste) will be collected and transported back to the Freshwater Institute in Winnipeg and disposed of following the Freshwater Institute lab waste disposal procedures.