OPERATIONS REPORT

MARINE ROUTE SURVEY
STEENSBY INLET NUNAVUT
2025

Submitted to:

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Appendices

1 INTRODUCTION

Seaforth Geosurveys Inc. (Seaforth) was contracted by Baffinland to conduct a multibeam bathymetric survey within the designated corridor in Foxe Basin, Nunavut, as part of the 2025 field campaign. This work represents a continuation of the survey program previously completed by Seaforth in 2023, with corridor completion proposed for 2026. This project is in response to the Statement of Work (SoW) provided by Baffinland Iron Mines Corporation (Baffinland).

The purpose of this survey was to provide data capable of increasing the accuracy of existing navigational charts and environmental data within the area of interest.

A total of ~2800 survey km were completed. A single survey line was collected along the RPL from KP850 on transit into KP 358, where the full 1NM corridor was surveyed (Figure 1-1). A second survey line was collected along the RPL on transit out of the survey area to KP850.

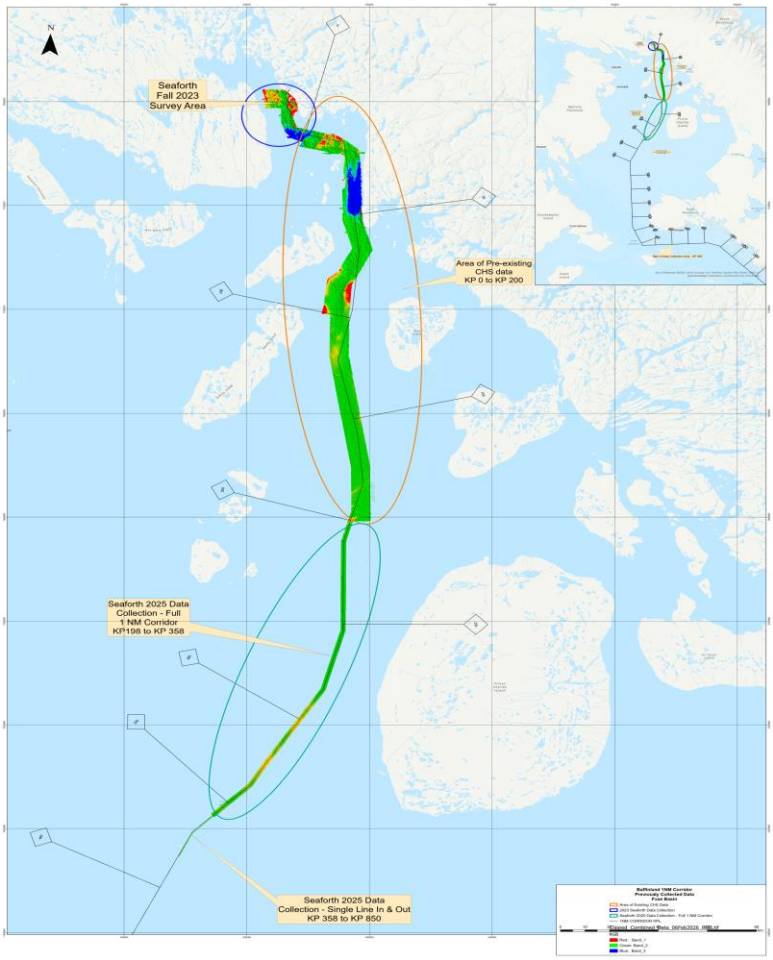

Figure 1-1: Survey Areas for Steensby Inlet, NU. 2023 data (blue circle), CHS data (orange circle), 2025 data (green circle).

The required scope of work for the bathymetric survey operations was conducted from the survey vessel RV Connor Murphy.

Seaforth was responsible for the full performance of the survey, including all required data acquisition, processing, and the issuance of the relevant reports.

This document outlines the completed project scope of work, details the methodologies/ procedures, and resources utilized to complete the SoW to the Client's specified requirements.

2 SCOPE OF WORK

The following summarizes the project Scope of Work:

- The project scope of work required multibeam bathymetry/ backscatter data to be collected to International Hydrographic Organization (IHO) S-44 standards. Data was collected to meet IHO Order 1A.
- Survey line spacing was maintained such that 20% overlapping data with adjacent swaths was achieved.
- A minimum of two sound velocity casts were taken each day. All sound velocity casts were appropriately spatially distributed.

3 MARINE SURVEY EQUIPMENT

3.1 Survey Vessel

The RV Connor Murphy was utilized to survey all portions of the 2025 field campaign.

3.1.1 RV Connor Murphy

The Connor Murphy is a 28m long steel-hulled vessel, owned and operated by RS Marine, based out of St. Johns, NL (Figure 3-1). The RV Connor Murphy is owned and operated by RS Marine, based in St. John’s, NL. The Canadian-flagged, Near Coastal - 1 Class vessel was formerly the CCGS Harp; it has since undergone refitting for survey purposes and holds relevant certification from Transport Canada.

It will had accommodations for a total of 15 people; the vessel required crewing of six (6) personnel; therefore, nine (9) berths were available for Seaforth and additional personnel. The RV Connor Murphy was capable of twenty-four hours (24hrs) a day operations in up to Force five (5) winds (Beaufort Scale), up to three-meter (3m) seas, and has an endurance of 30 days.

Survey and vessel crew remained on-board, and the vessel was equipped with enough fuel and provisions to complete the entire trip to and from the survey area.

Figure 3-1: RV Connor Murphy

3.2 Survey Equipment

The survey equipment utilized during the bathymetric survey on board the Connor Murphy is listed in Table 3-1. For further details on mobilization, please see the Mobilization Report.

RV Connor Murphy	
System	**Mobilized Equipment**
Integrated Navigation System:	BeamworX NavAQ
Multibeam Acquisition Software	Kongsberg SIS5
Positioning System:	SBG Apogee Navsight Backup: SBG Ekinox 2-U
Differential Corrections:	Fugro GNSS Marinestar Satellite Corrections
Heading System:	SBG Apogee Navsight Backup: SBG Ekinox 2-U
Motion Sensor:	SBG Apogee Navsight Backup: SBG Ekinox 2-U

Multibeam Echosounder System:	Kongsberg EM712
Velocity Profiler:	Valeport Swift SVP Backup: AML base x2 SVP
Data Processing Software	Caris HIPS and SIPS version 11.4.45

Table 3-1: Mobilized survey equipment – Connor Murphy

Detailed equipment specifications are included in Appendix A.

3.3 Marine Survey Crew

Seaforth personnel utilized during the project are listed in Table 3-2.

Name	Position	Shift
Lucas Dorrance	Party Chief/Processor	0600-1800
Alex Maizlish	Data Acquisition	0000-1200
Jeremy Corcoran	Data Acquisition	1200-0000
Bryan Rutherford	MMO	0700 - 1900

Table 3-2: Marine survey personnel list

3.4 Project Geodetic Datum

Survey control was referenced to WGS84 with projections in UTM Zone 17N. The geodetic parameters used during survey acquisition are listed in Table 3-3.

Datum Parameters	
Ellipse Name:	WGS84
Datum Name:	WGS84
Semi Major Axis (a):	6378137.0
Semi-minor Axis (b):	6356752.314
Inverse Flattening:	298.257223563

Table 3-3: Project Geodetic Datum Parameters

3.5 Vertical Geodetic Datum

Bathymetry data was reduced to Chart Datum (CD) in post-processing utilizing Ellipsoid-referenced surveying techniques. Seaforth utilized Fugro's GNSS Marinestar satellite-based correction service to record high precision ellipsoidal elevations. The Fugro Marinestar high-

precision satellite-based corrections is an L-band correction service providing global horizontal positional accuracies of 10cm (95% confidence) and vertical accuracy of 15cm (95% confidence).

The satellite corrections were recorded in real-time using SIS5 navigational software with the SBG Apogee Navsight on the Connor Murphy.

The separation model to reduce ellipsoidal heights to CD (referenced to WGS84 ITRF08) was supplied by CHS (CANNORTH2025v1_ITRF08_CD).

4 SURVEY OPERATIONS

The following is a brief summary of survey operations (Table 4.1):

Date	Event
16th August 2025 to 18th August 2025	Mobilization of Connor Murphy in St. Johns, NL
18th August 2025 to 27th August 2025	Transit to Nain, NL
27th August 2025	Survey crew join vessel. Mobilize winch, PAM.
27th August 2025 to 31st August 2025	Transit to Foxe Basin (KP 850)
31st August 2025	Arrive at KP 850. Perform Patch Test. Begin survey
1st September to 3rd September 2025	Weather delay
3rd September 2025 to 20th September	Survey Operations
20th September 2025	Survey Operations complete
20th September 2025 to 23rd September 2025	Transit to Ivujivik
23rd September 2025	Arrive in Ivujivik. Transport crew and supplies to Fundy Legend.
23rd September 2025 to 30th September 2025	Transit to St. John's
30th September 2025	Arrive in St. John's. Demobilization

Table 4.1: Summary of survey operations timeline

4.1 Operational Activity

Table 4.2 details a combined total of survey activities conducted onboard the RV Connor Murphy, as reported in the project Daily Progress Reports (DPRs). Figure 4-1 displays the same activity time summary in chart format.

Operation Activity	Hours
Vessel Mobilization (In Port)	48.00
Equipment Calibration (Mobilization)	1.83
Transit	297.83
Survey Operations – Connor Murphy	446.34
Weather Downtime	31.00
Equipment Downtime	0.00
Vessel Downtime	1.00
Standby/Other	50.50
Demobilization (In Port)	24.00

Table 4.2: Summary of Operational Hours

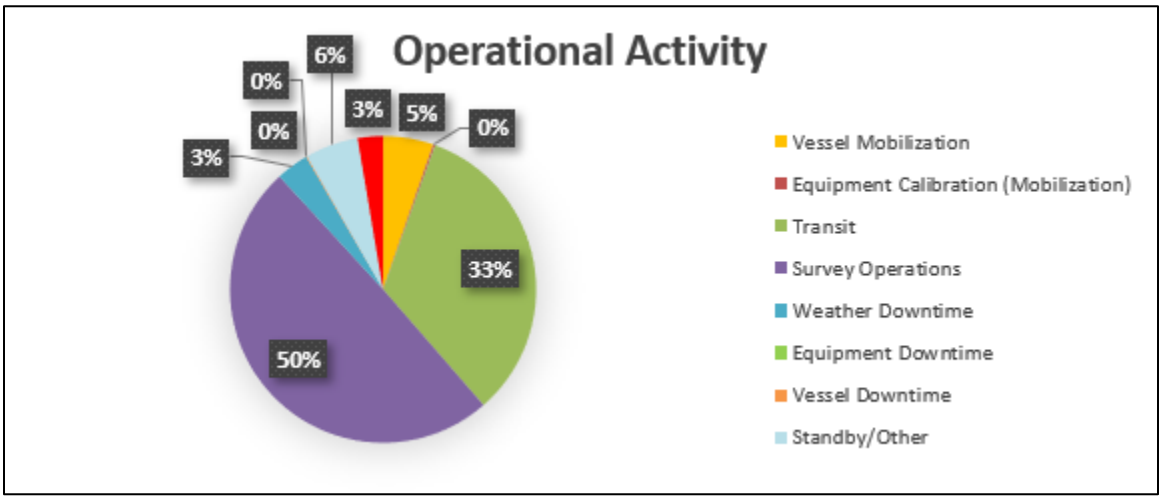

Figure 4-1: Summary of Operational Hours Chart

Refer to Appendix B 'Daily Progress Reports' for detailed daily operations and activities.

4.2 MMO Operations

Due to the Kongsberg EM712 frequency range falling within the hearing range of known marine mammals in the survey area, a MMO personnel was present onboard during daylight operations. The MMO held shift from 0700-1900 hours in the wheelhouse keeping a log of any observations made in the field. During nighttime hours, (1900-0700) a Passive Acoustic Monitoring System (PAM) was deployed off the stern of the vessel and towed while surveying. The nighttime surveyor was responsible for monitoring the PAM data for any anomalies.

During the operational survey, the period 27th August to 20th September, a total of five (5) marine mammal observations were reported. All observations were visual, conducted by MMO/PAM operator on the bridge of the survey vessel. No acoustic detections were observed on the iCListen PAM system.

Of the 5 marine mammal observations, none required mitigation events. See Appendix C for full observation logs and Marine Mammal Mitigation Report.

4.3 Mobilization

For full details of mobilization completed for the 2025 survey, refer to ***SGI2025-946_Baffinland-MOB Report*** for the mobilization report.

4.4 Survey Methodology

Kongsberg's SIS5 aboard the Connor Murphy interfaced with Beamworx's NavAQ acquisition and navigation software formed the central component for positioning and data collection throughout the acquisition process. These systems ensured precise vessel positioning, timing, and recording, enabling the real-time attainment and upkeep of survey specifications.

The EM712 operated using a frequency of 75-100kHz throughout the survey area.

Raw data files were recorded in Kongsberg's native format (.kmall) in SIS5.

Line spacing was variable, determined by water depth and sonar swath width. Adjacent survey lines were offset on a line-by-line basis depending on the swath width from the adjacent survey line. Lines were spaced such that the data coverage achieved a minimum of 20% overlap on adjacent lines.

5 DATA PROCESSING

5.1 Multibeam Data Processing

The majority of the multibeam processing took place aboard the Connor Murphy with a portion of the data being completed in the office post survey. All data processing was achieved using Caris HIPS and SIPS 11.4 software.

The data was processed to comply with the CHS scope of work, requiring an accuracy to meet International Hydrographic Organization (IHO) Standards for Hydrographic Surveys (S-44) Order 1A. Sounding data was gridded at 1m resolution for depths ≤ 100m, 2m resolution for depths > 100m, but < 250m, and 5m resolution for depths ≥250m.

Data processing followed the workflow listed below:

1. Import kmall files
2. Georeference Bathymetry
    a. Apply Sound Velocity Correction (SVC)

   b. Source set to GPS or Tide
   c. Apply Separation Model
3. Create CUBE Surfaces
4. Data QC
   a. Attitude Editor - GPS Tide data cleaning
   b. Subset Editor – Area based cleaning
   c. Apply Specific Sound Velocity Profiles
   d. Add QC Layer
5. Export Products
   a. CSAR files
   b. XYZ
   c. GeoTiffs

Refer to the Processing Report (***SGI2025-946_ProcessingReport_0***) for further QC, and a breakdown of the post-processing steps undertaken to generate the final surface from the data.

5.2 Data QC

To verify that the data was corrected to CD, comparisons to the CHS NONNA Bathymetry data were conducted.

The following figures show the Difference Surface created (outlined in red) in CARIS by comparing the collected data to the CHS NONNA data. A Difference Surface is used to identify changes by comparing two surfaces of equal area created at different times. Each point in the surface creates a difference value, and the color range is based on those difference values. The statistical report image highlights the mean difference between the two surfaces.

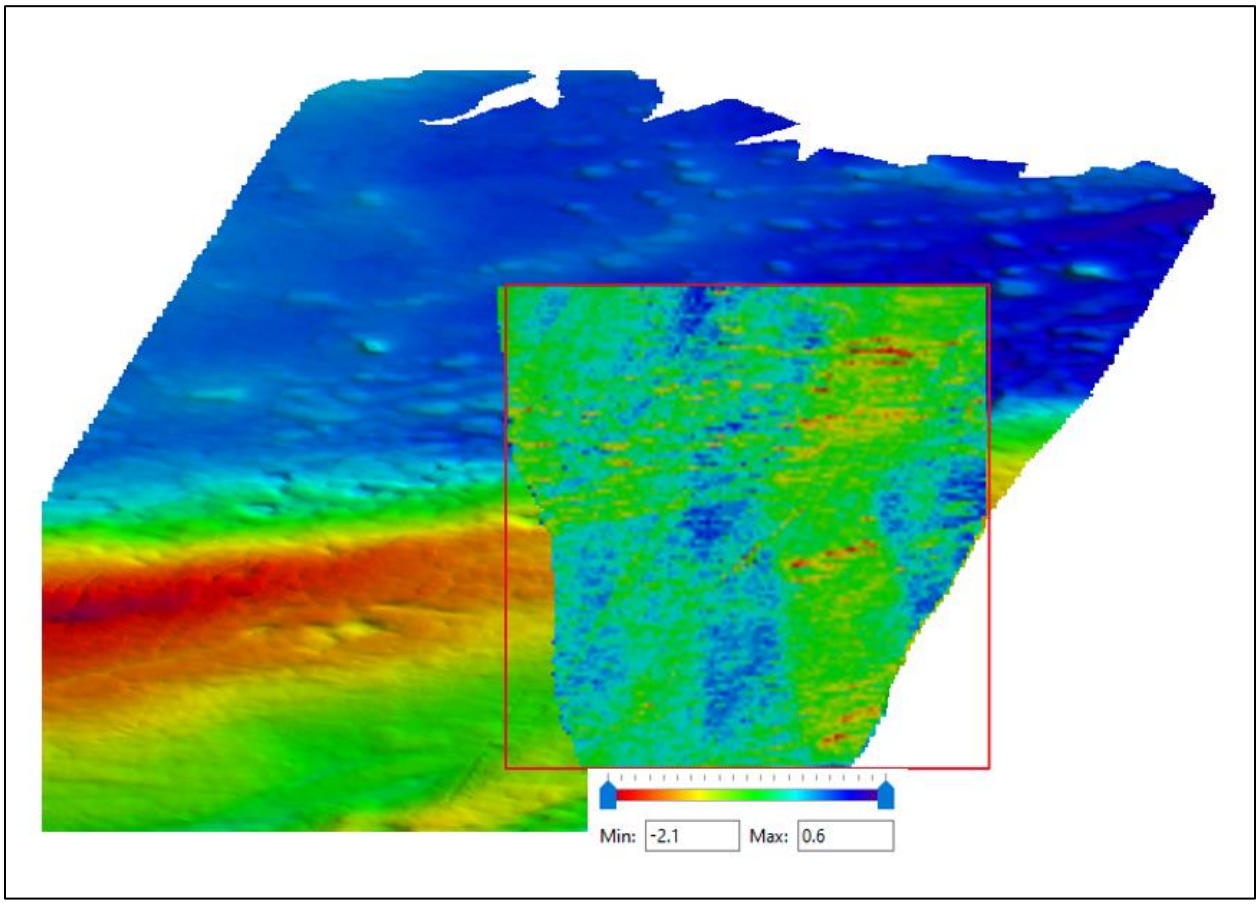

Figure 5-1: Difference Surface (outlined in red) between collected data and CHS NONNA data, min and max range of difference surface in meters.

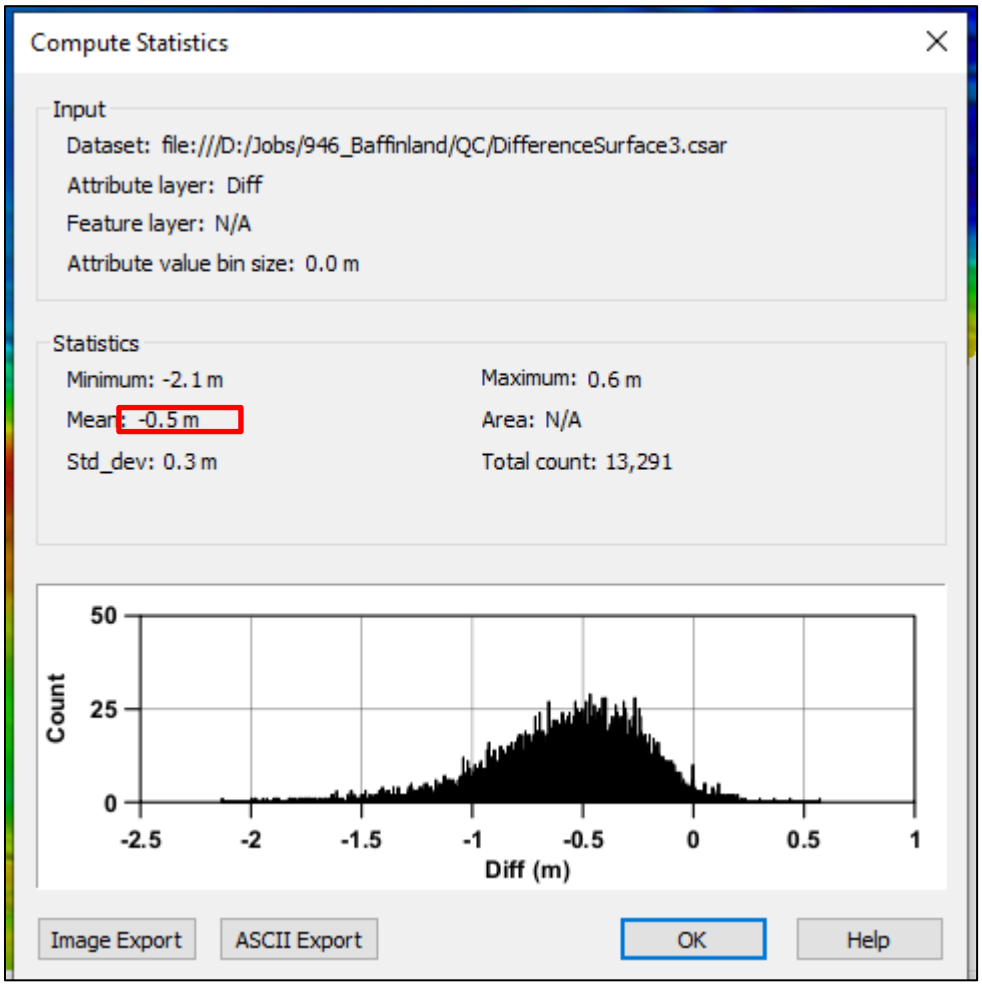

Figure 5-2: Statistics computed for the shallow water Difference Surface between collected data and NONNA data

6 SAFETY

Safety introduction and vessel familiarization were conducted by the captain for all survey personnel joining the vessels. HSE procedures were reinforced, focused primarily on deck procedures to ensure proper PPE was being worn; all deck work was conducted using at least two (2) personnel. PFDs were worn during all deck operations, including the deployment and recovery of the PAMS towed system and during all SVP casts, with constant communication with the bridge via VHF radio.

One (1) incident occurred that led to the loss of a piece of survey equipment to the seafloor. On the 14th of September, 2025, a Valeport SVP was lost to the seafloor while underway.

A full incident report can be found in **Appendix D.**

7 RESULTS

Approximately 350 km^2 of bathymetry data was collected across twenty-one (21) days of survey operations. The weather was favourable during survey operations, with only 31 hours of weather downtime for the Connor Murphy.

Final, cleaned surfaces were exported using resolutions based on water depth, using the following parameters:

Water Depth	Surface Resolution
≤ 100m	1m
> 100m but < 250m	2m
≥250m	5m

Table 7-1: Surface resolution based on water depths.

The following figure presents the final processed multibeam data collected within the survey area in Steensby Inlet, NU.

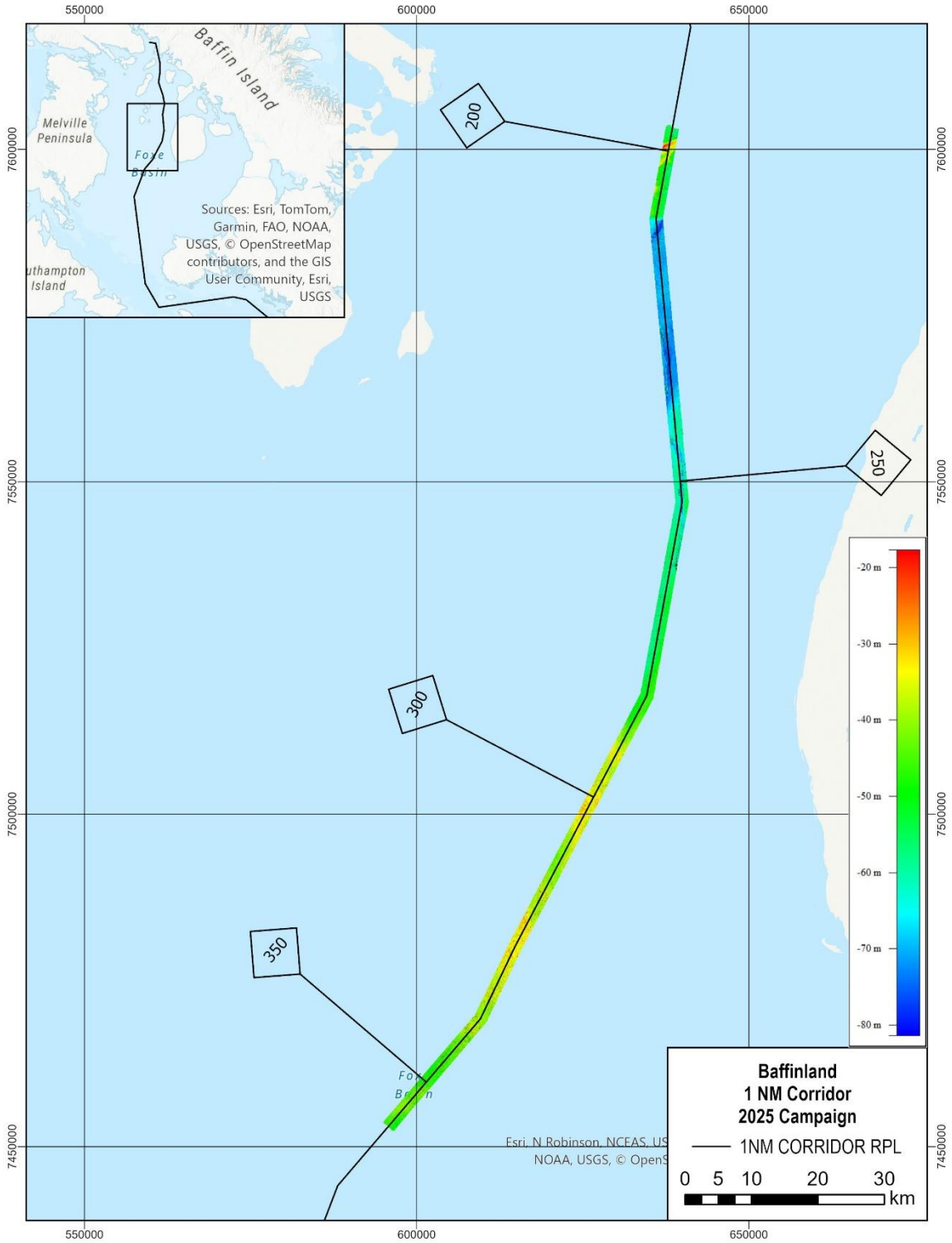

Figure 7-1: Final surface of 1 NM Corridor

8 DELIVERABLES

The data delivered to CHS will include both processed and raw datasets provided on external hard drives. Only Blocks 1 through 6, where the full corridor extent has been acquired, will be submitted at this time. The single in-and-out line will be delivered once the remaining corridor coverage is collected during the 2026 campaign, allowing for complete processing. The provided external hard drives will contain the following folder structure:

Raw Data (All Raw data organised in sub-folders per Julian Day)
- •Inertial: SBG Raw position/motion data recorded using SBG software.
- •SVP: Raw SVP files
- •Kmall: Raw Kongsberg data records

Processed Data (CARIS folder structure)
- •Blocks 1-6
  - •Vessel file
  - •Preprocess
  - •Ancillary Data
  - •TrackLines
  - •Tide
  - •Hips File

Final Products (Final CUBE Surfaces)
- •Multibeam surfaces (CSAR)
- •Backscatter surfaces (CSAR)

Metadata (Final Report)
- • Survey Report
- • Appendices

Data submitted to Baffinland:
- Final Report and Appendices
- Final Charts
  - 1m contour interval chart with bathymetric data
  - AutoCAD Drawing with 1m contour interval

EDGEWISE ENVIRONMENTAL

SEAFORTH GEOSURVEYS

Baffinland Multibeam Survey – Steensby Inlet Corridor

Marine Mammal Mitigation Report

06 - March - 2026

V.3

Submitted to:
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300 Prince Albert Road
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Program:
Baffinland Multibeam Survey – Steensby Inlet Corridor

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REVISION DETAILS

REVISION #	DATE	ORIGINATOR	REVIEWED BY	COMMENTS
V1	30 October 2025	Kyla Graham	Ashley Noseworthy	Development
V2	18 November 2025	Ashley Noseworthy	Lexie Morey	Revisions
V3	6 March 2026	Kyla Graham	Emily Welsh	Finalised report

EDGEWISE ENVIRONMENTAL

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Table of Abbreviations and Acronyms

Abbreviation / Acronym	Definition
Baffinland	Baffinland Iron Mines Corporation
BF	Beaufort
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
DFO	Fisheries and Oceans Canada
EMP	Environmental Monitoring Plan
EZ	Exclusion Zone
Km	Kilometer
m	Meter
MBES	Multibeam echosounder
MMO	Marine Mammal Observer
NIRB	Nunavut Impact Review Board
nm	Nautical mile
PAM	Passive Acoustic Monitoring
QA/QC	Quality Assurance / Quality Control
SARA	Species at Risk Act

Executive Summary

Edgewise Environmental was contracted by Seaforth Geosurveys Ltd. to implement Seaforth's Environmental Monitoring Plan for Baffinland Iron Mines Corporation's (Baffinland) multibeam bathymetric survey of the Steensby Inlet Corridor, Nunavut. The project required visual and acoustic monitoring of marine mammals during survey operations along the Steensby Inlet Corridor, located within the Foxe Basin between the Melville Peninsula and Baffin Island. All monitoring and mitigation requirements outlined in the Seaforth Environmental Monitoring Plan (Seaforth, 2025) were implemented without deviation.

A single Marine Mammal Observer (MMO), cross-trained as a Passive Acoustic Monitoring (PAM) Operator, was deployed for 22 days from August 27 to September 20, 2025, aboard the survey vessel *RV Connor Murphy*. Visual monitoring was conducted during daylight hours, supplemented by acoustic monitoring when visibility was reduced (e.g., during fog). Night-time PAM monitoring was conducted by Seaforth personnel; daytime PAM was available but not required due to favourable visual conditions. Over the 25-day survey period, 231 hours and 27 minutes of visual observation were completed.

Five marine mammal sightings were recorded, comprising three (3) species and five (5) individual animals. None of the observed species were listed under the Species at Risk Act (SARA), nor were they narwhal (*Monodon monoceros*) or beluga (*Delphinapterus leucas*), the designated shutdown species for this project. All sightings occurred outside the 200 m safety zone; therefore, no shutdowns, delays, or ramp-up interruptions occurred during the survey.

Weather conditions were predominantly northerly winds (Beaufort Force four (4) – five (5)), with sea states described as choppy to rough, and swell heights ranging from zero (0) to four (4) m. Visibility exceeded five (5) km for 89% of the survey period, while sun glare was absent for 53% of observation time. Rainfall was recorded on only two (2) % of survey days, contributing to conditions generally conducive to effective visual detection.

1. Project Description

The site of the Baffinland Multibeam Survey – Steensby Inlet Corridor, was located within the Foxe Basin, Nunavut, between the Melville Peninsula and Baffin Island (Figure 1). Water depths within the survey corridor range from approximately 20 m to 400 m. The objective of the survey was to acquire multibeam bathymetric echo sounder (MBES) data along two defined sections of the survey corridor:

- A single line of MBES data collected during vessel transits into and out of the Foxe Basin (from KP 850 to KP 360); and
- A one (1) nautical mile (nm)-wide corridor of data collected between KP 198 and KP 360.

The single transit line, shown as the red line in Figure 1, was surveyed both at the beginning and end of the campaign, during entry to and exit from the Foxe Basin. The one (1) nm corridor, represented by the red line in Figure 1, was achieved through multiple overlapping MBES swaths, ranging from 55 m to 750 m in width depending on water depth, until the target coverage was reached. The yellow line represents two passes, one in and one out.

Seaforth Geosurveys Ltd. developed an Environmental Monitoring Plan (EMP) outlining all marine mammal mitigation and monitoring requirements for the Baffinland Multibeam Survey – Steensby Inlet Corridor project (Seaforth, 2025). Baffinland, the client, was responsible for approval from both Fisheries and Oceans Canada (DFO) and the Nunavut Impact Review Board (NIRB). Survey operations were conducted in accordance with approvals obtained by Baffinland from DFO and NIRB.

Survey operations were conducted between August 31 and September 20, 2025. The survey vessel mobilized from Nain, Newfoundland and Labrador, on August 27, 2025, and demobilized in St. John's, Newfoundland and Labrador, on September 30, 2025.

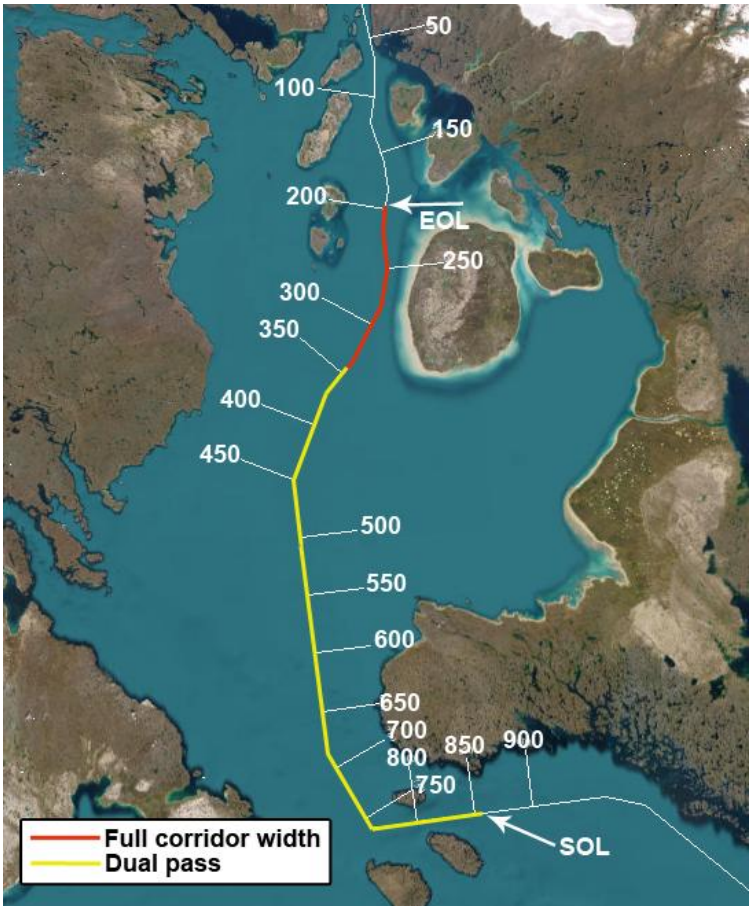

Figure 1: The location of the Baffinland Survey Corridor (Seaforth Geosurveys 2025b)

1.1. Observation Platform

The RV *Connor Murphy* served as the observation platform for the Baffinland Multibeam Survey – Steensby Inlet Corridor project. Marine mammal monitoring was conducted during transit to the survey site from August 27–30, 2025, and throughout survey operations from August 31–September 20, 2025.

When weather and sea conditions permitted, visual observations were conducted outside from the forward deck near the vessel's bow. All monitoring locations were selected to maximize visibility while maintaining safe working conditions. During periods of adverse weather or elevated sea state, observations were carried out from the bridge, thereby ensuring uninterrupted monitoring.

In periods of reduced visibility or conditions unsuitable for visual observation, PAM was conducted using equipment deployed from the aft deck.

Figure 2: Observation platform Connor Murphy

2. Marine Mammal Monitoring Protocols and Equipment

2.1. Mitigation Requirements

Mitigation procedures were implemented in accordance with the Seaforth EMP (Seaforth, 2025b) to ensure compliance with the Species at Risk Act (SARA) and to minimize potential impacts to culturally significant species, including narwhal (*Monodon monoceros*) and beluga (*Delphinapterus leucas*).

Exclusion Zone

- A 200 m Exclusion Zone (EZ) was established around the vessel during all survey operations.
- The EZ was monitored for 30 minutes prior to initiation of the MBES.
- When the sound source had been inactive for ≥ 20 minutes, a pre-watch was conducted and a gradual 20-minute ramp-up of acoustic power was conducted before the MBES reached full power.
- The vessel maintained a maximum operating speed of 10 knots or less while within the survey area, except in emergencies.
- The MMO documented all pre-start clearance periods and confirmed the EZ was free of marine mammals prior to each MBES activation.

Response Procedures

- Pre-start monitoring:
  If a marine mammal entered the EZ during the 30-minute pre-start period, ramp-up was delayed until the animal had exited. If the animal was not visually or acoustically detected exiting the EZ, ramp-up commenced 30 minutes after the last sighting.
- Shutdown:
  If a SARA-listed or culturally significant species (narwhal, beluga) was observed within the EZ during operations:
    - The MMO/PAM Operator immediately alerted the survey team.
    - If a cetacean could not be positively identified, it was presumed to be a shutdown species.
    - All geophysical survey equipment was shut down until the animal was observed leaving the EZ.
    - If the animal was not seen leaving, survey operations resumed 30 minutes after the final sighting/detection.
    - If the interruption lasted less than 20 minutes, operations resumed at full power; otherwise, a ramp-up was required.
    - Vessel speed was reduced to the minimum safe operating speed.

Operational Integrity

- The MMO/PAM Operator performed no additional duties during shifts.
- The MMO was not assigned a watch schedule exceeding 12 hours within a 24-hour period.
- The MMO/PAM Operator was responsible for implementing all marine mammal mitigation measures and conducting visual and acoustic monitoring for up to 12 hours per day. Seaforth personnel provided additional support by operating the PAM system during nighttime hours and as needed during periods of reduced visibility, ensuring continuous monitoring coverage throughout survey operations.

2.2. Equipment and Data Collection

Visual monitoring was conducted using 7×50 binoculars to maintain continuous 360° coverage of the EZ. Reticulated binoculars were employed when necessary to estimate the distance to marine mammals accurately. All observations, including species sightings, mitigation actions, and prevailing environmental conditions, were recorded in a digital logbook and observation forms to ensure consistent and verifiable data collection throughout the survey. All binoculars, reticulated optics, and digital logging systems were inspected prior to deployment and function-tested daily. Acoustic monitoring was conducted using a PAM system comprising an Ocean Sonics icListen HF hydrophone (10–200 kHz) mounted on a tow wing with approximately 75 m of soft-tow cable. The system operated through PAMGuard software, allowing for real-time detection, recording, and analysis of marine mammal vocalizations. The PAM system was deployed from the aft deck of the observation platform and operated by the MMO/PAM Operator during daylight hours when visibility was reduced, and by Seaforth personnel during nighttime hours, ensuring continuous 24-hour acoustic monitoring throughout survey operations.

3. Operations and Effort

3.1. Monitoring Effort

Visual monitoring was conducted during daylight hours by a dedicated, dual-qualified MMO/PAM Operator. All effort reported in this section reflects visual observations only. Environmental conditions remained suitable for effective visual detection throughout the project, and as a result, the MMO/PAM Operator was not required to transition to acoustic monitoring during their duty periods. The MMO/PAM Operator's 12-hour daily work limit was maintained each day.

Night-time PAM monitoring, as well as any additional acoustic effort outside the MMO's duty hours, was conducted by Seaforth personnel in accordance with the Seaforth Environmental Monitoring Plan (Seaforth, 2025b). These activities are documented in Seaforth's internal EMP reporting and therefore are not included in this visual-effort summary.

In total, 231 hours and 27 minutes of visual monitoring were completed over the course of the project, including 19 hours during transit to the survey site (August 27–30) and 212 hours and 27 minutes during survey operations (August 31–September 20).

The MBES sound source was active for a total of 446 hours and 20 minutes throughout the project duration.

4. Project Environment

4.1. Environmental Conditions

During the project, winds were predominantly northerly, with wind force ranging from Beaufort (BF) one (1) to six (6). The majority of visual effort (56%) occurred in conditions of BF four (4) or greater. Sea state was classified as *choppy* (34%) or *rough* (20%) for a combined 54% of observation time. Swell height was <2 m during 81% of visual effort and ≥2 m during 19%. Visibility was *good* (>5 km) for 89% of observation time and *moderate* (1–5 km) for 11%. Sun glare was *absent* during 53% of observation effort, *strong* during 42%, and *weak* during 5%. Precipitation was minimal, with *no rain* recorded during 98% of observation effort, *light rain* during 1%, and *snow* during 1%.

For a detailed summary of weather conditions throughout the project, refer to Appendix C.

5. Visual Observations

5.1. Visual Observations

The MMO/PAM Operator conducted visual monitoring during daylight hours, recording a total of five (5) sightings comprising five (5) individual animals from two (2) positively identified species; bearded seal (*Erignathus barbatus*) and harp seal (*Pagophilus groenlandicus*), as well as one (1) unidentified seal species (Table 1). No species listed under Schedule 1 of SARA were observed during the project, and none of the visual sightings corresponded with acoustic detections.

Table 1: Marine mammal visual observations during the Baffinland Multibeam Survey (2025) (August 31st, 2025 – September 20th, 2025).

Species	Number of Sightings	Number of Individuals
Bearded Seal (*Erignathus barbatus*)	2	2
Harp Seal (*Pagophilus groenlandicus*)	2	2
Unidentified Seal Species	1	1
Total	**5**	**5**

6. Marine Mammal Mitigation

6.1. Visual Sightings

No mitigation was required at any point during the Baffinland Multibeam Survey – Steensby Inlet Corridor project. All marine mammal sightings occurred outside the 200 m EZ, and none involved shutdown species (narwhal, beluga) or any species listed under Schedule 1 of the Species at Risk Act. As a result, no ramp-up delays, speed reductions, or shutdown procedures were triggered during survey operations.

7. Quality Assurance / Quality Control (QA/QC)

7.1. QA/QC Reporting

All marine mammal observations and associated metadata underwent routine quality assurance and quality control procedures throughout the project. The MMO/PAM Operator submitted both daily and weekly reports, enabling systematic verification of data completeness and accuracy. As part of this process, 100% of marine mammal observation entries and over 25% of all additional environmental and operational metadata were reviewed on a weekly basis by project management.

8. References

Seaforth Geosurveys Ltd. (2025a, July 21). *Baffinland Survey Corridor – Project Execution Plan* (Revision A, Document Ref: GI-2025-946-A) Prepared by Seaforth for Baffinland.

Seaforth Geosurveys Ltd. (2025b, August 28). *Environmental Monitoring Plan, Multibeam Survey – Steensby Inlet Corridor* (Revision B, Document Ref: SGI-946-EMP-B). Prepared by Seaforth for Baffinland.

Government of Canada. (2025). Species at Risk Public Registry: Species search. Retrieved September 28, 2025, from Government of Canada website: https://species-registry.canada.ca/index-en.html#/species?sortBy=commonNameSort&sortDirection=asc&pageSize=10.

APPENDIX A

Marine Mammal Species Present in the Steensby Inlet Corridor

Table 1A: Potential Presence and Listing Status of Marine Mammals in the Steensby Inlet corridor (Government of Canada, 2025)

Species	Designation / Status		Potential Presence in Survey Area
	SARA Schedule 1 Listing	COSEWIC Assessment	
Beluga Whale (*Delphinapterus leucas*), (Eastern Hudson Bay population)	None (under consideration)	Threatened	Unlikely to be present in the survey area. During summer, found in Western Hudson Bay, James Bay and around Southampton Island
Narwhal (*Monodon monocerus*)	None	None	Potentially present in the Foxe channel during single survey line, entering and exiting Foxe Basin
Bowhead whale (*Balaena mysticetus*) (Eastern Canada-Western Greenland population)	None (under consideration)	Special Concern	Unlikely to be present in survey area. Migrate through western Foxe Basin from Gulf of Boothia in Autumn
Atlantic Walrus (*Odobenus rosmarus*) (Central/Low Arctic population)	None	Special Concern	Unlikely to be present in the area due to lack of pack ice, most sightings occur in the North end of Foxe Basin
Bearded seal *(Erignathus barbatus*)	None	None	Present year round.
Harp seal (*Pagophilus groenlandicus*)	None	None	Present year round.
Ringed seal (*Pusa hispida*)	None (under consideration)	Special Concern	Present year round.
Polar bear (*Ursus maritimus*)	Special Concern	Special Concern	Unlikely to be present in area due to lack of pack ice.

APPENDIX B

Weather Conditions During the Baffinland Multibeam Survey

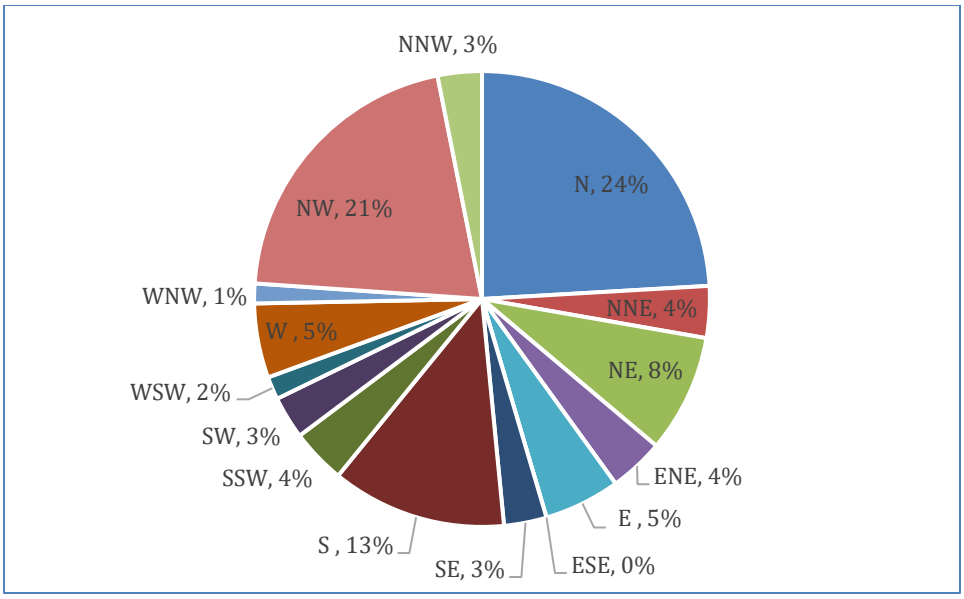

Figure B1. Wind direction observations during the Baffinland Multibeam Survey (August 31st, 2025 - September 20th, 2025). Numbers represent the percentage of time a corresponding condition was observed.

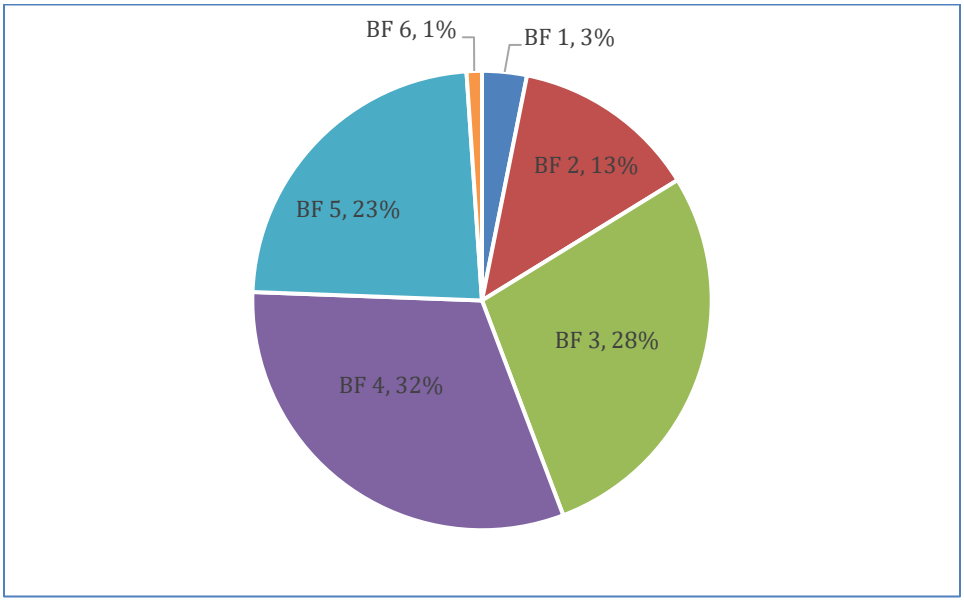

Figure B2. Beaufort wind force observations during the Baffinland Multibeam Survey (August 31st, 2025 - September 20th, 2025). Numbers represent the percentage of time a corresponding condition was observed.

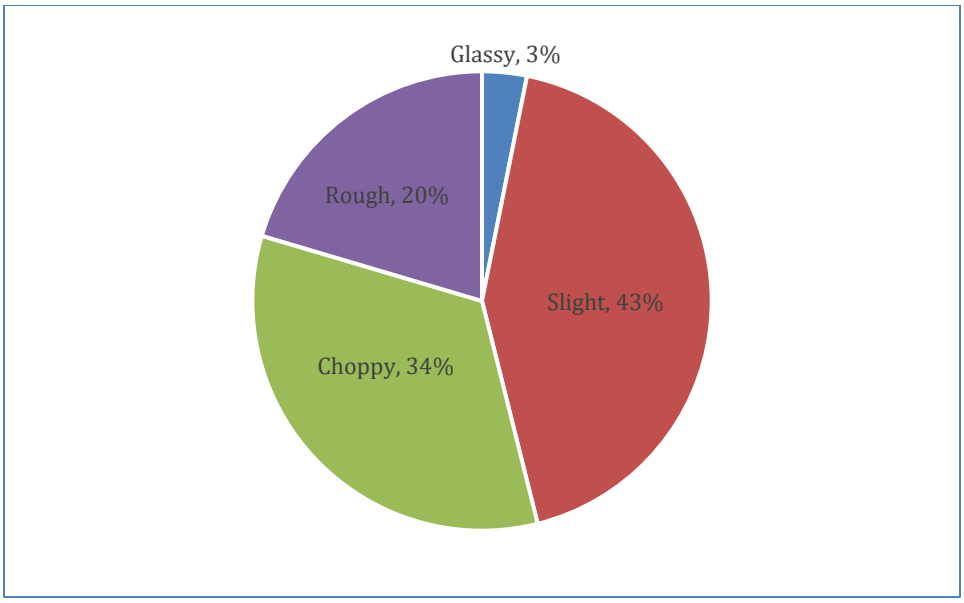

Figure B3. Sea state observations during the Baffinland Multibeam Survey (August 31st, 2025 - September 20th, 2025). Numbers represent the percentage of time a corresponding condition was observed.

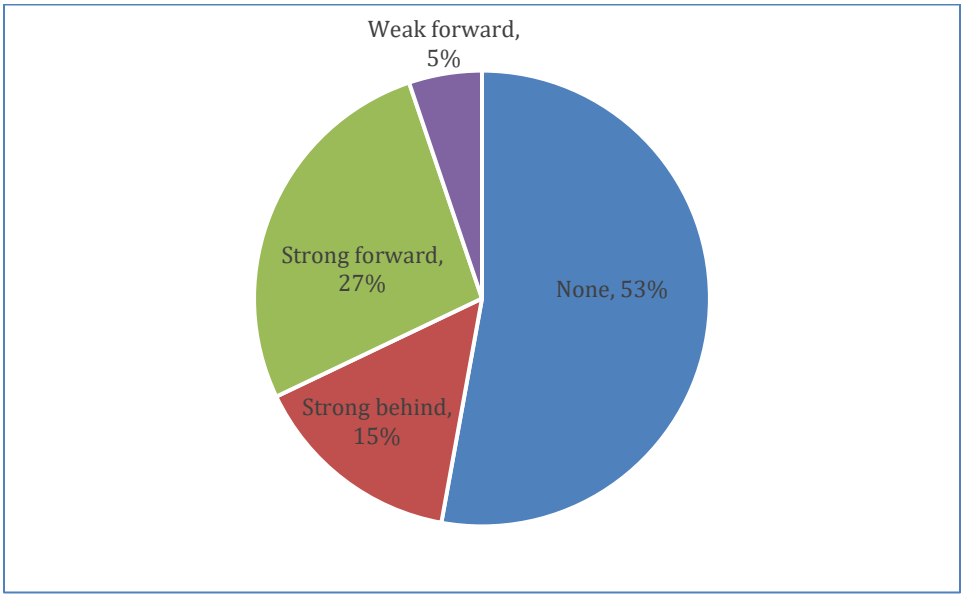

Figure B4. Sun glare observations during the Baffinland Multibeam Survey (August 31st, 2025 - September 20th, 2025). Numbers represent the percentage of time a corresponding condition was observed.

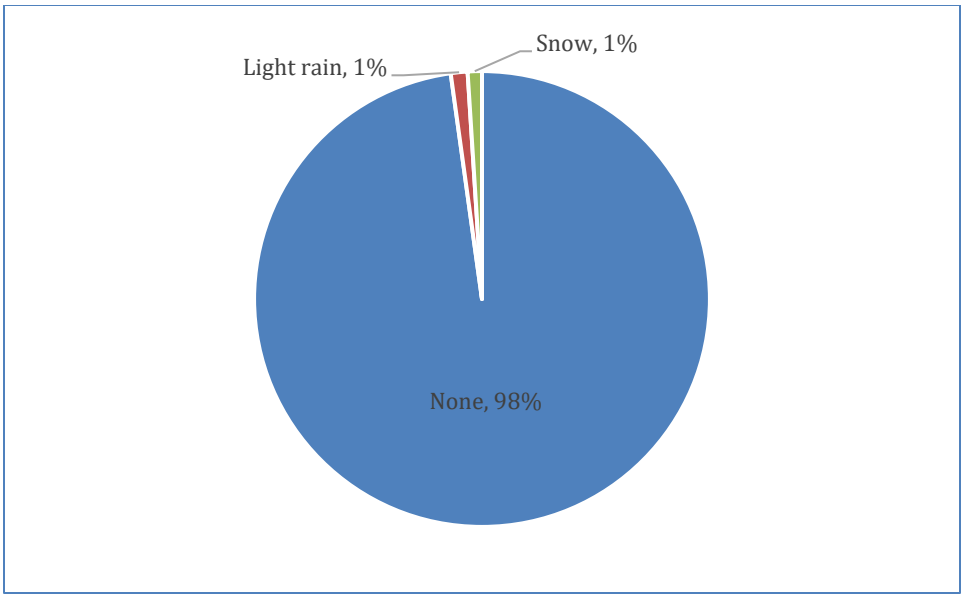

Figure B5. Precipitation observations during the Baffinland Multibeam Survey (August 31st, 2025 - September 20th, 2025). Numbers represent the percentage of time a corresponding condition was observed.

APPENDIX C

Marine Mammal Sightings Photos

Figure C1. Sighting # 2 – Harp seal (*Pagophilus groenlandicus*)

Figure C2. Sighting #3 – Bearded seal (*Erignathus barbatus*)