



# Marine Environmental Working Group (MEWG) Meeting

**Meeting ID:** M-0807025

**Group / Organization:** MEWG Members and Observers, Baffinland and Consultants

Meeting Location: Conference Call
Meeting Chair: Cortney Oliver

| Organization Name  | Participants   |  |  |
|--|--|--|--|
| Member Organization  |  |  |  |
| Mittimatalik Hunters and<br>Trappers Organization (MHTO)   | Jonah Kunnak   |  |  |
| Igloolik Hunter and trappers<br>Organization (IHTO)  | None   |  |  |
| Sanairaijak Hunters and Trappers<br>Organization (HBHTO)   | Laimike Ullapak (LU)   |  |  |
| Nangmautaq Hunters and<br>Trappers Organisation (NHTO)   | Nysana Qillaq (NQ)   |  |  |
| Ikajutit Hunters and Trappers Association (IHTA)   | None   |  |  |
| Cortney Oliver (CO), Lizzie Philips (LP) Translator  Baffinland Iron Mines Adriana Safatly (AS)  Corporation (Baffinland) Jesse Manufor (JM), Brad Rasmussen (BR) Andrea Trischuk (AT) |  |  |  |
| Environment and Climate Change Canada (ECCC)   | Jessica Kassar (JK)<br>Melissa Pinto (MP)  |  |  |
| Qikiqtani Inuit Association (QIA) and Consultants  | Tom Williamson (TW) Bruce Stewart (BS) Lindsay Galbraith (LG) Andrew Jaworenko (AJ) Jeff Higdon (JH) Richard Nesbit (RN)   |  |  |
| Government of Nunavut (GN)   | Jessica Waldinger (JW)   |  |  |
| Parks Canada (PC)  | Marie-Claude Martel (MCM)  |  |  |
| Department of Fisheries and<br>Oceans Canada (DFO)   | Marianne Marcoux (MM) Jose Audet-Lecoutte (JAL) Paul Harper (PH) Nicholas Wasilik (NW) Cory Matthews (CM) Kim Howland (KH) |  |  |
| Natural Resources Canada (NRCan)   | None   |  |  |
| Baffinland Consultants   |  |  |  |
| WSP Golder   | Andrea Locke (AL)  |  |  |



| Organization Name                  | Participants  |  |
|------------------------------------|---|--|
|                                    | Patrick Abgrall (PA)                                |  |
|                                    | Phil Rouget (PR)                                    |  |
|                                    | Karisa Petho (KP)                                   |  |
|                                    | 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)        | Litia Belanger Taqtu representing Melissa Alexander |  |
| Occasio North (ON)                 | Kristin Westdal (KW)                                |  |
| Oceans North (ON)                  | Alex Ootoowark (AO)                                 |  |
| Transport Canada (TC)              | Adam Downing (AD)                                   |  |
| Transport Canada (TC)              | Alisa Norman (AN)                                   |  |
| Makivvik                           | Camille LP (CLP)                                    |  |
| Others                             |   |  |

# **AGENDA**

| Time             | Activity  | Lead                                      | Materials  | Purpose                      |
|------------------|---|---|--|------------------------------|
| 11:00 –<br>11:30 | Welcome and Roll Call   | C. Oliver                                 | N/A  | N/A                          |
| 11:30 –<br>11:45 | Review Minutes and<br>Action Items                                  | J. Manufor                                | Minutes<br>Action Log  | For Approval For Information |
| 11:45-12:45      | 2024 Marine Environment Annual Monitoring Program Results Questions | P. Abgrall & A. Locke                     | 2024 MEEMP & BH<br>report<br>Marine Program<br>Presentation Deck | For Discussion               |
| 2:30 – 2:40      | Health Break  |   |  |                              |
| 2:40 – 3:40      | DFO Program Updates:  | Cory Matthews, M.<br>Marcoux & K. Howland | Presentation   | For Discussion               |
| 3:40 – 4:00      | Summary of Actions and<br>Wrap-Up                                   | C. Oliver                                 | N/A  | Discussion                   |



# **SUMMARY OF ACTION ITEMS**

| Action ID             | Responsibility            | Item Description  | Due Date   | Status   |
|-----------------------|---------------------------|---|--|--|
| M-<br>14062022-<br>04 | Daniel<br>Coombs<br>(DFO) | Provide MEWG and TEWG for review the details and report of the sampling program in the Robertson River area.  | September 30 <sup>th</sup> , 2025                            | Not started – DFO asked to update the due date. QIA is still interested in the report.                 |
| M-<br>12122023-<br>09 | DFO                       | DFO to provide aerial survey program results from Steensby Inlet area to the IHTO.  | Not<br>specified   | Not started. – Clarify<br>this action from the<br>December MEWG<br>minutes where it was<br>actioned.   |
| M-<br>14052024-<br>08 | DFO                       | To meet offline with Andrea Locke (WSP) on the gauge discussion and seek experts within DFO that can provide advice on the issues raised with tidal gauge monitoring. | Not<br>specified   | In progress. This has<br>lost some traction,<br>PH (DFO) will follow<br>up with colleagues on<br>this. |
| M-<br>05062024-<br>03 | BIM                       | To meet with Igloolik to hear their concerns and adjust the mapping for spill modelling if we need to.  | Not<br>specified   | In progress. BIM has started Steensby engagements.   |
| M-<br>09012025-<br>1  | BIM                       | To organize an interim virtual MEWG in the next 8 weeks to discuss the 5-year monitoring plan for the Northern Shipping Route previously shared in May and June 2024. | End of<br>February<br>or 2 <sup>nd</sup><br>week in<br>March | Completed: A virtual meeting was organised on March 20 <sup>th</sup> .                                 |
| M-<br>09012025-<br>2  | BIM                       | To confirm the fuel used by vessels when they turn off their scrubber. Whether it is Ultra Low Sulphur Fuel (ULSF) or Marine Gas Oil.                                 | As soon as possible  | Completed: The ships<br>use Marine Gas Oil<br>(MGO)  |
| M-<br>09012025-<br>3  | QIA                       | Bruce Stewart QIA to share his thoughts and recommendation on the sedimentation issue in the MEEMP program in an email to Cortney                                     | As soon as possible  | Completed – emailed on Feb 28 <sup>th</sup> , 2025   |
| M-<br>09012025-<br>4  | BIM                       | BIM to hold an information session on the ToR at the same meeting as action M-09012025-1.   | End of<br>February<br>or 2 <sup>nd</sup><br>week in<br>March | Completed: An adhoc<br>MEWG/TEWG was<br>organised on March<br>20th                                     |



| Action ID             | Responsibility | Item Description  | Due Date                     | Status   |
|-----------------------|----------------|---|------------------------------|--|
| M-<br>09012025 -<br>5 | BIM            | BIM committed to provide duration of vessels staging at Ragged Island and proportion of vessels that transited directly to Milne Port compared to those that staged at Ragged Island for the 2024 shipping season. This is to evaluate the risk of hull fouling at Ragged Island. | Not<br>specified             | Completed – 70 ore carriers called at Milne Port in 2024, 37 vessels anchored at Ragged Island for an average duration of 33.52 h each. This included three vessels that anchored for extended durations in September due to a weather event, and a conveyor breakdown at Milne Port. Excluding these three vessels, the average duration of anchoring at Ragged Island for the remaining 34 vessels was 25.29 h/vessel. |
| M-<br>08072025-<br>1  | BIM            | While BIM does not discharge any waste in the RSA, it was agreed that the language was not comprehensive, and BIM agreed to update description of waste to include - Bilge water, sewage, grey water etc.   | Next<br>report               |  |
| M-<br>08072025-<br>2  | BIM            | BIM/WSP to confirm the number of convoy transits before and during the Bruce Head Program   | Next<br>meeting              | Completed - Bruce Head surveys ran from 9 Aug to 3 Sept, 2024. 7 convoys occurred before the BH program started and 8 convoys occurred during the BH program.  |
| M-<br>11072025 -<br>1 | BIM            | To present or add Steensby spill mitigation measures as part of MEWG Agenda   | Next<br>Meeting              | Completed - This was attached and sent to the MEWG with the draft minutes on July 22 <sup>nd</sup> , 2025.   |
| M-<br>11072025-<br>2  | вім            | To include Lindsay Galbraith, Sam Davin and Devin Holterman to the rolling ship schedule  | Before<br>shipping<br>season | Completed  |



| Action ID            | Responsibility | Item Description  | Due Date         | Status |
|----------------------|----------------|---|------------------|--------|
| M-<br>11072025-<br>3 | DFO            | DFO to confirm if they have a research vessel around Eclipse Sound. | Not<br>specified |        |

#### **MEETING MINUTES**

Cortney Oliver (BIM) started the meeting by doing a rollcall and asked participants to introduce themselves. This was followed by a call by Jesse Manufor (BIM) for approval of the previous minutes, this was approved unanimously. Members were reminded of an outstanding action seeking expertise or recommendation on Tidal gauge monitoring.

#### **Marine Monitoring Program 2024 Results**

- Andrea Locke (WSP) presented results from the 2024 marine monitoring program, covering water quality, sediment quality, benthic infauna, fish community composition, fish health, and tissue chemistry.
- Water and sediment samples showed that all metal and hydrocarbon levels did not go over the
  acceptable limits. Iron levels remained stable, and hydrocarbons were either absent or below
  detection limits, particularly near the freight dock.
- Cape-sized vessel monitoring revealed they observed slight seafloor disturbance at some locations. However, diversity and richness of benthic organisms remain consistent with previous years, suggesting no ongoing disturbance or decline.
- Analysis confirmed that conditions are still aligned with predictions made in the Final Environmental Impact Statement (FEIS), and no additional mitigation measures are currently needed.
- The monitoring team marked there was a shift in dominant fish species compared to 2023, specifically higher Arctic sculpin counts, though overall health and tissue samples continued within normal parameters.

## Non-Indigenous and Invasive Species (NIS/AIS)

- 54 new taxa were detected this season, a big reason being advances in DNA barcoding and expanded taxonomy reference libraries. Majority were low-risk, with five species precautionarily added to the watch list.
- No species met the criteria for the trigger list, meaning no formal response actions were required under the current framework.
- Andrea Locke and the DFO team confirmed their ongoing collaboration with the University of New Brunswick to verify identifications and update reference data.
- A previously listed polychaete species continues to be under observation, but its current distribution and abundance suggest it is not behaving invasively.



## **Freight Dock Habitat Offset Monitoring**

- Year 5 monitoring has shown the artificial reef structures continue to gradually colonize. Algal
  coverage and sessile invertebrate presence (such as tunicates and barnacles) are increasing;
  however, they are still below natural reference habitat levels.
- There was notable variation in colonization rates across transects, possibly due to current flow patterns and sediment accumulation.
- Structural observations noted localized slumping of boulders and some silt build-up in low-energy zones. These issues are not impacting overall dock integrity but will be monitored to prevent erosion or navigational safety risks.

### **Bruce Head Monitoring Program**

- Patrick Abgrall from WSP presented results from 2024 narwhal monitoring under the Bruce Head program, confirming temporary behavioral responses when vessels approached within approximately 2.6 km. On average, narwhals avoided close proximity for about 19 minutes before returning.
- Importantly, narwhal behavior beyond a 3 km range remained stable. Drone and visual observations showed no long-term displacement, and narwhals were still observed resting, foraging, and socializing near vessel routes.
- The 2024 season saw the highest number of narwhal groups observed in the last decade, reinforcing that vessel presence is not currently causing population-level disturbance.
- Key early warning indicators, such as group size and calf-to-adult ratios, remained consistent with prior years.

#### **Questions & Clarifications**

- Cape Size Vessel Sampling: Bruce Stewart (QIA) asked how many vessels arrived before sampling.

  Action: Andrea Locke responded that none arrived before sampling.
- Baseline vs. 2023 Comparison: Marie-Claude Martel (PC) asked why 2023 data was used; Andrea explained differences in baseline methodologies.
- **Bilge Water Discharge:** Bruce Stewart (QIA) asked about discharge practices; Andrea confirmed none in the study area.
- Regulatory Framework: Sam Davin (WWF) requested clarification under the Arctic Waters
  Pollution Prevention Act and discharge of bilge water and sewage. Action: While BIM does not
  discharge any waste in the RSA, it was agreed that the language was not comprehensive, and BIM
  agreed to update description of waste to include -Bilge water, sewage, grey water etc.
- Bruce Stewart (QIA), asked BIM to confirm the number of conveys that transited through Bruce Head before and during the Bruce Head monitoring program -Action.



# DFO Presentation on Walrus, Beluga, Narwhal and Ballast Water

The DFO team comprising of Cory Matthews and Marianne Marcoux made presentations to the MEWG on DFO's current research on Beluga Whales, Walrus and Narwhal. Kim Howland presented on the 2024 Ballast Water program, highlighting the successes and areas for improvement.

Cortney Oliver (BIM), thanked everyone for participating and meeting adjourned to reconvene on July 11<sup>th</sup> for the second day of meeting.



Jul 11, 2025

# Marine Environmental Working Group (MEWG) Meeting

**Meeting ID:** M-1207025

**Group / Organization:** MEWG Members and Observers, Baffinland and Consultants

Meeting Location: Conference Call
Meeting Chair: Cortney Oliver

| Organization Name   | Participants   |  |  |  |
|---|--|--|--|--|
|   | Member Organization  |  |  |  |
| Mittimatalik Hunters and<br>Trappers Organization (MHTO)                            | Jonah Kunnak   |  |  |  |
| Igloolik Hunter and trappers<br>Organization (IHTO)                                 | None   |  |  |  |
| Sanairaijak Hunters and Trappers<br>Organization (HBHTO)                            | None   |  |  |  |
| Nangmautaq Hunters and<br>Trappers Organisation (NHTO)                              | None   |  |  |  |
| Ikajutit Hunters and Trappers<br>Association (IHTA)                                 | None   |  |  |  |
| Baffinland Iron Mines<br>Corporation (Baffinland)                                   | Lou Kamermans (LK) Cortney Oliver (CO), Adriana Safatly (AS) Jesse Manufor (JM), Brad Rasmussen (BR) Andrea Trischuk (AT) Megan Lord-Hoyle (MLH) Angie Bischoff (AB) Todd Swenson (TS) |  |  |  |
| Environment and Climate Change Jessica Kassar (JK) Canada (ECCC) Melissa Pinto (MP) |  |  |  |  |
| Qikiqtani Inuit Association (QIA)<br>and Consultants                                | Tom Williamson (TW) Bruce Stewart (BS) Lindsay Galbraith (LG) Andrew Jaworenko (AJ) Jeff Higdon (JH) Richard Nesbit (RN)   |  |  |  |
| Government of Nunavut (GN)  | Jessica Waldinger (JW)   |  |  |  |
| Parks Canada (PC)  Department of Fisheries and  Oceans Canada (DFO)                 | Marie-Claude Martel (MCM)  Jose Audet-Lecoutte (JAL)  Nicholas Wasilik (NW)  |  |  |  |
| Natural Resources Canada<br>(NRCan)   | None   |  |  |  |
| Baffinland Consultants  |  |  |  |  |
| WSP Golder  | Andrea Locke (AL) Patrick Abgrall (PA) Phil Rouget (PR)  |  |  |  |





| Organization Name Participants                         |   |  |  |
|--|---|--|--|
| Observer Organization                                  |   |  |  |
| CIRNAC   | Absent                                      |  |  |
| World Wildlife Fund (WWF)                              | Devin Holterman (DH)                        |  |  |
| Nunavut Impact Review Board (NIRB)                     | Absent                                      |  |  |
| Canadian Northern Economic Development Agency (CANNOR) | Litia Belanger Taqtu rep Melissa Alexander  |  |  |
| Oceans North (ON)                                      | Kristin Westdal (KW)<br>Alex Ootoowark (AO) |  |  |
| Transport Canada (TC)                                  | Adam Downing (AD) Alisa Norman (AN)         |  |  |
| Makivvik   | Camille LP (CLP)                            |  |  |
| Others   |   |  |  |

#### **AGENDA**

| Time          | Activity                               | Lead                  | Materials                         | Purpose                 |
|---------------|--|-----------------------|-----------------------------------|-------------------------|
| 11:00 – 12:00 | Steensby Update                        | C. Oliver             | Presentation                      | For Information         |
| 12:00 – 1:00  | Lunch break                            |                       |                                   |                         |
| 1:00 – 2:00   | 2025 Monitoring Program Plan Questions | P. Abgrall & A. Locke | 2025 Program<br>Presentation deck | <sup>-</sup> Discussion |
| 2:00 – 3:00   | 2025 Shipping Season                   | C. Oliver             | Presentation                      | For Discussion          |
| 3:00 – 3:30   | Summary of Actions and Wrap Up         | C. Oliver             | N/A                               | N/A                     |

### **MEETING MINUTES**

Cortney Oliver (BIM) started the meeting with a rollcall and asked participants to introduce themselves.

# **Steensby Update**

Lou Kamermans (BIM) presented to the group Baffinland's ongoing work at Steensby.

- Reviewed historical marine environment data dating back to 2006, including IQ, land use studies, and baseline surveys.
- Post-approval monitoring and permitting largely completed by 2023; focus now on project certificate requirements and pre-construction activities for the Steensby component (earliest construction expected in 2026).
- Ringed Seal Aerial Survey Report (2021 & 2024) under preparation; to be included in 2025 NIRB Annual Report.



- Bathymetric Data Mapping continues to fill gaps along the shipping route (Hudson Strait to Fox Basin) to ensure vessel safety.
- Spill Modeling: Four priority locations identified (Steensby Port, Mill Islands, and two other sensitive areas) with scenarios to refine spill response plans. Updated spill response plans will be circulated for comments before finalization.
- Community Engagement: Planned for fall 2026 in Igloolik and Sanirajak.

#### **Questions and Comments**

- Tom Williamson (QIA) expressed interest in attending the oil pollution prevention training and will confirm with his supervisor regarding availability and approval. Todd Swenson (BIM) informed him that the training has been done for 2025.
- Camille LP (Makivvik) requested for a dedicated presentation or memo summarizing prevention and response measures. **Action:** Lou agreed to share this before the next MEWG meeting
- Bruce Stewart (QIA) asked how 2025 baseline studies will align with older (2007–2009) designs.
   Lou confirmed lessons from northern programs will be incorporated and regional partnerships prioritized.
- Bruce Stewart (QIA) and Camille LP (Makivvik) asked how the spill modeling locations were confirmed. Phil Rouget (WSP) explained that the locations were chosen based on project certificate terms and IQ. He expressed that community feedback may refine future modeling.
- José Audet-Lecouffe (DFO) emphasized the need for coordination with DFO for future Steensby sampling protocols. Lou confirmed commitment to collaborate.

## 2025 Marine Monitoring Programs (Andrea Locke and Patrick Agbrall)

## Marine Environment Effects Monitoring Program (MEEMP) July 23 - August 13, 2025

- Andrea Locke confirmed that the 2025 program will mirror the 2024 activities, excluding freight
  dock habitat monitoring. This ensures data continuity while adapting to field conditions such as
  weather impacts, shifting substrate, or access challenges.
- Potable quadrats will be used for the two benthic quadrats that were lost in 2023. Feedback from
  field teams will be collected to evaluate how portable quadrats are performing in comparison to
  permanent ones, particularly in areas with limited visibility or dynamic currents.
- She confirmed that no environmental sampling will take place at Ragged Island in 2025 due to safety concerns stemming from difficult currents, logistical access constraints and no concerns of AIS/NIS based on the current monitoring at Milne Port.

#### **Bruce Head Monitoring Program August 6 to September 3 2025**

 Narwhal monitoring will again involve a combination of drone (UAV) surveillance and visual observations to document group behavior, movement, and interactions with nearby vessels.



 There is no anticipated changes in survey design or data analysis approaches for this upcoming field season.

## **Questions and Comments**

- Members stressed that Ragged Island location remains environmentally significant and should not be overlooked in future planning. BIM was asked to revisit the previous action M-09012025 that was made to collect information on average vessel staging durations at Ragged Island to assess potential biofouling risk, even in the absence of active sampling -Action
- BIM asked the DFO team if the have a vessel around Eclipse Sound. DFO responded that they will get back on the question -Action

### 2024 Shipping Season Recap and 2025 Overview

- The 2024 shipping season involved 74 carrier transits, with no major incidents or regulatory concerns reported.
- The group reviewed logistical improvements and noted enhanced coordination between vessels, the operations team, and local communities.
- The 2025 shipping season will start between July 30<sup>th</sup> to Aug 2<sup>nd</sup> pending ice conditions and 50 ore carriers are expected to call at Milne Port.

#### **Comments**

- Three individuals—Lindsay Galbraith, Sam Davin and Devin Holterman expressed interest to be added to the rolling shipping schedule distribution - Action
- Members emphasized the importance of maintaining clear and timely communication with all shipping partners, particularly in the event of route deviations or schedule shifts.

#### Other business

Cortney Oliver (BIM) will follow up with identified Independent Chair nominees to confirm their interest and availability. And subsequently circulate their resumes and qualifications for the MEWG to review and provide feedback prior to selecting a final facilitator.

She thanked everyone for their continued interest and participation and the meeting was adjourned.





