

Final Financial Report to NWMB – February 2023

1. **NWSF Project Number:** NWSF-2022-001
2. **Project Title:** Cumberland Sound beluga biopsy program
3. **Project Leader:** Simeonie Keenainak, HTA Chair, Pangnirtung, NU, pang@baffinhto.ca, 867-473-8751
4. **Original project budget:**

Local contracts for biopsy collection (boat, driver, fuel, sample)	\$30,000
Field supplies for hunters	\$2,000
Travel for community member to travel to conference to present research	\$7,000
Service fees, translation, analyses	\$5,000
Genetic analysis	\$15,000
Summary meeting in Pangnirtung post-research	\$10,000
Total	69,000

5. **Original contributions:**

Fisheries and Oceans Canada	\$39,000
NWMB	\$30,000
Total funds	\$69,000

There were no variations from this original proposal.

6. **Explanation of Changes:** NA

7. Financial Report

Budget Item	Budgeted	Disbursed	Variance
Local contract for biopsy sampling)	\$30,000 from NWMB	\$30,000	\$0

8. **Explanation of variances:** NA

9. **Verification of information provided:**

I certify that this is an accurate statement of the Board project funds received and disbursed in accordance with the joint contribution agreement.



 January 2023, 30TH

Signature Date

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4. Summary:

Aerial surveys suggest beluga whale abundance in Cumberland Sound is ~1380 individuals. It was suggested by Department of Fisheries and Oceans (DFO) that an annual harvest of 41 belugas may not be sustainable, since current evidence suggests this is a genetically and spatially segregated beluga population. However, the community hunts two types of belugas, and one of these types does not remain in Cumberland Sound year round. Hunters have historically collected beluga samples for the DFO sampling program, but the sample size has been too low for proper genetic testing, and we believe the second type of belugas are more common after the hunt is complete. To determine if whales from other populations visit Cumberland Sound, biopsy collections from these whales are needed. The proposed project aimed to collect biopsies from belugas in Cumberland Sound from August to September 2022 outside of Clearwater Fiord to target the other population of beluga.

5. Project Objectives:

Ricky Kilabuk was hired and aimed to collect biopsies from beluga whales outside of Clearwater Fiord in summer/fall of 2022.

6. Materials and Methods:

Crossbows and biopsy darts were used to biopsy beluga whales from the boat. Ricky was unable to locate beluga outside of Clearwater Fiord to biopsy in August. However, Ricky successfully collected a beluga biopsy in September 2022. This was the first season Ricky has attempted beluga biopsying and now that he has learned the technique, the plan is to collect biopsies this upcoming season, which will be analyzed for genetics by Fisheries and Oceans Canada.

7. Results

A single biopsy was collected and is currently being analyzed for genetics, along with hunter collected samples, by Fisheries and Oceans Canada.

8. Discussion/Management Implications:

Genetic analysis was presented in October 2022 which revealed there is a second population of beluga whales that inhabit Cumberland Sound. More information is now needed on the morphology, timing of migration, and behaviour of whales in this other

population. This has management implications for the currently defined Cumberland Sound beluga stock.

9. Reporting to communities/resource users

Fisheries and Oceans Canada is responsible for sharing the results of the genetic analyses with the Pangnirtung HTA and the community of Pangnirtung. Some information as well as a Science Advisory Report (DFO 2022) was shared in December 2022.

10. References:

DFO. 2022. Genetic assessment for discrimination of beluga whales in Cumberland Sound. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2022/056.