



## Marine Environmental Working Group (MEWG) Meeting – November 17, 2025

**Meeting ID:** M-1117025  
**Group / Organization:** MEWG Members and Observers, Baffinland and Consultants  
**Meeting Location:** Conference Call  
**Meeting Chair:** Cortney Oliver

Organization Name	Participants
<b>Member Organization</b>	
Mittimatalik Hunters and Trappers Organization (MHTO)	Elisha Kasarnak (EK)
Igloodik Hunter and trappers Organization (IHTO)	Seemee Qamaniq (SQ)
Sanirajak Hunters and Trappers Organization (HBHTO)	None
Nangmoutaq Hunters and Trappers Organisation (NHTO)	None
Ikajutit Hunters and Trappers Association (IHTA)	None
Baffinland Iron Mines Corporation (Baffinland)	Cortney Oliver (CO), William Bowden (WB) Todd Swenson (TS) Jesse Manufor (JM), Brad Rasmussen (BR) Andrea Trischuk (AT) Paige Glenn (PG) Tarek Ghadieh (TG) Tabitha Kasarnak (TK)
Translators/Interpreters	Gela Naqica (GN) Rhoda Katsak (RK)
Environment and Climate Change Canada (ECCC)	Jessica Kassar (JK) Grant Gilchrist (GG) Jennifer Sabourin (JS) Sarah Forte (SF)
Qikiqtani Inuit Association (QIA) and Consultants	Amoudla Kootoo (AK) Bruce Stewart (BS) Lindsay Galbraith (LG) Jeff Higdon (JH)
Government of Nunavut (GN)	Jessica Waldinger (JW)
Parks Canada (PC)	Marie-Claude Martel (MCM) Vincent Marmillot (VM)
Department of Fisheries and Oceans Canada (DFO)	Jose Audet-Lecoutte (JAL) Paul Harper (PH)

Organization Name	Participants
	Kim Howland (KH)
Makivvik	Andrew Dumbrille (AD)
Natural Resources Canada (NRCan)	None
Baffinland Consultants	
WSP Golder	Andrea Locke (AL) Patrick Abgrall (PA) Phil Rouget (PR) Julia Horgan (JH) Mitch Firman (MF) Tannis Thomas (TT) Sima Usvyatsov (SU)
Observer Organization	
CIRNAC	Absent
World Wildlife Fund (WWF)	Sam Davin (SD) Devin Holterman (DH)
Nunavut Impact Review Board (NIRB)	Absent
Canadian Northern Economic Development Agency (CANNOR)	Aminul Haque (AH) Alexie Baillargeon (AB)
Oceans North (ON)	None
Transport Canada (TC)	None
Others	

## AGENDA

Time	Activity	Lead	Materials	Purpose
10:00 – 10:30	Welcome and Roll Call Welcome Kinngait and Kimmirut	C. Oliver	N/A	N/A
10:30 – 11:00	Review Minutes and Action Items	J. Manufor	Minutes Action Log	For Approval For Information
11:00 – 12:00	Summary of Marine Monitoring Work completed in 2025 – MEEMP  Q & A	A. Locke (WSP)	Presentation	For Discussion
12:00 – 1:00	Lunch Break			
1:00 – 2:00	Summary of Marine Monitoring Work completed in 2025 – Bruce Head	P. Abgrall & A. Locke (WSP)	Presentation	For Discussion

	Q & A			
2:00 – 2:30	2025 Shipping Season Overview Q & A	C. Oliver	Presentation	For Discussion
2:30 – 2:45	Health Break			
2:45 – 3:30	ECCC Seabird Study Preliminary Results Q & A	G. Grant (ECCC)	Presentation	For Discussion
3:30 – 3:45	Summary and Meeting Wrap-up	C. Oliver	N/A	

SUMMARY OF ACTION ITEMS

Action ID	Responsibility	Item Description	Due Date	Status
M-14062022-04	Daniel Coombs (DFO)	Provide MEWG and TEWG the report of the sampling program in the Robertson River area.	September 30 <sup>th</sup> , 2025	Not started – DFO requested an updated due date. QIA remains interested in the report.
M-14052024-08	DFO	To meet offline with Andrea Locke (WSP) about the tidal gauge discussion and seek experts within DFO to provide advice on issues raised regarding tidal gauge monitoring.	Not specified	<b>Completed.</b> DFO organised a meeting between BIM and Canadian Hydrological Services (CHS). Baffinland is following up with conversations with CHS.
M-05062024-03	BIM	To meet with Igloodik to hear their concerns and adjust spill modelling if needed.	Not specified	<b>In progress.</b> BIM has started Steensby engagements. Meetings were held the week of Nov 17 <sup>th</sup> , 2025.
M-11072025-3	DFO	DFO to confirm if they have a research vessel around Eclipse Sound.	Not specified	
M-11172025-1	BIM	BIM to explore the use of sediment traps for the MEEMP program.  Rationale: WWF suggested that sediment traps may provide more accurate results than relying on the top 5cm of grab samples.	Before next meeting	
M-11172025-2	BIM/WSP	BIM/WSP to confirm data availability to compare all 5-baseline ringed seal survey years (2006, 2007, 2008, 2021 and 2024)	BIM/WSP to confirm data availability for this comparison.	
M-11172025-3	BIM	ECCC requested early access to final Annual reports to allow sufficient review.	As soon as possible	
M-11182025-1	BIM	Baffinland to organise a meeting with HTOs on the Independent Chair Process ahead of	As soon as possible	Completed. A meeting was held with the HTOs on Dec 2 <sup>nd</sup> .

Action ID	Responsibility	Item Description	Due Date	Status
		January virtual meeting to ensure Boards are set-up to vote on a Chair.		
M-11182025-2	BIM	Baffinland to set up a virtual meeting to meet with Independent Chair candidates in the 2 <sup>nd</sup> week of January, 2026. As requested by members.	2 <sup>nd</sup> week in January, 2026	In progress
<b>M-11182025-3</b>	BIM	Baffinland will have dedicated engagement with the HTOs (Igloolik, Kimmirut and Kinngait) and Makivvik corporation to discuss the spill modelling work.		
M-11182025-4	BIM	BIM to revise the memo on rationale to amend 5-year monitoring plan following Parks Canada’s clarification on hydrophone deployment in the TINMCA.	As soon as possible	Completed. This was recirculated on Nov 18 <sup>th</sup> .

## MEETING MINUTES

### Welcome and Opening Remarks

Cortney Oliver (BIM) opened the meeting and conducted a roll call. Members were reminded of completed follow-up actions, including the Steensby spill mitigation measures that was circulated on July 22<sup>nd</sup> with the draft 42 MEWG minutes and BIM thanked DFO for completing their action item by organising the meeting with Canadian Hydrological Services regarding tidal gauge monitoring that occurred on October 7<sup>th</sup>, 2025.

### 1. Summary of Marine Monitoring Work Completed in 2025 – Marine Environmental Effects Monitoring Program (MEEMP). Presented by Andrea Locke (WSP)

Andrea Locke (WSP) presented a summary of the marine environmental monitoring programs conducted in 2025 as part of the Marine Environmental Effects Monitoring Program (MEEMP) and the Non-Indigenous and Aquatic Invasive Species (NIS/AIS) program. These programs include eight main components: marine water quality, marine sediment quality, benthic infauna, macroflora and epifauna, fish community, fish health and tissue chemistry, and NIS/AIS monitoring. Some programs, such as tide gauge monitoring, are currently being reviewed and redeveloped to improve scientific certainty. Monitoring activities were carried out at Milne Port and nearby reference areas using established methods and sampling frequencies.

Marine water quality monitoring was conducted through five sampling events during the summer of 2025, timed where possible to coincide with active discharges from holding ponds. Preliminary results indicate that water

quality conditions are consistent with findings from 2017–2025. All measured parameters were within applicable guidelines, with the exception of one chromium result that slightly exceeded guidelines. Iron concentrations continued a decreasing trend observed in recent years, dissolved iron was below detection limits in all samples, and no hydrocarbons were detected. Marine sediment quality and benthic infauna monitoring were conducted under a reduced sampling program, as these components operate on a three-year cycle due to the absence of previously identified adverse effects. Eight stations near the ore dock were sampled to assess potential effects associated with larger ore vessels, such as propeller wash.

Additional monitoring included scuba-based surveys of macroalgae and benthic epifauna, with 26 quadrats (including 2 quadrats near the mouth of Philips Creek that could not be located in 2024 and were replaced during the open water season of 2025 i.e. temporary quadrats) sampled across Milne Port and a reference area. Fish community sampling involved 97 sampling events, resulting in 615 fish representing 11 taxa, with Arctic char making up 24 percent of the catch. Fish health and tissue chemistry programs focused on horn sculpin, rock bore clams, and Arctic char, with samples collected for body condition, metals, and PAH analysis; laboratory results are still pending. NIS/AIS monitoring involved screening all collected species against known invasive species lists and reviewing new species records for distribution and origin. Targeted programs also included zooplankton sampling, settlement plate monitoring for species identification and DNA analysis, and additional benthic samples preserved for genetic work. Together, these activities provide a comprehensive overview of marine environmental conditions in 2025, with further results expected when laboratory analyses are completed.

#### Questions & Comments

Andrew Dumbrille (Makivvik): Requested clarification on release timelines for the monitoring results. **Response:** Cortney Oliver (BIM) explained the reporting cycle: preliminary results in fall; final results in spring; published in the NIRB Annual Report with intervener comments.

Andrew Dumbrille (Makivvik): asked for clarifications on where contaminants might be coming from if they are detected. **Response:** Andrea Locke (WSP) clarified that any contaminant would be detected through water-quality and marine-sediment sampling. If Non-Indigenous Species (NIS) were present, they would be observed on the settlement plates. She also noted that ships do not discharge anything other than treated ballast water, and that DFO is currently conducting a program that actively samples ballast water prior to discharge. Kim Howland (DFO) added that DFO has been sampling ballast water and has found viable propagules in some of the discharges. She pointed out that it is potentially feasible to do similar tests along with the salinity tests that BIM currently does using compliance testing devices as a more rapid testing approach. In response, Cortney Oliver (BIM) highlighted that, according to DFO's preliminary results, the number of organisms detected was lower than levels observed at other Canadian ports. Kim Howland (DFO) agreed with this clarification.

Sam Davin (WWF): Recommended deploying sediment traps to obtain more precise sedimentation data. **Response:** Cortney Oliver (BIM) noted risk of loss but agreed to review feasibility. **(Action M-11172025-1)**

Seemee Qamaniq (Igloodik HTA): Emphasized importance of local knowledge when placing sampling devices. **Response:** Andrea Locke (WSP) stated that Baffinland has been working with Inuit on the environmental sampling team. Members of this team have been very helpful as they informed the location of the reference areas. He

further asked what determines the number of fish that are caught and sent for analysis. **Response:** Andrea Locke (WSP) explained that an established scientific protocol outlines the number of samples to be collected.

## 2. Bruce Head Monitoring Program - Patrick Abgrall (WSP)

Patrick Abgrall (WSP) provided an overview of the 2025 Bruce Head shore-based monitoring program, noting that the presentation focused on what data were collected and how the program was carried out, rather than final results. The field program ran for approximately four weeks, from August 8 to August 31, with some adjustments due to weather and ice conditions that limited water access and required the team to leave slightly early. About 15 staff lived at the Bruce Head camp during this period. Patrick highlighted how the observation infrastructure has improved significantly over the years, including a sheltered observation platform and a designated drone launch area, which now allow for safer, more consistent, and higher-quality data collection under challenging Arctic conditions.

The monitoring program relies on several complementary data sources. Visual observations are conducted from the shore using binoculars to record narwhal numbers, locations, group composition, and behaviour across 28 defined sub-areas of the study area. These surveys are typically completed hourly and intensified when vessels pass through the area to understand how narwhal distribution changes in the presence or absence of ships. Observers also record vessel traffic using AIS data from both satellite and shore-based receivers, including systems accessible to community members in Pond Inlet. In addition, weather conditions and other human activities, such as hunting or tourism vessels, are documented because they can influence both narwhal behaviour and observation quality.

Patrick also described the growing role of drones in the program. In 2025, 107 drone-based focal follow surveys were completed, bringing the total number of drone surveys to 642 since the program began. These surveys allow researchers to closely examine narwhal behaviour, group structure, movement patterns, and mother-calf interactions, including nursing, at distances farther from the observation station and closer to vessel routes. This information feeds into the program's Early Warning Indicator (EWI), which tracks changes in the proportion of juveniles and calves over time. While full analysis is still underway and results will be presented in spring meetings, Patrick emphasized that combining visual observations, drone data, and vessel tracking provides a robust and evolving understanding of narwhal presence and behaviour in the Bruce Head area.

### Questions and Answers

Devin Holterman (WWF-Canada) asked for clarification on what is meant by a "focal follow" in the drone monitoring program. Specifically, he wanted to know whether each drone outing counts as one survey and whether the reported 107 focal follow surveys represent 107 individual drone flights or something else. **Response:** Patrick Abgrall (WSP) explained that a focal follow refers to the tracking of a single, identifiable group of narwhals using a drone. A focal follow ends if the animals dive for a prolonged period and can no longer be confirmed as the same group, or if battery life or weather conditions require the drone to return. If there is enough battery time remaining, the same drone flight may include a second focal follow on a different group. He confirmed that the 107 focal follows represent 107 different narwhal groups, not 107 drone flights. The length of each focal follow

varies widely, ranging from a few minutes to up to 15–20 minutes, depending on animal behaviour, visibility, and operating conditions.

Lindsay Galbraith (QIA): asked if BIM could provide the number of surveys per year over time, as it would be useful to see that level of effort on actual numbers without having to go back to all of the annual reports. She further asked how differing methodologies (shore-based vs. drone) are handled for EWI. **Response:** Patrick Abgrall (WSP) responded that observation data at Bruce Head vary with hunting and visibility. However, drone imagery ensures enough data availability. Hence, both datasets remain separate but are analyzed together. On the number of surveys, it is reported for each year in the respective annual report.

Lindsay Galbraith (QIA): Asked the range of focal follow length in addition to the survey effort. **Response:** Patrick Abgrall (WSP) explained that this information is presented in the various annual reports, but the 2025 data is still being analyzed. Cortney Oliver (BIM) added that all Baffinland's monitoring reports are available on Baffinland's website.

### 3. Ringed Seal Program – Patrick Abgrall (WSP)

Patrick Abgrall (WSP) presented an overview of the methodology and results from the 2021 and 2024 Steensby Ringed Seal supplementary baseline aerial survey program, noting that the 2024 work was only recently finalized and therefore is being presented now. The surveys were conducted to update and supplement earlier baseline data collected in 2006–2008, addressing the long gap in information and supporting regulatory requirements related to future shipping activities. Surveys were carried out in early June, when ringed seals are most visible on the ice, using a single aircraft based out of the Mary River Mine site. The work followed Fisheries and Oceans Canada survey protocols and relied entirely on infrared and digital photographic imagery rather than visual observers.

The surveys covered two areas: the Steensby Inlet shipping corridor and a control area at Tasiujaq, allowing comparisons between a future shipping area and a location without shipping influence. Infrared imagery was first used to detect heat signatures on the ice, which were then verified using conventional digital photographs to confirm the presence of ringed seals and distinguish them from other heat sources. Results showed clear year-to-year variation in seal densities in both areas. In Steensby Inlet, estimated densities declined from about 0.9 seals per square kilometre in 2021 to about 0.5 in 2024, while similar declines were observed in the control area. These values fall within the range observed in earlier surveys, reinforcing that interannual variability is a normal feature of ringed seal distribution.

He also highlighted that changes were observed not only in overall density but in the spatial distribution of seals. Hotspot analyses showed that the locations where seals were most likely to be found shifted between years, with relatively low overlap in hotspots in Steensby Inlet compared to greater consistency in the control area. This variability likely reflects changing environmental conditions such as prey availability or ice conditions. Together, the findings provide an important baseline for understanding natural variability and will help inform future monitoring and mitigation once shipping begins. The presentation concluded with an overview of community

participation, noting increasing involvement from multiple communities in monitoring roles as programs expand in the Steensby area.

#### Questions & Comments

Lindsay Galbraith (QIA): stated that she has two questions. First, I heard you say that there will be a survey when shipping starts for ringed seal. That would be the next survey, so there's no other pre shipping surveys planned. Is that correct? And, it sounds like you might not have that plan yet, but when do you think that survey might take place for Steensby? Second, how does environmental variability like weather conditions and ice affect survey results. **Response:** On the first question, Cortney Oliver (BIM) explained that the goal of the ringed seal survey was to update some of the baseline that was collected in the early 2000s – 2006 and 2008. So, the commitment TC 119 was to get two years of supplemental baseline study which we have done. As far as future monitoring plans, Baffinland indicated that they do not have timelines that can be shared, but that they are across the project certificate on what needs to be done and what needs to be updated. And that the working group is the avenue to share that information when it is complete. Patrick Abgrall (WSP) in answering the second question explained that weather strongly affects seal haul-out; and that the surveys were not conducted consecutively due to weather limitations.

Paul Harper (DFO): Noted that, based on the 2021 and 2024 ringed seal programs, it is difficult to assess trends using only two sampling years spaced apart. He added that the project's terms and conditions indicate that baseline data should include at least two years of sampling prior to icebreaking. **Response:** Patrick Abgrall (WSP) clarified that the 2021 and 2024 ringed seal surveys were used to update the 2006–2008 baseline dataset. The DFO team requested a five-year comparison to fully address questions regarding area use and hotspots. Baffinland agreed to confirm the availability of the raw baseline data from 2006, 2007, and 2008 to support this analysis (**Action M-11172025-2**).

Sam Davin (WWF) asked for clarification on whether there is a formally defined southern Regional Study Area (RSA), given the area selected for the ringed seal survey. **Response:** Cortney Oliver (BIM) clarified that the RSA is defined in the 2012 Final Environmental Impact Statement (FEIS) and includes Hudson Strait. However, the map presented reflected only the ringed seal study area, not the full RSA. It was also noted that there will be opportunities to conduct aerial surveys to supplement baseline data in Hudson Strait

Paul Harper (DFO): Requested more review time for annual reports to ensure a more robust discussion. **Response:** Cortney Oliver (BIM) noted the comment and will share documents earlier where possible. (**Action M-11172025-3**)

#### **4. Review of the 2025 Shipping Season - Cortney Oliver (BIM)**

Cortney Oliver (BIM) provided an overview of the 2025 shipping season, highlighting that it began on July 29 and ended earlier than in previous years, on October 9. The season lasted 73 days and benefited from open-water conditions at both the start and end, with no need for icebreaking support. In total, 49 ore carriers operated during the season, including a mix of Capesize, Baby Cape, and primarily Panamax vessels, along with six resupply vessels and fuel tankers. Twelve convoys were used opportunistically to help reduce underwater noise exposure. The first

convoy passed Pond Inlet just before midnight on July 29, and the final convoy departed on October 9. Overall, the season was described as smooth and successful, particularly from a safety and ice-management perspective.

She also summarized community communications and compliance measures during the season. Annual pre-shipment meetings were held with the Hamlet of Pond Inlet and the Mittimatalik Hunters and Trappers Organization, along with advance flow-edge confirmation and distribution of 72-hour and 24-hour shipping notices. 14 shipping monitors were hired to provide round-the-clock coverage, share vessel tracking information with the community, and post regular updates through Facebook, VHF announcements, and rolling schedules. While 18 minor deviations were recorded—mostly related to route adjustments for ice or vessel passing, and two speed-related incidents—these were addressed through established reporting and safety protocols. Overall community feedback declined compared to previous years, suggesting fewer concerns or questions, and Cortney noted that the season was considered very successful from an operational and safety standpoint.

#### Question and comments

Andrew Dumbrille (Makivvik): Asked why vessels started later this season. **Response:** Cortney Oliver (BIM) explained that lower shipping tonnage allowed more flexible scheduling; operations began once conditions were suitable.

Andrew Dumbrille (Makivvik) asked for clarification on whether all commitments made in the North would also apply to the South. **Response:** Cortney Oliver (BIM) explained that terms and conditions are reported in the annual report. She clarified that if a requirement pertains to the South—and Baffinland is not currently operating there—it will not be reported on. Commitments related to Steensby, once operational, are clearly outlined in the Project Certificate.

Sam Davin (WWF-Canada) asked clarification around Milne Port and the northern route once Steensby is operational. He stated that going back to the Project Description, it states that once Steensby Port is operational, Milne Port will only be used occasionally for the delivery of oversized equipment for the mine site. To me, that seems quite explicit that there would not be regular shipping to Milne Port. **Response:** Cortney Oliver (BIM) clarified that there could still be shipments such as freight, fuel, or heavy equipment.

Sam Davin (WWF-Canada) further asked if there could be a breakdown of ship transits to and from the northern route, particularly how the convoys are structured and how often they are used. He asked about the status of discussions with Transport Canada and other government entities on whether this is how operations will proceed, or if the matter is still under discussion. **Response:** Cortney Oliver (BIM) replied that the dialogue is still ongoing.

Marie-Claude Martel (Parks Canada) asked how many tonnes of ore Baffinland shipped this summer and whether any ore remains on the ore dock for next year. **Response:** Cortney Oliver (BIM) stated that Baffinland shipped 4.5 million tonnes wet weight as Baffinland reports in wet weight because that is the number we have early. The dry weight will be about 4.3 million tonnes which is what is used for sales. She added that ore remains on the ore pad, but she can't confirm the exact quantity.

Seemee Qamaniq (Igloodik HTA) asked whether ships operating in the region have their hulls cleaned before entering Inuit waters and how hull fouling is managed. A discussion ensued, with different persons making comments. **Response:** Andrea Locke (WSP) explained that vessels are not cleaned before each arrival; instead,

hull maintenance and anti-fouling practices are governed by International Maritime Organization (IMO) guidelines. Ships apply approved anti-fouling coatings, keep records, and are typically cleaned during scheduled dry-dock periods, primarily for efficiency and fuel performance, rather than in response to project-specific or Canadian regulatory requirements.

Andrew Dumbrille (Makivvik) clarified that IMO and Transport Canada hull-fouling guidelines are voluntary rather than mandatory. He questioned whether Baffinland vessels are required to follow these guidelines and how compliance is verified. Andrea Locke (WSP) explained that Baffinland conducts due diligence at the shipping company level—reviewing company practices and expectations—rather than inspecting every individual vessel before arrival. Transport Canada follows IMO guidance, with regulations focused mainly on the toxicity of hull coatings rather than mandatory cleaning schedules.

The conversation concluded with agreement that hulls are generally cleaned during dry-dock periods, typically within a five-year cycle. Cortney Oliver (BIM) emphasized that Baffinland issues a standing instruction to all vessels annually and expects chartered vessels to align with IMO and Transport Canada guidance.

## **5. ECCC Seabird Study – Preliminary Results - Grant Gilchrist (ECCC)**

Grant Gilchrist presented an overview of a long-standing, multi-phase seabird research collaboration directly linked to the Baffinland project, focused primarily on Thick-billed Murres (Akpa). The research evolved alongside changes in shipping routes, initially concentrating on the southern route, shifting to the northern route, and now returning to the south while building on earlier baseline data. The collaboration emerged from Marine Working Group discussions and information gaps identified by the Nunavut Impact Review Board, particularly around where seabirds occur, when they are present, and how they may interact with shipping. Environment and Climate Change Canada leads the research with academic partners, while Baffinland provides financial support that is leveraged with external grants. Importantly, the research is conducted at arm's length, with results published in peer-reviewed literature and used to inform marine spatial planning and mitigation discussions. Advanced tracking technologies, cliff-based fieldwork supported by professional climbers, and long-term data collection allow the team to generate robust, repeatable datasets that establish defensible baselines on seabird movements, foraging behaviour, and habitat use across seasons and years.

The presentation highlighted detailed findings from Cape Graham Moore and other key colonies, showing how murres' movements vary by breeding stage, sea ice conditions, and oceanography, and how these factors influence potential overlap with shipping routes. Tracking data demonstrate consistent northeast foraging patterns during incubation, shorter trips during chick rearing, and rapid seasonal migration through Hudson Strait, suggesting that periods of highest vulnerability to shipping may be brief but variable across years. The work also integrates satellite ice data, vessel traffic information, and Indigenous knowledge, while supporting graduate students and postdoctoral researchers who drive much of the analytical work. Looking ahead, the team plans expanded research across northern Hudson Bay, Hudson Strait, Baffin Island, and northern Quebec, alongside Inuit-led field training programs that build local capacity and pathways into environmental monitoring careers. Gilchrist emphasized that climate-driven sea ice loss is likely to keep seabirds in northern waters for longer periods

in the future, potentially increasing interactions with shipping, underscoring the importance of sustained, collaborative, long-term research to inform adaptive management and mitigation.

#### Question and comments

Seemee (Igloolik HTA) asked about polar bear management and Inuit involvement in the program. **Response:** Grant Gilchrist (ECCC) clarified that majority of field staff are Inuit and camps use polar bear fencing.

#### Closing

Cortney Oliver (BIM) provided a summary of action items from the meeting – investigation of sediment traps as suggested by Sam Davin (WWF), an analysis of the 5 years of ringed seal baseline data a request from DFO and Paul Harper (DFO) request for timely circulation of report for more review time. She thanked everyone for attending the first day of the meeting. The meeting was adjourned to the next day November, 18, 2025

## Marine Environmental Working Group (MEWG) Meeting – November 18, 2025

**Meeting ID:** M-1118025  
**Group / Organization:** MEWG Members and Observers, Baffinland and Consultants  
**Meeting Location:** Conference Call  
**Meeting Chair:** Cortney Oliver

Organization Name	Participants
<b>Member Organization</b>	
Mittimatalik Hunters and Trappers Organization (MHTO)	Elisha Kasarnak
Igloodik Hunter and trappers Organization (IHTO)	Seemee Qamaniq
Sanirajak Hunters and Trappers Organization (HBHTO)	Laimiki Ulluapak
Nangmoutaq Hunters and Trappers Organisation (NHTO)	None
Ikajutit Hunters and Trappers Association (IHTA)	Kunnak Enoogoo
Baffinland Iron Mines Corporation (Baffinland)	Cortney Oliver (CO), Paige Glenen (PG) Jesse Manufor (JM), Tarek Ghadieh (TG) Andrea Trischuk (AT) Tabitha Kasarnak (TK) Angie Bischoff (AB) Todd Swenson (TS)
Translator/Interpreter	Gela Naqica (GN)
Environment and Climate Change Canada (ECCC)	Jessica Kassar (JK) Jennifer Sabourin (JS) Grant Gilchrist (GG) Sara Forte (SF)
Qikiqtani Inuit Association (QIA) and Consultants	Amoudla Kootoo (AK) Bruce Stewart (BS) Lindsay Galbraith (LG) Jeff Higdon (JH)
Government of Nunavut (GN)	Jessica Waldinger (JW)
Parks Canada (PC)	Marie-Claude Martel (MCM) Vincent Marmillot (VM)
Department of Fisheries and Oceans Canada (DFO)	Jose Audet-Lecoutte (JAL) Paul Harper (PH)
Natural Resources Canada (NRCan)	None
<b>Baffinland Consultants</b>	

Organization Name	Participants
WSP Golder	Andrea Locke (AL) Patrick Abgrall (PA) Phil Rouget (PR)
OSRL/TetraTech	Eric Comerma (EC) Matt Frediani (MF)
Observer Organization	
CIRNAC	Absent
World Wildlife Fund (WWF)	Devin Holterman (DH) Sam Davin (SD)
Nunavut Impact Review Board (NIRB)	Absent
Canadian Northern Economic Development Agency (CANNOR)	Aminul Haque (AH) Alexie Baillargeon (AB)
Oceans North (ON)	None
Transport Canada (TC)	None
Makivvik	Andrew Dumbrille (AB)
Others	

## AGENDA

Time	Activity	Lead	Materials	Purpose
10:00 – 10:10	Welcome and Roll call	C. Oliver	N/A	N/A
10:10 – 10:40	Independent Chair	C. Oliver	N/A	For Discussion
10:40 – 11:10	Steensby Spill modelling update  Q & A	P. Glenen	Presentation	For Discussion
11: 10 – 11:25				
11:25 – 12:35	Monitoring Plans for 2026  Q & A	C. Oliver	Presentation	For Discussion
12:35 – 12:45	Summary and Meeting Wrap-up	C. Oliver	N/A	

## MEETING MINUTES

Cortney Oliver (BIM) started the day's meeting with a roll call and welcomed new participants.

### 1. Independent Chair Process – Cortney Oliver (BIM)

The meeting opened with Cortney Oliver (BIM) providing an update on the process for selecting an Independent Chair. Members were reminded that an information package had been circulated outlining the three shortlisted candidates and that the initial phases of the selection process, as defined in the Terms of Reference, had been completed. This update was intended to clarify the group's current position in the process and to outline the decision points ahead.

She explained that the next step is to determine how the group wishes to proceed toward final selection. Two options are available under the Terms of Reference: inviting the shortlisted candidates to attend a virtual meeting to introduce themselves and discuss what they would bring to the role, or proceeding directly to a vote based on the written applications and members' independent review. Cortney emphasized that either approach is acceptable and encouraged members to consider which option would best support an informed and confident decision.

She also noted that voting is conducted by members, with the Government of Canada participating through a consolidated vote rather than by individual departments. Federal representatives were asked to identify a lead department to coordinate internal input and submit the consolidated federal position. The floor was then opened for questions and discussion, allowing members to share perspectives on the process to date and to provide input on the preferred next steps for advancing the selection of the Independent Chair.

#### Questions & Comments

Andrew Dumbrille (Makivvik): Asked if Chair's duties match BIM's current role. **Response:** Cortney Oliver (BIM) replied Yes—responsibilities remain the same under the Terms of Reference (ToR).

Jessica Waldinger (GN): Asked if only five candidates were nominated. **Response:** Cortney Oliver (BIM) replied yes, stating that only two organizations submitted nominations. ECCC put forward one candidate on behalf of the Government of Canada and Baffinland also interviewed her set of own candidates.

Seemee Qamaniq (IHTO): Suggested including local representatives as vice-chair. The other HTO/HTAs representatives expressed that they have not seen the memo on Independent Chair candidates. **Response:** Cortney Oliver (BIM) proposed to organise a meeting with the HTOs/HTAs to review the ToR, review the candidates, understand the process and take the discussion back to their respective boards and come to a decision. **(Action M-11182025-1)**

Jessica Waldinger (GN), Andrew Dumbrille (Makivvik), Jose Audet-Lecouffe (DFO) and Amoudla Kootoo (QIA) all stated that they would like a meeting to meet with the candidates. **Decision:** Virtual meeting with Chair candidates will occur in the second week of January 2026. **(Action M-11182025-2)**

## 2. Steensby Spill Modelling Update – Cortney Oliver (BIM)

Cortney Oliver (BIM) introduced an update on the spill modeling work for the Steensby shipping route, noting that external technical experts are supporting the effort. The presentation builds on discussions held at the June 2024 meeting in Ottawa, where initial plans for spill modeling were shared. Since then, Baffinland has changed service providers and remains in the information-gathering phase, collecting inputs to refine the modeling approach. She

emphasized that this presentation was a recap of the study scope and methodology and that additional opportunities for community input would occur in the coming months, reflecting strong interest expressed previously by communities such as Igloolik.

The spill modeling is a computer-based simulation designed to assess potential impacts from hypothetical fuel spills along the shipping route. Using probabilistic modeling, hundreds of simulations are run for each scenario to account for variability in wind, currents, ice conditions, and weather patterns over a five-year data set. The model evaluates how fuel could travel across the marine environment, estimates minimum travel times to shorelines, and identifies areas with higher likelihood of exposure. Results supplement baseline spill modeling completed for the Environmental Impact Statement and are validated against real-world spill data to ensure reliability.

Cortney outlined four proposed spill modeling locations selected based on regulatory criteria, including ecological sensitivity, shipping pinch points, proximity to shorelines, and importance to marine mammals, birds, and Inuit harvesting activities. These locations include Steensby Port (SR1), Foxe Basin west of Prince Charles Island (SR2), the Mill Island area (SR3), and south of Kimmirut (SR4). Multiple spill scenarios will be modeled, including ship-to-shore fuel transfer spills, full fuel tanker loss, and releases from ore carriers during both open-water and ice conditions. Cortney noted that these proposed locations will be shared formally with communities through letters and engagement sessions, and that the modeling results will inform spill response, emergency preparedness, and management plans for southern shipping operations.

#### Questions & Responses

Grant Gilchrist (ECCC) expressed that the information is quite informative. He asked if the maps presented could be shared. **Response:** Cortney Oliver (BIM) responded that the maps can be made available in PDF and shared to him.

Lindsay Galbraith (QIA) asked what is the source of the 3D data used for the modelling and the second question why is the modelling a lower volume for winter spill scenario. **Response:** Cortney Oliver (BIM) replied that Baffinland would not be transporting fuel during winter, hence lower spill volume modelling. On question of 3D Modelling data, Matt Frediani (OSRL) stated that they are currently evaluating Copernicus and HYCOM datasets.

Lindsay Galbraith (QIA): Asked whether model will be made available to the public to be used for community emergency preparedness or other purposes. **Response:** Cortney Oliver (BIM) stated that reports will be shared through the NIRB process. However, open-source release requires further discussion as there are proprietary concerns.

Andrew Dumbrille (Makivvik): Asked whether spill probability, response time, and cost are included in the model. **Response:** Tarek Ghadieh (BIM) responded that the model assesses probability of oil reaching locations—not response measures or costs.

Sam Davin (WWF): Asked about simulation duration and if it took account of trapped-oil scenarios. **Response:** Matt Frediani (OSRL) replied that the spill is tracked for 30 days post-release, and the modelling will incorporate ice-related behaviour.

Sam Davin (WWF): Asked if any of the vessels that Baffinland currently charters or plans to charter in the future are equipped with dual fuel engines and if there a chance they would be using LNG or alternative fuels? The rationale for this question is that these fuels should also be modeled because fuels like LNG would really warrant atmospheric release modeling as well. **Response:** Cortney Oliver (BIM) thanked Sam for his question and replied that she does not have the information offhand today, but I will take your comments back.

### 3. Monitoring Plans for 2026 – Paige Glenen (BIM)

Paige Glenen provided an update on the process to revise monitoring and management plans for the Steensby project. Work has begun to update these plans, with formal community engagement planned for 2026. Once implemented, the monitoring plans will be living documents that are continuously updated and will explicitly document how Inuit Qaujimagatuqangit (IQ) is incorporated into monitoring and management. Inuit will continue to be involved at all levels of fieldwork, including as field monitors and participants, and communities will be regularly informed about how IQ is being applied.

The update focuses on management plans for the construction and operations phase, particularly those related to the marine environment under the project's environmental management system. Existing plans will be revised to include the southern shipping route, and several Steensby-specific plans will be newly developed. These include Spill at Sea response Plan, Marine Monitoring Plan, Ballast Water Management Plan, Adaptive Management Framework, Steensby Construction Environmental Protection Plan, Shipping and Marine Wildlife Management Plan, an Oil Pollution Prevention Plan, and an Oil Pollution Emergency Plan tailored to Steensby operations.

All updated and newly developed plans will be shared with QIA, the Marine Environment Working Group, NIRB, and regulators for review. The working group will play an active role in reviewing and updating the plans, with the anticipated start of this review process occurring in the second quarter of 2026.

#### Questions and Responses

Cortney Oliver (BIM) committed that Baffinland will be having dedicated engagement with the HTOs and Makivvik corporation to discuss the spill modelling work. **(Action M-11182025-3)**

Sam Davin (WWF): Asked whether underwater radiated noise is included in the management plan. **Response:** Cortney Oliver (BIM) replied yes. Stating that underwater noise will be managed under Steensby Construction Environmental Protection Plan.

Devin Holterman (WWF): Asked when management plan drafts will be circulated and available for review. **Response:** Paige Glenen (BIM) replied that the target is Q2 2026.

### 4. 5-Year Monitoring Plan Amendment – Cortney Oliver (BIM)

Cortney Oliver (BIM) introduced the final agenda topic for the meeting: an amendment of the five-year environmental monitoring plan that was originally proposed in May 2024. Based on the assessment of the last couple of years of monitoring and data, a key amendment involves moving the aerial surveys and acoustic monitoring programs to a three-year cycle rather than an annual one, confirming that 2026 would be a year when

both would be scheduled. To manage resources efficiently, the team proposed alternating monitoring programs in years when the aerial survey is conducted (which is confirmed to be running this year for mammals in Eclipse Sound and Admiralty Inlet), the Bruce Head program will be paused, allowing for ongoing mammal monitoring along the Northern route by alternating the two programs under the current shipping regime.

The most substantial change discussed involves the acoustic monitoring program in Eclipse Sound. While it is scheduled to run again in 2026, Cortney Oliver proposed pausing this specific monitoring on the Northern shipping route to shift those resources toward gathering supplementary baseline information in the Southern shipping route (Foxe Basin). The rationale for this move is that similar monitoring programs are already underway in Eclipse Sound, suggesting potential collaboration opportunities. Crucially, the current data already captures existing shipping configurations, and no new vessel types or shipping configurations are expected in the North, leading the team to prioritize the need for new baseline data in the southern area.

Vincent Marmillot (Parks Canada): Clarified that Parks Canada's hydrophone at TINMPA was removed 3 years ago; memo needs correction. **Response:** Cortney Oliver (BIM), we will amend memo and recirculate. **(Action M-11182025-4)**

Lindsay Galbraith (QIA): Stated that QIA does not support the amendment, requesting integrated results for Bruce Head and clarity on the Ship-Based Observer (SBO) program, as well as the alternative modeling approaches like sediment traps, ballast water monitoring and hull fouling. **Response:** Cortney Oliver (BIM) explained that the pause is to conduct broader aerial surveys, and that BIM has 10 years of consecutive Bruce Head data. Baffinland is still running the MEEMP program where alternatives like sediment traps will be reviewed, DFO is putting together a proposal on the ballast water program for consideration and there is no plan to conduct hull fouling in the near term and the rationale has been discussed in meetings in 2025. On the SBO program, there are health & safety challenges with continuing the program but Baffinland is exploring options.

### **Closing**

Cortney Oliver (BIM) in ending the meeting encouraged follow-up questions by email. She informed the MEWG that there will be a combined meeting of the MEWG and TEWG to discuss independent Chair selection in January, 2026. As part of engagements on spill modelling, letters will be going out to Kinngait, Igloodik and Kimmirut communities. She thanked members for their participation.