

## Final Project Report to NWMB – June 2024

1. **NWSF Project Number: NWSF-2023-001**
2. **Project Title:** Cumberland Sound beluga biopsy program
3. **Project Leader:** Simeonie Keenainak, Pangnirtung HTA Chair, Pangnirtung, NU, [pang@baffinhto.ca](mailto:pang@baffinhto.ca), 867-473-8751
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. However, the community hunts two types of belugas, and one of these types does not remain in Cumberland Sound year round. Recent genetic evidence supports that two populations of beluga inhabit Cumberland Sound. Differences in behaviour and morphology allow hunters to decipher the two populations, but this has not yet been matched to the genetic profile of these whales. Hunters have historically collected beluga samples for the DFO sampling program, but often behaviour and morphological features of the whales are not described and the sample size of the other whales has been too low for thorough genetic testing. To determine if the behaviour and morphology match the genetic signature of the other population of beluga whales, biopsy and hunt sample collections matched with behaviour and morphological information from these whales is needed. The proposed project aims to collect biopsies and hunt sample information from belugas in Cumberland Sound from July to October 2023.

### 5. **Project Objectives:**

Ricky Kilabuk was hired and aimed to collect biopsies from beluga whales outside of Clearwater Fiord in summer/fall of 2023.

### 6. **Materials and Methods:**

Crossbows and biopsy darts were used to biopsy beluga whales from the boat. Ricky successfully collected 4 beluga biopsy in October 2023. Biopsying wild free-ranging beluga is challenging and a new method of biopsying from a drone is being piloted to hopefully increase the probability of successful collection. Hunters collected 11 sample kits from hunting beluga. The plan is to collect more biopsies in the 2024 season, which will be analyzed for genetics by Fisheries and Oceans Canada.

### 7. **Results**

Biopsies are contributing to a long term archive of beluga samples for genetics and other analyses, along with hunter collected samples, by Fisheries and Oceans Canada.

### 8. **Discussion/Management Implications:**

Results of genetic analyses will be compared to phenotypic attributes to highlight the features of the second beluga population that are known to hunters which may have 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 genetic/tissue analyses with the Pangnirtung HTA and the community of Pangnirtung. A public meeting was held at the school in Pangnirtung on October 12, 2023, to discuss genetic results from tissue samples and the biopsy program running in Cumberland Sound.

## Final Financial Report to NWMB – June 2024

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4. **Original project budget:**

6.0 Budget (Provide a detailed, itemized budget. It is preferred that line items are not identified for specific funding sources.)		
Item	Funds (\$)	Funded by NWMB (Yes/No)
Local contracts	30K	Y
Field supplies for hunters	5K	N
Service fees/translation	2K	N
Genetic analyses	10K	N
Meeting in Pangnirtung post-research	10K	N
Costs of hunt sampling program	15K	N
Analysis	In-kind PY 0.5	
<b>TOTAL</b>	<b>72K</b>	

### 5. Original contributions:

6.1 Financial Contributions (Indicate the following: (1) the financial resources that the organization or individual has committed to the project; (2) the financial resources that other persons or agencies have committed or have been requested to commit to the project; (3) the "in-kind" resources that you or others are contributing, including personnel time (as PY's); (4) include the financial resources that you are requesting from the NWMB)	
Contributor	Funds (\$)/In-kind (PY)
Fisheries and Oceans Canada	42K/0.5 PY
NWMB (requested)	30K
<b>TOTAL FUNDS</b>	<b>72K</b>
<b>TOTAL IN-KIND</b>	<b>0.5 PY</b>

There were no variations from this original proposal.

**6. Explanation of Changes: NA**

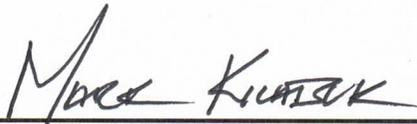
**7. Financial Report**

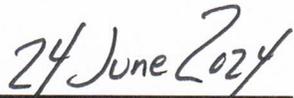
Budget Item	Budgeted	Disbursed	Variance
Local contract for biopsy sampling	\$30,000 from NWMB	\$30,000	\$0

**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.

  
Signature

  
Date