

NSF/UNOLS Arctic Icebreaker Coordinating Committee (AICC) Meeting
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Canadian NW Passage: Research Outreach Background & Recommendations

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Outline:

- Principal Towns & Research Centers in Inuit Nunangat
- Research Coordination with Inuit, Nunavut: Recommendations, POCs, and prior CG outreach
- Downlink locations planned by Quintillion for fiber optic/Internet along NWP
- Marine Protected areas along Canadian NW Passage

Research Coordination: Canadian National Recommendations

- Consult the Canadian National Inuit Strategy on Research (Inuit Tapiriit Kanatami): <https://www.itk.ca/wp-content/uploads/2018/03/National-Inuit-Strategy-on-Research.pdf>
- This outlines the different regions for research licenses, which may have different regulations/requirements. The regions are:
 - Inuvialuit Settlement Region (ISR): the westernmost area, with licenses granted by the Aurora Research Institute (ARI)
 - Nunavut, central area, with licenses granted by the Nunavut Research Institute (NRI)
 - Nunavik, easternmost area, with licenses granted by the Nunavik Research Centre (or others depending on type of research, eg human health is another group)
- Appendix A in this document includes a list of all Research Stations in these areas (shown in previous slide)
- While Polar Knowledge Canada (POLAR) is the lead agency for coordination, other agencies may also be involved depending on topic
- Additional permits are required for wildlife research in these areas, or research involving archaeology, or for work in National Parks.

Research Coordination, Nunavut: Ikaarvik [Bridges] Project

- Ikaarvik Project founded 2010 in Pond Inlet to build 'bridges' between researchers and Nunavut Arctic communities, especially working with youth because 60% of Nunavut communities are under 30 years old and 50% under 15 years.
- Founder and Program Lead: Shelly Elverum, Environmental Technology Instructor, Pond Inlet
- <http://ikaarvik.org/> & <http://ocean.org/our-work/arctic-connections/ikaarvik-barriers-to-bridges/>
- Goal to incorporate traditional Inuit knowledge and values (Inuit Qaujimaqatunngit = IQ) into research, and include consultation with Hamlet Councils and Hunters and Trappers Organizations
- Includes annual SciQ: Science and Inuit Quajimajatuqangit Youth Summit - 5 day meeting to review progress on science goals determined by local consensus
- Originally administered by Vancouver Aquarium, then in 2013 awarded Arctic Inspiration Prize, and expanded to three other communities: Gjoa Haven, Cambridge Bay and Kugluktuk. Have hired community Liaisons for researchers in all 5 Arctic communities to help researchers with local coordination.
- Current research projects include:
 - Community-based microplastics sampling – Kugluktuk, NU; Oceans North
 - Coppermine River health monitoring – Kugluktuk, NU; U. Waterloo
 - Arctic Corridors & Northern Voices – Gjoa Haven & Pond Inlet, NU; Salluit, Nunavik; U. Ottawa
 - Invasive Species – Pond Inlet, NU; Salluit, Nunavik; Fisheries & Oceans Canada
 - SIKU Inuit Knowledge Social Mapping Platform – Gjoa Haven, NU; Arctic Elder Society

Research Coordination, Nunavut: Ikaarvik [Bridges] Project

- Prepared recommendations for researchers in 2018, “Research and Meaningful Engagement of Northern Indigenous Communities: Recommendations from the Ikaarvik Youth SciQ Summit, Nov. 19-23, 2018”: <https://ocean.org/wp-content/uploads/SciQ-Report-and-Recomendations-lores.pdf>
- Recommendations include:
 - A research license from the Canadian government is required for research in Nunavut, including a demonstration of how IQ will be incorporated into the research
 - Reminder that the 8 IQ principles (outlined in document above) will guide local interactions
 - Reminder that by law all materials in Nunavut have to be prepared in both Latin letters and Canadian Syllabic writing
 - Recommend scientists remember Inuktitut language in each of the main 5 villages is different; local translators should be hired to get the correct language for each
 - Be sure local communities are consulted and aware in advance when visits are planned
 - Recommend: working with Hunters & Trappers Organizations; announcing projects on local radio; hosting community gathering/public presentation/feast; engaging with local schools & colleges

Nunavut Outreach contacts & Prior CG Outreach:

- Pond Inlet Radio Station (Isuma Radio): PH (867) 899-8884
- Nasivvik High School, Pond Inlet, Principal: Janice Beardsley,
email: janice.beardsley03@gmail.com ; PH: (867)899-1771
- Mittimatalik Hunters and Trappers Association (Pond Inlet HTO): Molleen Anaviapik (manager)
email: htopond@qiniq.com ; PH (867)889-8856
- USCG Buoytender 2018 MAPLE transit of NWP: deployed acoustic moorings in Pond Inlet in conjunction with PhD candidate Josh Jones (J. Hildebrand lab), Scripps in coordination with local community project on monitoring ocean acoustic noise in advance of development of large iron mine in the area.
- HEALY 2000 transit of NWP: donated collection of Arctic books to Cambridge Bay School Library, to replace some of the collection lost in an August 1998 fire.

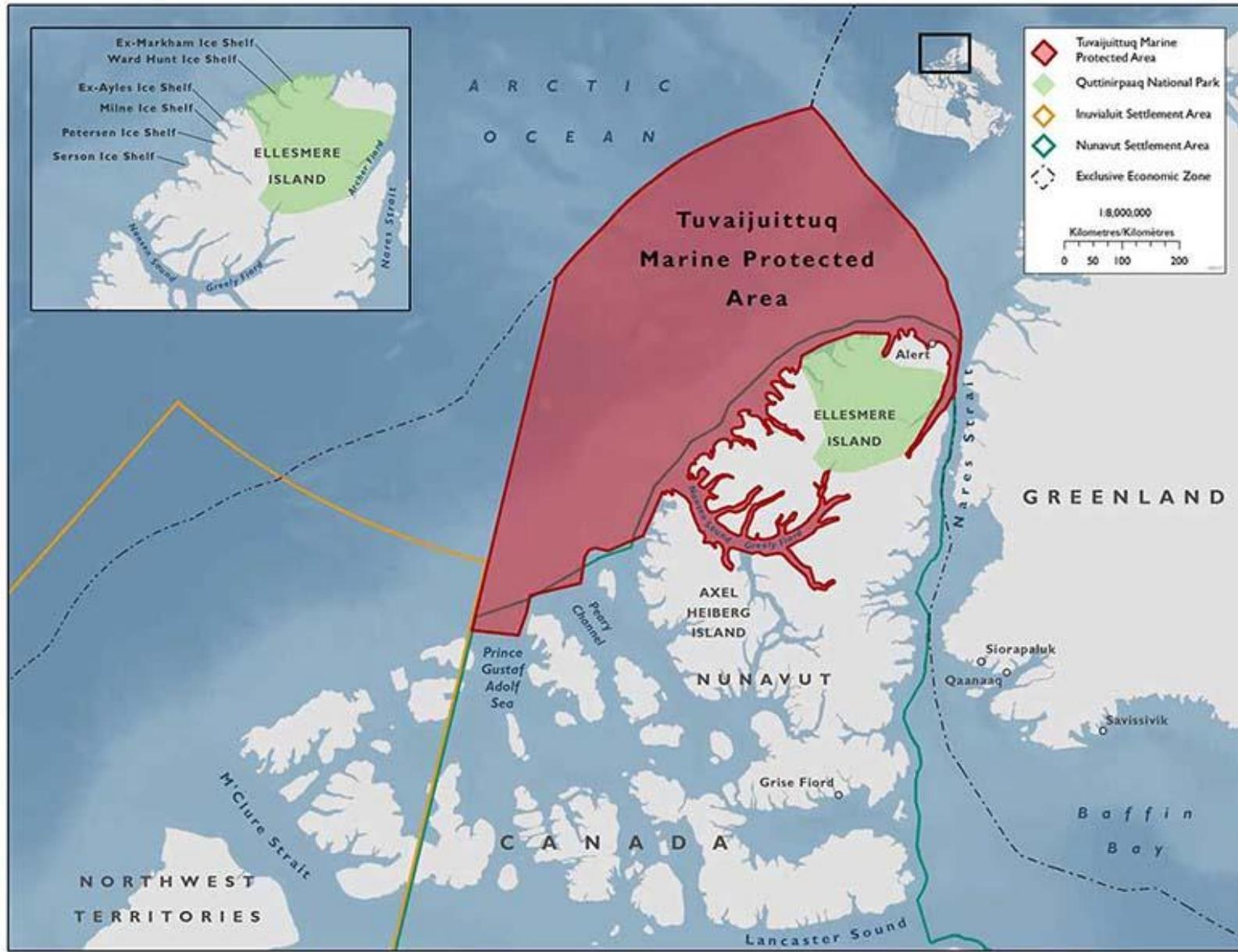
Quintillion f.o. cable route: downlinks planned along NWP tentatively include: Cambridge Bay, Gjoa Haven, Taloyoak, Igloolik, Hall Beach/Sanirajak, Cape Dorset, and Iqaluit



Canada Marine Protected Areas, Marine Conservation Areas and [Marine] National Wildlife [Conservation] Areas, 2020 (shown in next slides)

- 3 MPAs: Tuvaijuittuq MPA (multiyear ice area, NW Ellesmere Is.)
Tarium Niryutait MPA (3 disjunct subareas, Mackenzie R. delta)
Anguniaqvia Niqiqyuam MPA (E. side Parry Peninsula & E. Darnley Bay)
- 1 MCA: Tallurutiup Imanga MCA (Lancaster Sound)
- 4 [Marine] National Wildlife [Conservation] Areas (NWAs)
 - Nirjutiqavvik NWA – northernmost, surrounding Colberg Is., south of Ellesmere Is.
 - Qaqulluit NWA – next south, off NE tip of Baffin Is.
 - Akpait NWA – next south, NE of Cumberland Peninsula central Baffin Is.
 - Ninginganiq NWA – southernmost, off SE coast of Baffin Is., including Isabella Bay, Aulitivik Is. & the smaller Aulitiving Is.

Tuvaijuittuq MPA: multi-year ice area off NW Ellesmere Isl.
Protects: multi-year ice ecosystems, polar bears & marine mammals



Tarium Niryutait & Anguniaqvia Niqiqyuam MPAs: 3 sub-areas in Mackenzie R. delta & along the east side of the Parry Peninsula and eastern Darnley Bay

Protects: largest stock of belugas, fish sps.

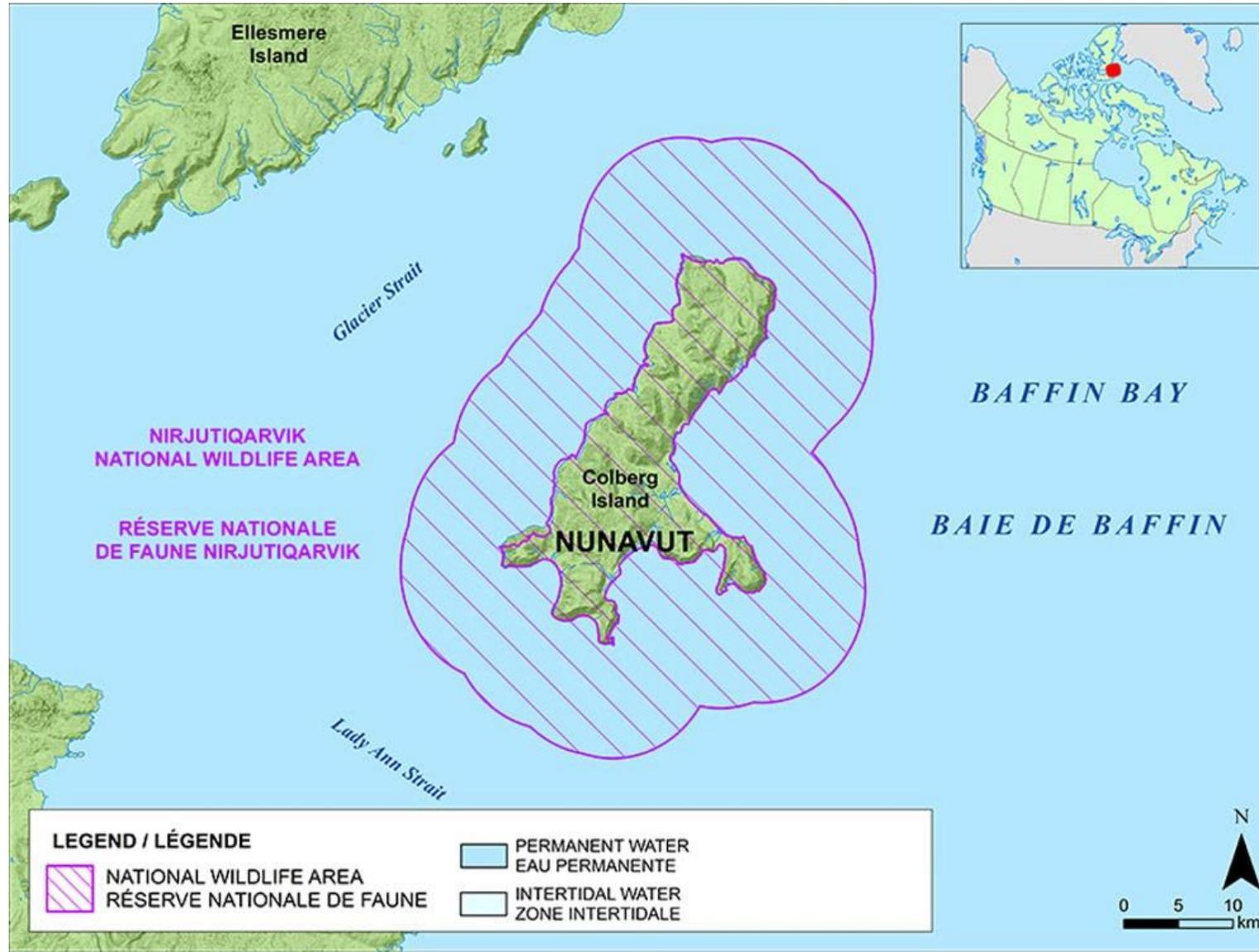


Tallurutiup Imanga MCA: Lancaster Sound, from Resolute in west & east to Grise Fjord on Ellesmere Is. in north, and Pond Inlet on Baffin Is. to south.
Protects: polar bears, narwhals, bowheads & belugas

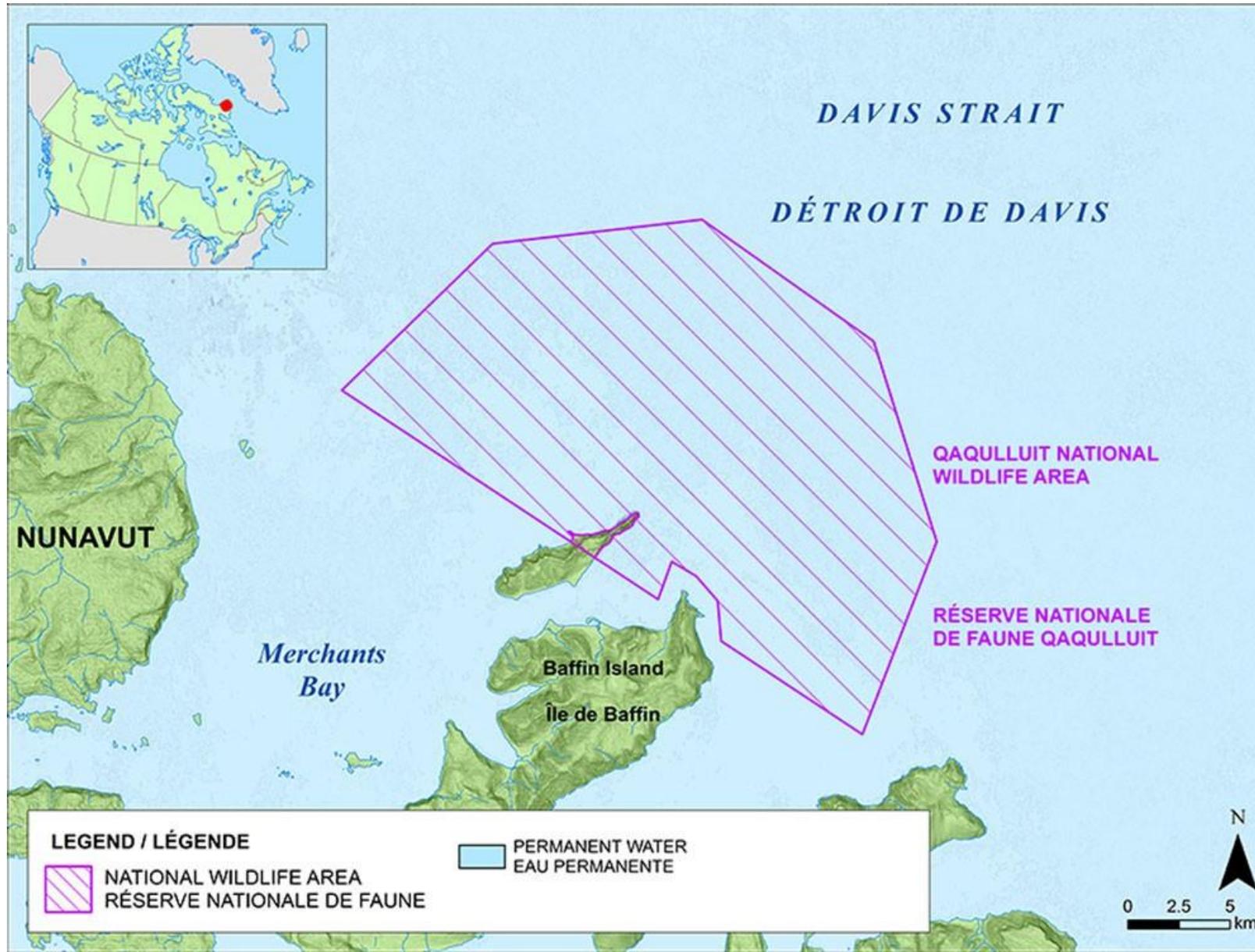


Nirjutiqavvik NWA: south of Ellesmere Is., north of Devon Is., area surrounding Colberg Is., between Glacier (north) & Lady Ann (south) Straits

Protects: thick-billed murres, black-legged kittiwakes, seabirds, p.bears, ring seals

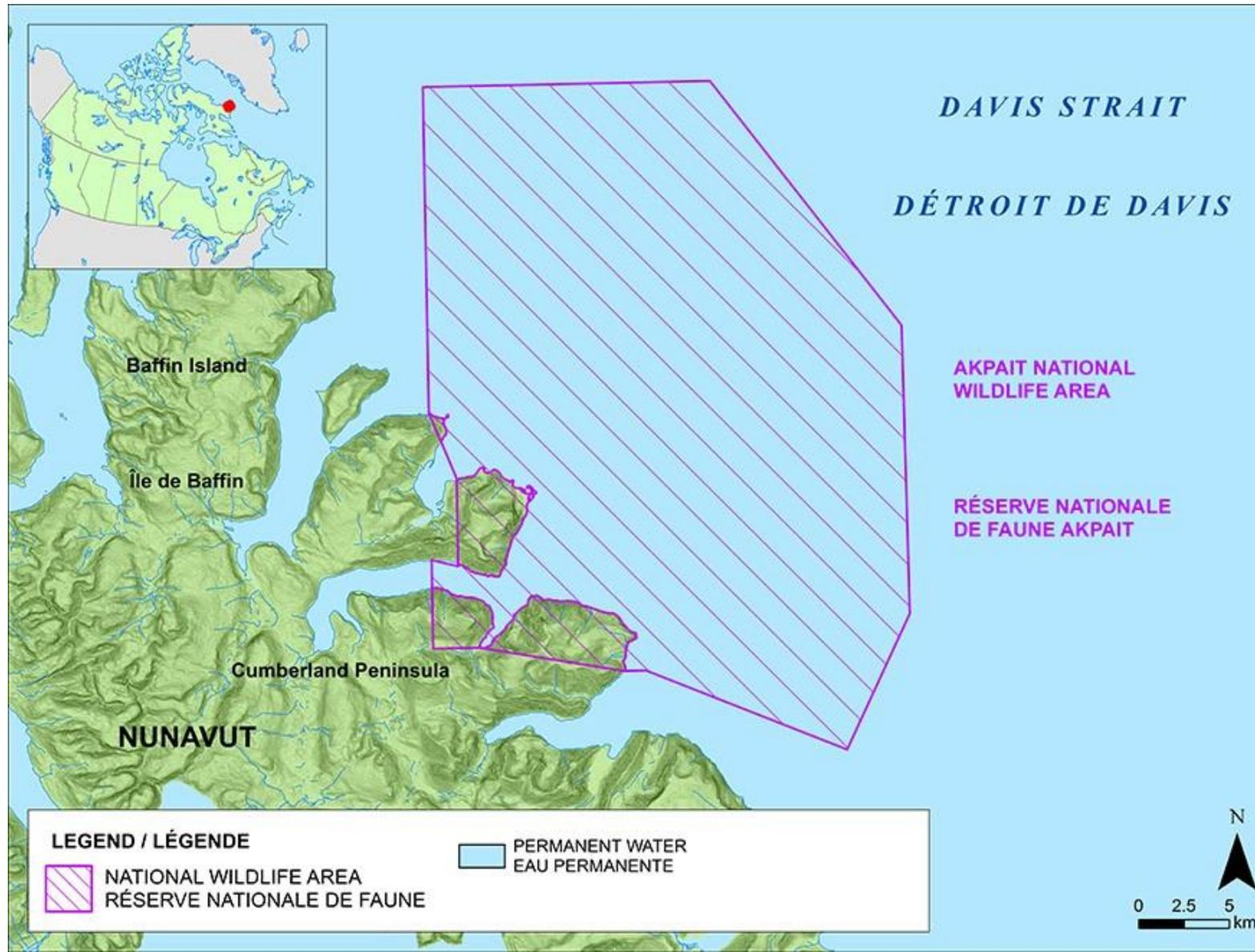


Qaqqullit NWA: NE of northern tip of Baffin Isl.
Protects: Fulmars, seabirds, walrus, ring seal



Akpaik NWA: NE of Cumberland Peninsula, Baffin Island

Protects: Thick-billed murre, p.bear, seabird & walrus



Ninginganiq NWA: Isabella Bay, Aulitivik & Aulitiving Islands

Protects: largest concentration of Bowhead whales in Canada

