

Tallurutiup Imanga NMCA Research and Monitoring Pilot Project

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Number of person covered by the permit : 10. Vincent Marmillot, Steve Travis , Maryse Mahy, Sarah Klingbell, Hower Blair, Lynn Smale, Lanny Arnakallak, Community members (e.g. HTO, Ikaarvik)

Project objectives : As part of the establishment of the Tallurutiup Imanga National Marine Conservation Area (TINMCA), a Research and Monitoring Strategy is being co-developed with Parks Canada, the Qikiqtani Inuit Association (QIA), Fisheries and Oceans Canada (DFO), and Transport Canada (TC), in collaboration with the five communities adjacent to the protected area (Arctic Bay, Clyde River, Grise Fiord, Pond Inlet, and Resolute Bay). This monitoring program is intended to be implemented incrementally over the next several years, with the goal of addressing Inuit concerns identified through in-person engagement with community members since 2023.

The monitoring will focus on indicators aligned with Inuit priorities and needs, helping assess the state of the NMCA and informing decision-making for its management. The Interim Management Plan and the Research and Monitoring Strategy for TINMCA are in the final stages of completion and will provide guidance for the monitoring program.

The project proposed for 2026 aims at identifying optimal sampling stations, provide training in oceanographic measurements, and potentially collecting initial data on seawater properties, sea conditions, and the abundance and distribution of seabirds and marine animals.

Project Location: Surrounding waters of Bylot Island, Eclipse Sound, Navy Board Inlet and Milne Inlet. The exact coordinates of the stations will be determined in collaboration with the other department (DFO, CFS, ECCC) and in consultation with HTO (see the map below).

Date and duration of visit: From August 1st to August 31st, 2026, a few hours at each site.

Method of transportation: Motorized boat (approximately 30 feet / 10 m). 6 – 8 hours / day

Summary of activities and rationale: This pilot project aims at helping to implement the long term monitoring programs for TINMCA by testing some equipment and taking preliminary measurements. In 2026, fieldwork activities are proposed to take place around Bylot Island, Eclipse Sound, Navy Board Inlet and Milne Inlet. We will travel to the sampling stations by boat from Pond Inlet in the morning and return at the end of each day. At each station, we will deploy sensors to measure seawater properties, including temperature, salinity, pressure, acidity, turbidity (how transparent the water is), and chlorophyll-a (part of plankton, to understand plankton productivity), dissolved oxygen, at multiple depths (surface, 10, 20, 30, 40, 50, and 100 meters). These measurements will be repeated several times at each location.

No moorings are planned for this year, and all equipment will be retrieved immediately after measurements are completed.

A drone may be used to monitor sea-ice conditions, the presence and abundance of marine mammals, and the seabird colony.

Waste disposal : the waste will be stored on board and disposed of in Pond Inlet

Potential environmental impacts and mitigation measures:

The anticipated impacts are expected to be very low, as the activities will primarily involve deploying oceanographic instruments to measure seawater properties and providing training on monitoring techniques and protocols.

Monitoring protocols for seabirds and marine mammals will be developed in collaboration with appropriate experts to ensure appropriate mitigation measures and minimize any potential impacts

Marine mammals and birds from noise and proximity: Standard mitigations about minimum distances from wildlife will be followed, including those developed by DFO and the Canadian Wildlife Service. Mitigations specific to drone use will also be followed and only a trained pilot will operate the drone.

Fuel spills: Mitigations will be followed on how to safely fuel the boat and how to address potential spills.

Disturbance of Inuit engaging in harvesting or cultural activities: Consultations will take place with the HTO of Pond Inlet to ensure the proposed timing and location of the project does not affect community members' harvesting and cultural activities and to modify proposed plans accordingly.

Disturbance of seafloor from temporary anchoring: Mitigations will be researched and implemented as needed.

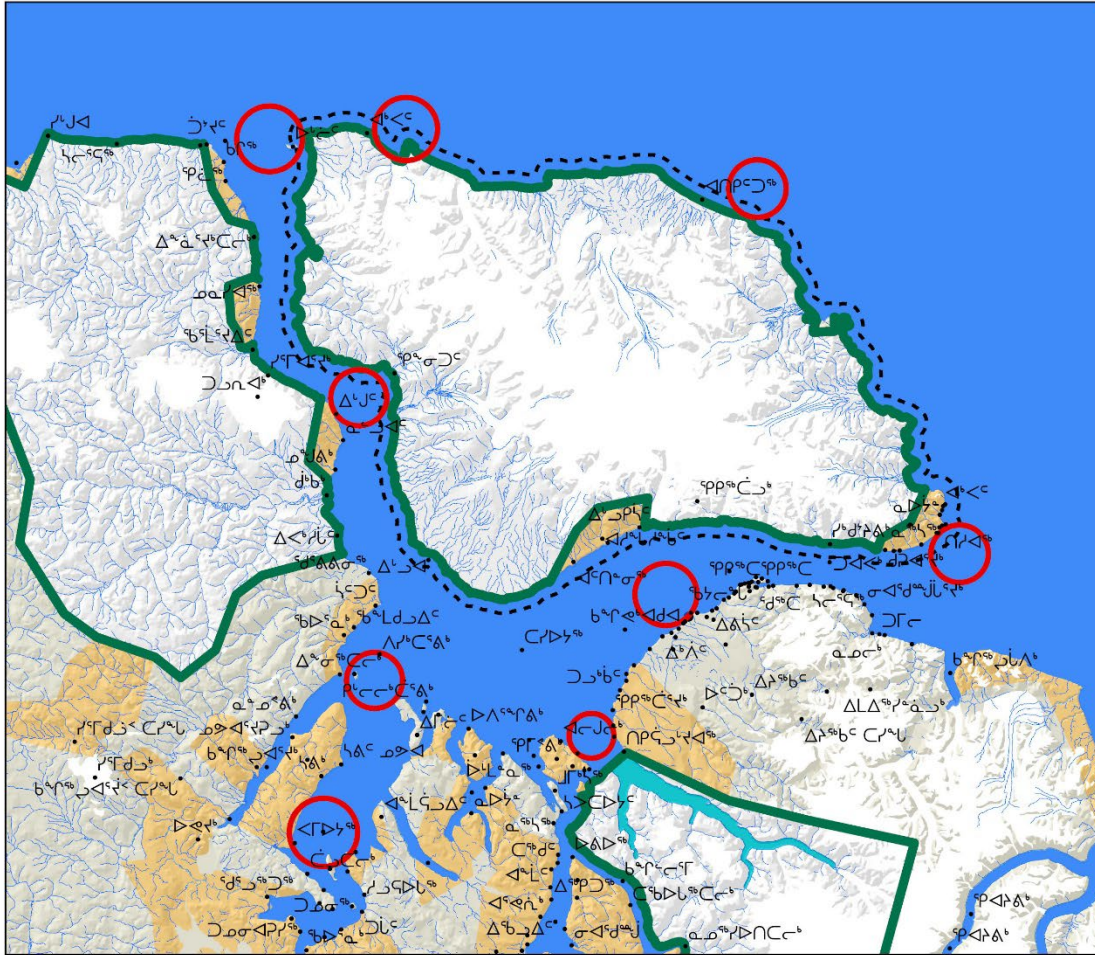
Measures to avoid dangerous wildlife encounters

The risk of dangerous wildlife encounters is expected to be low as the team will be at sea and will keep safe and required distances from wildlife to avoid disturbing them. Standard measures to avoid polar bear encounters and deter bears will be followed if required.

Community consultation and involvement

A two-phase in-person engagement began in 2023 to develop TINMCA's research and monitoring strategy. The second phase of engagement with the Mittimatalik HTO, Hamlet council members in Pond Inlet, Sirmilik National Park Joint Park Management Committee, and Ikaarvik took place in November 2025 to provide updates on the overall development of the program. A letter is currently being drafted and translated and will be sent to the HTO in February 2026 to initiate a consultation on the details of the 2026 proposed activities. The consultation will include questions on the proposed sampling stations. Research and Monitoring activities are reported twice a year to the management board for TINMCA. Board meetings are open to the public and a communication strategy is being developed to inform community members of research and monitoring activities and findings.

Map showing the locations of the proposed sites



2026 Proposed Sites

Tallurutiup Imanga National Marine Conservation Area

Sirmilik National Park

Bylot Island Migratory Bird Sanctuary

Inuit Owned Lands

Oceanographic instruments and drone potentially used in 2026



<https://rbr-global.com/wp-content/uploads/2025/03/RBRmaestro3-Datasheet-0005576revG.pdf>

https://store.dji.com/ca/list/camera-drones?category=101%3D101.203.311&tab=101&sort=recommendation&page=1&from=store_homepage&gl=1%2A13rnyed%2A_up%2AMQ..%2A_gs%2AMQ..&gclid=Cj0KCQiAyvHLBhDIA RIsAHxl6xpokRqOqfnDgCa3dmdjENShtC7aS_ICphk4C_1w0WumwcZe6NOleE0aAmJbEALw_wcB&gbraid=0AAAAADO_H_fyPrM-r3U-amlfr45qzWQg