NPC 150413: Kinngait beluga and walrus biopsy, tagging, camera, and drone work

Close

Proposal Status: Conformity Determination Issued

Overview Documents

Project Overview

Type of application: New

Proponent name:

Marianne Marcoux

Proponent company:

Fisheries and Oceans Canada

Project Description:

Our objective is to better understand marine mammals (beluga and walrus) surrounding Kinngait. Data generated from this project will form baseline information to assess and monitor potential impact of increased shipping over the next few years with the construction of Baffinlands Steensby Port in Foxe Basin. Belugas from the Western Hudson Bay and the Eastern Hudson Bay populations migrate and over winter in the Hudson Strait. The Western Hudson Bay beluga population was last surveyed in 2015. It produced an abundance estimate of 54,400 (95 %; CI = 45,000–66,000) while the Eastern Hudson Bay beluga population was estimated at 2,500 belugas (95% CI=1,400-4,300) from an aerial survey in 2021. Walrus from the Hudson Bay–Davis Strait stock visit the area around Kinngait. This stock was last assessed at 44,600 animals (95% CI = 19,500–102,000) from an aerial survey conducted in 2017. There are still uncertainty in the population composition of the belugas that visit Kinngait in the fall and winter and thus, more information is needed to understand the potential impact of increased shipping on these animals. This project aims to address uncertainties in the habitat use and the stock definitions of beluga and walrus using satellite telemetry, and genetics. We are proposing to conduct fieldwork based out of Kinngait to biopsy, tag, and collect camera/drone footage of beluga and walrus. We are proposing to 1) remotely collect biopsy samples of walrus and beluga for genetics, 2) remotely equipping walrus and beluga whales with satellite tags that provide location and depth data, 3) using drone and time lapse camera footage to monitor walrus haul outs and gather behavioural data on beluga whales, and 4) deploy hydrophones to monitor marine mammal presence. This work will be based in the town of Kinngait working closely the Aiviq Hunters and Trappers Organization, hiring local field research assistants and boat captains to conduct the work. The team will be boating to locations

as day trips to conduct the proposed work. Boat trips will be done as day trips and the team will return to town at the end of each day (i.e. no field camp). Operations will take place between September 10 to October 10 (exact timing and focus areas will be based on local expertise from the HTO). The polygons in the project map cover large areas to make sure we have the flexibility to follow HTO's recommendation, but we are not planning on getting anywhere close to protected areas/national parks. The walrus work (tag, biopsy, and time-lapse camera deployment) has received support from the HTO and the beluga work is pending confirmation will depend on support .

Project Schedule

Start Date:

2024-09-10

End Date:

2024-10-10

Project Map

List of project geometries:

Id	Geometry	Location Name
11943	polygon	Kinngait

NPC Planning regions:

No Approved Plan

Project Land Use and Authorizations

Project Land Use:

Scientific Research

Marine-Based Activities

Scientific Research

Licensing Agencies:

Government of Canada - Fisheries and Oceans Canada

Government of Canada - Fisheries and Oceans Canada

Nunavut Impact Review Board

Material Use

Equipment:

Type	Quantity

Type Use
Drones
2
3.8 x 3.6 x 8.7
Will be flown by licensed pilots to collect information on beluga and walrus diving behaviour and body condition
Boat
1
0x0
Boat dimension / driver will be determined by the Aiviq HTO
Air rifle
2
42.5x3
To collect biopsy samples
Crossbow
2
15x20
To deploy satellite telemetry tags
Camera
2
5x 4
To take time lapse images of walrus haul-outs

Fuel Use:

Type Container Capacity Use
Gasoline
2
205
Boats

Hazardous Material and Chemical Use:

Type Container Capacity Use
No data found

Water Consumption:

Daily Amount (m^2)	Retrieval Method	Retrieval Location
0		

Waste and Impacts

Environmental Impacts:

N/A

Waste Management:

Waste Type	Quantity Generated	Treatement Method	Disposal Method
No data found			