

Project Description

Proposed Ministerial Order Marine Protected Area in Sarvarjuaq

1. Collaboration and Proposal for a Ministerial Order MPA under the *Oceans Act*

The Sarvarjuaq Study Area (Sarvarjuaq) surrounds the North Water Polynya which is located between Canada and Greenland in northern Baffin Bay. This region is characterized by one of the largest recurring polynyas in the Arctic, which supports high productivity and biodiversity. In March 2019, the Prime Minister of Canada, Justin Trudeau, released a joint statement with Canadian Inuit leaders that committed to working in partnership to advance the sustainable marine management and environmental protection of the region surrounding the North Water Polynya. DFO and QIA are pursuing the establishment of a Ministerial Order MPA under the *Oceans Act* in Sarvarjuaq to limit the impact of additional unforeseen stressors on the area while partners explore options for long-term protection.

This proposal for a Ministerial Order MPA in Sarvarjuaq requires the negotiation of an Inuit Impact and Benefit Agreement (IIBA) under the *Nunavut Agreement*. An IIBA between the Government of Canada and QIA is currently being negotiated and will be completed prior to establishment.

The North Water Polynya was identified by DFO in 2011 as one of the Ecologically and Biologically Significant Areas within Canada's Arctic. In addition to supporting community interests for protection, the proposed MPA would contribute to Canada's goal of conserving 25 per cent of its oceans by 2025, and mandate to increase Indigenous collaboration on marine conservation. Establishment of an MPA in Sarvarjuaq would advance reconciliation with Inuit through self-determination, Inuit leadership and collaboration in marine conservation stewardship.

Objectives identified for the proposed Sarvarjuaq MPA are:

- (1) To support the conservation, protection, and understanding of Sarvarjuaq (the North Water Polynya) and its unique biologically productive ecosystem that is of immense value to Inuit and Inuit culture.
- (2) To support Inuit leadership in the conservation of Sarvarjuaq to ensure the continuity of Inuit culture, values, and practices, including accumulating and passing down Inuit knowledge, as well as Inuit stewardship and governance.

Protection under a Ministerial Order MPA would freeze the footprint of activities in the area, for a period of up to five years. This would mean that activities that have lawfully occurred in the area over the 12 months prior to designation (or that were authorized by a federal or territorial permit, licence, or some other form of express authorization to occur but have not yet taken place) would be allowed to continue for the duration of the Order. For the duration of the Ministerial Order, no new human activities, other than Inuit activities provided for in the *Nunavut Agreement*, exempted foreign activities, marine scientific research, and activities carried out for purposes of public safety, national defence, national security or law, or in response to emergency situations, provided for under subsection 35.1(3) of the *Oceans Act*, would be allowed to occur in the area following this proposed designation.

The proposed Sarvarjuaq Ministerial Order MPA would establish the boundaries and designate an MPA in the area found in the Nares Strait in Northern Baffin Bay, at the entrance to Smith Sound; extending both North and South along the international boundary between Canada and Greenland.

The proposed Sarvarjuaq Ministerial Order MPA would prohibit all human activities that disturb, damage, destroy or remove from that MPA any unique geological or archeological features or any living marine organism or any part of its habitat or is likely to do so within the designated boundaries, except the following activities:

Classes of Ongoing Activities

For the purposes of paragraph 35.1(2)(a) of the *Oceans Act*, the following classes of activities are ongoing activities in the MPA:

- Hunting and trapping (including sport hunting)
- Fishing (including sport fishing)
- Harvesting of marine plants
- Constructing, dismantling, maintaining and repairing, and using of temporary structures on sea ice
- Marine navigation
- National defence activities carried out by the Department of National Defence
- Canadian Coast Guard activities carried out by the Canadian Coast Guard
- Tourism activities
- Recreational activities
- Educational activities
- Travel over sea ice using motorized vehicles and non-motorized methods
- Inuit Qaujimajatuqangit and community-based research activities (including stewardship activities)
- Scientific research activities
- Filming and media content development

DFO has consulted with the communities of Arctic Bay, Clyde River, Grise Fiord, Pond Inlet, Resolute Bay and Qikiqtarjuaq, QIA, the Government of Nunavut, stakeholders and other federal departments to identify existing and authorized (i.e., ongoing) activities in the proposed Sarvarjuaq MPA.

Activities under the Nunavut Agreement

The proposed Order would not apply with respect to rights of Inuit as provided for under the *Nunavut Agreement*.

Public safety

Any activity carried out on behalf of His Majesty for the purpose of public safety, national defence, national security, or law enforcement, or in response to an emergency (including environmental emergencies), would be allowed to occur within the MPA by way of the statutory exception provided under subsection 35.1(3) of the *Oceans Act*, such as emergency search and rescue, response to shipping or aircraft accidents, or national security requirements.

2. About the Area

a. Location

The proposed Sarvarjuaq MPA is found in the Nares Strait and in Northern Baffin Bay (Figure 1). The boundaries were refined in collaboration QIA. A portion of the proposed Sarvarjuaq MPA falls within the Nunavut Settlement Area (NSA). The outer portion of the proposed Sarvarjuaq MPA extends further to the southeast and runs along the boundary of Canada's Exclusive Economic Zone. It also includes the seabed, the subsoil to a depth of five metres and the water column, including the sea ice, each of which is below the low-water line. Adjacent Canadian communities to the Sarvarjuaq region include Grise Fiord, Resolute Bay, Arctic Bay, Pond Inlet, Clyde River and Qikiqtarjuaq.



Figure 1. Map of the proposed Sarvarjuaq MPA

b. Ecological Importance

A major feature in the Sarvarjuaq area is the North Water Polynya (also known as Pikialasorsuaq), which is an area of year-round open water surrounded by sea-ice cover. The North Water Polynya is one of the largest (80,000 km²) polynyas in the Arctic, and is well known for its seasonally early and reliable productivity, as well as its high biodiversity. The polynya provides critical habitat for a number of marine mammal species, such as Atlantic walrus (*Odobenus rosmarus rosmarus*), beluga (*Delphinapterus leucas*) and bowhead whale (*Balaena mysticetus*), narwhal (*Monodon monoceros*), ringed seal (*Pusa hispida*), bearded seal (*Erignathus barbatus*), and polar bear (*Ursus maritimus*), as well as sea birds, fish and other marine life. The Sarvarjuaq area is also home to an estimated 60 million birds, including the endangered ivory gull, and the largest aggregation of dovebies/little auks on earth.

The region serves as a crucial feeding and breeding ground for many Arctic marine species. Species like seals, walrus, whales, and seabirds rely on the polynya's open waters to access food resources. Seabirds also use the coastal-fiord regions surrounding the polynya for breeding, foraging and nesting. These species often migrate long distances to reach the polynya, highlighting its importance in their life cycles.

The high biodiversity and species presence in the Sarvarjuaq region are largely attributed to a series of unique physical features in the area. These include:

- Atmospheric and oceanic circulation patterns creating dominant northerly winds and ocean currents, which push sea ice south through Nares Strait into Baffin Bay (DFO, 2021);
- Ice bridges forming in Nares Strait, Kane Basin and Smith Sound, largely due to narrow channels blocking the passage of sea ice southward, resulting in less sea ice south of Smith Sound (DFO, 2021);
- Ocean circulation patterns and upwelling mixing nutrient-rich waters, with cold Pacific water flowing south from the Arctic (along the Canadian coast) and warmer Atlantic waters coming flowing north from Davis Strait (along the Greenlandic coast) (DFO, 2021);
- Increased primary productivity due to a longer ice-free period.

Other significant biophysical features in the Sarvarjuaq Study Area that contribute to its ecological importance include; a high presence of glaciers and their subsequent freshwater runoff into the marine environment, early phytoplankton blooms providing an early source of food. In addition, the North Water Polynya is considered to be a carbon sink and is regionally important in the exchange of carbon dioxide and other gases.

The North Water Polynya has dynamic and fluctuating oceanographic features, stemming from both sea ice and icebergs from glaciers in the region. Fresh water flows and mixes into the marine environment, fed by the melting ice caps in Canada and Greenland. The effects of climate change and increased meltwater on the North Water are uncertain. Recently, the ice bridges that help in the formation of the polynya are becoming less stable and occurring with less predictability. Like many other Arctic regions, the polynya is vulnerable to the effects of climate change, such as shifts in ice cover, altered ocean currents and impacts on species that rely on it (ICCC, 2017; DFO, 2021).

Sarvarjuaq and the wider area of Pikialasorsuaq are both socially and culturally important. For millennia, this region has been home to some of the northern-most human settlements. The polynya has connected communities across Canada and Greenland (ICCC, 2017), and supported many of these settlements.

Overall, the North Water Polynya serves as a unique and vital ecosystem, supporting diverse marine life, playing a role in regional climate dynamics, and providing cultural importance to Inuit communities. It is important to understand and preserve this unique ecosystem for those who rely on the region, as well as for global climate change research and conservation efforts.

c. Socio-economic Considerations

A socio-economic analysis was completed by DFO's Policy and Economic Sector. The majority of economic activity for Sarvarjuaq falls within the categories of natural resource management and eco/cultural tourism. Activities identified through the socio-economic analysis include annual sealift operations, vessel transportation of materials from the Mary River iron ore mine, icebreaking activities, passenger and cruise ship traffic, marine research vessel activity, media and filming activities, subsistence and traditional wildlife harvesting, recreational activities, and tourism. DFO's analysis, consultation with other Federal departments, community consultations, and industry and stakeholder engagement informed the list of ongoing activities presented above.

Forecasted possible economic growth in the proposed Sarvarjuaq MPA lies within recreational and tourism activities. It is important to note that one variable in future economic development is climate change, as scientific studies have shown a reduction in ice thickness and age (DFO, 2021) could lead to greater accessibility of the Sarvarjuaq region.

Limited commercial fishing activities have taken place within the proposed Sarvarjuaq MPA. The proposed MPA overlaps with the boundaries of the North Atlantic Fishing Organization (NAFO) fishing division 0A. The NAFO Convention regulations allow Nunavut offshore license holders to harvest Greenland Halibut.

No current mineral exploration or exploitation licenses are held within the proposed Sarvarjuaq MPA. Baffinland's Mary River Mine, is currently the only operational mine in proximity to Sarvarjuaq. The mine is located a few hundred kilometers south of Sarvarjuaq, on northern Baffin Island (Baffinland, 2017). Vessel transportation of materials from the mine can route through the proposed MPA.

There is currently a moratorium on new oil and gas exploration licensing in and around Sarvarjuaq. According to the Strategic Environmental Assessment in Baffin Bay and Davis Strait (Nunavut Impact Review Board, 2019), there is currently little interest from oil and gas companies to undertake development in the region.

Currently, shipping and navigation traffic in and around the proposed Sarvarjuaq MPA boundaries occurs for the purposes of general cargo, fishing, tanker, passenger ship and pleasure craft, government and icebreaking. Vessel traffic could potentially increase in the future if resource projects within mining, oil and gas were developed/approved.

Due to the preservation of natural ecosystems that are associated with a protected area, an increase in eco/cultural tourism is possible. An increase in cruise vessel visits in Nunavut and the Qikiqtani region has been observed and linked with decreasing sea ice and longer ice-free seasons. Currently, there are eight different licensed outfitters and ten different licensed tour operators in the communities of Grise Fiord, Pond Inlet, Clyde River, Resolute and Arctic Bay. These licensed outfitting and tour operators provide tourists a variety of recreational activities. An increase in recreational and tourism activities may be possible in the future if sea ice continues to decrease.

3. Consultation and Engagement

Below is a short summary of the consultations and engagements that have occurred. A more detailed description of the consultations and engagements undertaken is provided in a separate “Consultation and Engagement Summary” document and in the “What We Heard” Report, both included in this submission.

a. Partnerships

Since 2019, the Government of Canada and QIA have been working together to identify options for the conservation and protection of Sarvarjuaq and other sites within the Qikiqtani Region of Nunavut. In 2021 a Qikiqtait and Sarvarjuaq Working Group (the Working Group) was created to advance the conservation and protection of the proposed Qikiqtait and Sarvarjuaq MPAs. The Working Group includes representatives from the Government of Canada, QIA and the Government of Nunavut.

b. Consultation and Engagement

Through the Working Group DFO has been working with QIA to implement an approach to community consultations in the Qikiqtani region of Nunavut. QIA indicated that consultations should focus on the six communities in closest proximity to the proposed Sarvarjuaq MPA: Grise Fiord, Resolute Bay, Arctic Bay, Pond Inlet, Clyde River, and Qikiqtarjuaq.

The first round of consultations occurred in Pond Inlet, Clyde River and Qikiqtarjuaq from October 24-27, 2023 and in Arctic Bay, Grise Fiord and Resolute Bay from January 16-18, 2024. During the first round of consultation meetings were held with the Hamlet Councils, Hunters and Trappers Organizations and the general public in each community. Unfortunately the public meeting in Qikiqtarjuaq scheduled for October 26 was cancelled due to bad weather. During all the meetings DFO’s presentation began by introducing the proposed Sarvarjuaq MPA, as well as discussing short and long-term protection goals and their associated timelines. A major point of DFO’s presentation was introducing the MPA’s draft conservation objectives and hearing feedback about the objectives. In all meetings, QIA also presented on the Qikiqtani Regional Conservation Model, discussing the pillars of the model and their vision for long-term protection as an IPCA. QIA also discussed Inuit stewardship, Indigenous-led governance, infrastructure support and fisheries reconciliation. Programs for monitoring and regional governance such as the Nauttiqsuqtiit Program were also covered.

The second round of consultations took place in Pond Inlet, Clyde River, and Qikiqtarjuaq from May 13-15 2024, and in Arctic Bay, Resolute Bay and Grise Fiord from June 3-7 2024. The second round of consultation meetings again were held with the Hamlet Councils, Hunters and Trappers Organizations

and the general public in each of the six community. During these meetings DFO presented additional information regarding the proposed Marine Protected Area by Ministerial Order including a review of the progress, an in-depth overview of the Ministerial Order as a protection tool, the proposed boundaries. DFO also presented on the regulatory intent that included an overview of economic activities or potential activities for the area and what activities we have documented as occurring within the proposed Sarvarjuaq MPA. QIA presented more details about Inuit Protected and Conserved Areas as a proposed long-term protection tool. During these meetings, communities members expressed their support for to advance protection of Sarvarjuaq.

In September 2024, the Working Group distributed a “What We Heard” report to the six communities which summarized the feedback provided by community members during consultations. Letters in support of the proposed regulation were received from all six communities’ Hunters and Trappers Organizations and Hamlet Councils. The Government of Nunavut has also provided a letter of support.

Other Stakeholders

DFO engaged with industry and key stakeholders on the proposed Sarvarjuaq MPA by Ministerial Order in two phases. Stakeholder groups engaged in this process included, but were not limited to: the Nunavut Water Board, Nunavut Wildlife Management Board, Qikiqtaaluk Wildlife Board, Nunavut Tunngavik Inc., Inuit Circumpolar Council, Inuit Tapiriit Kanatami, environmental non-governmental organizations (ENGOS), commercial fishing industry, shipping industry, media industry, cruise ship industry, oil and gas and mining industries, tour operators, fiber optic industry, and academia. In July 2024, a letter was sent from all parties of the Working Group seeking input on any ongoing activities currently being conducted or planned within the Sarvarjuaq Study Area. Following this first round of engagement, in October 2024, DFO engaged these same stakeholders on its proposed regulatory intent for a Ministerial Order MPA in Sarvarjuaq, seeking their input.

DFO also engaged all implicated federal departments, including (but not limited to) ECCC, Transport Canada, Crown-Indigenous and Northern Affairs Canada, Parks Canada, Natural Resources Canada, Canadian Coast Guard, Global Affairs Canada, and Department of National Defense.

4. Establishment Timeline and Next Steps

After the NIRB screening and review process, and if NWMB approves DFO’s proposal to establish a Ministerial Order in Qikiqtait, DFO will proceed to publication of the Order in Canada Gazette, Part II, which designates the new MPA. Canada and its partners will continue to work toward long-term options for Qikiqtait, which includes the consideration of an Inuit Protected and Conserved Area.

References Cited

Baffinland. 2017. Baffinland Iron Mines 2016 Annual Report to the Nunavut Impact Review Board: Project certificate No. 005. Available from https://www.baffinland.com/resources/document_portal/2016-nirb-annual-report-for-the-mary-river-project_2017-11-01-55.pdf

DFO. 2011. Identification of Ecologically and Biologically Significant Areas (EBSA) in the Canadian Arctic. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2011/055. Available from <https://waves-vagues.dfo-mpo.gc.ca/library-bibliotheque/344747.pdf>

DFO. 2021. Identification of Ecological Significance, Knowledge Gaps and Stressors for the North Water and Adjacent Areas. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2021/052. Available from <https://waves-vagues.dfo-mpo.gc.ca/library-bibliotheque/41029112.pdf>

ICCC (Inuit Circumpolar Council Canada). 2017. People of the Ice Bridge: The Future of the Pikialasorsuaq. Report of the Pikialasorsuaq Commission. Inuit Circumpolar Council Canada. Ottawa, ON. xvi + 103 p Available from <https://wwf.ca/wp-content/uploads/2020/06/Pikialasorsuaq-Report-2017.pdf>

Nunavut Impact Review Board (NIRB). (2019). Final Report for the Strategic Environmental Assessment in Baffin Bay and Davis Strait. NIRB File No. 17SN034. . Available from <https://www.nirb.ca/publications/Strategic%20Environmental%20Assessment/first%20row-first%20file%20-190731-17SN034-Final%20SEA%20Report-Volume%201-OPAE.pdf>